

ACADEMIC ORGANISER

2023 – 24

SRI SAURABH GAUR, I.A.S.,

SECRETARY



PART-III

VOCATIONAL COURSES

ANNUAL ACADEMIC PLANS

BOARD OF INTERMEDIATE EDUCATION

114/C3, ESHWAR ELITE, BESIDE SONOVISION,
TADEPALLI, GUNTUR - 522501

NAME OF THE COURSE
AGRICULTURAL COURSES
CROP PRODUCTION & MANAGEMENT [CPM] - 109
LIVE STOCK MANAGEMENT & DAIRYING [LM & D] 110
FISHERIES [FISH] - 111
SERICULTURE [SERI] - 112
BUSINESS AND COMMERCE COURSES
ACCOUNTING & TAXATION [A & T] - 212
OFFICE ASSISTANT SHIP [OAS] - 213
BANKING & RETAIL MANAGEMENT [BRM] - 217
ENGINEERING & TECHNOLOGY COURSES
COMPUTER SCIENCE ENGINEERING [CSE] - 319
ELECTRONICS ENGINEERING TECHNICIAN [EET] 320
ELECTRICAL TECHNICIAN [ET] - 321
PRINTING TECHNOLOGY [PTG] - 324
MECHANICAL & AUTOMOBILE ENGINEERING TECHNICIAN [M & AT] - 325
CIVIL ENGINEERING TECHNICIAN [CET] - 326
HOME SCIENCE COURSES & OTHER COURSES
COMMERCIAL GARMENT TECHNOLOGY [CGT] - 409
FASHION GARMENT MAKING [FGM] - 410
HOTEL OPERATIONS [HO] - 411
PRE-SCHOOL TEACHER TRAINING [PSTT] - 412
COMPUTER GRAPHICS & ANIMATION [CGA] - 505
TOURISM & TRAVEL TECHNIQUES [TTT] - 506
HEALTH & PARA-MEDICAL COURSE
MEDICAL LAB TECHNICIAN [MLT] - 616
OPHTHALMIC TECHNICIAN [OT] - 617
PHYSIOTHERAPY [PT] - 618
MULTIPURPOSE HEALTH WORKER [FEMALE] [MPHW] [F] - 619

AGRICULTURAL COURSES
<i>CROP PRODUCTION & MANAGEMENT [CPM] – 109</i>
<i>LIVE STOCK MANAGEMENT & DAIRYING [LM & D] 110</i>
<i>FISHERIES [FISH] – 111</i>
<i>SERICULTURE [SERI] – 112</i>

**Annual academic plan 2023-2024(FIRST YEAR)Crop
production & management – 109**

Month & No Of Working Days	Principles Of Crop Production VT1 &VP1	Soil & Water Management VT2 & VP2	Farm Management & Agricultural Extension VT3 & VP3
<p style="text-align: center;">June 2023</p> <p style="text-align: center;">No of days-24</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>1. <u>Agriculture:</u></p> <ul style="list-style-type: none"> ▪ Terminology- agriculture, agronomy & it is relationship with basic sciences. ▪ National & international institute of agricultural research in India. ▪ Agro climatic zones of A.P. <p>2. <u>Agro Meteorology:</u></p> <ul style="list-style-type: none"> ▪ Terms & definitions- weather & climate. ▪ Atmosphere- composition & vertical. ▪ Monsoon- types & impacts on agriculture operation. 	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>1. <u>Soil In Relation To Plant Growth:</u></p> <ul style="list-style-type: none"> ▪ Introduction. ▪ Components of a mineral soil. ▪ Soil reaction. ▪ Soil texture & structure. ▪ Soil organic matter & its effects on soil properties, C: N ratio. ▪ Soil fertility & productivity. ▪ Soil fertility management. 	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>1. <u>Introduction To Farm Management:</u></p> <ul style="list-style-type: none"> ▪ Definition of farm management. ▪ Nature of farm management. ▪ Scope of farm management. ▪ Factor of production (land, labor, capital & organization). <p>2. <u>Farm Records:</u></p> <ul style="list-style-type: none"> ▪ The need to maintain farm records. ▪ The important use of farm records. ▪ Important farm records & their maintenance (dairy, cash book, labor wage register, stock register & inventory).

JULY- 2023 No. of days-24	<u>PRACTICAL-20 (PERIODS)</u> 1. Rain gauge. 2. USWB class a pan evapor meter. 3. Maximum thermometer. 4. Mould board plough.	<u>PRACTICAL-20 (PERIODS)</u> 1. Solid profile. 2. Surface irrigation method. 3. Drip irrigation method. 4. Sprinkler irrigation method.	<u>PRACTICAL-20 (PERIODS)</u> 1. Self help groups (SHG). 2. Dairy co operative society. 3. Primary agricultural credit co operative society (PACS) - functions. 4. NABARD- functions.
	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I

<p>AUGUST - 2023 No. of Days - 25</p>	<p style="text-align: center;"><u>THEORY-18(PERIODS)</u></p> <p><u>Agro meteorology:</u></p> <ul style="list-style-type: none"> ▪ Wind, solar radiation- Air temperature, soil temperature, atmospheric pressure, humidity & evaporation & their utility in crop production. ▪ Drought & their effects on crop production. ▪ Weather forecasting- importance. ▪ Weather hazards & their mitigation- cyclones, depression, tsunami, and frost hail storms, hurricanes & tornado. ▪ Remote sensing & its application in agriculture. <p>3. <u>Tillage & Tith:</u></p> <ul style="list-style-type: none"> ▪ Definition objectives & factors influencing tith. ▪ Characteristics of good seeded. ▪ Types of tillage- primary tillage, second tillage & inter-cultural operations. 	<p style="text-align: center;"><u>THEORY-18(PERIODS)</u></p> <p>02. <u>Mineral nutrition, manures & fertilizers:</u></p> <ul style="list-style-type: none"> ▪ Introduction. ▪ Essential elements- classification functions & deficiency symptoms. ▪ Classification of manures & fertilizers, soil testing. ▪ Biogas plant, green manuring types & crops & vermicomposting. ▪ Bio fertilizers. ▪ Fertilizers application methods. ▪ Balanced fertilization & integrated nutrient management. 	<p style="text-align: center;"><u>THEORY-18(PERIODS)</u></p> <p>03. <u>Agricultural marketing:</u></p> <ul style="list-style-type: none"> ▪ Meaning of agricultural marketing. ▪ Definitions of agricultural marketing. ▪ Importance of agricultural marketing. ▪ Classification of markets. ▪ Functions of markets. ▪ Defects in present marketing system. ▪ Step taken for improving agricultural marketing to safeguard farmers. ▪ Regulated markets. ▪ Marketing channels. ▪ Concept of rythu bazaars.
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	<u>PRACTICAL - 18(PERIODS)</u>	<u>PRACTICAL - 18(PERIODS)</u>	<u>PRACTICAL - 18(PERIODS)</u>
		5. Methods of preparation of farm yard manure.	
	5. Types of sprayers. 6. Visit to nearby Agro meteorological station. 7. Tillage- differentiates between primary & secondary tillage. 8. Primary tillage impacts. 9. Secondary tillage impacts.	6. Procedure for preparation of vermieom post. 7. Procedure for determination of soil pit. 8. Determine soil moisture Content (gravimetric method). 9. Determine maximum water holding capacity. 10.	5. Basic types of farm records. 6. Classification of audio visual aids. 7. Different types of charts.
	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>

<p>SEPTEMBER 2023 No. of days - 22</p>	<p style="text-align: center;"><u>THEORY-17 (PERIODS)</u></p> <p><u>Tillage & Tithh:</u></p> <ul style="list-style-type: none"> ▪ Primary & secondary tillage implements (ploughs, harrows, activators, ridges, rotovator, leveler & peddler). ▪ Seeding implements- seed drill ferity cum seed drill, paddy transplanted, and paddy seed drum. ▪ Harvesting implements- paddy combined harvesters. ▪ Modern concepts of tillage- minimum tillage, zero tillage, stubble mulch tillage. <p>8. <u>Cropping system:</u></p> <ul style="list-style-type: none"> ▪ Concept of cropping system & terminology of multiple cropping. ▪ Intercropping- principles, advantages & limitations. ▪ Relay cropping & sequence cropping. ▪ Crop rotation- principles & advantages. ▪ Farming system- mixed farming advantages. 	<p style="text-align: center;"><u>THEORY-17 (PERIODS)</u></p> <p>3. <u>Irrigation water management:</u></p> <ul style="list-style-type: none"> ▪ Introduction. ▪ Definition & objectives of irrigation drainage. ▪ Soil moisture availability. ▪ Water requirement of crops. ▪ Water management practices for major field & horticultural crops of Andhra Pradesh. ▪ Methods of irrigation. 	<p style="text-align: center;"><u>THEORY-17 (PERIODS)</u></p> <p>4. <u>Farm credit:</u></p> <ul style="list-style-type: none"> ▪ Meaning, definition & need of farm credit. ▪ Classification of farm credit. ▪ Sources of credit. ▪ National bank for agriculture & rural development (NABARD). ▪ Regional rural banks (RRB) ▪ Kisan credit cards. ▪ Crop insurance.
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	<p align="center"><u>PRACTICAL-17(PERIODS)</u></p> <p>10. Differentiate between grasses & sedges.</p> <p>11. Herbicide label information.</p> <p>12. Seed rate calculation.</p> <p>13. Fertilizer calculation.</p>	<p align="center"><u>PRACTICAL-17(PERIODS)</u></p> <p>10. Classification of different fertilizers.</p> <p>11. Forms of nitrogenous fertilizers.</p> <p>12. Classify the polosphatice fertilizers.</p> <p>13. Classify the potassic fertilizers.</p> <p>14. Fertilizer calculation.</p>	<p align="center"><u>PRACTICAL-17(PERIODS)</u></p> <p>8. Phases of method demonstration.</p> <p>9. Method demonstration to farmers.</p> <p>10. Advantages or fermentation on audio visual aids.</p> <p>11. Advantages of farm records.</p>
	<p align="center">ASSIGNMENT TO BE CONDUCTED VERY WEEK END & QUARTERLY EXAMINATIONS</p>	<p align="center">ASSIGNMENT TO BE CONDUCTED VERY WEEK END & QUARTERLY EXAMINATIONS</p>	<p align="center">ASSIGNMENT TO BE CONDUCTED VERY WEEK END & QUARTERLY EXAMINATIONS</p>
	<p><u>THEORY-16(PERIODS)</u></p> <p>5. <u>Weed management:</u></p> <ul style="list-style-type: none"> ▪ Common weeds losses & benefits. ▪ Crops weed capitation. ▪ Methods of weed control. ▪ Classification of herbicides. ▪ Chemical weed control in different crops (rice, black groan, groundnut, cotton, onion& mango) & integrated weed management. 	<p><u>THEORY-16(PERIODS)</u></p> <p>3. <u>Irrigation water management:</u></p> <ul style="list-style-type: none"> ▪ Quality of irrigation water. ▪ Drainage system. <p>4. <u>Dry land agriculture:</u></p> <ul style="list-style-type: none"> ▪ Introduction. ▪ Characteristics of dry land & rain fed agriculture. ▪ Problems of dry land agriculture- climate & soil. 	<p><u>THEORY-16(PERIODS)</u></p> <p>5. <u>Agriculture cooperation:</u></p> <ul style="list-style-type: none"> ▪ Meaning & definition of cooperation. ▪ Aims of cooperation. ▪ Principles of cooperation. ▪ Cooperative sociefies act- features. ▪ Cooperative credit structure. <p>6. <u>Agriculture extension:</u></p> <ul style="list-style-type: none"> ▪ Meaning of extension education. ▪ Objectives of agriculture extension education. ▪ Difference B/W formal & extension education.

OCTOBER – 2023 No. of days - 18	<u>PRACTICAL-16 (PERIODS)</u> 15. Agro meteorological observatory. 16. Soil thermometer- measurement of soil temperature. 17. Seed bed preparation. 18. Procedure for neem seed kernel extract.	<u>PRACTICAL-16 (PERIODS)</u> 15. Factors affecting the preparatory of farm yard manure. 16. Differentiate between drip & sprinkler irrigation. 17. Reagents used in determination of drip. 18. Green manures.	<u>PRACTICAL-16 (PERIODS)</u> 12. Identification of the charts & indicating the purpose. 13. Preparation of the charts.
	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III
	<u>THEORY-17(PERIODS)</u> 6. Sustainable Agriculture: <ul style="list-style-type: none"> ▪ Introduction & definition. ▪ Major components of sustainable agricultural systems. ▪ Organic farming – definitions, principles, relevance to modern agriculture, components of organic farming. 	<u>THEORY-17(PERIODS)</u> 4. Dry land agriculture: <ul style="list-style-type: none"> ▪ Soil erosion- water and wind erosion, losses due to erosion. ▪ Soil & moisture conservation agronomic. Mechanical & agrostologic measures. ▪ Efficient crops & cropping systems for dry lands. 	<u>THEORY-17(PERIODS)</u> 6. Agricultural extension: <ul style="list-style-type: none"> ▪ Extension teaching methods. ▪ Audio visual aids. ▪ Communication process & problems. ▪ Mass communication media. ▪ Methods & result demonstration.

NOVEMBER- 2023 No. of day-25	<ul style="list-style-type: none"> ▪ Bio control agents & bio pesticides. 	<ul style="list-style-type: none"> ▪ Watershed management- watershed concept, principles of watershed management. 	<ul style="list-style-type: none"> ▪ Exhibition. ▪ Leadership. ▪ Self help groups. ▪ Rythu mitra groups. ▪ Group dynamics. ▪ Farmers training centers. ▪ Kisan vigyan kendras. ▪ DAATTCS ▪ Participatory rural appraisal.
	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS
	<u>PRACTICAL-17 (PERIODS)</u> 19. Herbarium preparation. 20. Weeds- identification (common name, scientific name & family). 21. Different herbicide application methods. 22. Precautions- herbicide application identification. (Section-05 practical manual)	<u>PRACTICAL-17 (PERIODS)</u> 19. Soil sampling. 20. Agronomical measure- soil & water conservation. 21. Different methods of fertilizers applications. Identification (Section-05 Practical manual)	<u>PRACTICAL-17 (PERIODS)</u> 14. Market channels. 15. Market channels for food grains & oilseeds.
DECEMBER 2023	ON THE JOB TRAINING	ON THE JOB TRAINING	ON THE JOB TRAINING
No of Days - 24	UNIT - 4	UNIT - 4	UNIT - 4

JANUARY- 2024 No of Days - 20	REVISION PRE-FINAL EXAMS -1	REVISION PRE-FINAL EXAMS -1	REVISION PRE-FINAL EXAMS -1
FEBRUARY- 2024 No of Days - 21	IPE MODEL PAPERS PRACTICING IPE MARCH – 2024. PRACTICAL EXAMS	IPE MODEL PAPERS PRACTICING IPE MARCH – 2024 PRACTICAL EXAMS	IPE MODEL PAPERS PRACTICING IPE MARCH – 2024 PRACTICAL EXAMS
MARCH- 2024 No of Days - 24	IPE March-2024 EXAMINATIONS	IPE March-2024 EXAMINATIONS	IPE March-2024 EXAMINATIONS

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Annual academic plan 2023-2024(SECOND YEAR)

Crop production & management – 109

Month & No Of Working Days	Management of field and commercial crops VT4 & VP4	Management of horticultural crops VT5 & VP5	Seed production & processing VT6 & VP6
June 2023 No ofNo days- 24	<u>THEORY-20(PERIODS)</u> 1.Cereali & Millets (Cultivation practices & plant Protection) -Rice -Maize -Jowar -Bajra -Ragi	<u>THEORY-20(PERIODS)</u> 1.Introduction : 1.1 – Definition 1.2 -- Importance of Horticulture 1.3 -- Scope of horticulture 1.4 – Divisions of horticulture 2.Propagation methods & nursery management 2.1 – Plant propagation , sexual ,Asexual methods of propagation 2.2 – propagation of plants through speciatized structures 2.3 - propagation of plants by cutting 2.4 - propagation of plants by layering 2.5 - propagation of plants by grafting 2.6 - propagation of plants by budding 2.7 – Raising of Nursery	<u>THEORY-20(PERIODS)</u> 1. Plant Breeding: 1.1 – Plant breeding 1.2 - Modes of pollination 1.3 - Male sterility 1.4 - Vegetative Reproduction 1.5 - Hybridization
JULY-2023 No. of days- 24			

	<p><u>PRACTICAL-20(PERIODS)</u></p> <ol style="list-style-type: none"> 1. Importance rice varieties – important characteristic features 2. Seed treatment – different types & procedure 3. Different types of rice nurseries 4. Rice crop – major pests 5. Different methods of fertilizer application 6. Collection of data in groundnut crop.. 	<p><u>PRACTICAL-20(PERIODS)</u></p> <ol style="list-style-type: none"> 1. Pests of vegetable crops 2. Pests of mango 3. Diseases of Banana 4. Different methods of layering 5. Different methods of grafting 6. Diseases of Mango 	<p><u>PRACTICAL-20(PERIODS)</u></p> <ol style="list-style-type: none"> 1. Management of insect pest during storage 2. Seed treatment – methods advantages 3. Components of physical pwater analysis 4. Determination of seed moisture..
	<p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I</p>	<p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I</p>	<p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - I</p>
<p><u>AUGUST-2023</u> No.ofDays - 25</p>	<p><u>THEORY-18(PERIODS)</u></p> <p><u>2. Pulses</u> --Red gram -- Bengal gram --Black gram --Green gram</p> <p><u>3. Oilseeds</u> -- Groundnut --Sunflower</p>	<p><u>THEORY-18(PERIODS)</u></p> <p><u>3. Land scaping:</u> 3.1 – Importance 3.2 – Elements of landscape 3.3 – Principles of landscape design 3.4--Establishment an maintenance of lawn</p> <p><u>4 . Production of fruit crops</u> Mango , Banana</p>	<p><u>THEORY-18(PERIODS)</u></p> <p><u>2 . Seed</u> 2.1 – Difference between seed and grain 2.2 – Characters of quality seed 2.3 – Classes of seed 2.4 – Principles of seed production 2.5 – Maintenance of genetic purity in released varieties</p>
	<p><u>PRACTICAL-18(PERIODS)</u></p> <ol style="list-style-type: none"> 7. Herbicide application (pre-Emergence) – field crops 8. Intercultural & thinning operations – field crops 9. Important characteristics features of redgram varieties 10. Seed bed preparation for irrigated & dry land crops 11. Different methods of sowing field crops 12. 25 square meter plot area of greengram crop note down the observation 	<p><u>PRACTICAL-18(PERIODS)</u></p> <ol style="list-style-type: none"> 7. Diseases of vegetable crops 8. Preparation of nursery beds 9. Intercultural operations – fruit crops 10. Pests of Banana 11. Diseases of citrus 12. Different methods of budding. 	<p><u>PRACTICAL-18(PERIODS)</u></p> <ol style="list-style-type: none"> 5. Seed viability(TZ – Test) 6. Seed vigour – methods of seed vigour tests 7. Purpose & steps involved in seed certification 8. Detail about seed sampling 9. Pelleting – Definition, Benefits 10. Advantages of seed testing 11. Chemical methods of seed treatment

	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & <u>UNIT-II</u>
SEPTEMBER 2023, No. Of days-22	<u>THEORY-17(PERIODS)</u> 3.Oil seeds Castor Sesamum Saf flower 4.Fibers Cotton Mestha	<u>THEORY-17(PERIODS)</u> 4.Production of fruit crops Citrus Papaya 5.Production of vegetable crops Tomato Okra/bendy /ladies finger Brinjal Amaranthus Spinach/Palk	<u>THEORY-17(PERIODS)</u> 3.SeedProductionTechniquesofvarieties & Hybrids 3.1 Rice 3.2 Maize 3.3Jawar 3.4 sun flower 3.5cotton 3.6Groundnut 3.7 Black gram 3.8 Red Gram
	<u>PRACTICAL-17(PERIODS)</u> 13. Important operations performed in sugar cane crops. 14. Gypsum application methods 4 stages of crop 15. Deficiency symptoms of ground nut crops 16. Important Research station & K.V.K 17. Seed rate calculation 18. Fertilizer calculation 19. Fertilizer calculation	<u>PRACTICAL-17(PERIODS)</u> .13. Raising of vegetables seedings in Nursery 14.Preparation of potting mixture. 15.special Problems in first crops 16.Different types of preming in Rose 17.pests of Citrus 18.vists to fruits makets 19.Morphological Characters- Vegetables & Spice Crop 20.Cashew nuts & Coconut- Manures & Fertilizer application. 21.visit to vegetables form 22.Fruit Crops-,anures& Fertilizer Application	<u>PRACTICAL-17(PERIODS)</u> 12.Roughig in castor. 13.Dataselling in Maize 14.Evaluation of seedings in germination test as per ISTA 15.Good Characters of medium(sand/paper) 16.Purpose & uses of Got
	ASSIGNMENT TO BE CONDUCTED VERY WEEK END & <u>QUARTERLY EXAMINATIONS</u>	ASSIGNMENT TO BE CONDUCTED VERY WEEK END & <u>QUARTERLY EXAMINATIONS</u>	ASSIGNMENT TO BE CONDUCTED VERY WEEK END & <u>QUARTERLY EXAMINATIONS</u>

OCTOBER-2023 No.ofdays-18	THEORY-16(PERIODS) 5. <u>Sugar Crops</u> Sugar Cane	THEORY-16(PERIODS) 6. <u>Production of Flower Crops</u> 6.1 Rose 6.2 Jasmine 7.<u>Production of plantation crops</u> 7.1 Cashew nut 7.2 Coconut	THEORY-16(PERIODS) 3. <u>Seed Certification</u> 4.0 Seed Certification 4.1 Seed threshing 4.2 Seed drying 4.3 Seed processing 4.4 Seed cleaning 4.5 Seed treatment 4.6 Seed packing 4.7 Seed Storage	
	PRACTICAL-16(PERIODS) 20.Procedure of Rhizobium seed treatment in legumes 21. Paddy transplanter merits – demerits 22. Diseases of Rice Crop 23. Rice Crop- data collection on yield attributes & yield characters	PRACTICAL-16(PERIODS) 23. Nutritional deficiency symptoms in vegetable crops 24.Approach & in arching methods of grfting 25.visit to florist shop 26.vegetable crops- manures & fertilizers in vegetables crops 27.morphological characters-flower& spice crops 28.Planting & care of fruit crops 29.morphological characters of fruits & plantation crops.	PRACTICAL-16(PERIODS) 17. causes of Dormancy 18.packing material 19.charachters of ideal seed storage 20.function of seed Certification Agency.	
	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III.	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT - III	
NOVEMBER-2023, No.ofday-25	THEORY-17(PERIODS) 6 . <u>Narcotics.</u> --Tobacco	THEORY-17(PERIODS) 7 .<u>Production of spice crops</u> ■ chillies ■ Turmeric ■ Onion	THEORY-17(PERIODS) 5 <u>Seed Testing</u> 5.1 – Moisture 5.2 - physical purity 5.3 - Genetic purity 5.4 - Viability 5.5 - Vigour 5.6 - Seed germination 5.7 - Seed Dormency 5.8 - Seed act 5.9 - Intellectual property rights	

	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS	ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & HALF-YEARLY EXAMINATIONS
	<u>PRACTICAL-17(PERIODS)</u> 24. steps in preparation of Herbarium 25.various operations performed in tobacco crop 26.deficiency symptoms of macro Nutrients- cotton & Rice Crops. Identification (Section as per practical/manual)	<u>PRACTICAL-17(PERIODS)</u> 30. Different types of Irrigation methods 31.classification of layering. 32.classification of grafting. 33.Advantages of Mulching. 34.Differentiate between training & pruning. 35. Differentiate between grafting & budding. 36. Differentiate between basin and modified basin methods of irrigation. 37.Advantages of nursery. 38.seed Treatment of Vegetable seeds.	<u>PRACTICAL-17(PERIODS)</u> 20. Differentiate the pure seed & weed seed b. Fumigation & slurry treatment c. Seed Dormancy & seed Germination d. stratification & scarification 22. calculate moisture percentage. 23. Advantage of Got. 24. Advantages of seed treatments.
DECEMBER 2023 No ofDays-24	ON THE JOB TRAINING UNIT – 4	ON THE JOB TRAINING UNIT - 4	ON THE JOB TRAINING UNIT - 4
JANUARY-2024 No ofDays- 20	REVISION PRE-FINALEXAMS-1	REVISION PRE-FINALEXAMS-1	REVISION PRE-FINALEXAMS-1
FEBRUARY-2024 No ofDays-24	IPE MODEL PAPERS PRACTICINGIPEMARCH–2024 PRACTICALEXAMS	IPE MODEL PAPERS PRACTICINGIPEMARCH–2024 PRACTICALEXAMS	IPE MODEL PAPERS PRACTICINGIPEMARCH–2024 PRACTICALEXAMS
MARCH-2024 No ofDays-21	IPEMarch-2024 EXAMINATIONS	IPEMarch-2024EXAMINATIONS	IPEMarch-2024EXAMINATIONS

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LIVESTOCK MANAGEMENT AND DAIRYING

ANNUAL ACADEMIC PLAN 2023 -2024				
LIVESTOCK MANAGEMENT AND DAIRYING (LM&D-110) FIRST YEAR				
Month & No of working days/No of Periods	RUMINANT LIVESTOCK PRODUCTION AND MANAGEMENT VT1 & VP1	NONRUMINANT LIVESTOCK PRODUCTION AND MANAGEMENT VT2&VP2	FEEDS AND FEEDING OF LIVESTOCK VT3 & VP3	Assignments/ unit tests
JUNE 2023 No of working days 24	<p>THEORY-25 Periods 1. Introduction-confirmation points of different Ruminants (05) Livestock statistics -Dairy animals, Sheep and Goat, Role of Livestock in Indian economy, Common terms used in Farm Animal Management, External body parts of Dairy animal, Sheep and Goat</p>	<p>THEORY-20 PERIODS 1. POULTRY PRODUCTION – (JUNE 20 +JULY 25 +AUGUST 25=75) Poultry statistics -Role of Poultry production in Indian economy, Common terms used in poultry production, External body parts of Fowl, Reproductive system of Hen and Cock, Formation of egg and structure of an egg,</p>	<p>THEORY-20 Periods 1.FODDER PRODUCTION –(20) Study of soils for Fodder production, Importance of green fodder feeding, Crop rotation, Study of different forage farm equipment -Ploughing, Harrowing, Planking etc, General principles of irrigation, fertilizers requirement in fodder production, Cultivation practices of common fodder crops, Silvi pasture-Hortipastures. PRACTICALS-20 Periods 1.Fodder production –(20) Study of soil types, Study of forage farm implements /equipments, Application of fertilizers, Irrigation of fodder crops, Weeding of fodder crops, Cultivation of annual legumes, Cultivation of perennial legumes, Cultivation of cereal fodders, Cultivation of perennial grasses, Development of pasture lands and selvipastures, Harvesting of fodder crops, Compost making -</p>	<p style="color: green;">Assignment to be conducted on every week end</p>

<p>JULY, 2023 No of working days 24</p>	<p>2.Breeds of Dairy Cattle Buffaloes, Sheep and Goats (20) Definition of breed -Classification of Indian Cattle Breeds, Important Indian breeds of Dairy Cattle, Important Exotic Dairy Breeds, Important Indian Buffalo Breeds, Classification of Indian Sheep Breeds -Important Breeds, Important Exotic Sheep Breeds, Classification of Indian Goat Breeds -Important Goat breeds, Important Exotic Goat Breeds. PRACTICALS-25 1.Confirmation Points of Cattle, Buffalo, Sheep and Goats - (10) Confirmation points of cow, Confirmation points of Bull, Confirmation points of Ewe, Confirmation points of Ram, confirmation points of Doe, Confirmation points of Buck. 2.Breeds of ruminant Livestock-(15) Identification of Cattle Breeds, Identification of Buffalo breeds, Identification of Sheep breeds, Identification of goat breeds.</p>	<p>1.POULTRY PRODUCTION(25)Classification of Poultry, Important indigenous and Exotic breeds of Poultry like Aseelvarieties, White leghorn, Rhode Island Red, Plymouth Rock, Cornish and New Hampshire, Deep litter and cage systems of Poultry housing, Housing systems for Brooders, growers, layers and broilers, Selection and culling of poultry, Breederflock management - Systems of breeding in poultry, Brooding and rearing practices used for chicken. PRACTICALS-30 Periods 1.POULTRY PRODUCTION – (July30+Aug45Periods=75) Confirmation points of Fowl, Identification of poultry breeds, Deep litter system, Cage system Brooding of Chicks, Culling of birds at different age groups, Vaccination schedule, Feeders and waterers, Debeaking.</p>	<p>vermiculture preparation, Visit to fodder Farmand grass lands. THEORY-20 Periods 2.FODDER CONSERVATION -(10) Chaffing of fodders -Advantages -Disadvantages, Improvement of low quality roughages and non conventional feeds-Urea paddy straw treatment, Aims of fodder Conservation -Advantages and disadvantages, Importance of feeding Silage to animals, Design of Silo pit, method of silage making Method of hay making. 3.COMMON FEEDS AND FODDERS-(10) Classification of Nutrients and their role in Animal Nutrition, Importance of analysis of feeds, Classification of feeds, Composition of commonly used Feeds and Fodders PRACTICALS-20 Periods 2.FODDER CONSERVATION –(10) Chaffing of fodder, Silage preparation, Hay making, Improve the nutritive values of poor quality roughages, Forage farm records. 3.COMMON FEEDS AND FODDERS – (10) Identification of common feed ingredients, Identification of common unconventional ingredients, Identification of feed additives, Identification of Agro Industrial by products.</p>	<p>Assignment to be conducted on every week end & Unit I</p>

<p>AUGUST 2023 No of working days 25</p>	<p>THEORY-30 Periods 3.Selection and breeding of Ruminant Livestock –(15) Selection of Dairy animals, Sheep and Goat for Breeding, Selection of Sheep and Goat for Mutton purpose, Culling of Ruminant animals, System of Breeding - Inbreeding, Cross breeding and Gradingup, State and national policies for enhancing Livestock production. 4.Housing of, Hygieneand Sanitation of Livestock forms-(15) Selection of Site for Livestock Forms, Systems of Housing for cattle -Loose housing system -Conventional Dairy barn, Floor space requirements and various buildings required for Dairy sheep and goat farms, Cleaning and Sanitation in Livestock farms, Bio-Gas Plant, Vermi Culture. PRACTICALS-35 3.Breeding for Ruminant Livestock (15) Selection of cow and buffalo by score card method, Culling of Dairy animals, Selection of Sheep and Goat, Culling of Sheep and goat. 4.Housing ofCattle,buffalo, sheep and goat –(20) Floor plans for Loose Housing system, Floor plans for Conventional system, Floor plans for single row, double row, face to face and tail to tail system, Housing for Sheep, Housing for goat, Cleaning and sanitation of animal shed s, Study of Bio-Gas plant Study of Vermicompost.</p>	<p>THEORY-25 PERIODS 1.POULTRY PRODUCTION –(25) Care and management of different classes of Layers, Care and management of Broilers, Summer management of Poultry, Transportation of day old chicks and adult birds, Poultry farm routine, Cleaning and sanitation in poultry sheds, Identification of poultry, Debeaking and vaccination schedule, Layout of Hatchery and Hatchery practices, Incubaters and setters in Hatchery, Selection care and incubation of hatching eggs, Sexing grading packing and dispatch of chicks, Disinfection and fumigation of hatchery equipment biosecurity in hatchery, New breeds /strains developed for backyard poultry, Backyard poultry management, Management of ducks, quilturkey and guinea fowl. PRACTICALS- 45 Periods POULTRY PRODUCTION-(45) Summer management of poultry, Production of clean eggs, candling of eggs, Selection and storage of hatching eggs, Layout of hatchery and hatchery practices -factors affecting Fertility and Hatchability, Study of incubator setter and hatcher, Cleaning disinfection and fumigation of hatchery equipment, Sexing of day old chicks -Hatchery records and maintenance, Deworming schedule in poultry, practice of vaccination and medication in poultry,</p>	<p>THEORY-35 Periods 4.FORMULATION OF RATIONS –(10) Definition of Ration and Feeding standards, Desirable characters of Good ration, Thumb rules of Feeding Cattle, Buffaloes, sheep and goat. ,Principles Formulation of rations for different classes of animals, Formulation of milk replacer and starter, Formulation of concentrate feed. 5.FEEDING OF DAIRY ANIMALS –(25) Feeding of new born calf, Feeding of Calf up to 1year age, Feeding of Heifer, milch and dry animals, Feeding of Pregnant and newly calved animal , Feeding of animals during drought and cyclone. PRACTICALS-35 Periods 4.FORMLATION OF RATIONS –(10) Thumb rules of feeding cattle and buffaloes, Formulation of milk replacer and calf starter, Formulation of ration for milch animals, Formulation of ration for pregnant, dryand work animals, Formulation of ration for different classes of sheep and goat, Formulation of ration for different classes of pigs, Formulation of ration for starters, growers and layers, Formulation of ration for different age groups of broilers, Formulation of ration for different classes of Rabbits, Formulation of ration for different classes of dogs and Cats.</p>	<p>Assignment to be conducted on every week end & Unit II</p>
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		Visit to poultry farm and hatchery to observe the practices.	5.FEEDING OF DAIRY ANIMALS –(25) Feeding of new born animals, Feeding of pregnant animals, Feeding of milch animals, Feeding of dry animals, Feeding during Disasters, Feeding of Bulls and bullocks.	
SEPTEMBER 2023 No of working days 22	<p>THEORY-25 Periods</p> <p>5.Care and Management of Ruminant Livestock -(25)</p> <p>Starting of new Dairy sheep and Goat farms, Care and Management of Calf, heifer, milch, dry and pregnant cattle, Care and management of bulls and bullocks, Care and management of kids and lambs, Care and Management of young sheep and goat, Care and Management of pregnant ewe and doe, Care and management of Ram and Buck, Management of animals during transport.</p> <p>PRACTICALS -25</p> <p>5.Care and management of Ruminant Livestock –(25)</p> <p>Management of Calf, Management of Heifer, Management of milch animal, Management of dry and pregnant animal, Management of bull and bullock, Management of different classes of goat, Management of Livestock during transport.</p>	<p>THEORY -20 PERIODS</p> <p>2.SWINE PRODUCTION – (September 20+October20Periods=40)</p> <p>Role of Swine Production in Indian economy, Common terms used in Swine production, External body parts of Pig, Restraining of pigs, Important Exotic and Indigenous breeds of Swine, Reproductive system Sow and Boar, Systems of breeding in Pigs Selection and culling of pigs.</p> <p>PRACTICALS-20</p> <p>SWINE PRODUCTION (september 20+October20=40periods)</p> <p>Confirmation points of Sow, Confirmation points of Boar, Identification of pig breeds, Methods of restraining in pigs, Methods of identification in pigs, Layout of Swine shed,</p>	<p>THEORY-20 Periods</p> <p>6.FEEDING OF SHEEP AND GOAT – (10)</p> <p>Feeding of Breeding stock, Feeding of pregnant Ewe and Doe, Feeding of new born and orphans, Creep Feeding, Feeding of Ram Lambs,</p> <p>7.FEEDING OF PIGS AND RABBITS – (10)</p> <p>Feeding of piglet, Feeding of Gilt, Feeding of Sow, Feeding of Boar, Feeding of different age groups of Rabbits</p> <p>PRACTICALS-20 Periods</p> <p>6.FEEDING OF SHEEP AND GOAT – (10)</p> <p>Feeding of breeding stock, Feeding of pregnant Ewe and Doe Feeding of newborn and orphans, creep feeding, Feeding of ram lambs.</p> <p>7.FEEDING OF PIGS AND RABBITS – (10)</p> <p>Feeding of Piglet, gilt, Sow, Boar and different age groups of Rabbits</p>	<p>Assignment to be conducted on every week end &Quarterly examinations</p>

<p>OCTOBER 2023 18 days</p>	<p>THEORY-15 6.Activities in Livestock Farms–(15) Dairy farm, Sheep and goat farm daily routine activities, Restraining methods of Dairy cattle, sheep and goat, Dentition and ageing of animals, Methods of identification in Dairy cattle, sheep and goat farms, Common vices of Dairy animals, sheep and goat, Weaning of calf, Lamb and kid, Grooming, disbudding, hoof trimming, castration and de-ticking, Dipping, clipping and shearing operations. PRACTICALS-20 6.Activities in Livestock farms –(20) Feeding of Colostrum to new born calves, lambs and kids, Weaning of calf, lamb and kid, Deworming, Vaccination schedule for Dairy animals, Vaccination schedule for sheep and goat, Castration, Disbudding, Deticking in animals, Grooming and washing of animals, Dipping and spraying, Clipping and shearing, Animal restraining methods, Preparation of animals for shows, Dairy farm routine, observation of dentition and ageing of Livestock, Identification methods for Ruminant Livestock, clean milk practices, study of Dairy farm records Study of sheep and goat farms records .</p>	<p>THEORY-20 Periods 2.SWINE PRODUCTION –(20) Housing for different classes of pigs, Care and management of different classes of pigs, Swine farm routine, Dentition and ageing of Pigs, Identification of pigs, Weaning, Castration, Slaughter and dressing of pigs. PRACTICALS-20 2.SWINE PRODUCTION –(20) Layout of Swine shed, Selection of pigs for breeding, Selection of pigs for meat, Care of pigs during transport, Summer management in pigs, Visit to Swine farm to observe practices.</p>	<p>THEORY- 20 Periods 8.FEEDING OF POULTRY –(10) Feeding of chicks, growers and layers in poultry, Feeding of different age groups of broilers, Feeding of ducks, quills ,Guinea fowls and turkeys. 9.FEEDING OF DOG AND CAT –(05) Feeding of different classes of dogs, Feeding of different classes of Cats. 10.QUALITY CONTROL OF FEEDS – (05) Procurement &storage of feed ingredients, Methods of detection of feed adultrants, Quality control of finished feed, Packing and forwarding of feeds, Cleaning and fumigation of stores, Use of pesticides in feed stores to control biological agents, Spoilage of feed during storage PRACTICALS 15Periods 8.FEEDING OF POULTRY –(05) Feeding of starters, growers and layers in poultry, Feeding of different age groups of broilers, Feeding of ducks, quills, gunia fowls and turkey. 9.FEEDING OF DOGS AND CATS – (05) Feeding of different classes of dogs, Feeding of different classes of cats. 10.QUALITYCONTROLOFFEEDS -(05) Sampling of feed ingredients for examination, Detection of adultrants in feed ingredients, Quality control tests for feedingredients.</p>	<p>Assignment to be conducted on every week end & Unit III</p>
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<p>NOVEMBER 2023 No of working days 25</p>	<p>THEORY-40 7.Reproductive System and Artificial Insemination –(25) Reproductive system of Cow, Ewe and Doe, Reproductive system of Bull, Ram and Buck, Oestrous cycle -Symptoms of Heat, A. I advantages and disadvantages, Pregnancy Diagnosis, Parturition - Assistance and other precautions, Study of obstetrical equipment. 8.LactationandMilking methods-(15) Mammary gland, structure and development, Lactogenesis and Galactopoiesis, Milk let down, Milking methods, Sources of Milk contamination- sSteps in Clean milk production, Marketing of Milk. PRACTICALS-30 7.Reproductive system and A. I-(20) Reproductive organs of cow, Ewe, Doe, Bull, Ram and Buck, Preparation and study of Artificial Vagina, Sterilization of A. I equipment, Demonstration of semen collection methods, Examination of semen, Practicing of A. I, Maintenance of Alrecords, Sudy of obstetrical equipment. 8.Lactation and Milking methods –(10) Practicing of milking methods, Clean Milk production steps.</p>	<p>THEORY-20 Periods 3.RABBIT PRODUCTION –(10) Common terms used in Rabbit Production, External body parts of Rabbit, Important indigenous and Exotic breeds of Rabbit, Housing for different classes of Rabbits, Systems of breeding in Rabbits, Care and management of different classes of Rabbit, Rabbit farm routine and miscellaneous activities in rabbit farm, Identification and weaning. 4.PET ANIMAL PRODUCTION –(10) Common terms used in pet animals, External body parts of Dog and Cat, Important breeds of dogs and cats, Care and management of different classes of dogs, Care and management of different classes of Cats, Grooming, nail trimming and washing of dogs and cats Deworming and Deticking, Vaccination schedule for Dog and Cat. PRACTICALS-20 Periods 3.Rabbit Production –(10) External body parts of Rabbit, Identification of Rabbit breeds, Housing of Rabbits, Summer management of Rabbits ,Selection and culling of Rabbits, Cleaning and sanitation of Rabbit sheds, Visit to Rabbit farm to study the practices. 4.PET ANIMAL MANAGEMENT –(10) External body parts of Dog, External body parts of Cat, Identification of dog breeds, Identification of Cat breeds, Handling and restraint of dogs, Handling and restraint of cats, Use of different types of collars, Care of Puppy, Grooming of dog, Nail trimming, Deworming in dogs and cats, Vaccination schedule in dogs, Vaccination schedule in cats.</p>	<p>THEORY- 20 Periods 11.FEED PLANT –(10) Methods of purchasing, procurement of feed ingredients and their physical evaluation, Grinding of feed ingredients equipment, Mixing of feeding ingredients equipment, Pelleting process advantages and disadvantages, Compounding of Feeds objectives advantages. 12.DIGESTIVE SYSTEM-(10) Digestive system of Ruminants, pigs, poultry, Rabbit, Dog and Cat. PRACTICALS-20 11.FEED PLANT-(10) Grinding and Mixing of feed ingredients, Preparation of mash feeds, Packing and labeling of feeds, Cleaning and fumigation of feed stores ,Preparation of urea, molasses, salt bricks ,Visit to feed plant. 12.DIGESTIVE SYSTEM –(10) Sketch the diagram of digestive system of Cattle, Sheep, goat, Pig, Poultry, Rabbit, Dog and Cat.</p>	<p>Assignment to be conducted on every week end & Unit IV</p>
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DECEMBER 2023 No of working days 24	ON THE JOB TRAINING ONE MONTH - HALF YEARLY EXAMINATIONS	HALF YEARLY EXAMINATIONS
JANUARY 2024 No of working days 20	REVISION & PRE FINAL EXAMINATIONS -I	
FEBRUARY 2024 No of working days 24	PRACTICAL EXAMINATIONS& PRE FINAL EXAMINATIONS -II	
MARCH 2024 No of working days 21	THEORY EXAMINATIONS	

PREPARED BY:

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LIVESTOCK MANAGEMENT AND DAIRYING

ANNUAL ACADEMIC PLAN 2023 -2024				
LIVESTOCKMANAGEMENTAND DAIRYING (LM&D-110) II YEAR				
Month & No of working days/No of Periods	LIVESTOCK HEALTH MANAGEMENT VT4 & VP4	DAIRY ECONOMICS, EXTENSION AND QUALITY CONTROL OF MILK VT5&VP5	MILKPROCESSINGANDMILKPRODUCTS VT6 & VP6	Assignments /unit tests
JUNE 2023 No. of working days 24	<p>THEORY-23 Periods</p> <p>1.SIGNS OF HEALTH –(03) Definition of Health and Disease Signs of health and ill-health, Recording body temperature, pulse and respiration rates, Normal values of body temperature, pulse and respiration rates.</p> <p>2.BACTERIAL DISEASES-(20) Classification of Livestock diseases, Anthrax, H. S, , Black Quarter ,Brucellosis, Vibriosis, Tuberculosis, Jhones Disease, Leptospirosis, Listeriosis, Actinomycosis,, Contagious bovine pleuropneumonia, Tetanus, Enterotoxemia Colibacillosis, Swine Erysipelas, Fowl cholera.</p> <p>PRACTICALS-10</p> <p>1. HEALTH-(10) Identification of sick animals ,Recording body temperature, Pulse and respiration rates.</p>	<p>THEORY -20 Periods</p> <p>1.DAIRYECONOMICS(10) Estimation of costs and returns in Dairy farming, Management practices involved to enhance profit in Dairying, Economic institutions supporting Dairy Development Programmes, Project reports to be submitted for financial institutions for 2,10and 50 animals Dairy units.</p> <p>2.MILK PROCUREMENT –(10) Systems of milk collection, systems of milk pricing, Principles involved in pricing of milk products, Planning for milk collection and transportation routes, Measures to increase milk collection during lean season.</p> <p>PRACTICALS-10 Periods</p> <p>1.0DAIRY ECONOMICS – (10)Preparation of project reports for 2,10,50, animal units and 5000 liter units, Calculation of cost of milk production, and milk products.</p>	<p>THEORY-20 Periods</p> <p>1.MILKRECEPTION(10) Milk collection and transportation, Methods of milk preservation, Milk Reception at Dock (un loading, weighing, sampling, grading, dumping), Milk chilling methods and storage.</p> <p>2.FITRATION AND CREAM SEPARATION –(10) Milk filtration Method, Milk Clarification, Cream separation methods, Cream separator -parts and arrangement of parts, Factors affecting efficiency of cream separator, Milk standardization for fat and SNF procedure.</p> <p>PRACTICALS -10 PERIODS</p> <p>MILK SAMPLING TECHNIQUES, PHYSICO - CHEMICAL QUALITY CONTROL TESTS AND MICROBIOLOGICAL QUALITY TESTS – (JUNE10+JULY15) Sampling of milk for physical, chemical and Microbiological Examination, Platform tests, Fat test by Gerber’s Method, Determination of Specific gravity of milk by Lactometer ,Determination of titrableacidity, Sediment test.</p>	<p>Assignment to be conducted on every week end.</p>

<p>JULY 2023 No of working days 24</p>	<p>THEORY-26 Periods 3.VIRAL DISEASES-(16) Rinderpest Foot and mouth disease, Pox diseases :Buffalo pic, Cow pox, Sheep pox, Goat pic, Download, Infectious Bovine rhinotracheites, Ephemeral fever ,Rabies, Blue tongue, Pestispetis de ruminants, Contagious Ecthyma, Hog cholera, Mareks disease, Avian Leucosis complex, Ranikhet disease, Avian Influenza. 4.PROTOZOAN DISEASES-(10) Trypanosomiasis, Babesiosis, Theileriasis, Anplasmosis, Leishmaniasis, Coccidiosis, Amaebiasis.</p> <p>PRACTICALS-20 2.FIRST AID-(20) Study of first aid kit. Maintenance of first aid kit, First aid to woundsburns and scalds.</p>	<p>THEORY -20PERIODS 3.DAIRY DEVELOPMENT PROGRAMMES –(10) Various dairy development programmes operated in India, Operation Flood Aims and achievements, National technology mission for Dairy development. 4.DAIRY COOPARATIVES –(10) Cooperatives Importance of cooperatives Principals of cooperation, Milk cooperatives An and pattern, Functioning of milk cooperative society, Structure and activities of District Milk Union, Role of State Milk cooperative Federation. Records and Registration in milk society, Insurance of Dairy animals</p> <p>PRACTICALS- 20 Periods 2. MILK PROCUREMENT –(10) Working on various systems of milk pricing, Planning of milk collection, Planning for transportation routes . 3.DAIRY COOPERATIVES –(10) Visit to village Cooperative society, Visit to district milk union, Records maintained in milk societies.</p>	<p>THEORY-20PERIODS 3.HEAT TREATMENT OF MILK –(10) Pasteurization -definition -objectives, advantages and disadvantages, Types of Pasteurizations, Batch Pasteurization, HTST pasteurization, UHT pasteurization, Sterilization of milk, Homogenization of milk -definition, advantages and disadvantages, Packing of milk and storage. 4.CLEANING AND SANITIZATION-(10) Detergents and Sanitizers-Desirable characters, Cleaning and Sanitization - Methods -Hand, Machine and CIP systems, Cleaning and Sanitization of cans -Types of can washers, Cleaning and Sanitization of HTST pasteurizers and other equipment.</p> <p>PRACTICALS-15 Periods 1.MILK SAMPLING TECHNIQUES, PHYSICO CHEMICAL QUALITY CONTROL TESTS AND MICROBIOLOGICALQUALITY TESTS(15) Detection of adultrants in milk, Detection of preservatives in milk, MBRT Test, Resazurintest, Standard Plate Count (SPC) test, Direct Microscopic Count test, Colifarm count test, Yeast and Moulds test.</p>	<p>Assignment to be conducted on every week end & UNIT</p>
<p>AUGUST2023 No of working days 25</p>	<p>THEORY-19 Periods 5.HELMINTHIC AND EXTERNAL PARASITE DISEASES –(11) Round worms, Tapeworms, Liver and stomach flukes,</p>	<p>THEORY -20 PERIODS 5.MARKETING-(10) Marketing of Dairy animals, Marketing plans for liquid milks, Strategy for marketing of Milk products, Role of</p>	<p>THEORY-20 Periods 5.LIQUID MILKS–(10) Flavouredmilk, Sterilized milk ,Toned Milk, Double Toned Milk, Recombined milk, Reconstituted milk, Standardized milk,</p>	

	<p>Nasalschistosomiasis, Flies, Ticks and mites.</p> <p>MYCOTIC DISEASES –(08) Ring worm, Aspergillosis</p> <p>PRACTICALS:20Periods 3.SPECIMENS COLLECTION-(20) Collection of various specimens for examination, Collection of dung sample, Collection of milk samples .</p>	<p>advertisement for market promotion, Role of salesman and marketing person's in marketing of Dairy products.</p> <p>6.EXTENSION-(10) Role of extension in Livestock Development, Livestock extension methods, Role of audio visual aids in extension, Training different types of trainings evaluation of training, Adoption process stage of adoption rate of adoption, Constraints to Extension services, Role of information technology in Livestock Extension.</p> <p>PRACTICALS -20Periods 4.MARKETING-(10) Planning for marketing of liquid milk, Survey for consumer demand and satisfaction, Planning for advertisement, Feedback from consumer, Development of strategies after feedback.</p> <p>5.DAIRY EXTENSION –(10) Preparation of Extension teaching materials posters, charts, bulletins and models, Organization of milk producers meeting, Planning for farmers training, Planning for organization of cattle shows and exhibitions, Handling of Audio visual aids.</p>	<p>Irradiated milk, Humanization of milk.</p> <p>6.FAT RICH MILK PRODUCTS –(10) Cream Definition Composition and types of cream, Methods of cream separation, Factors affecting cream separation, Butter Definition Composition and legal standards, Methods of Manufacture of Butter, Types of Butter Ghee Definition Composition and legal standards, Desi method of Ghee preparation Preparation of Ghee from cream</p> <p>PRACTICALS –20 Periods 2.OPERATIONS IN MILK PROCESSING –(20) Study of activities at reception dock, Chilling of milk plate chiller and bulk milk cooler, Study of filters and clarifiers, Study of cream separating parts and assembly, Separation of Cream, Study of HTST pasteurizer, Packing of milk bottles and cans, Packing of milk sachets, Preparation of Sterilized milk batch method, Study of tetra packing Cleaning and Sanitization of Dairy equipment.</p>	<p>Assignment to be conducted on every week end &UNIT II</p>
<p>SEPTEMBER 2023 No of working days 22</p>	<p>THEORY-18 7.PRODUCTION AND SYSTEMIC DISEASES –(12) Ketosis, Milk Fever, Downer Cow syndrome,</p>	<p>THEORY-20 Periods 7.COMPOSITION OF MILK –(10) Definition of milk, PFA designated milks, Composition of milk different</p>	<p>THEORY- 15 Periods 7.ICE-CREAM –(05) Ice cream Definition, composition and legal standards, Methods of preparation of ice</p>	<p>Assignment to be conducted on every week end</p>

	<p>Pregnancy toxemia, Bloat, Acid and Alkaline indigestion, Mastitis, Pneumonia Enteritis, Dermatitis.</p> <p>8.DISEASES OF NEW BORN – (06)</p> <p>Calf scores, Calf Septicaemia, Hypoglycemia and Hypothermia, Piglet Anaemia, Joint ill and septic arthritis.</p> <p>PRACTICALS:20Periods</p> <p>4.LABORATORY EXAMINATION –(20)</p> <p>Operation of Compound Microscope, Examination of Blood Smear, Preparation of blood smear Examination of milk Sample for Mastitis, Examination of skin scrapings.</p>	<p>species, Detailed composition of milk Nutritive Value of milk, Factors affecting the composition of milk.</p> <p>8.PHYSICO CHEMICAL PROPERTIES OF MILK –(10)</p> <p>Colour and flavor, PH and acidity, Specific gravity, Freezing and Boiling of milk, Viscosity and surface tension, Off flavors</p> <p>PRACTICALS-25Periods</p> <p>6.MILK SAMPLE TECHNIQUES –(10)</p> <p>Sampling of milk for physical and chemical examination, Plarformtests for milk, Sampling of milk for microbiological analysis.</p> <p>7.PHYSICO CHEMICAL QUALITY CONTROL TESTS –(SEP 15+OCT15)</p> <p>Fat test by Gerbers Method, Determination of Specific Gravity of milk by lactometer, Determination of Titrable Acidity in milk.</p>	<p>creams, Classification of Ice creams.</p> <p>8.FERMENTED MILK PRODUCTS –(10)</p> <p>Starter cultures Types of cultures, Classification of Fermented Milks, Dahi, Srikhand and Yoghurt, Classification of Cheese varieties, Chaddar and Cottage cheese.</p> <p>PRACTICALS- 25 Periods</p> <p>3.LIQUID MILKS –(10)</p> <p>Preparation of Flavoured milk, Toned Milk, Double Toned Milk, Recombined milk, Reconstituted milk and preparation of Standardized milk.</p> <p>4.FAT RICH PRODUCTS AND ICE CREAM – (15)</p> <p>Study of cream separator, Cream separation, Desi method of Butter preparation, Cremery method of butter preparation, Desi method of Ghee preparation, Cremary method of Ghee preparation, Study of AGMARK labelling of Ghee, Study of ingredients for Ice Cream, Figuring of Ice Cream, Ice cream preparation, Softy Ice Cream preparation.</p>	<p>& Quarterly examinations</p>
<p>OCTOBER 2023 No of working days 18</p>	<p>THEORY-12Periods</p> <p>9.REPRODUCTIVE DISORDERS - (12)</p> <p>Anaestrum, Repeat Breeding, Retained Placenta, Endometritis Pyometra, Infertility Causes and Prevention, Other diseases associated with reproduction,</p>	<p>THEORY-10 Periods</p> <p>9.ADLTRANTS AND PRESERVATIVES –(10)</p> <p>Common adultrants in milk and their detection, Common preservatives in milk and their detection, Adultrants of buffalo milk with cow milk -Hamsa test. Effects of adultrants and</p>	<p>THEORY- 10 Periods</p> <p>9.CONCENTRATED AND DRIED MILKS-(10)</p> <p>Classification of Concentrated Milks, Preparation of Condensed and Evoparated Milk, Dried milks Definition, Types and standards, Preparation of Whole Milk Powder and Skim Milk Powder.</p> <p>PRACTICALS -10PERIODS</p>	<p>Assignment to be conducted on every week end &UNIT III</p>

	<p>Dystocia, Pyometra.</p> <p>PRACTICALS-15 Periods</p> <p>PREPARATION OF MEDICINES – (15)</p> <p>Preparation of Ointments, Preparation of tonics /mixtures.</p>	<p>preservatives on human health.</p> <p>PRACTICALS -15PERIODS</p> <p>7.PHYSCOCHEMICAL QUALITY CONTROL TESTS –(15)</p> <p>Sediment test, Clot on boiling, Detection of adultration in milk, Detection of preservatives in milk .</p>	<p>5.FERMENTED AND COCENTRATED MILK PRODUCTS –(10)</p> <p>Dahi preparation, Shrikhand preparation, Cottage cheese preparation, Study of Condensed milk, Study of evaporated milk, Study of Dried milks .</p>	
<p>NOVEMBER 2023 No of working days 25</p>	<p>THEORY-12 periods</p> <p>10.PRINCIPLES OF DISEASE CONTROL AND PREVENTION – (06)</p> <p>Isolation of sick animals, Quarantine ,Vaccination schedule for Livestock and Poultry, Deworming schedules in Livestock and Poultry, Hygienic disposal of dead animals, Disinfection of premises, Sterilization of equipment hot /cold/chemical methods.</p> <p>11.FIRST AID-(06)</p> <p>Definition of First Aid and it's Principles, Attending to traumatic condition wounds, Attending to poisoning cases, Identification of obstetrical difficulties, First Aid to burns and Scalds attending to Fracture, First Aid kit, First aid during natural calamities.</p> <p>PRACTICALS -30Periods</p> <p>6.SPECIAL TECHNIQUES -(20)</p> <p>Practicing of subcutaneous</p>	<p>THEORY-20PERIODS</p> <p>10.MICROBIOLGY OF MILK –(10)</p> <p>Types of microorganisms present in milk, Milk born diseases, Microbial standards of raw and pasteurized milk.</p> <p>11.ESTIMATION OF MICROBES IN MILK-(10)</p> <p>MBRT Test, RRT test, Direct Microscopic count, Standard Plate Count, Coliform count, Yeast and mould count.</p> <p>PRACTICALS -15 Petiods</p> <p>8.MICROBIOLOGICAL QUALITY TESTS FOR MILK –(15)</p> <p>MBRT test, Resazurin test, Standard Plate Count test(SPC).Direct Microscopic tests, Coliform count, Yeast and Mould.</p>	<p>THEORY -25PERIODS</p> <p>10.INDEGENOUS MILK PRODUCTS –(20)</p> <p>Classification of Indigenous Milks with examples, Khoa and Khoa based Sweets, Channa and Channa based sweets, Paneer, Khmer, Kulfi.</p> <p>11.PACKING AND STORAGE OF MILK PRODUCTS –(05)</p> <p>Packing Definition, Objectives of Packing, Packing materials, Packing of Milk products, Storage of milk products.</p> <p>PRACTICALS-35 PERIODS</p> <p>6.INDEGENOUS MILK PRODUCTS –(20)</p> <p>Khoa preparation, Peda preparation, Burfi preparation, Kalakhand preparation, GulabJamoon preparation, Preparation of Channa, Preparation of Sadness, Preparation of Sandesh, Preparation of Rosogulla, Preparation of Paneer, Preparation of Kheer, Preparation of Milking.</p> <p>7.VISITS-(15)</p> <p>Visit to milk chilling center ,Visit to Milk products Factory, Study of milk collection, Study of milk transportation.</p>	<p>ASSIGNMENT to be conducted on every week end & UNIT IV</p>

	injection, Intramuscular Injection, Intramuscular Injection, Practicing drenching, Attending to fractures, obstetrical difficulties, Poisoning cases, Practicing of wound dressing, Attending traumatic condition. 7.VACCINATION-(10) Preparation of list of diseases that may occur in different seasons, Preparation of vaccination programmes, Publicity for vaccination programmes, Vaccine Indent and transport, Maintenance of vaccines reacted animals.			
DECEMBER 2023 No of working days 24	ON THE JOB TRAINING			One month only Half yearly examinations
JANUARY 2024 No of working days 20	REVISION & PRE FINAL EXAMINATIONS -I			
FEBRUARY 2024 No of working days 24	PRACTICAL EXAMINATIONS& PRE FINAL EXAMINATIONS -II			
MARCH 2024 No of working days 21	THEORY EXAMINATIONS			

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ANNUAL ACADEMIC PLAN – 2023-24 (FIRST YEAR)

FISHERIES -111

<p align="center">Month & No. of working days</p>	<p align="center">TAXONOMY, ECOLOGY AND BIOLOGY OF FISHES VT1 & VP1</p>	<p align="center">PRINCIPLES OF FISHERIES AND AQUACULTURE VT2 & VP2</p>	<p align="center">SEED PRODUCTION TECHNOLOGY VT3 & VP3</p>
<p align="center">June 2023 No. of Working days: 24</p>	<p>Theory-15 (PERIODS) 1. Introduction to Taxonomy, ecology and biology of fish and prawn: 1.1 Introduction to Taxonomy Introduction to Ecology, Introduction to biology of fish & prawn advance supplementary theory & practical examinations-2023 & Admission Drive</p>	<p>Theory-15 (PERIODS) 1. Introduction of Aquaculture: 1.1 History of Aquaculture 1..2 Scopes of aquaculture preset status of fisheries andaquaculture advance supplementary theory& practical examinations-2023 & Admission Drive</p>	<p>Theory-15(PERIODS) 1. Introduction to Seed: Introduction Present status of fish seed production Present status of prawn and shrimp seed advance supplementary theory& practical examinations-2023 & Admission Drive</p>
<p align="center">July 2023 No. of Working days:24</p>	<p>Theory-20 (PERIODS) 2. General Character and Classification of fish and prawn: Introduction to fish general characters, morphology and classification 2. 2 Introduction to prawn general characters, morphology and classification Practical-20(Periods) Section-I Water Analysis 1. Estimate the DO of the given watersample 2. Estimate total Alkalinity of the given water sample 3. Estimate the total Hardness of the given water sample 4. Determine the Salinity if the given water sample 5. Determine the PH value of given water sample 6. Determine the Nitrates of the given water sample Assignment to be conducted on every weekend & Unit I</p>	<p>Theory-20 (PERIODS) Types of Aquacultures: Introduction Types of aquacultures Fresh water aquaculture, Brackish water aquaculture Mariculture Practical-20(Periods) Section -I Identify the given Fish. Write the characters with labeled diagram. 1 a) Catla catla b) Common carp 2. a) Labeo Rohitha b) Silver carp 3. a) Cirrhinus mrigala b) Grass carp 4. a) Catla catla b) Labeo beta 5. a) Labeo rohita b) Labeo calbasu 6. a) Cirrhanus mrigala b) Labeo fibraatus Assignment to be conducted on every week end & Unit I</p>	<p>Theory-20 (PERIODS) 2 Life cycles of Fish Shrimp Prawn and Crab: Introduction Life cycle of Fish Life cycle of Prawn Life cycle of Shrimp Life cycle of Crab Practical-20(Periods) Section-I Demonstration Experiments 1. Identification of developmental stages of fish 2. Identification of developmental stages of shrimp 3. Identification of developmental stages of prawn 4. The slide preparation of nauplia of shrimp 5. The slide preparation of zoea of shrimp 6. The slide preparation of Mysis of shrimp Assignment to be conducted on every week end & Unit I</p>

<p>August 2023 No. of Working days:25</p>	<p>Theory-18 (Periods) 3 Ecosystem and Limnology: Introduction to Ecosystem and Limnology Types of Ecosystems and Biotic and Abiotic components Energy flow in Ecosystems Food chains and Food web Tropic levels of Ecological pyramids Limnology of pond ecosystem 4 soils: Introduction to soil Definition and composition of soil Types of soil structure and texture Soil biotic factors</p>	<p>Theory-18 (Periods) 3 Culture systems: Introduction Open systems Semi closed systems Closed systems Race way culture 4 Cultivable fauna in aquaculture Introduction Criteria for selection of fish Cultivable fishes</p>	<p>Theory-18 (Periods) 3. Seed Resources in India: Introduction Fresh water fish seed resources Shrimp seed resources 4.Seed Procurement Introduction Seed procurement from natural seed resources Collection of seed natural resources Factors effecting seed collection Identification spawn fry and finger lings Seed Transportation</p>
	<p>Practical-18 (Periods) Section-II Dissections 7 Dissect and display the Digestive system of the given fish draw the labeled diagram. 8. Dissect and display the Digestive system of the given Prawn draw the labeled diagram. 9. Dissect and display the Nervous system of the given fish draw the labeled diagram. 10 Dissect and display the Nervous system of the given Prawn draw the labeled diagram. 11 Dissect and display the Reproductive system of the given fish draw the labeled diagram. 12 Dissect and display the Reproductive system of the given prawn draw the labeled diagram. 13 Assignment to be conducted on every week end & UNIT-II</p>	<p>Practical-18 (Periods) Section -II Identify the given Crustaceans. Write the characters with labeled diagram. 7 a) Penaeus monodon b) Scylla serrata 8 a) Macrobrachium rosenburgii b) Scylla tranquibarica 9. a) Penaeus indicus b) Thenus ornatus 10 a) Lithopenaeus vannamei b) Panulirus ornatus 11 a) Penaeus monodon b) Lithopenaeus vannamei 12 a) Penaeus indicus b) Scylla serrata Assignment to be conducted on every week end & UNIT-II</p>	<p>Practical-18 (Periods) Section-II 7. The method of induced breeding in fishes 8. Induced breeding in fish with HCG 9. Method of extraction and preservation of fish pituitary gland 10. Induced breeding in fish with Ovaprim 11. Culture method of Artemia 12. Culture of Diatoms Assignment to be conducted on every week end & UNIT-II</p>

<p>September 2023 No. of Working days:22</p>	<p>Theory-17(Periods) 5.Biogeochemical Cycles and aquatic pollutions: Introduction to Biogeochemical cycles Gaseous sedimentary cycles Aquatic pollution and its effect on fisheries 6 Skeletal system of fish and prawn: Skelton of fish Skelton of prawn Practical-17 (Periods) Section -III Identify the given spotter. Write the characters with labeled diagram 13. a) Scoliodon b) Macrobrachium rosenbergi 14. a) Tarpedo b) Penaeus monodon 15. a) Exocoetus b) Macrobrachium malcomsoni 16 a) Hippocampus b) Penaeus indicus 17 a) Wallago attu b) Chanos 18 a) Sardinella logiceps b) Mugil cephalus</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Theory-17(Periods) 5.Cultivable flora in aquaculture Introduction Seaweed resources in India Chlorophyta Rhodophyta Azolla Spirulina 6.Fish Biotechnology Introduction 6.2. Biotechnology in fish breeding Trance genic fish Hybridization Practical-17 (Periods) Section -III Identify the given Aquatic weeds. Write the characters with labeled diagram 13. a) Pistia b) Valisnaria 14. a) Eichhornia b) Hydrilla 15. a) Azolla b) Typha 16 a) Nymphia b) Marsilia 17 a) Nelumbo b) Potomogeton 18 a) Echhornia b) Typha</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Theory-17(Periods) 5. Induced Breeding Technology Introduction Brook stock management Induced breeding with different inducing agents Stripping Influence of factors on breeding Breeding of common carp 6. Fish hatchery management Introduction Types of hatcheries D- variety Chinese hatcheries Practical-17 (Periods) Section -III Identify the given Fish and Prawn larval stages. Write the characters with labeled diagram. 13. a) Fertilized egg of prawn b) Nauplius 14. a) Zoea b) Mysis 15. a) Post Larvae b) Gravid female prawn 16 a) Fertilized egg of fish b) Hatchling 17 a) Spawn b) Fry 18 a) Fingerling b) Mature male/female fish</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>
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<p>October 2023 No. of Working days:18</p>	<p>Theory-16(Periods) 7.Digestive system of Fish and Prawn: Introduction to digestive system Digestive system of fish Physiology of digestion in fish Digestive system of prawn Physiology of digestion in prawn 8 Respiratory and circulatory systems of Fish and Prawn Introduction Respiratory system of fish Circulatory system of fish Respiratory system of prawn Circulatory system of prawn</p>	<p>Theory-16(Periods) 7.Aquarium: Introduction Definitions Fabrication of aquarium Decoration and maintenance of aquarium Study of aquarium fishes and breeding Diseases Of aquarium fishes 8.Fishing craft and Gear Introduction Types of crafts Trawlers Seiners & Gill nets non-fishing vessels Types of Gears Fabrication of fishing gears</p>	<p>Theory-16(Periods) 7 Bundh Breeding Introduction Types of Bundh Management of Bundh Breeding Advantages and disadvantages of Bundh 8.Induced maturation in Shrimp Introduction Induced maturation shrimp Induced maturation technology Physiological changes after induced maturation</p>
	<p>Practical-16 (Periods) Section -IV Identify the given fish and prawn scales fins and tails. Write the characters with labeled diagram. 19. a) Cycloid scale b) Pectoral fin 20. a) ctenoid scale b) Pelvic fin 21. a) Placoid scale b) Hetero cercal tail 22 a) Ganoid scale b) Homocercal tail Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16 (Periods) Section -IV Identify the given Molluscs and seaweeds. Write the characters with labeled diagram. 19. a) Unia b) Spirulina 20. a) Pila b) Sargassum 21. a) Mytilus b) Laminaria 22 a) Pinctada b) Gracilaria Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16 (Periods) Section -IV Identify the Nets and write comments 19. a) Hand net b) Shooting net 20. a) Cast net b) Drag net 21. a) Cast net b) Shooting net 22 a) Gill net b) Drag net Assignment to be conducted on every week end & Unit III</p>

<p>November 2023 No. of Working days: 25</p>	<p>Theory-17 (Periods) 7 Excretory and Re-productive systems of fish and prawn: Excretory system of fish Excretory system of prawn Reproductive system of fish <i>Reproductive system of prawn</i> 10.Nervous and endocrine systems of fish and prawn Introduction Nervous system of fish Nervous system of prawn Endocrine system of fish Endocrine system of prawn</p>	<p>Theory-17 (Periods) 9.Fishing Methods Introduction Electric fishing Line fishing Trawling PurseSeining Gill netting 10. Fisheries Institutions Introduction CMFRI CIBA CIFA CIFE CIFNET CIFT CICFRI FSI MPEDA</p>	<p>Theory-17 (Periods) 9. Prawn Hatchery Management: Introduction Criteria for the selection of size Hatchery equipment Brood stock selection and egg collection Rearing and identification of larvae</p>
	<p>Practical-17 (Periods) Section -V Identify the given spotter of Zooplankton and Phytoplankton. Write the characters with labeled diagram. 25. a) Euglena b) Nostoc 26. a) Artemia b) Anabina 27. a) Moina b) Spirulina 28. a) Artemia b) Oscillatoria 29. a) Brachionus b) Spirogyra 30. a) Paramecium b) Dhapnia Assignment to be conducted on every weekend & Unit-IV Examinations</p>	<p>Practical-17 (Periods) Section -IV Identify the given aquarium fishes and plants. Write the characters with labeled diagram. 25. a) Gold fish b) Vallisneria 26. a) Koi b) Hydrilla 27. a) Gourami b) Ceretophyllum 28. a) Molly b) Potomegeton 29. a) Guppy b) Chara 30. a) Zebra fish b) Hydrilla Assignment to be conducted on every week end & Unit-IV Examinations</p>	<p>Practical-17 (Periods) Section-V Field visit report /submission project report 25. Field visit report of fish seed farm 26. Field visit report of fish hatchery 27. Field visit report of fresh water prawn seed farm 28. Field visit report of shrimp hatchery 29. Field visit report of shrimp seed farm 31 Field visit report of fresh water prawn hatchery. Assignment to be conducted on every week end & Unit-IV Examinations</p>

December 2023 No. of Working days: 24	OJT- (One month only) Half Yearly examinations	OJT- (One month only) Half Yearly examinations	OJT- (One month only) Half Yearly examinations
January 2024 No. of Working days: 20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations
February 2024 No. of Working days:24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024
March 2024 No. of Working days:21	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024

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	<p>5. Determine the Nitrates of the given water sample</p> <p>6. Estimate the Organic matter of the given sample</p> <p>Assignment to be conducted on every week end & Unit I</p>	<p>5. Estimate the Phosphates of the given water sample</p> <p>6. Estimate the Ammonia of the given sample</p> <p>1. Procedure for Activating GST intally</p> <p>2. Seatingup GST Rates. Write the Procedure</p> <p>Assignment to be conducted on every week end & Unit I</p>	<p>3. Demonstrate the canning method in fish preservation</p> <p>4. Demonstrate the packing techniques through charts</p> <p>5. Demonstrate the types of marketing channels through charts</p> <p>6. Analyze the intermediaries in fish marking</p> <p>Assignment to be conducted on every week end & Unit I</p>	
<p>August 2023 No. of Working days:25</p>	<p>Theory-18 (Periods)</p> <p>3. Nursery Pond Management:</p> <p>3.1 Introduction</p> <p>3.2 Pre-stocking management</p> <p>3.3 Stocking management</p> <p>3.4 Post-stocking management</p> <p>4. Rearing and stocking pond management:</p> <p>4.1 Introduction</p> <p>4.2 Rearing pond management</p> <p>4.3 Stocking pond management:</p>	<p>Theory-18 (Periods)</p> <p>3 Integrated Fish Farming Systems:</p> <p>3.1 Definition</p> <p>3.2 Historical overview</p> <p>3.3 Fish cum paddy culture</p> <p>3.4 Fish cum Poultry culture</p> <p>3.5 Fish cum Duck culture</p> <p>3.6 Fish cum Horti culture</p> <p>3.7 Fish cum Pig farming</p> <p>4 Sewage fed fish culture, Cage culture, Pen culture</p> <p>4.1 Sewage fed fish culture</p> <p>4.2 Cage culture</p> <p>4.3 Pen Culture</p>	<p>Theory-18 (Periods)</p> <p>3.Sport Fisheries in India Kolleru and Pulicat lake Fisheries:</p> <p>3.1 Introduction</p> <p>3.2 Kolleru lake</p> <p>3.3 Pulicat lake</p> <p>3.4 Sports fisheries India</p> <p>3.5 Cold water fisheries</p> <p>4.Over Fishing, Effect of Dams and Barrages on Fisheries and Fish Migration:</p> <p>4.1 Introduction</p> <p>4.2 Over fishing</p> <p>4.3 Fish migration</p> <p>4.4 Effect of dams on fish migration and fisheries</p>	

	<p>Practical-18 (Periods) Section-II Identify the given aquatic weed, write the characters with labeled diagram</p> <p>7. a) Pistia b) Hydrilla 8. a) Eichornia b) Valisneria 9. a) Lemna b) Chara 10 a) Azolla b) Utricularia 11 a) Nymphaea b) Narsilia 12 a) Nelumbo b) Typha</p> <p>Assignment to be conducted on every week end & UNIT-II</p>	<p>Practical-18 (Periods) Section- II Experiments / Demonstrations</p> <p>7. Demonstrate the fabrication of cages 8. Explain the use of aerators in aquaculture 9. Explain the use of water Testing kit 10 Explain the use of soil testing kit 11 Explain the use of trail netting aquaculture 12 Demonstrate the preparation of artificial feeds</p> <p>Assignment to be conducted on every week end & UNIT-II</p>	<p>Practical-18 (Periods) Section-II Identify the given fish. Write the characters with neat labeled diagrams.</p> <p>7. a) Ctila b) Bombay duck 8. a) Rohu b) Oil sardine 9. a) Mrigala b) Tuna 10 a) Silver carp b) Sea bass 11 a) Grass carp b) Pom fret 12 a) Common carp b) Hilsa ilisha</p> <p>Assignment to be conducted on every week end & UNIT-II</p>
<p>September 2023 No. of Working days:22</p>	<p>Theory-17(Periods) 5.Culture Practices:</p> <p>5.1 Introduction 5.2 Lime and its application 5.3 Manure and their application 5.4 Eradication of aquatic weeds 5.5 Sanitizer and Pro-biotic</p> <p>6 Natural Food: 6.1 Introduction 6.2 Food and feeding habits of fish 6.3 Food and feeding habits of prawn 6.4 Natural food organism in pond 6.5 Role of plankton and their culture</p>	<p>Theory-17(Periods) 5 Crustacean Fisheries:</p> <p>5.1 Introduction and general features 5.2 Cultivable crustaceans 5.3 Fresh water prawns 5.4 Marine shrimps</p> <p>6 Moll scan Fisheries 6.1 Introduction 6.2 Edible oyster farming 6.3 Pearl oyster farming 6.4 Mussel Cultures</p>	<p>Theory-17(Periods) 5. Fish Processing and Preservation</p> <p>5.1 Introduction 5.2 Fish and prawn spoilage 5.3 Processing and preservation of fish</p> <p>6.By Products of fish and prawn, Value addition to fishery products:</p> <p>6.1 Introduction 6.2 Byproducts of fish 6.3 Byproducts of prawns 6.4 Value addition to fishery products 6.5 Marketing</p>

	<p>Practical-17 (Periods) Section -III Identify the predatory fish and predatory insects. Write the characters with labeled diagram.</p> <p>13. a) Channab) Nepa 14. a) Clariasb) Ranatra 15. a) Mystusb) Notonecta 16 a) Wallagoattu b) Belanostoma 17 a) Heteronuestus b) Cybister 18 a) Anabusb) Dragon fly nymph</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Practical-17 (Periods) . Section -III Identify the given spotter. Write the characters with labeled diagram.</p> <p>13. a) Hatchling b) Ancor worm 14. a) Fry b) Argulus 15. a) Spawn b) Mongenetrematodes 16 a) Fingerlings b) Ergasilus 17 a) Spawnb) Hemiclepsis 18 a) Fry b) Mongenetrematodes</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Practical-17 (Periods) Section -III Identify the given spotter. Write the characters with labeled diagram.</p> <p>13. a) Macrobrachumrosenburgii b) Penaeus indicus 14. a)Macrobrachummalconsonii b) Penaeus monodon 15. a) Metapeneausdobsonii b) Penaeus semiselcates 16 a) Macrobrachumrosen burgii b)Lithopeneausvannamei 17 a) Metapeanusmonocerus b) Penaeus indicus 18 a) Penaeus monodon b) Lithopeneausvannamei</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>
<p>October 2023 No. of Working days:18</p>	<p>Theory-16(Periods) 7 Artificial Food: 7.1 Introduction 7.2 Nutritional requirements 7.3 Supplementary feed and application 7.4 Formulated feed and FCR 7.5 Quality feed 7.6 Bio-enriched feeds 8 Health Management 8.1 Introduction 8.2 Classification of fish disease</p>	<p>Theory-16(Periods) 7.Air Breathing Ornamental Fish Culture: 7.1Introduction 7.2 Cultivable live fishes 7.3 Culture of Murrells 7.4 Air Breathing fish culture in cages 8.Modern Aquaculture 8.1 Introduction 8.2 Recirculatory Aquaculture system 8.3Bio-floc technology</p>	<p>Theory-16(Periods) 7.Marketing and marketing intermediaries: 7.1 Introduction 7.2 Marketing 7.3 Types markets 7.4 Fish marketing intermediaries 7.5 Marketing system flow channel 8 Economic status of the fishermen</p>

	<p>8.3 Common fish diseases 8.4 Good Health management</p>		<p>8.1 Introduction 8.2 Socio-economic status of the fisher folk 8.3 Co-operative in fisheries sector 8.4 Problems in fisheries sector 8.5 Governments schemes</p>	
	<p>Practical-16 (Periods) Section -IV Identify the fish and prawn diseases. Write the symptoms of disease. 19. a) VHS b) Vibriosis 20. a) Dropsy b) Tail rot disease of prawn 21. a) Furunculosis b) Shell disease 22 a) Columnar is b) SEMBV 23 a) Branchiomycosis b) Filamentous bacterial disease 24 a) Branch mycosis b) Yellow head virus Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16 (Periods) Section -IV Identify the fish and prawn diseases. Write the symptoms of disease. 19. a) Columnar is disease b) SEMBV 20. a) Dropsy b) Shell disease 21. a) Furunculo b) Tail rot disease 22 a) Saprolegiasis b) Filamentous bacterial 23 a) Branchiomycosis b) YHV 24 a) Viral hemorrhagic septicemia b) Vibroy Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16 (Periods) Section -IV Identify the given by product of fish and write comments 19. a) Fish meal b) Shagreen 20. a) Fish manure b) Isinglass 21. a) Fish glue b) Fish liver oil 22 a) Fish body oil b) Isinglass 23 a) Fish protein b) Artificial pearls 24 a) Fish manure b) Fish glue Assignment to be conducted on every week end & Unit III</p>	
<p>November 2023 No. of Working days: 25</p>	<p>Theory-17 (Periods) 9 Water Quality Management in Ponds: 9.1 Introduction 9.5 Physical factors 9.6 Chemical factors 9.7 Water filtration and aeration</p>	<p>Theory-17 (Periods) 9.Seaweed Culture 9.1 Introduction 9.2 Algae vs Plants 9.3Where the seaweeds found 9.4 Seaweeds and red tides 9..5Environmental benefits from seaweeds 9.6 Seaweed farming</p>	<p>Theory-17 (Periods) 9. Fisheries Economics-Principles: 9.1 Role of fisheries in India's economics development 9.2 Potentials 9.3 Job opportunities and career guides 10 Export and Quality Control</p>	

	10.Routine Pond Management 10.1 Introduction 10.2 Daily Management 10.3 Monthly Management 10.4 Reason for fish and prawn kills	9.7 Economic importance 9.8 Feature directions	10.1 Introduction 10.2 Export promotion measures 10.3 Quality control	
	Practical-17 (Periods) Section -V Identify the given spotter of Zooplankton and Phytoplankton. Write the characters with labeled diagram. 25. a) Nostoc b) Paramecium 26. a) Microcystis b) Braciosis 27. a) Euglena b) Daphnia 28a) Volovex b) Moina 29a) Spirogyrab) Moina 30 a) Anabina b) Artemia Assignment to be conducted on every week end & Unit-IV Examinations	Practical-17 (Periods) Section-V Field visit / submission of models/charts 25.Submission of field visit report of fish seed production farm by the students 26. Submission of field visit report of fish culture farm by the students 27. Submission of field collection and observation report by the students 28. Submit the prepared model of ideal fish culture farm 29. Submit the model prepared by the students of the ideal fish seed farm 30. Submit the model prepared by the students of the integrated fish culture Assignment to be conducted on every week end & Unit-IV Examinations	Practical-17 (Periods) Section-V Field visit report / submission project report 25. Submit the field visit report Local Reservoirs 26. Submit the visit report District fisheries office 27. Submit the observation report of the fish market 28.Submit the observation report of processing plants 29. Submit the visit report cold storage unit. 30 Submit the visit report of the fish by-product industry. Assignment to be conducted on every week end & Unit-IV Examinations	
December 2023 No. of Working days: 24	OJT- (One month only) Half yearly Examinations	OJT- (One month only) Half yearly Examinations	OJT- (One month only) Half yearly Examinations	
January 2024 No. of Working days: 20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	

February 2024 No. of Working days:24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	
March 2024 No. of Working days:21	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024	

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Annual academic plan 2023-2024 (FIRST YEAR)

SERICULTURE - 112

Month & No. of Working days	Mulberry cultivation VT1 & VP1	Silkworm Rearing Requirements & Management VT2 & VP2	Silkworm Rearing Technology VT3 & VP3
June-2023 24	<u>THEORY-23(PERIODS)</u> 1. History of Sericulture 1.1 Introduction 1.2 History 1.3 Silk Road, Silk Production 2. Morphology and Taxonomy of Mulberry 2.1 Introduction 2.2 Distribution of Mulberry 2.3 Mulberry Varieties and Morphological Character 2.4 Systematic Position	<u>THEORY-23(PERIODS)</u> 1. Vanya silkworms 1.1 Introduction 1.2 Distribution 1.3 Salient features of non-mulberry silkworms 2. Rearing house 2.1 Introduction 2.2 Selection of Building Site	<u>THEORY-23(PERIODS)</u> 1. Hatching and Brushing 1.1 Introduction 1.2 Incubation 1.3 Handling of eggs 1.4 Black boxing 1.5 Hatching 1.6 Hatching percentage 1.7 Brushing 1.8 Methods of brushing 1.9 Leaf harvesting methods, Transportation and 2. Preservation Chawki rearing 2.1 Introduction 2.2 Quality of Leaf 2.3 Leaf Selection 2.4 Feeding Schedules Bed cleaning
	<u>PRACTICAL-23(PERIODS)</u> 1. Morphology and taxonomy of Mulberry	<u>PRACTICAL-23(PERIODS)</u> 1. Identification of different non-mulberry silkworms and cocoons	<u>PRACTICAL-23(PERIODS)</u> 1. Identification of blue egg stage and black boxing (10) 2. Methods of leaf harvesting
July- 2023 24	<u>THEORY-23(PERIODS)</u> 2.5 Morphology and Taxonomy of Mulberry 3. Non-Mulberry Food Plants 3.1 Introduction 3.2 Tassar, Eri and Muga Food Plants 4. Soils and preparation of land 4.1 Introduction	<u>THEORY-23(PERIODS)</u> 2. Rearing house 2.3 CSB model Rearing House 2.4 Types of Rearing House 3. Rearing equipment 3.1 Introduction 3.2 Equipment and Uses 4. Chemicals used in rearing house mechanisation Preparation for Rearing 4.1 Introduction 4.2 Cleaning	<u>THEORY-23(PERIODS)</u> 3. Chawki rearing 3.1 Spacing 3.1 Moulting 3.2 Chawki Rearing Methods 3.3 Chawki Rearing Centers 3.4 Artificial diet 4. Late age rearing 4.1 Introduction 4.2 Quality of leaf 4.3 Leaf selection 4.4 Feeding schedules 4.5 Bed cleaning 4.6 Spacing 4.7 Moulting

	<p><u>PRACTICAL-23 (PERIODS)</u></p> <p>2. Anatomy of Leaf, Stem, Root section cutting</p> <p>3. Identification of Different Soils and Recording of PH</p> <p>UNIT TEST- I</p>	<p><u>PRACTICAL-23(PERIODS)</u></p> <p>2. Study the plan of CSB Model Rearing House</p> <p>3. Identification of different rearing appliances and its drawing</p> <p>UNIT TEST- I</p>	<p><u>PRACTICAL-23(PERIODS)</u></p> <p>3. Methods of brushing and Preparing report</p> <p>4. Rearing methods for young age Larva</p> <p>UNIT TEST- I</p>
	<p><u>THEORY-24(PERIODS)</u>4.2Types of</p>	<p><u>THEORY-24(PERIODS)</u></p> <p>4.2 Disinfection methods</p>	<p><u>THEORY-24(PERIODS)</u></p> <p>2.1 Late age rearing</p>
August - 2023 -25	<p>Soils and Properties</p> <p>4.2 Suitable Soils for Mulberry</p> <p>4.3 Soil PH and reclamation</p> <p>4.4 Selection of Land</p> <p>4.5 Land preparation</p> <p>4.6 Soil Erosion</p> <p>4.7 Soil & Soil Texture, soil Humans</p> <p>4.9 Soil Moisture & Conservation Methods</p> <p>4.10 Mechanisation in Mulberry Cultivation</p> <p>5. Mulberry Planting Methods</p> <p>5.1 Introduction</p> <p>5.2 Selection of mulberry Varieties</p>	<p>4.3 Preparation of Disinfectants</p> <p>4.4 Maintenance of Hygenic Conditions and rearing Records</p> <p>5. Environmental conditions</p> <p>5.1 Introduction</p> <p>5.2 Temperature</p> <p>5.3 Humidity</p> <p>5.4 Air</p> <p>5.5 Light</p>	<p>methods</p> <p>4.Spinning and Mounting</p> <p>4.1 Introduction</p> <p>4.2 Ripening of Worms</p> <p>4.3 Process of Spinning</p> <p>4.4 Mounting</p> <p>4.5 Types of Mountages</p> <p>4.6 Environmental Conditions</p> <p>4.7 Care During Mounting</p> <p>4.8 Cocoon Harvesting</p> <p>4.9 Transport</p> <p>4.1 Bye products of silkworm Rearing and value addition</p> <p>5. Effective Rate of Rearing (E.R.R.)</p> <p>5.1 Introduction</p> <p>5.2 Calculation of E.R.R. by weight</p> <p>5.3 Calculation of E.R.R. by Number Calculation of L.C.R.</p>
	<p><u>PRACTICAL-24(PERIODS)</u></p> <p>4. Identification of Different Garden Implements</p> <p>5. Selection of preparation of land .</p>	<p><u>PRACTICAL-24(PERIODS)</u></p> <p>4. Preparation of different disinfectants (15)</p> <p>5. Demonstration of Disinfection of rearing Equipment and rearing house</p>	<p><u>PRACTICAL-24(PERIODS)</u></p> <p>5. Shoot rearing method (late age Rearing)</p> <p>6. Spacing and bed cleaning in Chawki and lateage rearing</p>
	UNIT TEST- 2	UNIT TEST- 2	UNIT TEST- 2

September 2023 25	<p><u>THEORY-16(PERIODS)</u> 5.3 Planning methods 5.3 Sexual and Asexual Propagation 6. Mulberry Cultivation 6.1 Introduction 6.2 Cultural practices</p>	<p><u>THEORY-16(PERIODS)</u> 6. Economics of silkworm rearing 6.1 Introduction Establishment cost of Mulberry garden first year and second year 6.2 Equipment required for 300 Dfl's shoot rearing and its economics 6.3 Economics of CRC</p>	<p><u>THEORY-16(PERIODS)</u> 6. Bivoltine Rearing Technology 6.1 Introduction 6.2 Bi-voltine breeds) races 6.3 Rearing aspects 6.4 Advantages of Bi-voltine Rearing</p>
	<p><u>PRACTICAL-16(PERIODS)</u> 6. Soil moisture and Conservation methods 7. Propagation of Cuttings, Grafts QUARTERLY EXAMINATIONS</p>	<p><u>PRACTICAL-16(PERIODS)</u> 6. Maintenance of rearing records 7. Devices used for controlling temperature and Humidity and their operation QUARTERLY EXAMINATIONS</p>	<p><u>PRACTICAL-16(PERIODS)</u> 7. Identification of mountages 8. Harvesting and sorting cocoon QUARTERLY EXAMINATIONS</p>
October 2023 18	<p><u>THEORY-16(PERIODS)</u> Garden implements 6.3 Weeds and inter cultivation 6.4 Pruning and training 6.5 Importance of water shed 6.6 Methods of Irrigation 6.8 Detailed study of Drip-irrigation</p>	<p><u>THEORY-16(PERIODS)</u> 6.4 Bye products of silkworm rearing and their Utilization 7. Entrepreneurship Development Programme 7.1 Introduction 7.2 Scope for self-employment In sericulture</p>	<p><u>THEORY-16(PERIODS)</u> 7. Silkworm anatomy 1. Introduction 2. Digestion system of larva and Moth 3. Silk gland 4. Reproduction System of Silkworm larva and moth</p>
	<p><u>PRACTICAL-16(PERIODS)</u> 7. Budding, Layering 8. Identification of different types of weeds 9. Pruning methods 10. Preparation of Compost and Vermi Compost</p>	<p><u>PRACTICAL-16(PERIODS)</u> 8. To work out Economics of 100 dfl's silkworm Rearing 9. To work out economics of 2acre model/5000 dfl's Batch chawki silkworm rearing (CRC)</p>	<p><u>PRACTICAL-16 (PERIOD)</u> 9. Calculation of E.R.R. and L.C.R. 10. Dissection of silkworm and Moth 11. Identification of different of Silkworm and its symptoms</p>
	<p>UNIT TEST-3</p>	<p>UNIT TEST-3</p>	<p>UNIT TEST-3</p>
November 2023 25	<p><u>THEORY-23(PERIODS).</u> 7. Manures and Fertilizers 7.1 Introduction 7.2 Organic Manures 7.3 Types of Fertilizers,</p>	<p><u>THEORY-23(PERIODS)</u> 7.3 Government schemes 7.3 Schemes for Financial Assistance 8. EDP In Sericulture 8.1 Introduction</p>	<p><u>THEORY-23(PERIODS)</u> 8. Silkworm Diseases and Pest Management 8.1 Introduction</p>

	Application Methods and Schedules 7.4 Detailed study of Vermi Compos 8. Nutrivitie values of mulberry 8.1 Introduction	8.2 EDP in mulberry nursery	8.2 Protozoan Disease 8.3 Bacterial Disease 8.4 Viral Disease
	<u>PRACTICAL-23(PERIODS)</u> 11. Glucose test in Mulberry Leaf (Iodine test) 12. Preparation of Herbarium viz in Mulberry leaf Varieties and Weeds 13. Visit to nearest Mulberry Farm	<u>PRACTICAL-23</u> 10. Study the preparation of various successful Stories 11. Study of Various Financial Supporting scheme	<u>PRACTICL-23 (PERIODS)</u> 12. Identification of different Pests of silkworm and its Symptoms. 13. Preparation of rearing report 14. Visit to nearest rearing house and CRC'
	UNIT TEST- 4	UNIT TEST- 4	UNIT TEST- 4
DECEMBER-2023 24	ON THE JOB TRAINING HALF-YEARLY EXAMINATIONS	ON THE JOB TRAINING HALF-YEARLY EXAMINATIONS	ON THE JOB TRAINING HALF-YEARLY EXAMINATIONS
January - 2024 20	<u>THEORY-10(PERIODS)</u> 8.2 Bye products of mulberry 8.3 Medicinal and other uses of Mulberry Contents of Mulberry leaf	<u>THEORY-10(PERIODS)</u> 8.3 EDP in chawki rearing centres 8.4 EDP in Grainage 8.5 EDP in Silk Reeling Industry cantents of mulberry leaf	<u>THEORY-10(PERIODS)</u> 8.5 REVISION 8.6 Fungus Disease 8.6 Pests (Major and Minor) 8.7 Integrated disease and pest Management
	PRE-FINALEXAMS-1	PRE-FINALEXAMS-1	PRE-FINALEXAMS-1
February - 2024 24	REVISION PRE-FINALEXAMS-2 PUBLIC PRACTICALEXAMS	REVISION PRE-FINALEXAMS-2 PUBLIC PRACTICALEXAMS	REVISION PRE-FINALEXAMS-2 PUBLIC PRACTICALEXAMS
March - 2024 21	REVISION IVPEXAMINATIONS	REVISION IVP EXAMINATIONS	REVISION IVP EXAMINATIONS

PREPARED BY:

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ANNUAL ACADEMIC PLAN 2023 - 24

SERICULTURE

COURSE CODE : 112

SECOND YEAR

<p>Month &No. of Working days</p>	<p>Seri Bio-technology and Farm management Theory Paper – I Seri Bio-technology and Farm management Practical Paper - I</p>	<p>Silkworm Seed Technology TheoryPaper – II Silkworm Seed Technology practical Paper - II</p>	<p>Post Cocoon Technology Theory Paper – II Post Cocoon Technology PracticalPaper – II</p>
<p>June 2023 24</p>	<p><u>Theory : (15) Periods</u> 1. Seri Bio-technology Introduction Bio-technology & its branches Scope of Bio-technology Plant Bio-technology Seri Bio-technology Tissue culture Tissue culture in mulberry Importance of Mulberry Breeding Importance of Silkworm Breeding Laboratory equipment used in Bio-Technological experiments Sericulture Research & Development Institutes in India</p>	<p><u>Theory : (15) Periods</u> 1. Systematic Position of Bombyx mori Introduction Systematic position and classification Types of silkworm 2. Morphology and Life Cycle of Bombyx mori Introduction Study of life stages and cycle</p>	<p><u>Theory : (10) Periods</u> 1. Silk Reeling Industry Introduction Importance of reeling industry Scope and Limitation</p>
	<p><u>Practicals : (15) Periods</u> 1. Preparation of Culture media 2. Observation of Mitosis in Onion root -Tip</p>	<p><u>Practicals : (15) Periods</u> 1. Morphological Study of Bombyx mori 2. Study of Different Silkworm Races and Breeds in current use</p>	<p><u>Practicals : (10) Periods</u> 1. Identification of parts of Cocoon. 2. Assessment of Commercial Parameters and quality Test</p>

<p>July 2023 24</p>	<p>Theory : (20) Periods 2. Cytology and Anatomy of Mulberry Introduction Prokaryotic cell vs Eukaryotic cell Cell Organelles Cell Divisions Genetics Mendal Laws Anatomy -Tissue system Anatomy of mulberry root Anatomy of mulberry stem Anatomy of mulberry leaf</p>	<p>Theory : (20) Periods 2. Morphology and Life Cycle of Bombyx mori Sex differences in Larva, Pupa and Moth Metamorphosis 3. Parental Races Introduction Distribution Seed Organization Parental Races Voltinism Moultinism Breeds & Hybrids in Current use</p>	<p>Theory : (15) Periods 2. Cocoon Quality and Cocoon Sorting Introduction Physical characters Commercial Characters Properties of silk and selection of Raw material Tactile and Numerical Tests Good Cocoons Defective Cocoons Principles of Assessment Model Problems</p>
	<p>Practicals : (20) Periods 3. Identification of leaf diseases and Symptoms 4. Identification of stem diseases and Symptoms 5. Identification of root diseases and Symptoms</p>	<p>Practicals : (20) Periods 3. Study plan of Model Grainage building 4. Identification Of Grainage Equipment</p>	<p>Practicals : (15) Periods 3. Identification and Calculation of Good and Defective Cocoons Stifling of cocoons 4. Stifling of cocoons</p>
<p>Unit Test - 1</p>			
<p>August 2023 25</p>	<p>Theory : (15) Periods 3. Farm Management Introduction Factors influencing farm Management decisions Mulberry farming Raising of Mulberry Sapling in Nursery Bed Integrated weed management in Mulberry Labour Management Farm Records 4. Mulberry Diseases Introduction Foliar diseases of mulberry Root diseases of mulberry</p>	<p>Theory : (20) Periods 4. Grainage Equipments Introduction Pre Requisites of Grainage Grainage Model Building Equipment and Use Disinfection Grainage Registers and Use</p>	<p>Theory : (20) Periods 3. Cocoon Marketing Introduction Rules and Acts Price Fixation Model problems 4. Cocoon Stifling Introduction Stifling Methods Ushna Koti Sorting of Cocoons Storage of Cocoons De-flossing Riddling Mixing</p>
	<p>Practicals : (15) Periods 6. Identification of pests of mulberry and Symptoms 7. Identification of nutrient deficiency and Symptom</p>	<p>Practicals : (20) Periods 5. Preparation of Disinfectants and Disinfection Of Grainage 6. Processing and Preservation of Seed Cocoons</p>	<p>Practicals : (20) Periods 5. Reeling water suitability 6. Cooking and Brushing of cocoons</p>
<p>Unit test - 2</p>			

September 2023 22	<u>Theory : (15) Periods</u> 4. Mulberry Diseases Macro and Micro nutrients Deficiencies Preventive and control methods of Nutrient deficiency 5. Mulberry Pests Introduction Types of mulberry pests Sapsuckers	<u>Theory : (15) Periods</u> 5. Grainage Operations Introduction Selection of Seed Races Procurement of Seed Cocoons Sex Separation Coupling and De- Coupling Ovi position	<u>Theory : (15) Periods</u> 5. Cocoon Cooking and Brushing Introduction Cooking and Methods of Cooking Brushing and Methods of Brushing
	<u>Practicals : (15) Periods</u> 8. Nursery bed preparation and Maintenance of Farm records	<u>Practicals : (15) Periods</u> 7. Sex Separation Of Pupa 8. Identification Of Male and Female Moths	<u>Practicals : (15) Periods</u> 7. Reeling – Charka, Cottage Basin and Multi-end Reeling Machines 8. Epprovette – Calculation of Filament length, Denier and Average Denier
Quarterly Examinations			
October 2023 18	<u>Theory : (15) Periods</u> 5. Mulberry Pests Leaf Eaters Root – Shoot feeders Reasons for pest outbreak in Mulberry Preparation of Insecticides Integrated Pest Management (IPM)	<u>Theory : (15) Periods</u> 6. Seed Production Introduction Preparation of Layings Preparation of Sheet Eggs Preparation of Loose Eggs	<u>Theory : (15) Periods</u> 6. Reeling Introduction Reeling apparatus and machines Reeling Water Re-Reeling Silk Examination Lacing & Skeining Book Making and Baling Spun Silk Making Non-mulberry Cocoon Reeling
	<u>Practicals : (15) Periods</u> 9. Estimation of Leaf Yield 10. Calculation of Economics of Nursery and 1acre Mulberry	<u>Practicals : (15) Periods</u> 9. Coupling, De-Coupling and Ovi position 10. Production Eggs On Sheet	<u>Practicals : (15) Periods</u> 9. Re-reeling, Silk Examination, Lacing, Skeining, Booking 10. Degumming and Silk Dyeing
Unit Test- 3			

November 2023 25	<u>Theory : (15) Periods</u> 6. Estimation of Leaf Yield Introduction General norms for a satisfactory Mulberry garden Method of mulberry leaf estimation 7. Establishment and maintenance of Chawki garden Introduction Importance of chawki mulberry Garden Package of practices for chawki Mulberry garden	<u>Theory : (15) Periods</u> 7. Acid Treatment and Hibernation Schedules Introduction Types of Eggs Physical and Chemical Stimulants Types of Acid Treatment Hibernation Schedules of Eggs	<u>Theory : (25) Periods</u> 7. Raw Silk Testing Introduction Testing methods and Parameters Standard Testing Appliances Conditioning of Raw Silk Classification of Raw Silk 8. Reeling Economics Introduction Economics of Charka Economics of Cottage Basin Economics of Multi-End Reeling Machine Reeling Records and Use
	<u>Practicals : (15) Periods</u> 11. Field study on the Mulberry Diseases and its report	<u>Practicals : (15) Periods</u> 11. Preparation of Loose Eggs 12. Individual Moth Examination, Mass Moth Examination and Dry Moth Examination 13. Egg sorting and Surface Sterilization	<u>Practicals : (25) Periods</u> 11. Collection and Preservation of Bye Products of Reeling
	Unit test - 4		
December 2023 24	O J T (1Month Only) ON THE JOB TRAINING HALF - YEARLY EXAMINATIONS		
January 2024 20	<u>Theory : (15) Periods</u> 8. Economics of mulberry cultivation Introduction Economics of nursery Economics of mulberry cultivation under rainfed conditions Economics of mulberry cultivation under irrigated conditions Sericulture Economics for acre per year Production of Vermi Compost	<u>Theory : (10) Periods</u> 8. Seed Economics Introduction Economics for 10 Lakhs Cross Breed Layings Production	<u>Theory : (10) Periods</u> 9. Silk Dyeing Introduction Types of Dyes Degumming and Bleaching Methods of Dyeing Bye- Products of Reeling

	<u>Practicals : (15) Periods</u> 12. Field Studies on the Mulberry Pests and Collection of Mulberry Diseased Leaves and Pests 13. Study of different forms (sericulture) in the villages	<u>Practicals : (10) Periods</u> 14. Collection and Preservation of Bombyx mori Life Stages 15. Maintenance of Grainage Records	<u>Practicals : (10) Periods</u> 12. Visit to nearest Reeling Centre
		16. Visit to Nearest Grainages and Preparation of Report	
	Pre Final Examination – 1		
February 2024 24	Revision Pre Final Examination – 2 Public Practical Examinations-2024.		
March 2024 21	Revision I V P Examinations - 2024.		

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BUSINESS AND COMMERCE COURSES
<i>ACCOUNTING & TAXATION [A & T] – 212</i>
<i>OFFICE ASSISTANT SHIP [OAS] – 213</i>
<i>BANKING & RETAIL MANAGEMENT [BRM] – 217</i>

ANNUAL ACADEMIC PLAN – 2023-24 (FIRST YEAR)
ACCOUNTING & TAXATION (A&T)
COURSE CODE – 212

Month & No. of working days	BUSINESS ORGANIZATION(VT-1) BUSINESS ORGANIZATION (VP-1)	ACCOUNTANCY & COMPUTERS (VT-2) COMPUTERS(VP-2)	TAXATION(VT-3) TAXATION (VP-3)
June 2023 No. of Working days:24	<p>Theory20(Periods) 1.Basic concepts and Forms of Business organization: 1.1 Business organization its scope Business, 1.2 Profession, 1.3 Industry–Trade, 1.4 Types of trade- Aids to trade, 1.5 Classification of industry, 1.6 Forms of Business Organization</p> <p>Practical-20(Periods) 1. Write the procedure of the following: i) Deed of Partnership ii) E-Commerce Business 2. Fill-up the following forms and write the procedure: iii) Cooperative Society Registration Form iv) Company Incorporation Form</p> <p>ASSIGNMENT to be conducted on every weekend</p>	<p>Theory-20(Periods) 1. Introduction to Accountancy: 1.1 Definitions of Accounts 1.2 book keeping 1.3 Objectives – Merits and Demerits 1.4 Accounting concepts Conventions 1.5 Single entry system–Double entry system 1.6 Advantages–Accounting cycle Accounting standards – IFRS – Concept and Need</p> <p>Practical-20(Periods) a. Write and demonstrate MS-Dos Commands b. Write and demonstrate MD, CD, RD commands with syntax c. Write and demonstrate ERASE/DELETE</p> <p>ASSIGNMENT to be conducted on every weekend</p>	<p>Theory-20(Periods) 1. Introduction of Taxation: 1.1 Concept of Tax–Direct and indirect taxes 1.2 Introduction of Income Tax Act, 1961 1.3 History of Income tax 2.1 Tax rates–Slab rate–Flat rate</p> <p>Practical-20(Periods) 1. Fill the application form No 49(a) for individuals 2. Fill the application form No 49 (a) for HUF 3. Fill the application form No 49(a) for firm</p> <p>ASSIGNMENT to be conducted on every weekend</p>

<p>July 2023 No. of Working days:24</p>	<p>Theory (23 Periods) 2.Sole Trader, Joint Hindu Family: 2.1 Sole Trader – Characteristics 2.2 Merits and Demerits of Sole Trader 2.3 Joint Hindu family– Karta 2.4 Merits and Demerits of H.U.F 2.5 Schools of J.H.F 3.Partnership: 3.1. Partnership Characteristics – Merits and Demerits 3.2. Partnership Deed–Types of Partners 3.3. Rights and Duties of Partners 3.4. Limited liability partnership meaning and definition</p> <p>Practical-20(Periods) 1. Fill-up the following forms and write the procedure: - i) Memorandum of Association ii) Articles of Association</p> <p>2. Procedure for Preparation of Prospectus</p> <p>3. Fill-up the following forms and write the procedure: - i) Pay-in-Slip ii) With drawl Form iii) Demand Draft Form</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT- I</p>	<p>Theory (23 Periods) 2.Journals & Ledgers: a.Types of Accounts – Rule of Debit and Credit b.Journal–Journal Entries (Including Problems) c.Meaning Classifications of Ledger- Posting the transactions into accounts – d.balancing the accounts(Including Problems)</p> <p>3.Subsidiary books: a.Types of subsidiary books b.Purchase book, Purchase returns book, Sales book, Sales returns book, billsreceivable book, Bills payable book, c.Journal proper (Including Problems)</p> <p>Practical-20(Periods) Write and a.demonstrate COPY command with syntax b. Write and demonstrate DIR command with syntax.</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT- I</p>	<p>Theory (23Periods) 2. Basic concepts of Income tax: 2.1 Assessee –Person 2.2 Assessment year–previous year 2.3 Permanent Account Number 2.4 Income – Indian company – Foreign company –Domestic company</p> <p>3 Agricultural Income: 3.1. Agricultural income 3.2. Integration of agricultural income with non- agricultural income</p> <p>Practical-20(Periods) 1.Fill the application form No 49(a) for company 2.Fill the application form 49(B) How do you decide the residential status of as an individual?</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT- I</p>
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<p>August 2023 No. of Working days:25</p>	<p>Theory (23 Periods) 4. Joint Stock company: 4.1. Characteristics –Merits and Demerits 4.2. Kinds of companies 4.3. Transnational company 4.4. Promoter. 5. Incorporation of Joint Stock company: 5.1. Procedure of promotion and incorporation of joint stock company 5.2. Memorandum of Association – 5.3. Articles of Association - Prospectus Golden rule of framing Prospectus.</p> <p>Practical-20(Periods) Fill-up the following forms and write the procedure:-Savings Bank Account Opening Form i) prepare the Specimen of Fixed Deposit Receipt ii) RTGS/NEFT Form Draw the following Specimen’s and write the procedure:- i) Warehouse Layout ii) Warehouse Operation</p>	<p>Theory (23Periods) 4. Cash book: 4.1 Types of cashbook–Simple or Single column cashbook 4.2 Two column cash book 4.3Threecolumncashbook 4.4 Petty cash book 5. Banking Reconciliation Statement: 5.1. Meaning–Need cash book vs Passbook 5.2. Favorable balance – Un favorable balance(Over Draft)– Practical-20(Periods) 1.Write and demonstrate Creation of folder in windows. 2.Write and demonstrate Naming /Renaming of a folder in windows. 3.Write and demonstrate COPY and MOVE files /folders in windows. 4.Write and demonstrate Screen/Display setting in windows 5.Write and demonstrate Mouse setting in windows. Assignment to be conducted on every weekend & UNIT-II</p>	<p>Theory (23Periods) 4 Capital and Revenue: 4.1. Capital and Revenue receipts 4.2. Capital and Revenue Expenditure 4.3Capital and Revenue Loses 5. Residential Status &Incidence of tax: 5.1Resident – Resident but not Ordinarily resident–Non Resident 5.2 Incidence of tax- Indian incomes– Foreign Incomes Practical-20(Periods) Determine the residential states of individuals form the following information On 10th October 2022, Mr. Anudeep Practicing chartered Accountant left India for the first time to join Atlas financial service in New York city, America and returned to India on 18th March, 2023 on 15 days leave. Determine the residential status. Write the meaning of Indian Income and Foreign Income? Assignment to be conducted on every weekend & UNIT-II</p>
<p>September 2023 No. of Working days:22</p>	<p>Assignment to be conducted on every weekend &UNIT-II</p>		

<p>October 2023 No. of Working days:18</p>	<p>Theory (20 Periods) 6.Cooperative Societies: 6.1Characteristics – Types of cooperative Societies 6.2. Merits and demerits. Practical-20(Periods) Fill-up the following forms and write the procedure: - 1. LIC Service Request Form 2. Draw Insurance Claim Flow Chart 3. Draw and write the following: - Advertising Promo Procedure Case Study on Transportation in India</p> <p>Assignment to be conducted on every weekend &Quarterly Examinations</p> <p>Theory (16 Periods) 7. Banking &Insurance Services: 7.1Definition of Bank – Types of Banks 7.2. Functions of Commercial Banks 7.3. Insurance– Definition – Advantages of Insurance – Principles of insurance 7.4Types of insurance</p>	<p>Theory (20Periods) 6.Trial Balance &Rectification of Errors: 6.1Importance and preparation of trail balance 6.2. Rectification errors Before preparation of trial balance and After preparation of trial balance (including problems) Practical-20(Periods) 1.Write and demonstrate creating a short cut under windows 2.Write and demonstrate creating and saving a document in MS word 3.Write and demonstrate Font formatting of a document in MS word</p> <p>Assignment to be conducted on every weekend &Quarterly Examinations.</p> <p>Theory (16 Periods) 7.Final Accounts: 7.1. PreparationofTradingaccount 7.2Profit &Loss account and Balance sheet with adjustments (including problems)</p>	<p>Theory (20Periods) 6.Exempted Incomes: 6.1 Exempted incomes relating to individuals only Practical-20(Periods) Compute the income from house property (let out house) from the following information. Mr. Vijay is the owner of a house, which is let out on a monthly rent of Rs. 7,500/- The municipal value is Rs. 80,000/- Per annum. Vijay incurs the following expenses Municipal taxes Rs.9300, repairs Rs. 5,000/- interest paid on loan taken to purchase of house Rs. 14,300. compute income from house property. Find the exempted house rent allowance from the following information Mr. Durga Prasad is working in state electricity Board, Hyderabad. His salary particulars are: Basic Pay Rs. 1800/- PM; D.A. Rs. 750/- PM, C.C.A Rs. 180 PM; HRA Rs. 600PM (Rent paid Rs. 750/- PM) calculate exempted amount of House rent allowance. Assignment to be conducted on every weekend &Quarterly Examinations Theory (16 Periods) 7.Income from Salary:</p>
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<p>November 2023 No. of Working days:25</p>	<p>Practical-16(Periods) Prepare the following Charts: - i) Business Start-up Flow Chart ii) Business Activity Flow Chart iii) Modes of Transportation Write the following: - iv) Write a Success Story of any Successful Business Person? v) Write a Success Story of any Successful Indian Business</p> <p>Assignment to be conducted on every weekend & UNIT-III</p>	<p>Practical-16(Periods) 1. Write and demonstrate Mail merge in Ms Word 2. Write and demonstrate creating tables in Ms Word 3. Write and demonstrate formatting tables in MS Word 4. Write and demonstrate printing in MS Word 5. Write and demonstrate various aspects of Excel</p> <p>Assignment to be conducted on every weekend & UNIT-III</p>	<p>BASIS OF CHARGE OF SALARY INCOME ALLOWANCES (Problems on calculating Exempted amount of i) Entertainment allowance House Rent Allowance & Children education and Hostel allowance only) PERQUISITIES (valuation of rent free accommodation, motor car, interest free loans, medical facilities, credit card only) PROFIT IN LIEU OF SALARY (Provisions relating to Gratuity only) DeductionsU/s16 Practical-16(Periods) Fill the form16 Compute income from salary for the assessment year2023-24 Smt. Sahithi is working as lecturer, her salary details are as follows; Basic pay Rs 18,000 PM, D.A Rs. 5000/- HRA Rs 3500/- PM (she is living in her own house), entertainment allowance Rs. 1000/- PM. C.C.A Rs. 1500/- PM. Professional tax paid by her Rs. 175 P.M. compute Income from salary. She is working in a Government College. Compute the total income of a resident from the following Sri. Sandeep submitted the following details of income for the previous year 2022-23. Compute total income</p>
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<p>December 2023 No. of Working days:24</p>	<p>Theory (18 Periods) 8. Transportation, Warehousing & Advertisement: 8.1 Advantages of Transportation 8.2 Types of Transport 8.3 Types of Warehousing 8.4 Importance of Warehousing – 8.5 Need and importance of Advertisement 8.6 Print media and Out door</p> <p>Practical-16(Periods) Write the following: - 1. Write a Success Story of any Successful Business Person? 2. Write a Success Story of any Successful Indian Business</p> <p>Assignment to be conducted on every weekend & UNIT-IV</p> <p>ON THE JOB TRAINING (1 MONTH)</p> <p>HALF YEARLY EXAMINATIONS</p>	<p>Theory (18 Periods) 8. Fundamentals of computers Advantages of Computers Input, output devices Operating system Ms-Word, Ms-Excel</p> <p>Practical-16(Periods) 1. Write and demonstrate various types of data in Excel 2. Write and demonstrate formatting of cells in Excel 3. Write and demonstrate Sorting of data in Excel 4. Write and demonstrate creating an email account 5. Write and demonstrate receiving, viewing and sending mails 6. Write and demonstrate downloading of data/file</p> <p>Assignment to be conducted on every weekend & UNIT-IV</p> <p>ON THE JOB TRAINING (1 MONTH)</p> <p>HALF YEARLY EXAMINATIONS</p>	<p>when his residential status is resident. Salary received in India from a former employer of Dubai Rs.8,68,000/-</p> <p>Income from business in Hong Kong but controlled from china Rs.1,62,000/-</p> <p>Income from house property in India but received in UK Rs.2,79,000/-</p> <p>Assignment to be conducted on every weekend & UNIT-III</p> <p>Theory (18 Periods) 8. Income from House Property: Annual value Deduction u/s 24 Computation of Income from let out house Income/Loss from self-occupied house Income from partly self-occupied house</p> <p>Practical-16(Periods)</p> <p>What is E – filing and write the procedure of E-filing? Fill the Form 26AS.</p> <p>Assignment to be conducted on every weekend & UNIT-IV</p>
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January 2024 No. of Working days:20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	ON THE JOB TRAINING (1 MONTH) HALF YEARLY EXAMINATIONS
February 2024 No. of Working days:24	Syllabus Revision Practical Examinations IPE-2024 IPE Model Papers Practice Theory Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024 IPE Model Papers Practice Theory Examinations IPE-2024	Syllabus Revision Pre-Final Examinations Syllabus Revision Practical Examinations IPE-2024
March 2024 No. of Working days:21			IPE Model Papers Practice Theory Examinations IPE-2024

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ANNUAL ACADEMIC PLAN - 2023-24 (SECONDYEAR)

ACCOUNTING& TAXATION

COURSE CODE - 212

Month & No. of working days	AUDITING(VT-4) AUDITING (VP-4)	ACCOUNTANCY & TALLY(VT-5) TALLY(VP-5)	TAXATION - 2(VT-6) TAXATION- 2 (VP-6)
<p>June 2023</p> <p>No. of Working days:24</p>	<p>Theory - 20(Periods) 1.Introduction of Auditing: 1.1 Meaning of Auditing–Importance of auditing, 1.2 Advantages of auditing, 1.3 Difference between auditing and accountancy 1.4 Meaning of investigation, Practical-16(Periods) 1. What is meant by “Auditing”? Mention the importance and Advantages of an Audit. 2. Explain the differences between Accountancy and Auditing. 3. What are the differences between Auditing and Investigation? 4. What are the objectives of Auditing? 5. Explain different types of Audit. ASSIGNMENT to be conducted on every weekend</p>	<p>Theory-20(Periods) 1. Depreciation : 1.1 Depreciation: Meaning and need of depreciation 1.2 Causes of depreciation 1.3 Calculation of depreciation under Straight Line Method 1.4 and Diminishing Balance Method Practical-16(Periods) 1. Procedure for Activating GST in tally 2. Seating up GST Rates .Write the Procedure. ASSIGNMENT to be conducted on every weekend</p>	<p>Theory-20(Periods) 1. Income From Business : 1.1 income from business– 1.2 chargeability – deductions expressly allowed and disallowed– 1.3 general deductions–simple problems in computing income from business 1.4 (Simple problems) Practical-16(Periods) 1. What is ITR3?Who is eligible for ITR3? 2. Who is not eligible for ITR3? 3. Fill the application form ITR3 for individuals having income from business / profession. ASSIGNMENT to be conducted on every weekend</p>

<p>July 2023</p> <p>No. of Working days:24</p>	<p>Theory (23 Periods)</p> <p>2.Objects of Auditing:</p> <p>2.1Main objects– subsidiary objects</p> <p>2.2 Detection of Errors and Frauds</p> <p>Prevention of errors and frauds</p> <p>3.Types of Audit:</p> <p>3.1Types of audit - conduct of audit</p> <p>3.2Methods ofaudit</p> <p>3.3Audit Programme</p> <p>3.4Advantages and disadvantages of auditProgramme</p> <p>Practical-18(Periods)</p> <p>6. Distinguish between Continuous audit and Periodical audit.</p> <p>7. Distinguish between Private audit and statutory audit.</p> <p>8. What is meant by Audit Programme? Explain Advantages and Disadvantages of Audit Programme.</p> <p>9. Prepare a model Audit Programme.</p> <p>10. What are the qualifications and disqualification of a company auditor as per Companies Act, 2013?</p> <p>ASSIGNMENTto be conducted on every weekend &UNIT- I</p>	<p>Theory (23Periods)</p> <p>2.Accounts of Non tradingconcerns:</p> <p>2.1 Accounts of Non-trading concerns</p> <p>2.2 Distinction between Capital and Revenue Expenditure,</p> <p>2.3 Receipts and Payment Account,</p> <p>2.4 Income and Expenditure account.</p> <p>Practical-18 (Periods)</p> <p>3. Updating/creating sales andPurchase ledgers for GST</p> <p>4. Creating dutyledgers(CGST,SGST,IGST)</p> <p>ASSIGNMENTto be conducted on every weekend &UNIT- I</p>	<p>Theory (23 Periods)</p> <p>2. Income from profession:</p> <p>2.1 computing income from profession of</p> <p>2.2i) chartered accountant</p> <p>ii) doctor - professional income – professional expenses (Simple Problems)</p> <p>Practicals (18 Periods)</p> <p>4. Fill the application form ITR3 for HUF having income from business / profession.</p> <p>5 Problèm -1</p> <p>Income from Business</p> <p>Rs.6, 00,000,HousepropertyIncome from Kenya Rs.5, 00,000</p> <p>CalculâteTotal Income and fileITR3.</p> <p>6 Problèm - 2</p> <p>Income from profession</p> <p>Rs.8,00,000, House property</p> <p>Income from Australia Rs.1, 00,000</p> <p>Calculate Total Income and fileITR3.</p> <p>ASSIGNMENTto be conducted on every weekend &UNIT- I</p>
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<p>August 2023</p> <p>No. of Working days:25</p>	<p>Theory (23Periods)</p> <p>4.Qualification and Disqualification of Auditor :</p> <p>4.1ProvisionsofTheCompaniesAct,2013</p> <p>4.2Relating to qualification and disqualification of auditor</p> <p>4.3Appointment and removal of auditor :</p> <p>4.4Various methods of appointment of auditor</p> <p>4.5Provisions of The Companies Act, 2013</p> <p>4.6relating to appointment and removal of auditor.</p> <p>Practicals (20 Periods)</p> <p>11. What steps would you take before commencing the actual work of audit upon being appointed as auditor?</p> <p>12. What essential equalities must a good auditor possess?</p> <p>13. What are the provisions relating to appointment and removal of a company auditor?</p> <p>14. Model Appointment/Re-Appointment Letter of an Auditor.15.What are the provisions relating to Remuneration of a company auditor?</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT-II</p>	<p>Theory (23 Periods)</p> <p>3 Partnership Accounts-I:</p> <p>3.1 Meaning of Goodwill- Objectives</p> <p>3.2 Methods of Goodwill Calculation – Simple average and weighted average</p> <p>3.3 Profit/Loss Sharing ratios</p> <p>3.4 New Sacrificing, Gaining ratios</p> <p>3.5 Problems on Profit and Loss appropriation account</p> <p>4. Partnership Accounts-II</p> <p>4.1 Admission of a partner</p> <p>4.2 Retirement of partner – including Problems.</p> <p>Practicals (20 Periods)</p> <p>5. Creating party ledgers for GST</p> <p>6. Recording purchase and sales under GST print invoice</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT-II</p>	<p>Theory (23 Periods)</p> <p>3.Income from capital gains:</p> <p>3.1 capital assets – long term capital asset– short capital asset–</p> <p>3.2 computation of income from capital gains</p> <p>3.3 (excluding exemptions u/s54&54betc) (Simple Problems)</p> <p>Practical's (20Periods) 7. Write about E-Filing of ITR.</p> <p>8. What do you mean by Registration under GST?</p> <p>9. Write about Registration procedure underGST.</p> <p>ASSIGNMENT to be conducted on every weekend &UNIT-II</p>
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<p>September 2023</p> <p>No. of Working days:22</p>	<p>Theory (20 Periods)</p> <p>5. Remuneration, Rights & Duties of auditor</p> <p>5.1 Remuneration, 5.2 Rights and Duties of auditor-</p> <p>6 Vouching, Errors and Frauds:</p> <p>6.1 Meaning of vouching – Objects and Importance of vouching 6.2 Measures to be taken for vouching. 6.3 Meaning of Error and Fraud–Types of Errors and frauds.</p> <p>Practical-16 (Periods)</p> <p>16. Discuss the rights and duties of a company auditor. 17. Define the term Vouching. Explain the importance of Vouching. 18. What is meant by Error and Fraud? Explain different types of Errors and Frauds.</p> <p>ASSIGNMENT to be conducted on every weekend & Quarterly Examinations</p>	<p>Theory (20 Periods)</p> <p>4. Company Accounts - I:</p> <p>4.1 (As per Companies Act 2013) – Meaning of Company 4.2 Meaning of Share capital–Types Of Shares 5.3 Issue of Shares at par Premium, Discount.(Including Problems)</p> <p>Practicals (16 Periods)</p> <p>7. Debit note and Credit note issue 8. Generation of GSTR-1</p> <p>ASSIGNMENT to be conducted on every weekend & Quarterly Examinations</p>	<p>Theory (20 Periods)</p> <p>5. Income from other sources:</p> <p>5.1 income from interest on securities – computation of income from casual incomes</p> <p>Practicals (16 Periods)</p> <p>10. Explain about Certificate of Registration under GST. 11. What is GSTR1? 12. How to file GSTR1?</p> <p>ASSIGNMENT to be conducted on every weekend & Quarterly Examinations</p>
<p>October 2023</p> <p>No. of Working days:18</p>	<p>Theory (17 Periods)</p> <p>7. Audit Programme:</p> <p>7.1 Meaning, Advantages & Disadvantages - Audit Notebook 7.2 Audit Working papers Audit Markings Advantages of Audit Markings.</p> <p>Practicals (17 Periods)</p> <p>19. Checking of various types of vouchers and identifying errors and frauds. 20. Briefly explain the advantages</p>	<p>Theory (17 Periods)</p> <p>6. Company Accounts – II :</p> <p>6.1 (As per Companies Act 2013 – Company Final Accounts 6.2 Financial Statements as per Companies Act 2013 6.3 (Simple Problems) with outstanding, Prepaid, Closing Stock Adjustments</p> <p>Practicals (17 Periods)</p> <p>9. Generation of GSTR-2</p>	<p>Theory (17 Periods)</p> <p>5. Deductions from gross total income</p> <p>5.1 80C, 80CCD, 80CCF, 80D, 80E, 80G, 80GGA</p> <p>6. Assessment of individual:</p> <p>6.1 Problems on computation of assessee total income. (Simple Problems)</p> <p>Practicals (17 Periods)</p> <p>13. What is GSTR2? 14. How to file GSTR2?</p>

	<p>and Disadvantages of Audit Note Book.</p> <p>21. Model Audit Note Book</p> <p>Assignment to be conducted on every weekend &UNIT-III</p>		<p>15. What is GSTR3?</p> <p>Assignment to be conducted on every weekend &UNIT-III</p>
<p>November 2023</p> <p>No. of Working days:25</p>	<p>Theory (20 Periods)</p> <p>8. Audit Report :</p> <p>8.1 Meaning–Contents of Audit Reports</p> <p>8.2 Types of Audit Reports</p> <p>8.3 Characteristics of a Good Audit Report</p> <p>8.4 Audit Report vs Audit Certificate.</p> <p>Practicals (17 Periods)</p> <p>21. What do you mean by Audit Report? What are the contents in Audit Report?</p> <p>22. What are the different types of Audit Reports?</p> <p>23. Model Audit Report</p> <p>24. State the characteristics of good Audit Reports.</p> <p>Assignment to be conducted on every weekend &UNIT-IV</p>	<p>Theory (20 Periods)</p> <p>7.Accounting Packages-I (Tally)</p> <p>7.1 Introduction – Tally –</p> <p>7.2 Salient Features–Creating Company</p> <p>7.3 Altering Company – Accounting Features</p> <p>7.4 Inventory Features– Statuary and Taxation.</p> <p>8. Accounting Packages -II(Tally)</p> <p>8.1 Voucher entry–Groups–</p> <p>8.2 Ledger- Types of vouchers – Functional keys.</p> <p>Practicals (10 Periods)</p> <p>10.Generation of GSTR-3</p> <p>Assignment to be conducted on every weekend &UNIT-IV</p>	<p>Theory (20 Periods)</p> <p>7.Goods and Service tax-I :</p> <p>7.1 Introduction of GST –</p> <p>7.2 Meaning– objectives and advantages of GST-</p> <p>7.2 History of GST-GST council</p> <p>7.3 meaning of CGST,SGST,IGST-Levy and collection of GST-meaning of Input tax credit. (Theory)</p> <p>8. Goods and Service tax-II :</p> <p>8.1 Reverses charge (Meaning only)–</p> <p>8.2 Time of supply and Place of supply-</p> <p>8.3 Registration(a)persons who are liable to registration</p> <p>(b)person who are not liable to registration</p> <p>8.4 (c)compulsory registration - Monthly Returns– GSTR1,GSTR2,GSTR3.(Theory)</p> <p>Practicals (10 Periods)</p> <p>13. How to file GSTR3?</p> <p>Assignment to be conducted on every weekend &UNIT-IV</p>

December 2023 No. of Working days:24	<i>ON THE JOB TRAINING (1 MONTH)</i> HALF YEARLY EXAMINATIONS	<i>ON THE JOB TRAINING (1 MONTH)</i> HALF YEARLY EXAMINATIONS	<i>ON THE JOB TRAINING (1 MONTH)</i> HALF YEARLY EXAMINATIONS
January 2024 No. of Working days:20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations
February 2024 No. of Working days:24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024
March 2024 No. of Working days:21	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024

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ANNUAL ACADEMIC PLAN FOR THE ACADEMIC YEAR 2023-2024 OFFICE
ASSISTANTSHIP (OAS), COURSE CODE: 213 **IYEAR (OAS)**

Month & No. of working days	BUSINESS ORGANISATION (B.O) (VT1) BUSINESS ORGANISATION (B.O) (VP1)	ACCOUNTANCY & COMPUTERS (VT2) ACCOUNTANCY & COMPUTERS (VP2)	SHORTHAND & TYPEWRITING-I (VT3) SHORTHAND & TYPEWRITING (PT3)
<p><u>JUNE-2023</u></p> <p><i>No. of working days-24</i></p>	<p align="center"><u>THEORY-20(PERIODS)</u></p> <p>1. Basic concepts and Forms of Business organization: Business organization its scope Business, characteristics of Business, Profession Industry–Trade Types of trade–Aids to trade, Classification of Industry, Forms of Business Organization</p> <p><u>PRACTICAL-20(PERIODS)</u></p> <p>1. Fingering</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p>	<p align="center"><u>THEORY-20(PERIODS)</u></p> <p>1. Introduction to Accountancy:</p> <ul style="list-style-type: none"> • Definitions of Accounts and concepts of Bookkeeping and accounting • Accounting process • Objectives of accountancy • Merits and Demerits of accountancy • Accounting concepts and Conventions • Single entry system–Double entry system • Advantages of Double entry system • Accounting cycle • Accounting standards (IASC1973) (ASB 1977) • Basic accounting terms <p><u>PRACTICAL-20(PERIODS)</u></p> <ol style="list-style-type: none"> 1) Write and demonstrate MS-Dos Commands 2) Write and demonstrate MD,CD,RD commands with syntax 3) Write and demonstrate ERASE/DELETE commands with syntax 4) Write and demonstrate DIR command with syntax. 5) Write and demonstrate COPY comm. And with syntax <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p>	

<p><u>JULY-2023</u> No. of working days-24</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>2.SoleTrader,JointHinduFamily:</p> <ul style="list-style-type: none"> • Definition of Sole Trader • Characteristics of Sole Trader • Merits and demerits of Sole Trades • Definition and meaning of Joint Hindu family- Karta • Hindu Schools of thoughts- • Dayabhaga- Mitakshara • Merits and demerits of joint hindu family 	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>2. Journals:</p> <ul style="list-style-type: none"> • Meaning of Journal • Proforma of Journal • Classification of accounts • Accounting principals • Accounting equation • Steps in journalizing • Rule of Debit and Credit • Problems, Journal Entries 	
	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p>1. Words practice</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – I (26/07/2023 TO 28/07/2023)</p>	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p>6) Write and demonstrate Creation of folder in windows</p> <p>7) Write and demonstrate Naming/Renaming of a folder in windows</p> <p>8) Write and demonstrate COPY and MOVE files /Folders in windows</p> <p>9) Write and demonstrate Screen/Display setting in windows</p> <p>10) Write and demonstrate Mouse setting in windows</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – I (26-07/2023 to 28-07-2023)</p> <ul style="list-style-type: none"> • 	

<p style="text-align: center;"><u>AUGUST-2023</u> No. of working days – 25</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>3.Partnership:Meaning and definition of P.F. Characteristics–Merits and Demerits OF P.F. Partnership Deed–Types of Partners Rights and Duties of Partners Limited liability partnership meaning and definition</p> <p>4.JointStockcompany: Meaning and definition of company Characteristics–Merits and Demerits OF Joint Stock company. Kinds of companies Promoter.</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <ul style="list-style-type: none"> • 3. LEDGER • Meaning of ledger purpose of ledger • Classifications of Ledger- • Postingthetransactionsintoacco unts– balancingtheaccounts(Including Problems) <p>4.Subsidiarybooks: meaning of subsidiary books-Types of Subsidiary Books Purchase book, Purchase returns book, Sales book, Sales returns book, Bills receivable book, Bills payable book, Journal proper debit note, credit note(Including Problems)</p>	
	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p style="text-align: center;">Sentence Practice</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;"><u>UNIT-II (24/08/23 TO 26/08/2023)</u></p>	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p>11) Write and demonstrate creating a short cut under windows 12) Write and demonstrate creating and saving a document in Ms word 13) Write and demonstrate Font formatting of a document in Ms word 14) Write and demonstrate paragraph formatting of document in Ms word 15) Write and demonstrate Page formatting in Ms Word</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;"><u>UNIT-II (24/08/23 TO 26/08/2023)</u></p>	

<p style="text-align: center;">SEPTEMBER2023 No. of working days– 22</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>5.IncorporationofJointStockcompany: Procedure of promotion and incorporation of joint stock company Memorandum of Association– contents of MOA Articles of Association–Items in AOA. Prospectus, objectives of prospectus. Golden rule of framing Prospectus.</p> <p>6.CooperativeSocieties:Meaning and definition Characteristics OF Cooperative society Types of cooperative Societies Merits and demerits OF Cooperative society.</p>	<p style="text-align: center;"><u>THEORY- 20(PERIODS)</u></p> <p>5.cash book: meaning of cash book Types of cash book. Simple or single column cash book Two column cash book Three column cash book Petty cash book (Including problems)</p> <p>6.Trail Balance:</p> <ul style="list-style-type: none"> •Meaning of Trail balance •Features of Trail balance •Importance and preparation of trail balance • Methods OF preparation of trial balance (including problems) 	
	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p>Passage Practice</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END& QUARTERLY EXAMS (16-09-23 to 23-09-23)</p>	<p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <p>16. Write and demonstrate Mail merge in MS-Word</p> <p>17. Write and demonstrate creating tables in MS-Word</p> <p>18. Write and demonstrate formatting tables in MS-Word</p> <p>19. Write and demonstrate printing in MS-Word</p> <p>ASSIGNMENT TO BE CONDUCTED VERY WEEK END & QUARTERLY EXAMS (16-09-23 to 23-09-23)</p>	

<p><u>OCTOBER-2023</u></p> <p>No. of working days-18</p>	<p style="text-align: center;"><u>THEORY-18(PERIODS)</u></p> <p>7.AidstoTrade,Banking&InsuranceServices: Definition of Bank – Types of Banks Functions of Commercial Banks Insurance– Definition – Advantages of Insurance – Principles of insurance Types of insurance</p> <p style="text-align: center;"><u>PRACTICAL-18(PERIODS)</u></p> <p>Statement and invoice</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – III (16/10/2023 TO 18/10/2023)</p>	<p style="text-align: center;"><u>THEORY-18(PERIODS)</u></p> <p>7. Final Accounts: Introduction to final accounts. Objectives of final accounts Trading accounts and its components Profit & Loss account-Items in P&L account and Balance sheet and its format complete final accounts. final accounts with adjustments (including problems)</p> <p style="text-align: center;"><u>PRACTICAL-18 (PERIODS)</u></p> <p>20. Write and demonstrate various aspects of MS-Excel 21. Write and demonstrate various types of data in Excel 22. Write and demonstrate formatting of cells in Excel 23. Write and demonstrate Sorting of data in Excel 24. Write and demonstrate creating an email account 25. Write and demonstrate receiving, viewing and sending mails 26. Write and demonstrate downloading of data/file</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – III (16/10/2023 TO 18/10/2023)</p>	<p>•</p>
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<p><u>NOVEMBER-2023</u></p> <p>No.ofday-25</p>	<p><u>THEORY-20(PERIODS)</u></p> <p>8.Aids to Trade, Transportation, Warehousing &Advertisement: Advantages of Transportation Types of Transport Types of Warehousing Importance of Warehousing– Need and importance of Advertisement Types of media Print media and Outdoor media</p> <p><u>PRACTICAL-20(PERIODS)</u></p> <p>Business and official letters</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND & UNIT 4 (23/11/23 TO 25/11/23)</p>	<p><u>THEORY-20(PERIODS)</u></p> <p>8. Fundamentals of computers</p> <ul style="list-style-type: none"> • Features of computers • Advantages of Computers • Input, output devices • Operating system • Ms-Word • Ms-Excel <p><u>PRACTICAL-20(PERIODS)</u></p> <p>Ms Power point Internet concepts</p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEKEND UNIT-4 (23/11/23 TO 25/11/23)</p>	<p>•</p>
<p><u>DECEMBER 2023</u></p> <p>No of Days- 24</p>	<p>ONTHEJOBTRAINING OJT-(One month only)</p> <p>HALF-YEARLY EXAMS (18/12/2023 TO 23/12/2023)</p>	<p>ONTHEJOBTRAINING OJT-(One month only)</p> <p>HALF-YEARLY EXAMINATIONS 18/12/2023 TO 23/12/2023</p>	
<p><u>JANUARY-2024</u></p> <p>No of Days-20</p>	<p>REVISION</p> <p>PRE-FINALEXAMS-1</p>	<p>REVISION</p> <p>PRE-FINALEXAMS-1</p>	
<p><u>FEBRUARY-2024</u></p> <p>No of Days-24</p>	<p>IPE MODEL PAPERS</p> <p>PRACTICINGIPEMARCH –2024</p> <p>PRACTICAL EXAMS</p>	<p>IPE MODEL PAPERS</p> <p>PRACTICINGIPEMARCH –2024</p> <p>PRACTICAL EXAMS</p>	
<p><u>MARCH-2024</u></p> <p>No of Days-21</p>	<p>IPEMarch-2024EXAMINATIONS</p>	<p>IPEMarch-2024 EXAMINATIONS</p>	
<p><u>APRIL-2024</u></p> <p>No of Days14</p>	<p>IPE THEORY EXAMINATIONS-2024</p>	<p>IPE THEORY EXAMINATIONS-2024</p>	

Prepared by:

ANNUAL ACADEMIC PLAN FOR THE ACADEMIC YEAR 2023-2024
OFFICE ASSISTANTSHIP (OAS), COURSE CODE : 213 II YEAR

Month & No.of Working Days / No. of Periods	SHORTHAND & TYPEWRITING	OFFICE ACCOUNTANCY-II (VT5)	OFFICE MANAGEMENT
<p align="center">JUNE – 2023 No. of working days: 24</p>		<p align="center"><u>THEORY-20 (PERIODS)</u></p> <p>1. Depreciation : 1.1 Depreciation: Meaning and definitions of depreciation 1.2 Need for calculation of depreciation 1.3 Causes for Depreciation 1.4 Components required for calculation of depreciation 1.5 Methods of depreciation(including problems) a) Straight Line Method b) Diminishing balance Method</p> <p align="center"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Introduction to accounting packages <p>Creation of company in Tally ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p>	<p align="center"><u>THEORY-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Meaning and definition of modern office. • Office work, Office activities. • Functions of Modern Office • Management meaning and definition • Principals of Office management. • Administrative functions of office management. <p align="center"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Paragraphs – Speed Drill - 10 • Income and Expenditure – 13 <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p>
<p align="center"><u>JULY- 2023</u> No. of working days:24</p>		<p align="center"><u>THEORY-20 (PERIODS)</u></p> <p>2.Accounts of Non trading concerns : 2.1 Meaning of Accounts of Non-trading concerns and examples 2.2 Meaning and Distinction between Capital and Revenue receipts and Expenditure 2.3 Receipts and Payment Account 2.4 Income and Expenditure account.</p>	<p align="center"><u>THEORY-20(PERIODS)</u></p> <ul style="list-style-type: none"> • Office Organization and Administration • Organization Definition and Characteristics of organization • Importance of Organization • Steps in Organization Management

		<p style="text-align: center;"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Financial function of tally. • Inventory creation. • How to create purchase voucher in tally <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;">UNIT-1 (26-07-2023 to 28-07-2023)</p>	<ul style="list-style-type: none"> • Principles of Organization • formal and informal organization • Types of organization • Administration meaning and definition • Distinction between administration and management • functions of administrative Office Manager <p style="text-align: center;"><u>PRACTICAL-20(PERIODS)</u></p> <ul style="list-style-type: none"> • Speed practice(35 wpm) <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;">UNIT-1 (26-07-2023 to 28-07-2023)</p>
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<p style="text-align: center;"><u>AUGUST - 2023</u> No. of working Days-25</p>	<ul style="list-style-type: none"> • 	<p style="text-align: center;"><u>THEORY-20 (PERIODS)</u></p> <p>3 Partnership Accounts-I:</p> <p>3.1 Meaning of partnership firm, characteristics partnership firm, merits and demerits of partnership firm, types of partners, methods of maintaining capital accounts of partners- fixed capital accounts system and fluctuated capital account systems.</p> <p>3.2 Meaning and definition of Goodwill Methods of Goodwill Calculation Simple average and weighted average</p> <p>3.3 Profit/Loss Sharing ratios</p> <p>3.4 New, Sacrificing, Gaining ratios</p> <p>3.5 Problems on Profit and Loss appropriation account and capital accounts.</p> <p style="text-align: center;"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Inventory application • How to create sales voucher in Tally • How to create a contra voucher in Tally <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;">UNIT-II (24-08-2023 to 26-08-2023)</p>	<p style="text-align: center;"><u>THEORY-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Office accommodation and environment. • introduction to office accommodation • principals to office accommodation • office location- office building • office layout – principals of layout • Office lighting • Types of lighting systems- ventilation, interior decoration • Office furniture <p style="text-align: center;"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Speed (35 wpm) • Balance sheet <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END</p> <p style="text-align: center;">UNIT-II (24-08-2023 to 26-08-2023)</p>

<p><u>SEPTEMBER - 2023</u></p> <p>No. of working Days-22</p>		<p align="center"><u>THEORY-20 (PERIODS)</u></p> <p>4 Partnership Accounts-II</p> <p>4.1 Admission of a Partner</p> <p>4.2 Points to be kept in mind at the time of admission.</p> <p>4.3 Revaluation/Profit and Loss adjustment. Partners capital accounts, cash account, Goodwill account and new balance sheet.</p> <p>4.4 Retirement of Partner – necessary accounts as in admission of partner including loan account of retired partner– including Problems.</p> <p align="center"><u>PRACTICAL-18 (PERIODS)</u></p> <ul style="list-style-type: none"> • What is the procedure for ledger creation in Tally • How to create individual (anil) capital account under capital ledger • Display necessary reports <p align="center">ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END and Quarterly exams (16-09-2023 to 23-09-2023)</p>	<p align="center"><u>THEORY-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Office stationary and record maintenance • Meaning and various stationary items used in an office • Importance of Stationary • Filing meaning. • Various filing systems • Methods of modern filing system • Mailing • Register of inward mail and outward mail register. • Procedure of inward mail and outward mail. <p align="center"><u>PRACTICAL-18 (PERIODS)</u></p> <ul style="list-style-type: none"> • Speed Drill – 40 wpm • Income and expenditure account <p align="center">ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END and Quarterly exams (16-09-2023 to 23-09-2023)</p>
<p><u>October - 2023</u></p> <p>No. of working Days-18</p>		<p align="center"><u>THEORY-18(PERIODS)</u></p> <p>5 Hire purchase & installment purchase system</p> <p>5.1 Features of hire purchase & installment purchase system.</p> <p>5.2 Distinction between hire purchase system and installment purchase system.</p> <p>5.3 simple problems in hire purchase system{</p>	<p align="center"><u>THEORY-18(PERIODS)</u></p> <p>Office communications & correspondence</p> <ul style="list-style-type: none"> • Meaning and definition of Office Communication and Correspondence and Mail Services. • Importance of communications • Factors determine the suitable communication system • Effective communication procedures

		<p>only ledger accounts).</p> <p>6 Rectification Of Errors</p> <p>6.1 Meaning and nature of accounting errors</p> <p>6.2 Types of errors</p> <p>6.3 Methods of rectification of errors in accounts</p> <p style="text-align: center;"><u>PRACTICAL-18 (PERIODS)</u></p> <ul style="list-style-type: none"> • How to create sales account under ledger account. • How to create indirect expenses ledger(printing and stationary account) • Ratio analysis <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END UNIT – III (16-10-2023 to 18-10-2023)</p>	<ul style="list-style-type: none"> • Note file, interoffice memo, official correspondence structure • Requisition- Indent- features of district office manual • Office Correspondence Organizing Correspondence <p style="text-align: center;"><u>PRACTICAL-18 (PERIODS)</u></p> <ul style="list-style-type: none"> • Speed Drill – 40 wpm • Memorandum <p><i>Government Order</i></p> <p>ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END UNIT – III (16-10-2023 to 18-10-2023)</p>
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<p style="text-align: center;"><u>NOVEMBER - 2023</u></p> <p>No. of working days- 25</p>	<ul style="list-style-type: none"> • 	<p style="text-align: center;"><u>THEORY-20 (PERIODS)</u></p> <p>7 Bank reconciliation statement</p> <p>7.1 Meaning and definition of BRS</p> <p>7.2 Causes for difference between cashbook balance and passbook balance</p> <p>7.3 Procedure of preparation of BRS</p> <p>7.4 Problems with favorable balance and with overdraft with both books</p> <p>8 Accounting Packages - I (Tally)</p> <p>8.1 Introduction – Tally –</p> <p>8.2 Salient Features–Creating Company</p> <p>8.3 Altering Company – Accounting Features</p> <p>8.4 Inventory Features– Statuary and Taxation.</p> <p>8.5 Voucher Entry–GroupsLedger– Types of vouchers – Functional keys</p> <p style="text-align: center;"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • How to display trail balance in tally and how to display profit and loss account, balance sheet, cashflow statement, funds flow statement <p style="text-align: center;">ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – IV (23-11-2023 to 25-11-2023)</p>	<p style="text-align: center;"><u>THEORY-20(PERIODS)</u></p> <p>Conduct of meetings</p> <ul style="list-style-type: none"> • Meaning of meeting • Meeting Notice- agenda • Preparation of notes for the agenda • Steps in preparation of agenda • Arrangements for conducting a meeting • Recording the minutes of a meeting • Model minutes for directors meeting and shareholders meeting <p style="text-align: center;">Minutes Recording-Practice</p> <p style="text-align: center;"><u>PRACTICAL-20 (PERIODS)</u></p> <ul style="list-style-type: none"> • Speed Drill – 40 wpm • Memorandum, income and expenditure accounts, Balance sheet, Government Order. <p style="text-align: center;">ASSIGNMENT TO BE CONDUCTED ON EVERY WEEK END & UNIT – IV (23-11-2023 to 25-11-2023)</p>
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DECEMBER 2023 No.of Days-24		ONTHEJOBTRAINING OJT-(One month only) Half Yearly examinations 18-12-2023 to 23-12-2023	ONTHEJOBTRAINING OJT-(One month only) Half Yearly examinations 18-12-2023 to 23-12-2023
JANUARY- 2024 No. of Days-20		REVISION PRE-FINAL EXAMS -1 19-01-2024 to 25-01-2024	REVISION PRE-FINAL EXAMS -1 19-01-2024 to 25-01-2024
FEBRUARY- 2024 No. of Days-24		IPE MODEL PAPERS PRACTICING IPE MARCH – 2024 PRACTICAL EXAMS	IPE MODEL PAPERS PRACTICING IPE MARCH – 2024 PRACTICAL EXAMS
MARCH- 2024 No. of Days-21		IPE MARCH-2024 EXAMINATIONS	IPE MARCH-2024 EXAMINATIONS

Prepared by:

1.V.NIRANJANA RAOJ.L.IN COMMERCE , S B N GOVT.JR. COLLEGE,PEDANA KRISHNA DT.

IVC ANNUAL ACADEMIC PLAN – 2023-2024

(Based on B & R M CURRICULUM)

BANKING AND RETAIL MANAGEMENT (B & RM) (C. C: 217) 1st YEAR

Total Working Days: 227

Total Periods: Theory – 135; Practical – 135; OJT – 363.

MONTH	No. of Working Days	Banking and Insurance - I	Business Accountancy - I	Retail Marketing	Assignments/ Exams
June 2023	24	<p>Theory: No of Periods - 20 UNIT – I : History and Evolution of Banking in India: Definition of bank, origin and growth of bank – Banking Structure in India: Reserve Bank of India: Functions - Commercial banks: Functions - Development Banks - Regional Rural Banks – Cooperative banks – EXIM bank – NABARD – IDBI - National Housing Bank.</p>	<p>Theory: No of Periods - 20 UNIT-I: Fundamentals of Business & Accountancy: Introduction – Features of Business –trade, industry and commerce - Classification of trade, industry. Introduction to Accountancy: Definition – Book Keeping – Accountancy Objectives - Merits and Demerits.</p>	<p>Theory: No of Periods - 20 UNIT-I : Introduction: Marketing Meaning – Nature – Objectives - Scope - Functions of Marketing - Importance of Marketing - Marketing Environment - Marketing Mix, Market Segmentation - Digital Marketing – Features. Retailing: Meaning – Nature – Classification - Growing Importance of Retailing - Factors Influencing Retailing - Functions of Retailing - Retail as a career.</p>	

July 2023	24	<p>Theory: No of Periods - 22 UNIT – II: Growth and Working of Banks in India: Public Sector banks: State bank of India and other nationalized banks – Private Sector banks: New Generation Private Sector Banks: ICICI, HDFC – Foreign Banks - Lead Bank Scheme - Objectives of Nationalization of Banks. Functions of Commercial Banks. Recent Trends in Banking Sector: Demonetization – Mergers of Banks. Practical's: No of Periods - 25 Visit the Websites of Five Different Commercial Banks (Three Public Sector and Two Private Sector Banks) offering Retail Banking Products. Get details of the various Retail Banking Products offered by them. Fill-up the following forms and write the procedure:</p> <ol style="list-style-type: none"> Pay-in-slip form Withdrawal form Demand Draft form Savings Bank Account Opening Form Fixed Deposit Application Form Online Banking Registration Form etc., 	<p>Theory: No of Periods - 22 UNIT - II: Double Entry System – Meaning – Difference between Single entry system and Double Entry System – Advantages. Accounting Concepts - Accounting Conventions – Classification of Accounts: Personal, Real and Nominal Accounts – Accounting Principles.</p> <p>Practical's: No of Periods -25 Practical 1: Computer Devices: ➤ Display of Computer Devices (Input and Output Devices) ➤ Draw Block Diagram of Computer</p> <p>Practical 2: Operating System(OS): Single User/Multi User/Multi- Tasking</p>	<p>Theory: No of Periods - 22 UNIT - II: Retail Marketing Mix: Meaning - Concept - Visual Merchandising - Retail Advertising - Sales Promotions - Point of Purchase (POP) Displays - Point of Sale (POS) Displays - Promotional Prices - Loyalty Programs – Customer Relationship Management (CRM) - Elements of Retail Marketing Mix (7Ps) - Retail Communication - Emerging Trends in Retail: Changing Nature of Retailing - Modern Retail Formats - E-tailing – Benefits.</p> <p>Practical's: No of Periods -25 learning Practical implication of IT and software in Retail.</p>	Unit Test - I
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August 2023	25	<p>Theory: No of Periods - 25 UNIT – III: Banker and Customer: Definition of Banker – Definition of Customer – General relationship of Banker and Customer – Rights of the Banker – Rights of the Customer Grievance Mechanism – Ombudsman – Procedure to file complaint with Ombudsman -KYC: Objectives - Norms – Opening of Accounts and Requirements- Officially valid documents – Key elements of KYC Policy.</p> <p>Practical’s: No of Periods - 28 Draw the following and write the procedure: a) Specimen of Demand Draft. b) Specimen of Savings Bank Account. c) Specimen copy of FD receipt etc.,</p>	<p>Theory: No of Periods – 25 UNIT -III: Journal: Meaning - Principles of Accounts - Recording of transactions — Rules of Debit and Credit – Journal – Journal entries.</p> <p>UNIT - IV: Ledger: Classification of recorded transactions– Posting the transactions into Separate Accounts – Exercises.</p> <p>Practical’s: No of Periods -28 Practical 3: Windows: Demonstration and Practice of the Following:</p> <ul style="list-style-type: none"> ➤ Creating a Folder in Windows ➤ Naming/renaming of a folder / Copy and move files and folders 	<p>Theory: No of Periods - 25 UNIT - III: Store Layout and Design: Introduction - Types of Retail Location - Store Layout - Types of Retail Layouts - Design Decision - Functions of Retail. Store Associate — Purpose of store lay out. Objectives of Store Design- Process of store design.</p> <p>Practical’s: No of Periods -28 Students visited to explore the different areas of Retail and acquainted knowledge regarding various opportunities in retail sector and also understood various concepts.</p> <p>Students visit nearest store along with lecturer and observe instore work operations, duties and responsibilities of salesman</p>	Unit Test - II
			<ul style="list-style-type: none"> ➤ Screen/display settings / Creating a Shortcut 	and prepare PowerPoint presentation.	

<p>September 2023</p>	<p>22</p>	<p>Theory: No of Periods – 25 UNIT – IV: Negotiable Instruments Act 1881: Definition of Negotiable Instrument – Promissory Note, Bills of Exchange, Cheque – Characteristics – Stale cheque – Revalidation of Cheque – Post-dated Cheque – Crossing of Cheques – Types of crossing – Dishonour of Cheques - CTS enabled cheques. UNIT – V: Demonetization: Background–Demonetization Process–Objectives and Outcomes- Other effects – Legal Issues – Reactions – Political and Long – Term Impact.</p> <p>Practical’s: No of Periods - 28 Draw the following negotiable instruments: a) Specimen of Cheque. b) Promissory Note</p>	<p>Theory: No of Periods - 25 UNIT -V: Subsidiary books: Types of subsidiary books: Purchase Book, Sales Book, Purchase Return Book, Sales Return Book - Exercises. Cash Book: Types of cash book – Single column cash book – Two column cash book – Three column cash book – Petty cash book – Bills Receivable Book, Bills Payable Book and Journal Proper - Exercises.</p> <p>Practical’s: No of Periods -28 Practical 4: MS – WORD: Demonstration and Practice of the Following: ➤ Creating, Saving, Print a Document ➤ Font formatting, Paragraph formatting and Page formatting</p>	<p>Theory: No of Periods - 25 UNIT - IV: Buyer Behaviour: Concept – classification of buyers: - manufacturer buyers, middlemen buyers, consumers. Buyers’ buying motives: - rational, emotional motives – factors influencing purchase of a Product –buyer shopping behaviour: -frequency, place, and unit of purchase. UNIT-V: Business Communications: Introduction - Importance of communication - Communication Cycle- Principles of Communication – Forms of communication – Communication Equipment’s – Barriers in Communication – Methods Overcoming barriers – Essential Skills for Effective Communication.</p> <p>Practical’s: No of Periods -28</p>	<p>Quarterly Examinations</p>
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		c) Specimen of Bill etc.	<ul style="list-style-type: none"> ➤ Creating and Formatting Tables/ Header & Footer, Page Numbers ➤ Creating Labels/Envelopes and Inserting Pictures ➤ Mail Merge 	Prepare Power Point Presentation on Buyer's Behaviour.	
October 2023	18	<p>Theory: No of Periods – 18 UNIT – VI: Insurance: Introduction – Brief history of Insurance industry in India - Principles of Insurance – Need and Significance of Insurance. Types of Insurance: General, Life and Health Insurance – Features – Difference between Insurance and Assurance – Re Insurance and Double Insurance.</p> <p>Practical's: No of Periods - 26 Fill-up the loan agreement forms. Students to prepare a list of officially valid documents for proof of address and identity in order to comply with KYC norms. Prepare a chart on Types of Banking, on process of housing loan application etc.,</p>	<p>Theory: No of Periods - 15 UNIT -VI: Bank Reconciliation Statement (BRS)– Meaning – Need – Cash book vs. Pass book – Favourable Balance – Un-favourable balance (Over Draft) – Exercises.</p> <p>Practical's: No of Periods -26 Practical 5: MS -Excel: Demonstration and Practice of the following:</p> <ul style="list-style-type: none"> ➤ Creating, Saving, Opening and Print a worksheet ➤ Copying and Moving/Sorting/Filtering the cell data ➤ Applying elementary formulas and functions ➤ Generating graphs/ Account Tables based on the data. 	<p>Theory: No of Periods – 18 UNIT- VI: Introduction to Salesmanship: Concept of Salesmanship - Importance of salesmanship - Role and Functions of sales man - Features of Salesmanship - salesmanship is art or science? – Importance of personal selling. Types of selling: -sales clerk, telemarketing, broker, manufacturing representative.</p> <p>Practical's: No of Periods -26 Ascertain from the local market of selected consumer goods to what extent Economic, Social and Cultural factors affect the demand for particular goods, Prepare report.</p> <p>Conduct household or market survey and report on the buying motive of Consumers as regards to price and quality, consumers</p>	Unit Test -III

			<p>Practical 6: MS – Power Point: Demonstration and Practice of the following:</p> <ul style="list-style-type: none"> ➤ Creating/Composing/Saving a new presentation \ ➤ Adding, Deleting and Edit a slide/Text, Inserting clipart and images ➤ Slide Animation to the text and image 	<p>being classified by Age, sex and income, given certain selected products.</p>	
November 2023	25	<p>Theory: No of Periods – 25 UNIT – VII: Life and Health Insurance: Introduction – Objectives of Life Insurance – Procedure for taking a policy - Different types of Life Insurance Policies– Insurance Terms: Sum Assured, Premium, Bonus, Surrender Value - Features of Health Insurance - Evolution of Health Insurance in India – Health Insurance Policies. Significance of health insurance in the light of COVID-19 / new diseases. UNIT – VIII: General Insurance: Introduction – Importance – Types of General Insurance: Marine, Fire, Motor Insurance etc. – Advantages - Types of Motor</p>	<p>Theory: No of Periods – 28 UNIT -VII: Trial balance & Final Accounts – Importance of trial balance – Preparation of Trial Balance – Suspense Account. Preparation of Final Accounts: Trading account, Profit & Loss account and Balance sheet. UNIT -VIII: Computerised Accounting - I: Introduction – Computerised Accounting Process – Differences between Manual Accounting and Computerised Accounting – Advantages – Limitations – Sources of Accounting software – Accounting Packages.</p>	<p>Theory: No of Periods - 25 UNIT -VII: Salesman Career: Concept - Types of Salesmen: manufacturers’ salesman, wholesaler salesman, retailer salesman – Duties and Responsibilities of Salesman – Qualities of Salesman - Source of Recruitment of Salesman- Training of Salesman- Remuneration to the Salesman. UNIT - VIII: Product Knowledge: Product Concept - Major areas of Product Knowledge: product knowledge; manufacturing, uses, precautions – Importance of Product Knowledge –Source of Product information – Packaging-Types of</p>	Unit Test - IV

		<p>Insurance - Key Insurance Documents: Proposal Forms/Policy Forms/Cover Notes/Certificate of Insurance/Endorsements, Renewal Notice/Other Insurance Documents.</p> <p>Practical's: No of Periods - 28 Filling up of Life Insurance Proposal Form with Example. Settlement of Insurance Claims with Example.</p>	<p>Practical's: No of Periods -28 Practical 7: E – Mail: Demonstration and Practice of the following:</p> <ul style="list-style-type: none"> ➤ Creating E – Mail Address ➤ File attachment, Compose and Send Mail <p>Practical 8: Internet:</p> <ul style="list-style-type: none"> ➤ Internet Browsing Procedure (Searching and Downloading Information) <p>Practical 9: Opening and Signup/Sign in E – Commerce Apps (Amazon, Paytm Mall, Flipkart etc.,)</p> <p>Practical 10: Procedure for Online Shopping with UPI Payments.</p>	<p>Packaging Materials, Types of Packing: Anti – Corrosive Packing, Pharma Packing, Plastic Packing, Flexible Packing.</p> <p>Practical's: No of Periods -28 Chart making on Store Layout. Prepare a Model/ Chart on store and non - store retailing. Chart out retail operations.</p> <p>Visit a retail mall /outlet to observe the appearance and behaviour of the male staff and female staff and their way of dealing with customers.</p> <p>Taking any two brands of your choice, collect the following market information. (a) Segments for which they are made. (b) Competitors brands. (c) Marketing mix information – information about its price, ways of promotion, ways of distribution.</p>	
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December 2023	24 (OJT -363 Periods)	On The Job Training (OJT)	Half – Yearly Exams
January 2024	20	Syllabus Revision Pre-Final Examinations	
February 2024	24	Syllabus Revision Practical Examinations IPE-2024	
March 2024	21	IPE Model Papers Practice Theory Examinations IPE-2024	

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IVC ANNUAL ACADEMIC PLAN – 2023-2024

(Based on B & R M CURRICULUM)

BANKING AND RETAIL MANAGEMENT (B & RM) (C. C: 217)

2nd YEAR

Total Working Days: 227

Total Periods: Theory – 110; Practical – 115; OJT – 450.

MONTH	No. of Working Days	Banking and Insurance - II	Business Accountancy - II	Retail Management	Assignments/ Exams
June 2023	24	<p>Theory: No of Periods - 18 Unit – I: Indian Money Market- Characteristics, Structure, composition (call and notice, money market, treasury bills market, CDs, CPs, short term bill market, MMMFs and DFHI).</p>	<p>Theory: No of Periods - 18 Unit –I: Accounts of Non-Trading Concerns: Meaning - Capital Expenditure and Revenue Expenditure – Capital Receipts and Revenue Receipts - Preparation of Final Accounts: Receipts and payments account – Income and expenditure account – Exercises.</p>	<p>Theory: No of Periods - 18 UNIT -1: Essentials of Retailing: Retail organization - Retail Procedure-Drivers of retailing – socio economic factors; changing economic factor; changing age; consumption patterns-Issues and challenges of Indian Retail-Super Bazar, Big bazar, Malls, Departmental stores</p>	
July 2023	24	<p>Theory: No of Periods - 18 Unit – II: Commercial Banks Deposit Accounts: Types of Deposit Accounts: Fixed deposits, Savings bank deposit - Basic Savings Bank Deposit Account - Current Account - Pradhan Mantri Jan-Dhan Yojana (PMJDY) Account. Procedure for opening of Deposit accounts. Practical's: No of Periods - 20</p>	<p>Theory: No of Periods - 18 Unit –II: Hire purchase System: Features – Difference between Hire purchase and Installment purchase systems - Accounting Treatment in the Books of Hire Purchaser and Hire Vendor. Practical's: No of Periods -20</p>	<p>Theory: No of Periods - 18 UNIT-II: Inventory Management in Retailing: Introduction-Types of Inventory-FIFO, LIFO, Average methods – Objectives of Inventory management – Stock valuation and recording- Role of inventory supervisor- Duties and responsibility of inventory supervisor- Inventory</p>	Unit Test - I

		Visit a nearby bank branch and observe day to day SB/FD/RD/CA accounts transactions and to fill account opening forms.	<p>i) Company Creation with Example</p> <p>ii) Ledger Creation:</p> <ul style="list-style-type: none"> • Single Ledger • Multiple Ledger <p>iii) Voucher Entry:</p> <ul style="list-style-type: none"> • Sales Voucher • Purchase Voucher • Receipt Voucher • Payment Voucher • Contra Voucher • Journal Voucher 	<p>planning methods: methods of inventory control-ABC Analysis, EOQ.</p> <p>Practical's: No of Periods -20</p> <p>Visit a local food and grocery retail outlet. Study the category of products this store offers on the basis of a) type of product b) brand c) kind of handling and make a PowerPoint Presentation.</p> <p>Create Display for Diwali theme using mannequins and backdrop Mock Retail Store operations.</p>	
August 2023	25	<p>Theory: No of Periods - 20</p> <p>Unit – III: Loans and Advances: Meaning of Term loan - Considerations for Grant of Loans - Types of Loans: Cash credits, Overdrafts, Bill's discounting - Consortium finance – Non-Performing Assets (NPAs). Retail Loans: Gold loans - Housing loans - Personal loans - Educational Loans-Vehicle loans - Real Estate and Mortgage loans – Modes of charging securities against Loans: Loan, Pledge, Hypothecation, Mortgage.</p> <p>Practical's: No of Periods - 25</p>	<p>Theory: No of Periods - 14</p> <p>Unit – III: Bank Accounts: Introduction– Proforma of Profit and Loss Account and Balance Sheet as per Banking Regulation Act - Books and Registers to be maintained by banks-non-performing assets --Preparation of bank final Accounts – Exercises.</p> <p>Practical's: No of Periods -25</p>	<p>Theory: No of Periods - 20</p> <p>UNIT -III: Supply Chain Management for Retailing: Introduction –Basic components of SCM - advantages and limitation of SCM-elements of SCM principles of SCM - direct and indirect distribution - types of intermediaries in supply chain –channels of distribution for services -steps in SCM.</p> <p>Practical's: No of Periods -25</p>	Unit Test - II

		To make PowerPoint Presentation on Housing Loan Procedure. To make PowerPoint Presentation on Business Correspondent/Business Facilitator.	i) Display the list of all Ledgers ii) Display of Cash Book in Tally	Identify various types of displays in retail malls in Your City and prepare Chart. Prepare case study on Online Category Management of an ECommerce Website.	
September 2023	22	Theory: No of Periods - 20 Unit – IV: Micro Credit-Bank Linkage Programme: SHG’s – Formation - Self Help Groups finance – Bank Linkage - Revolving Fund – Financial inclusions: Mudra Loans – Features -Bank Mitra: Banking Correspondent – Business Facilitator – Duties and Responsibilities. Unit– V: Clearing House: Meaning –Clearing Structure – Clearing Process – Settlements of Funds – Return Clearing – Inter Branch Clearing – Time Lag – Collection of Outstation Instruments – CTS cheques clearance.	Theory: No of Periods –20 Unit -IV: Depreciation: Meaning – Causes - Need for depreciation – Causes of depreciation – Methods of depreciation – Straight Line Method and Diminishing Balance Method – Exercises. Unit –V: Joint Venture: Joint ventures – Features- Difference between joint venture and consignment, Accounting Procedure – Exercises.	Theory: No of Periods - 20 UNIT - IV: Non-Store Retailing: Introduction of E-retailing advantages and Dis advantages of E-Retailing-7C in E-marketing - Importance of Tele marketing Advantages and Disadvantages of Tele marketing-e-marketing vs traditional marketing-internet business. UNIT -V: Event Management: - Introduction-types of events - steps in event management- documentation for conducting events - principles of event management-checklist for event manger-tips for organizing an event.	Quarterly Examinations

		<p>Practical's: No of Periods - 25 Charts Preparation: Students to Prepare Charts of the Following: a) Bank lay -out. b) Teller System. c) ATM'S/CDM'S Visit any bank's e - corner and observe how to use ATM and CDM's. and draw flowchart.</p>	<p>Practical's: No of Periods -25 i) BRS in Tally ii) Display of Trial Balance in Tally</p>	<p>Practical's: No of Periods -25 Study of Advertising Media used by Retailers in and around your city and Prepare PowerPoint Presentation.</p>	
October 2023	18	<p>Theory: No of Periods - 14 Unit – VI: E-Banking Services: Debit Card – Credit Card – Features - Mobile Banking - Online Banking - RuPay Cards - Core Banking – advantages - Teller System: Cash Deposit Machines - Cheque Deposit Machines - Intra-bank Transfer – Inter-bank Transfers - EFT – RTGS - ECS – IMPS - DDs - Digital Wallets (Paytm, Phone pay etc.). – Digital Banker – Features – UPI Payments. Practical's: No of Periods - 20 to make PowerPoint Presentation on Financial Inclusion Schemes (PMJDY etc.) and draw a Chart.</p>	<p>Theory: No of Periods - 20 UNIT-VI: Partnership Accounts: Definition –Admission of a Partner Accounting Treatment – Exercises. Retirement of partner – Accounting Treatment – Exercises. Practical's: No of Periods -20</p> <ul style="list-style-type: none"> • Generating Financial Reports in Tally: • Profit and Loss Account • Balance Sheet • Cash Flow and Funds Flow Reports etc., Inventory Reports 	<p>Theory: No of Periods –14 Unit-VI: Customer Relationship Management: Introduction – steps in CRM – duties and responsibilities of customer service associates – customer retention strategies – handling customer grievances. Practical's: No of Periods -20 To make PowerPoint Presentation/ Draw a Chart of creative advertising for retail.</p>	Unit Test -III

<p>November 2023</p>	<p>25</p>	<p>Theory: No of Periods - 20 Unit – VII: Insurance Agent/Agency Services: Need – Methods for Insurance Agents to improve Customer Service – Insurance Agencies Services (BPO) – Insurance Agent Recruitment Process. Unit – VIII: Regulation of Life Insurance and Non-Life Insurance: – Practical aspects of Life Insurance, procedure for issuing a life insurance policy, issue of duplicate policies, nomination, surrender value, policy loans, assignment, revivals and claim settlement. (Formats of types of Insurance). Regulation of Insurance in India- Insurance Act, 1938 and IRDA 1999. Insurance Regulatory Development Authority – Functions of I.R.D.A.</p> <p>Practical’s: No of Periods - 25 Visit to nearest branch and ask how to clear the intra bank cheque and interbank cheques, Inward clearing procedure and outward clearing. Visit to near branch and ask internet banking procedure.</p>	<p>Theory: No of Periods - 20 Unit –VII: Company Accounts: Meaning of company – Meaning of Share capital – Classification of share capital – Types of shares – Issue of shares at par, premium,discount – Journal Entries. Unit–VIII: Computerised Accounting - II: Tally– Introduction - Features/Advantages – Gateway of Tally – Company Creation - Types of Vouchers - Function Keys - Ledger Creation – Customization of Financial Reports.</p> <p>Practical’s: No of Periods -25 Maintenance of Partnership Accounts in Tally</p> <ul style="list-style-type: none"> • GST in Tally: • Activating GST in tally • Updating /creating sales and purchase ledgers for GST • Creating duty ledgers (CGST, SGST) 	<p>Theory: No of Periods - 20 Unit -VII: Sales Presentation: Introduction - planning for sales presentation –objectives and techniques of sales presentation - steps in sales presentations –Introduction of Product by highlighting benefits and providing information relating to product features and Benefits. Objections- types of objections – reasons for objections – methods of handling objections.</p> <p>Unit - VIII: Specialized Categories of Salesman: Auction salesman – Insurance Agent – real estate Dealer - investment salesman – export salesman –service salesman - mail order sales man – Door to door salesman –Travel agency salesman Health care agent.</p> <p>Practical’s: No of Periods -25 Analyze and compare two different franchisee stores and</p>	<p>Unit Test - IV</p>
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		<p>a) how to download, install and open the Bank apps (Yono SBI etc.,)</p> <p>b) E -wallets: try to open e wallets (Paytm, Phone pay, Google Pay and other Wallets) on your android phone.</p> <p>Visit to a small, as well as established Micro-credit agencies and consider the following: to know how they operate, Maintenance of accounts, Bank subsidy and linkage programme procedure.</p> <p>Visit a nearest LIC Branch or any Insurance Company Branches with your lecturer and observe day to day transactions. Obtain and fill up applications.</p>	<ul style="list-style-type: none"> • Creating party ledgers for GST • Recording purchase and sales under GST print invoice 	<p>identify them success factors. Prepare questionnaire and analyze results for ten customers on shopping patterns.</p> <p>Comparison of any three brands in electronics/consumer goods their image, size, consumer perception and volumes and to make a Power Point Presentation.</p> <p>Visit and Make hierarchy chart of Category management of a fashion and lifestyle retailer and Supermarket.</p>	
December 2023	24 (OJT - 450 Periods)	On The Job Training (OJT)			Half – Yearly Examinations
January 2024	20	Syllabus Revision Pre-Final Examinations			

February 2024	24	Syllabus Revision Practical Examinations IPE-2024
March 2024	21	IPE Model Papers Practice Theory Examinations IPE-2024

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ENGINEERING & TECHNOLOGY COURSES
<i>COMPUTER SCIENCE ENGINEERING [CSE] – 319</i>
<i>ELECTRONICS ENGINEERING TECHNICIAN [EET] 320</i>
<i>ELECTRICAL TECHNICIAN [ET] – 321</i>
<i>PRINTING TECHNOLOGY [PTG] – 324</i>
<i>MECHANICAL & AUTOMOBILE ENGINEERING TECHNICIAN [M & AT] – 325</i>
<i>CIVIL ENGINEERING TECHNICIAN [CET] – 326</i>

ANNUAL ACADEMIC PAN
COMPUTER SCIENCE AND ENGINEERING (C.S.E.) Course Code: 319
First Year

Month& No. of working days / No of periods	COMPUTER FUNDAMENTAS & MS- OFFICE (Theory Paper - 1) (Paper Code - 1227) Widows & MS - Office (Practical Paper - 1)	Programming in 'C' Theory Paper -II (Paper Code - 1228) C - Programming Practical Paper - II	Accountancy & Tally Theory Paper - III (Paper Code - 1229) Engineering Drawing Practical Paper - III
June - 2023 Theory - 24 Practical - 24	<p><u>Theory:</u> <u>UNIT - 1. Introduction to Computer systems and Hardware (20)</u> Introduction to Computers, generations of computer (2) Classification of Computers based on Purpose, Operation & Size (2) Anatomy of Computers (2) Number Systems (4) Basic I/O Devices (4) Block Diagram of CPU (1) Memory units- Primary and Auxiliary memory (2) Programming Languages, general software features trends and utilities. (3) <u>UNIT - 2. Overview of Operating Systems (20)</u> Introduction to Operating system , function and its types (3) Features of DOS(1) <u>Practical:</u> <u>UNIT – I: MS - DOS (15)</u> Working with Internal commands (8)</p>	<p><u>Theory:</u> <u>UNIT - 1. Introduction to Problem Solving Techniques (15)</u> Procedure and Algorithms (5) Flowcharts (10) <u>UNIT - 2. Features of ‘C’ (40)</u> Introduction to ‘C’ (2) Structure of a ‘C’ Program (2) Constant and types of constants & Variable and types of variables (4) Data types in C (1) <u>Practical:</u> <u>UNIT – 1. Programs on input output operations and operators (25)</u> Using printf (), putc (), putchar (),scanf(), getc(), getchar() Using data types and assigning values to variables (Values to variables (static), Reading values to variables from key board) Using assignment operator Programs on arithmetic operators</p>	<p><u>Theory:</u> <u>Unit I: Introduction: (5)</u> Book keeping, Accountancy, Uses, Accounting terminology, uses of Accountancy (2) Accounting concepts (1) Accounting Conventions (1) <u>Unit II: Double Entry System: (5)</u> Meaning theory of double entry system(1) Classification of Accounts (2) Advantages of double entry system (2) <u>Unit III: Journal: (10)</u> Introduction (1) journalizing of different transactions (9) <u>Unit IV: Ledger: (10)</u> Meaning and significance, Ledger Posting (1) ledger of balancing (3) <u>Practical:</u> <u>Unit - 1 Introduction -6</u> Scope and objective of the subject,</p>

	<p>Working with external commands (7)</p> <p><u>UNIT - II WORKING WITH WINDOWS (20):</u></p> <p>Features of windows (GUI), File System, Multitasking, Plug and Play Support, Multimedia Support, Comparison with CUI (Dos or Unix) (2)</p> <p>Elements of Windows Interface, Desktop components, Mouse Operations, Shortcuts (3)</p> <p>Start Menu, Programs Menu, Documents Menu, Settings Menu, Find and Help Menu, Run Menu, Customizing Windows- resizing, moving and closing, SHUTTING DOWN THE PC – Different options like standby, restart etc. (2)</p> <p>MANAGING FILES AND FOLDERS</p> <p>WORKING IN WINDOWS - (2)</p>	<p>Programs on relational operators</p> <p>Programs on logical operators</p> <p>Programs on bitwise operators</p>	<p>Importance of engineering drawing as a communication medium, Drawing instruments and their uses, Scales : Recommended scales, reduced & enlarged, Sheet sizes : A0, A1, A2, A3, A4, A5. Layout of drawing sheet sizes of title block and its contents, Simple exercises on the use of drawing instruments. (6)</p> <p><u>Unit -2 Lettering and Dimensioning - 20</u></p> <p>Types of Lettering (4)</p> <p>Guide Lines for lettering (2)</p> <p>Recommended sizes of letters and numbers (2)</p> <p>Single stroke letters.(5)</p> <p>Dimensioning - rules and systems of dimensioning –(5)</p>
	Assignment	Assignment	Assignment
<p>July - 2023</p> <p>Theory - 24</p> <p>Practical - 24</p>	<p><u>Theory:</u></p> <p>Working with DOS Commands (5)</p> <p>Features of Windows (5)</p> <p>Meaning of Multitasking, File system, desktop components, control panel, Windows Explorer , Device manager, File Manager and Program Manager , Display properties, taskbar properties etc. (6)</p> <p><u>UNIT - 3. MS-Word (35)</u></p> <p>Introduction to Word Processing (1)</p> <p>Editing a Document (3)</p> <p>Move and Copy Text and Help</p>	<p><u>Theory:</u></p> <p>Data types in C (1)</p> <p>Operators in C (8)</p> <p>I/O Statements associated with scanf,printf,getc,putc,getchar,putchar (3)</p> <p>Control statements (if, if-else, nested if , else if ladder) (6)</p> <p>Loops(while, do-while, for, nested loops) (5)</p> <p>Branching (switch, break, continue)</p> <p>Unconditional branching (go to statement) (1)</p> <p><u>Practical:</u></p>	<p><u>Theory:</u></p> <p>ledger of balancing (4)</p> <p>advantages of ledger (1)</p> <p><u>Unit V: Subsidiary Books: (15)</u></p> <p>Meaning, significance,types and purpose of Subsidiary books (2)</p> <p>purchase book, Sales book, Purchase Return book, Sales returns book, Bills receivable book, Bills Payable book, Treatment ofTrade discount (2)</p> <p>Exercises on Subsidiary books (11)</p> <p><u>Unit VI: Cash book: (15)</u></p> <p>Meaning and significance types of cash books (1)</p>

	<p>System(2) Formatting Text and Paragraph (6) Finding and Replacing Text and Spell Checking (2)</p> <p><u>Practical:</u> MANAGING FILES AND FOLDERS WORKING IN WINDOWS - (1) Configuring windows for unique user and desktop: (4) Using accessories, disk tools and printers accessories available in windows (6) <u>MS – WORD (40)</u> Familiarization with MS Word Features of Word Processor Opening MS Word , Contents of MS Word Window , Saving with password, Opening an existing Document (3) Text Formatting (3) Paragraph Formatting (6) Searching for text: Finding and Replacing Text (1)</p>	<p>Programs on other operators (1) <u>UNIT – II. Programs involving control structures(40)</u> Programs involved on if statement - 5 if-else statement - 5 if -else ladder statement – 5 switch, break, continue –4 for loop – 3 while loop – (1)</p>	<p>features (3)</p> <p><u>Practical:</u> dimensioning a given drawing(2) <u>Unit - 3 Geometric Construction - 24</u> Bisecting a line - perpendiculars - parallel lines - division of a line (3) Angles - bisection, trisection(2) Tangent lines touching circles internally and externally (2) Polygons - Regular polygons - circumscribed and inscribed in circles.(5) Conic sections - Definitions of focus, directrix, eccentricity(2) Construction of Ellipse by Concentric circles method.(3) Construction of parabola by rectangular method.(3) Construction of Hyperbola when given the position of point from X-axis and Y-axis.(2)</p>
	<p>Assignment Unit Test- 1</p>	<p>Assignment Unit Test- 1</p>	<p>Assignment Unit Test- 1</p>
<p>August-2023 Theory - 25 Practical - 25</p>	<p><u>Theory:</u> Using Tabs (5) Enhancing Document (1) Columns, Tables and Other Features (5) Using Graphics, Templates and Wizards (5) Using Mail Merge (2)</p>	<p><u>Theory:</u> Branching (switch, break, continue) Unconditional branching (go to statement) (2) simple programs covering above units (5) <u>UNIT - 3. Arrays in ‘C’ (30)</u> Define an array and types of Arrays(</p>	<p><u>Theory:</u> Exercise on kinds of cash books: single cash book, cash book with cash and discount, cash book with bank and discount, cash book with cash and bank and discount columns, analytical petty cash books. (11)</p>

	<p>Miscellaneous features of Word (3) Introduction to Spreadsheet (2) Creating Worksheets & feeding data (2)</p> <p><u>Practical:</u> Searching for text: Finding and Replacing Text (2) Inserting Objects (2) Inserting Objects (4) Working with tables: (8) Working with Page Layout: (3) Mail Merge (3) Printing the Documents (2) Additional Tools (1)</p>	<p>single, two dimensional and multidimensional arrays) (8) Programs on arrays (10)</p> <p><u>Practical:</u> while loop (4) do – while loop (5) for loop (3) nested statements, loops and other programs (5)</p> <p><u>UNIT – III: Programs involved on Arrays (40)</u> Creating single dimension numeric, character, floating, double type of array (3) Programs on single dimensional arrays (Creating array, reading values to array, printing array elements) (4) Programs on single dimensional arrays (Sorting, matrix transpose, inverse of matrix etc) (1)</p>	<p><u>Unit VII: Bank Reconciliation Statement(BRS): (15)</u> Introduction, Definition, Significance, Pass book (2) over draft problems on BRS (5) problems on as per cash book balance and as per passbook balance (4) overdraft balance (2) overdraft balance (2)</p> <p><u>Unit VIII: Trial Balance and Rectification: (10)</u> Meaning, significance, features and Objectives (2) Preparation of trial balance (7) Errors disclosed by trial balance, Errors not disclosed by the trial balance (1)</p> <p><u>Practical:</u> Construction of Hyperbola when given the position of point from X-axis and Y-axis.(2)</p> <p><u>Unit - 4 Orthographic Projection - 35</u> Definition - Planes of Projection - Four quadrants – Reference line.(3) First angle projection - Third angle projection(5) Projections of points(5) Projections of straight lines(5) Projections of planes(5)</p>
	<p>Assignment Unit Test- 2</p>	<p>Assignment Unit Test- 2</p>	<p>Assignment Unit Test- 2</p>
<p>September-2023 Theory - 22</p>	<p><u>Theory:</u> <u>UNIT - 4 MS-Excel (35)</u> Creating Worksheets & feeding data (2)</p>	<p><u>Theory:</u> Programs on arrays (12)</p>	<p><u>Theory:</u> <u>Unit IX: Final Accounts: (20)</u> (a) Trading Account: Meaning and</p>

<p>Practical -22</p>	<p>Using functions (8) Editing Cells and Using commands and functions (3) Moving and Copying, Inserting and Deleting Rows and Columns (2) Formatting a Worksheet (2) Opening, Saving and Printing a Worksheet (2) Working with Charts (3) <u>Practical:</u> Additional Tools (2) <u>UNIT - IV MS-EXCEL - 30</u> Features of MS-Excel (1) Contents of the MS-Excel Window (2) Managing Worksheets (4) Working with Data, Entering Data, The Data Types, Formatting Data, Entering Series, Copying Data, Using Paste and Paste Special, Relative and Absolute Referencing, Assigning Range Names (5) Performing Calculations in Excel or using different types of functions (4) Charts in Excel (4)</p>	<p><u>UNIT - 4. Functions (40)</u> Function definition, pupose, uses (2) Difference between a function and a procedure Advantages of functions (5) User defined and library functions, main function, return() (3) <u>Practical:</u> Programs on single dimensional arrays (Sorting, matrix transpose, inverse of matrix etc) – 9 Creating multi or two dimensional numeric, character, floating, double type of array - 5 Programs on multidimensional arrays (4) Programs on multidimensional arrays (4)</p>	<p>significance, Performance and preparation of trading account, Adjustments (6) outstanding expenses , Prepaid Expenses, Depreciation (1) (b) Profit and Loss account: Meaning and significance, Steps in preparation of profit and loss accounts-performance of profit and loss account- adjustments (6) (c) Balance Sheet: Meaning and significance- objectives, Preparation of balance sheet- arrange of assets and liabilities, Adjustments. (7) <u>Unit X: Tally Package:- Introduction to Tally package (30)</u> a) Introduction to Accounting packages – Features, accounting, data migration capability, duties and taxes, advantages and disadvantages. (2) <u>Practical:</u> Projections of solids(6) Conversion of pictorial views into orthographic views(6) <u>Unit - 5 Isometric Projection -25</u> Definition - Isometric axes, lines and planes -5 Isometric Scale - Isometric view - 5</p>
	<p>Assignment QUARTERLY EXAMINATIONS</p>	<p>Assignment QUARTERLY EXAMINATIONS</p>	<p>Assignment QUARTERLY EXAMINATIONS</p>
<p>October - 2023 Theory - 18</p>	<p><u>Theory:</u> Working with Charts (1) Working with Macros(4)</p>	<p><u>Theory:</u> User defined and library functions, main function, return() (4)</p>	<p><u>Theory:</u> a) Introduction to Accounting packages – Features, accounting, data migration</p>

<p>Practical - 18</p>	<p>Pivot tables (4) <u>UNIT - 5. MS-PowerPoint (25)</u> Creating Presentations using AutoContent Wizard, Template & Blank Presentation (4) Working with Master's Slide, Title handout and Notes (3) Viewing a Presentation (2)</p> <p><u>Practical:</u> Charts in Excel (2) Working with Data (3) Additional Tools in Excel (3) Printing Excel Sheets (2)</p> <p><u>UNIT - V MS – POWER PONT - 20</u> Starting power point, The MS-PowerPoint Views (1) Creating a new presentation (7)</p>	<p>Concepts associated with functions – Recursion, scope of a function (4) extent of a variable(global&local) (4) Factorial and GCD using recursion (5) Call by value and call by reference with example (1)</p> <p><u>Practical:</u> Programs on multidimensional arrays (10)</p> <p><u>UNIT : IV. Programs to create and use Functions (15):</u> Programs on library, string, math, io, and other type of functions (8)</p>	<p>capability, duties and taxes, advantages and disadvantages. (2) b) Financial functions of Tally – Inventory and application – Creation of company, alteration of company, master configuration, creation of groups,(4) grouping of ledger accounts(2) voucher configuration (2) recording transactions of sample data. (3) c) Display and reports – Accounting reports, Balance sheet, profit and loss account, printing reports. (5)</p> <p><u>Practical:</u> Drawing of isometric views of plane figures - 5 Drawing of isometric views of prisms and pyramids - 5 Drawing of isometric view of cylinders and cones - 5</p> <p><u>Unit - 6 Using AutoCAD - 25</u> Introduction to AutoCAD: the Interface(2) The Basics of Using AutoCAD Drawing Tools (1)</p>
	<p style="text-align: center;">Assignment Unit Test - 3</p>	<p style="text-align: center;">Assignment Unit Test - 3</p>	<p style="text-align: center;">Assignment Unit Test – 3</p>
<p>November-2023 Theory - 25</p>	<p><u>Theory:</u> Viewing a Presentation (1) Drawing Objects & Inserting OLE (2)</p>	<p><u>Theory:</u> Call by value and call by reference with example (4)</p>	<p><u>Theory:</u> d) Ratio Analysis – Classification- Financial ratios, Profitability ratio,</p>

<p>Practical - 25</p>	<p>Drawing freeform shapes (5) Rotating Objects (3) Animation in slides/objects (6) Revision Practical: Creating a new presentation (3) Working with Slides (6) Running the Slide Show, Modifying the slide transition, Setting and Controlling the slide show – timer or mouse controlled (3) <u>UNIT – VI Software Installation and Hardware Maintenance (10)</u> Assembling and Disassembling the computer system(6) Install MS windows XP /7/10 on the personal computer.(4) Revision</p>	<p>Use of various categories of built in functions like mathematical functions and string functions (8) <u>UNIT - 5. Structures in 'C' (10)</u> Structures:- definition - declaration – creation of a structure (3) operation on structures: a) array of structures, b)array with structures. (4) Unions – definition – difference between union and structure (2) Revision Practical: Programs on library, string, math, io, and other type of functions (3) Programs on user defined functions (4) <u>UNIT : V. Structures in C (15):</u> Programs on structures (4) Programs on structures (11) Revision</p>	<p>Activity ratio analysis. (5) Cash flow statement and flow statement- Preparation of funds flow statement, limitations of funds flow statement, analysis of funds flow statement, Cash Flow in tally. (5) Revision Practical: The Basics of Using AutoCAD Drawing Tools (2) Using AutoCAD Navigation Tools(4) Using AutoCAD Drafting Tools(4) Modifying AutoCAD Drawing Objects using Copy / Move, Scale, Rotate etc. (6) Working with text in AutoCAD (6) Revision</p>
	<p style="text-align: center;">Assignment Unit Test - 4</p>	<p style="text-align: center;">Assignment Unit Test - 4</p>	<p style="text-align: center;">Assignment Unit Test - 4</p>
<p>December-2023 24</p>	<p style="text-align: center;">On The Job Training Half yearly Exams</p>	<p style="text-align: center;">On The Job Training Half yearly Exams</p>	<p style="text-align: center;">On The Job Training Half yearly Exams</p>
<p>January – 2024 Theory - 20 Practical-20</p>	<p style="text-align: center;">Revision</p>	<p style="text-align: center;">Revision</p>	<p style="text-align: center;">Revision</p>
	<p style="text-align: center;">Assignment PREFINAL EXAMINATIONS</p>	<p style="text-align: center;">Assignment PREFINAL EXAMINATIONS</p>	<p style="text-align: center;">Assignment PREFINAL EXAMINATIONS</p>
<p>February– 2024 24</p>	<p style="text-align: center;">Revision PRACTICAL EXAMINATIONS</p>	<p style="text-align: center;">Revision PRACTICAL EXAMINATIONS</p>	<p style="text-align: center;">Revision PRACTICAL EXAMINATIONS</p>

March – 2024 21	Revision THEORY EXAMINATIONS-2024.	Revision THEORY EXAMINATIONS-2024.	Revision THEORY EXAMINATIONS-2024.
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Prepared and submitted by:

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ANNUAL ACADEMIC PAN
COMPUTER SCIENCE AND ENGINEERING (C.S.E.)
Course Code: 319 Second Year

Month & No. of working days / No of periods	OOPS & JAVA (Theory Paper - 1) (Paper Code - 2227)OOPS & JAVA (Practical Paper - 1)	Relational Database Management Systems (RDBMS) Theory Paper -II (Paper Code - 2228) SQL, PHOTO SHOP, FLASH PLAYER Practical Paper - II	Data Communication and Computer Networks (DCCN) Theory Paper - III (Paper Code - 2229) Internet Technologies Practical Paper - III
June – 2023 Theory - 24 Practical - 24	<p><u>Theory:</u> <u>UNIT - 1. Object-Oriented Programming and Java (10)</u> Introduction, History of Java, Need of Object Oriented Programming (1) Principles of Object Oriented Programming Language: Class, Object, Data Encapsulation, Inheritance, Polymorphism (2) Application of Object Oriented Programming Language (1) Features of Java (2) JVM, JRE, JIT, Byte code (2) Java Program Structures (1) Installation of JDK (1)</p> <p><u>UNIT - 2. The Java programming language (25)</u> Stream, Stream Class, Types of Streams, Accepting characters from key board (2) <u>Variable:</u> Declaring Variables, Assigning values to variables, Scope of a variable (1)</p>	<p><u>Theory:</u> <u>Unit I: Concept of DBMS: (20)</u> Purpose of Data Base Systems, Introduction (1) Advantages of DBMS over FILE PROCESSING SYSTEM (1) Data abstraction, Definition, Three Levels of Data Abstraction (1) Data models, Data Model Definition, Types of Data Models (Object Based, Entity relationship, Record based data models) (1) Relational Model : Definition & Methodology, Relational Model Concepts, Advantages of Relational Model, Disadvantages of using Relational Model (2) Hierarchical Data Model, Definition & Methodology, Advantages of Hierarchical Model, Disadvantages of Hierarchical Model (2) <u>Network Data Model, Definition &</u></p>	<p><u>Theory:</u> <u>UNIT 1 :- Data communications:(10)</u> Definition, Characteristics of Communication, Components of communication (1) Modes of data transmission (Analog and Digital): Analog Signals, Periodic and Non Periodic Signals, Digital Signals (1) Types of communication (Simplex ,Half duplex, Full Duplex) (1) Types of Communications, Point to Point Communication, Point to Multipoint Communication (1) Bandwidth, Measurements of Band Width, Bit rate, Noise (2) Communication Channels: Guided Media (Functionality, Advantages and Disadvantages) - Twisted Pair Cable, Coaxial Cable, Fiber Optic Cable (2)</p>

<p><u>Constants</u>: Integer Constants, Real Constants, Single Character Constants, Back Slash Character Constants (1) Java Literals, Identifiers, Separator, Data Types, Min, Max holding values and Memory Size, Types of data types(Primitive and Non primitive) (2) <u>Casting Values</u>: Automatic Conversion, Explicit type casting, Mixed mode (1) <u>Operators</u>: Types of Operators Arithmetic Operators, Relational Operators, Logical Operators, Bitwise Operators, Increment Operator ++ (Pre increment, Post increment), Decrement Operator -- (Pre Decrement, Post Decrement) Assignment Operator =, Assigning value to a variable, Using assignment operator with other operators, Conditional Operator (? =) (5) <u>Class</u>: Syntax, Example, Instance Variables, static key word, Rules for Instance Variable (2)</p> <p><u>Practical:</u> <u>UNIT – I: Programs on data types and Operators (10)</u> Programs on data types (4) Programs on Operators (6)</p> <p><u>UNIT – II: Programming with Control Statements (25)</u> Programs involved on if statement (2) if-else statement (2)</p>	<p><u>Methodology, Advantages of Network Data Model (2)</u> <u>Physical Data Models (1)</u> Instances, Schemes (1) Data Independence, Types of Data Independence (2) Data Integrity (1) DDL , DML. DCL (1) Responsibility of a Database Manager (1) Data Base Administrator, Definition, Responsibility of Data Base Administrator (2) Data Base Users, Application users, Specialized Users, Stand alone users, Native users (1) <u>Unit II: Entity and relationship: (20)</u> Degree, Cardinality, Object, Literals (1) Definition and Functionality for Entity, Attributes, Relations (1) Entity and Entity sets, Strong Entity, Weak Entity sets (1) Attributes, Types of Attributes, Simple Attribute / Atomic Attribute, Complex Attribute / Composite Attribute, Single Valued Attribute (1) <u>Practical:</u> Queries on DDL COMMANDS (5) Queries on DML COMMANDS (5) Queries on DCL COMMANDS (5) Data Constraints, Primary Key (1) Constraint, Foreign Key Constraint (1)</p>	<p>Unguided Media: Radio Waves, Micro Waves, Infrared (2)</p> <p><u>UNIT 2:- Network Types and Topologies: (15)</u> Computer network: Definition, Applications of Computer Networks (3) Types of Networks- Definition, Characteristics, Functionality, Advantages and Disadvantages (LAN, MAN, WAN, PAN, HAN, Campus Networks, Enterprise Private Networks, BBN, GAN, SAN, VPN, EPN and The Internet) (8) Types (Bus, Ring, Star, Mesh and Hybrid) and structure of topologies, Advantages and Disadvantages topologies (3) <u>Practical:</u> <u>Familiarization with network components(10)</u> Cables, Crimping tools, Color combination, Network interface cards (5) addressing, Modems, Types of modems, Switch, Hub, Router, Gateways, Server, Client, Other Network devices (5) <u>Unit – II (20)</u> Basic Trouble shooting: (7) Diagnose the problem when the</p>
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	<p>if -else ladder statement (2) switch, break, continue (2) for loop (5) while loop (1)</p>	<p>Not Null and Unique key constraint, Business Rule Constraints (1) Set operators (1)</p>	<p>computer does not run properly. How to trouble shoot when the printer is not printing? Trouble shoot the problem when the keyboard does not respond and gives off a constant beeping noise when booting up. Diagnose mouse when acting as erratic</p> <ul style="list-style-type: none"> • Trouble shoot when the computer has no sound and also no sound is heard from audio media. <p>CMOS Setup (3) Formatting Hard disk(2) Partitioning Hard disk (2)</p>
	Assignment	Assignment	Assignment
<p>July – 2023 Theory - 24 Practical - 24</p>	<p>Theory: Objects: Creating Objects, Reference (1) Accessing classes and methods (1) <u>Access Specifiers:</u> private, public, protected, private protected, default (2) Constructor: Types of Constructors, Default Constructor, Passing values (args) to constructor (2) Methods: main method, Definition, creating method, method calling, void keyword, passing parameters by value, Method overloading (3) this operator, abstract classes and methods, Constructor Vs Method (2) UNIT - 3. Control Statements and</p>	<p>Theory: Multi Valued Attribute, Derived Attribute, Null Attribute, Key Attributes (1) i) Primary Key ii) Foreign key iii) Super key iv) Candidate key (3) Relationship and Relationship sets, Definition and Functionality (1) Mapping constraints (1) E-R representation symbols (1) Symbols and Representation Properties Ellipses, Diamonds, Lines, Double Ellipses, Dashed Ellipses, Double Lines, Double Rectangles, Total Participation, Cardinality Ratio, Structural constraint participation (1)</p>	<p>Theory: Types (Bus, Ring, Star, Mesh and Hybrid) and structure of topologies, Advantages and Disadvantages topologies (1) UNIT 3:- LAN Components: (20) Server, Different types of servers, Clients, different peripherals used as clients, Fileserver, Data Structures, FTP Commands (5) Ethernet cards- Definition, Purpose, Functionality (2) Hubs - Definition, Purpose, Functionality, Types of hubs (2) Switches - Definition, Purpose,</p>

<p>Arrays (25) Conditional Statements: Simple ' if ' statement, if - else statement, Nested ' if ' statement, else - if ladder (3) switch statement, Purpose of "default ", switch statement using operator or characters, switch statement using numbers, switch statement using Alphabets (2) Java Iteration statements (Looping statements) – while, do- while and for statements. (Purpose, Definition, Syntax, Flow chart, Example) (5) Difference between while and do- while loops, Nested loops (1) Break and Continue statements, difference between break and continue statements (1) One and two dimensional arrays, reading and writing to arrays, arithmetical operations on arrays, Arrays - Definition, Indexing , '\o' , Types of Arrays, Array size (1)</p> <p>Practical: While loop (4) do – while loop (5) nested statements, loops and other programs (2)</p> <p><u>UNIT – 3: Programming with Arrays (25)</u> Creating single dimension numeric,</p>	<p>Drawing E-R diagrams, History, Usage of ER Diagram (1) ER Model in Data Base Design (2) Drawing ER Diagrams Examples (5) Unit III: Relational Data Model: (20) Structure, table Structure (1) Domain, Range, degree of a table tuple, types and attributes (1) Types of Attributes, Simple Attribute / Atomic Attribute, Complex Attribute / Composite Attribute (1) Single Valued Attribute, Multi Valued Attribute (1) Derived Attribute, Null Attribute, Key Attributes (1) Relationship and Relationship sets (1) types of keys i) Primary Key ii) Foreign key iii) Super key iv) Candidate key (1) Formal query languages (1)</p> <p>Practical: Set operators (1) Joins(3) Sub queries and database objects (5) PL SQL programs(2) PHOTOSHOP (35) • Introduction to the Photoshop interface Familiarization with the toolbars (2) • Creating a new Photoshop file , adjusting colour, size and resolution</p>	<p>Functionality, Port Alignments, Difference between Hub and Switch (2) Routers - Definition, Purpose, Functionality (1) Gateways - Definition, Purpose, Functionality (1) Modem - Definition, Purpose, Functionality, Data Transmission Types (2) On board modem, Internal Modem, External Modem, Removable Modem (1) V - SAT - Definition, Purpose, Functionality (1) ATM - Definition, Purpose, Cell Format, Format Types, Functionality, Layers (3) <u>UNIT 4: Computer Networks - (20)</u> Computer Network Definition, Criteria, Advantages of Networks (1) Categories and Connections Network types (Point - to - Point, Point - to - Multipoint) (2)</p> <p>Practical: Partitioning Hard disk (1) Installing OS i.e., Windows XP, Windows NT, Windows 7 etc., (5) <u>UNIT – III: Configuring LAN: (15)</u> Crimping and Cabling(4)</p>
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	<p>character , floating, double type of array(2) Programs on single dimensional arrays (10) Creating multi or two dimensional numeric, character, floating, double type of array (3)</p>	<p>settings Importing and copying images into Photoshop (2) Working with layers-the layers palette, adding, deleting, adjusting the layer effects, layer features like locking, styles, opacity and blending options. (4) • Familiarizing with the types of tools in the toolbox. (4) Working with the selection tools –The marquee tools, lasso tools(1)</p>	<p>Configuring Switch, Hub (1) Configuring Router(1) Installing NIC (2) Installing Server (2) Connecting clients like Computer, Printer, Scanner, HDD and Other devices (2) IP Addressing (3) <u>UNIT – IV Browsing, E mail and File Transfer (25)</u> Components and Using of different browsers like Internet Explorer(2) Mozilla Firefox(1)</p>
	<p>Assignment Unit Test - 1</p>	<p>Assignment Unit Test - 1</p>	<p>Assignment Unit Test - 1</p>
<p>August - 2023 Theory - 25 Practical - 25</p>	<p>Theory: Single Dimensional Array -Definition, Syntax, Initialization, Direct Assigning values, Reading values to array (or) Reading Array elements, Printing Array elements on the console (2) Multi dimensional Arrays - Definition, Syntax, Initialization, Printing Array Elements, Printing Array, Elements on the console (2) Character Arrays - Definition, Syntax, Initialization, Reading Array Elements, Printing Array Elements, Direct Assigning Values (1) String Buffer class methods, Difference between String and String Buffer class and String Builder class Arithmetical</p>	<p>Theory: Relational Algebra: UNARY operations SELECT, PROJECT (2) Projection, Set Union, Cartesian Product, Set Intersection, RENAME(4) Tuple Relation Calculus, BINARY OPERATIONS (1) Commercial query languages, Examples, Basic structure, Difference between Formal and Commercial Query Languages (2) CODD rules (2) Normalization (1) <u>Unit IV: SQL: (30)</u> Introduction to SQL, Advantages and Disadvantages of SQL (1) 2. data types CHAR, VARCHAR,</p>	<p>Theory: CONNECTION-ORIENTED VERSUS CONNECTIONLESS SERVICE (1) Over view of Network Models (1) Protocol Layering Hierarchy, Features of Layering, Structure of Layer Hierarchy, Protocols, Encapsulation, Relationship of Services to Protocols (1) OSI Model - Definition, Purpose, Layer Architecture,(4) Definition, Functionality, Purpose or Responsibilities of each layer (4) TCP/IP Reference model - Definition, Purpose, Layer Architecture, Purpose or</p>

	<p>Operations on Arrays (1) String Arrays, Declaring String Arrays, Using String methods on the arrays like tolowercase(), touppercase (), replace (), etc, (3) String Buffer class methods, Difference between String and String Buffere class and String Builder class Arithmetical Operations on Arrays (3) <u>UNIT - 4. Implementing OOPS in Java (25)</u> Method- Definition, Types of Methods, main method, Standard Library Methods, using Standard Library methods, Examples on using the methods, User defined Methods: Creating Method, Access Modifiers, return type, Name of method, Parameters (passing arguments), Method body (4) calling method (1) Methods with public access modifier, Methods with Private access modifier, Methods with protected access modifier (2) Java Methods with arguments and return values, Method with zero arguments and return values, Methods does not return values, Advantages of using methods (3) Achieving Polymorphism (Definition, Purpose, Example) (2) Inheritance - Definition, Purpose, Child Class, Super Class, extends keyword (1)</p>	<p>VARCHAR2, NUBER, DATE, LONG, RAW (1) Creation of Two Dimension matrices, Grammar of syntax (1) 3. DDL,DML and DCL Commands DDL Commands: Create , Alter, Drop DML- Procedural and Non Procedural DML, DML Commands: Insert, Delete, Update, Select DCL Commands: Grant, Revoke, Commit, Roll Back, Save Point (6) Data Constraints, Primary Key Constraint, Foreign Key Constraint, Not Null and Unique key constraint, Business Rule Constraints, (4) <u>Practical:</u> Working with the selection tools –move tools, and the magic wand, crop and slice tools. (1) • Working with the retouch paint tools – The healing tools, brush, clone, history, eraser, fill tools, sharpen/blur, dodge/burn and sponge tools. (4) • Working with the drawing and type tools – The pen, freeform pen, Path selection, Line, Rectangle, Polygon, Ellipse, Custom shape, Direct selection, Anchor point and Convert Point Tools. Horizontal and Vertical Type and Type Mask tools. (4) Working with the annotation and measurements tools. (3)</p>	<p>Responsibilities (4) Comparison of OSI and TCP / IP Models (1) <u>UNIT 5. - Internet Connectivity and Services (20)</u> Introduction to internet, Frequently Used Terms, Advantages of Internet, Disadvantages of Internet (1) Advantages , browsers Services, Internet Explorer, Google Chrome, Mozilla Fire Fox, Safari, Opera, Slim jet Browser, Lynx, Netscape (2) Email - Definition, Purpose, Advantages of Email, Step wise procedure to create email account, components or options of mail box, Composing Email, sending email with attachments, Receiving or Viewing Email with attachments, downloading attachments, Forwarding Email with attachments (5) FTP, Data Structures, Objectives of FTP, Basic steps in FTP Session (1) <u>Practical:</u> Google chrome, Opera etc., (2) Creating mail Account (1) Different components of mail box like sent, inbox, starred, snoozed,</p>
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	<p><u>Practical:</u> Programs on multi dimensional arrays (7) Programs on multi dimensional arrays (3) <u>UNIT – IV: Creating and using Classes and Objects(20)</u> Programs on Creating classes using Instance Variables, static key word, Rules for Instance Variable (2) Programs on Using access specifiers private, public, protected, private protected, default(5) Creating methods (3) Programs on Creating Objects, Reference(2) Accessing classes and methods (3)</p>	<ul style="list-style-type: none"> • Working with the Image Menu - Image Size, Canvas Size, Image Adjustments, Color Modes etc. (3) • Working with the filter menu - Blur, Sharpen, Extract, Liquify, Vanishing Point, Distort, Pixel ate, Render etc. (3) • Working with the View Menu - Zoom In, Zoom Out, Proof Colors, Screen Modes, Rulers, Guides, Snap etc. (2) <p>Exercises involving image modifications using various photo editing and photo effects together. (2)</p> <p><u>FLASH PLAYER (45)</u> A. Introduction: About Flash (2) Understanding the Workspace of Flash (1)</p>	<p>drafts and categories (3) File transfer (1) FTP, SSH File transfer protocol (2) Viewing, Send and receive email with attachments(3) HTTP and other protocols (2) File Sharing (2) Managed file transfer (2) Peer to peer file sharing(2) Pull and Push technologies (2) <u>Unit – V Creating web pages using HTML:</u> Writing HTML code using the following: Basic Tags for a website – Html, Head, Title and Body (2) Tags for Text - <p>,
, <blockquote>, Headings <h1>...<h6>, Bold and italic tags, Horizontal line tags (1)</p>
	<p>Assignment Unit Test – 2</p>	<p>Assignment Unit Test – 2</p>	<p>Assignment Unit Test - 2</p>
<p>September – 2023 Theory - 22 Practical - 22</p>	<p><u>Theory:</u> Types of Inheritance: Single Inheritance -Definition, Example (1) Multi Level Inheritance- Definition,Example (1) Achieving Multiple Inheritance through Interfaces Interface - Definition, Syntax, Implements keyword, Example, Final fields, Abstract Methods (2)</p>	<p><u>Theory:</u> Column level constraints, NULL value concepts, Check constraint, Default value (2) 4. Set operators and joins: Union, Union all, Intersect, Minus, Simple join, Self Join, Outer Join, Non equijoin, Table aliases (5) 5. Sub queries and database objects: Sub Qureis - Any, Rapid all, Multiple</p>	<p><u>Theory:</u> Introduction to Internet security – Viruses, Trojan or Trojan Horse, Worms, Phishing (4) Hacking - Definition, Prevention, Antivirus - Definition, Purpose, Usage, Behavior (2) Antivirus software - List of Antivirus software’s, Installation, Using Antivirus Software, Functions of</p>

	<p>Implementing Interfaces in classes (1) Hierarchical Inheritance- Definition, Example (1) Hybrid Inheritance - Definition, Example (1) Constructors and Interfaces, Over Loading, Method Overloading - Definition, Example (2) Constructor overloading-Definition, Example (1) Operator Overloading - Definition, Example (1) Final Variables, Final Classes, Final Methods (1) <u>UNIT - 5. Packages and Interfaces(10)</u> Concepts and uses of packages, Creating and importing packages (1) Types of packages, Purpose of import Statement, importing packages, User defined packages - Definition, Syntax, Creating own package (3) Accessing package, Using a package, Adding class to a package (2) Interfaces - Definition, Syntax, implements keyword, Concepts of interface and its uses, Final Fields, Abstract Methods, Abstract Classes (2) Writing and implementing simple interfaces, Abstract classes, Abstract classes Vs Interfaces, implementing interfaces (2) <u>Practical:</u> Accessing classes and methods (6)</p>	<p>sub queries, Correlated Sub queries, (4) Data Objects-View, Synonym, Sequence, Index Sequences- Start with n, Min value n, Max value n, Cycle, No Cycle, Cache, No Cache, Next val, currval, Alter Sequence (4) More practical exercises on DML queries (3) Unit V: Software Development and Life cycle: (20) Definition of system, analysis and design (1) Characteristics of system, Elements of System (2) Analysis- Analyst(1) <u>Practical:</u> Understanding the Workspace of Flash (1) B. Getting Started with Flash: Flash Document Setup, Create Animation , Publishing , Basic drawing (4) C. Play with Text: Text Tool(4) Transforming Text, Skew, Break Apart and Color Text, Vertical Text, Rotate Text and Zoom Text (1) D. Symbols and Interactivity: Graphic symbol , Buttons symbol , Action Script , Movie clip symbol (5) E. Special Effects: Shape Tween , Mask , Spotlight (3)</p>	<p>Antivirus (delete, Move to chest, quarantine, clean), Email utions, Identifying Potential viruses in Email, Identification of Good files and bad files, Stopping and activating Antivirus Software (2) Firewall - Definition, Purpose, Functionality, Types of Firewalls (Packet Filtering, Proxy Servers, Application Gateway, Dynamic Packet Filtering , Circuit Level Gateway(2) <u>UNIT-6:- Trouble Shooting (25)</u> Introduction to Trouble Shooting, Process of Trouble Shooting, Tools helps in trouble shooting most networking issues: Ping, Tracert/traceroute, Ipconfig/ifconfig, Nslookup, (4) trouble shooting of Mother board (4) FDD,HDD, CDROM,, Trouble shooting of Floppy Disk Drive (2) Trouble shooting of Hard Disk Drive A) Software Solutions B) Trouble shooting process (2) <u>Practical:</u> Tags for creating lists - Ordered Lists, Unordered Lists(2) Tags for creating hyperlinks (2) Tags for creating and modifying images (2)</p>
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	<p><u>UNIT – V: Implementing polymorphism and operator overloading (10)</u> Programs on Polymorphism(3) Programs on Polymorphism(2) Programs on overloading (5) <u>Inheritance (10)</u> Programs on inheritance (6)</p>	<p>Motion Guides , Motion Tween , Motion Presets (3) F. Combine Flash Movies: Add Scenes , Load Movies (1)</p>	<p>Tags for creating Tables (3) Tables for creating frames Tags for creating forms(6) Create a website to display the information about your college (2) Create a website for a product company to display their product and price(2) Create your own personal website (3)</p>
	<p>Assignment Quarterly Examinations</p>	<p>Assignment Quarterly Examinations</p>	<p>Assignment Quarterly Examinations</p>
<p>October – 2023 Theory - 18 Practical - 18</p>	<p><u>Theory:</u> <u>UNIT - 6. Exception Handling (5)</u> Exception Handling fundamentals and Debugging, Error - Definition, Types of errors, (Run time error, Compile time error, Logical Error) (1) Exception Class, Definition, types (Checked Exceptions, un checked Exceptions), the try, catch, throw, throws and finally keywords. (2) Java’s built in exceptions, User defined exceptions (1) Writing simple programs for exception handling. (1) <u>UNIT - 7. Threads (5)</u> Concepts of Threads - Definition, Purpose (1) The Thread class and its methods (1) Multithreading and Multitasking (1) The Thread class and runnable interface, Manipulating threads - sleep, suspend,</p>	<p><u>Theory:</u> Role of System Analyst (1) Design - Architectural Design, Logical Design, Physical Design, Other Design Methodologies (3) Study of software life cycle, Purpose of SDLC, Stages of SDLC (3) Requirement analysis, design, development, testing, implementation and maintenance (1) Software Design Models (2) Development of Software (2) Testing - Definition, purpose, Types of Testing (4) <u>Revision</u> <u>Practical:</u> F. Combine Flash Movies: Add Scenes , Load Movies (4) G. Play with Graphic Brightness (2) Tint , Alpha , Remove background (4) H. Play with Sound Add background</p>	<p><u>Theory:</u> Trouble shooting of CD ROM (2) Printers trouble shooting - Testing Hardware, Testing software (2) Modem Trouble Shooting(2) Monitor Trouble Shooting - Common Problems, Display Problems, Power Cable related problem, Display or Graphic card problem(1) Monitor Trouble Shooting - Screen menu and Control related problems, Defective parts of computer monitor, Steps for dead or black screen (2) SMPS Trouble Shooting (3) <u>Revision</u> <u>Practical:</u> <u>UNIT – VI Web designing (20)</u> Web designing (18)</p>

	<p>yields, Difference between multi threading and multi tasking (1) Writing simple programs involving threads (1) <u>UNIT - 8. The Java Applet (5)</u> 1. Introduction to Java Applets: Definition, creating applet, Purpose, applet package, Applet class (1) 2. Basic methods of the Applet class: (born or Initialization, Running, stop, destroy, paint), Applet initialization and Termination (1) 4. The HTML applet tag and writing code to create simple applets, Comment section, head section, body section, Attributes - code, codebase, height width, align, name, vspace, mspace, etc (2) Applet viewer using for executing applet (1) Revision <u>Practical:</u> Programs on inheritance (4) <u>UNIT – VII: Creating Packages and interfaces (10)</u> Programs on packages (5) Programs on interfaces (5) <u>UNIT – VIII: Java Applets (5)</u> Programs of Applet (5)</p>	<p>music , Add sound effect (5) I. Video: Steps for importing video (5)</p>	
	<p>Assignment Unit Test – 3</p>	<p>Assignment Unit Test – 3</p>	<p>Assignment Unit Test – 3</p>

November – 2023 Theory - 25 Practical - 25	Theory: Revision Practical: Revision or Practice	Theory: Revision Practical: Revision or Practice	Theory: Revision Practical: Web designing (2) Revision or Practice
	Assignment Unit Test – 4	Assignment Unit Test – 4	Assignment Unit Test – 4
December – 2023 24	On The Job Training (one month only) Half Yearly Examinations	On The Job Training (one month only) Half Yearly Examinations	On The Job Training (one month only) Half Yearly Examinations
January – 2024 Theory - 20 Practical - 20	Theory: Revision Practical: Revision or Practice	Theory: Revision Practical: Revision or Practice	Theory: Revision Practical: Revision or Practice
	Assignment PREFINAL EXAMINATIONS	Assignment PREFINAL EXAMINATIONS	Assignment PREFINAL EXAMINATIONS
February – 2024 24	PRACTICAL EXAMINATIONS	PRACTICAL EXAMINATIONS	PRACTICAL EXAMINATIONS
March – 2024 21	THEORY EXAMINATIONS	THEORY EXAMINATIONS	THEORY EXAMINATIONS

Prepared and submitted by:

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ANNUAL ACADEMIC PLAN – 2022-23 (FIRST YEAR)

ELECTRONICS ENGINEERING TECHNICIAN -320

Month & No. of working days	CIRCUIT THEORY & ELECTRONICS COMPONENT [VT1] ELECTRONIC DEVICES & CIRCUIT LAB [VP1]	ELECTRONIC DEVICES & CIRCUIT [VT2] DIGITAL ELECTRONICS & COMPUTER FUNDAMENTAL LABS [VP2]	DIGITAL ELECTRONICS & COMPUTER FUNDAMENTALS [VT3] ENGINEERING DRAWING – [VP3]
June 2023 No. of Working days: 24	<p>Theory-15(Periods)</p> <p style="text-align: center;">1. RESISTORS</p> <p>1.1. TYPES OF RESISTORS, Fixed & Variable 1.2. Fixed-carbon film, wire wound, metal film 1.3. Color codes 1.4. OHM's Law 1.5. Kirchhoff's Voltage Law 1.6. Kirchhoff's Current Law 1.7. Series & Parallel circuits-simple calculations Power calculations Effect of Temperature on resistance 1.10. Measurement of resistance 1.11. VARIABLE- types: potentiometers, presets, thermistor, sensor. Specifications of resistor Resistance value, Power rating, Tolerance, etc. Resistors in series and parallel</p>	<p>Theory-15(Periods)</p> <p style="text-align: center;">1. SEMICONDUCTOR COMPONENTS</p> <p>State the electrical properties of solid state Semiconductor materials. Describe the formation of P type and N type materials 1.3. Identify Majority and Minority carriers in P and N Type materials. 1.4. Explain the formation of PN junction diode. 1.5. Describe the working of PN junction Diode forward/Reverse Bias with characteristics 1.6. Zener and avalanche breakdown. 1.7. Know the formation of transistor & Draw the symbol of transistor. Explain the working of PNP and NPN Transistors with characteristics Define alpha, beta and gamma Factors 1.10. CE, CB and CC configurations 1.11. FET & MOSFET principle of working and types with Their symbols</p>	<p>Theory-15(Periods)</p> <p style="text-align: center;">1. NUMBER SYSTEMS</p> <p>1.1. Explain Binary, Octal, Hexadecimal number systems and compare with decimal system. 1.2. Convert a given decimal number into Binary, Octal, and Hexadecimal numbers and vice versa. Convert a given binary number into octal and hexadecimal number system and vice versa. Perform binary Addition, Subtraction, Multiplication and Division. Write 1's complement and 2's complement numbers for a given binary number. Perform subtraction of binary numbers in 2's complement method.</p>

	<p>1.14. Extend the range of Ammeter, converting the ammeter into voltmeter</p> <p>Practical-20(Periods)</p> <p>1. Measurement of Resistance, Capacitance and inductance by E and I method and verification of Resistance by Colour code</p> <p>2. Resistors in Series and Parallel Circuits</p> <p>3. Measurement of Coefficient of coupling of an iron core transformer</p>	<p>1.12. Advantages over BJT</p> <p>1.13. Understand the Naming convention of Semiconductor components</p> <p>.</p> <p>Practical-20(Periods)</p> <p>1. Logic gates - I - AND, OR, NOT (Using IC's)</p> <p>2. Logic gates - II - NAND, NOR, EX-OR (Using IC's)</p> <p>3. Half Adders - Subtractor (Using IC Logic gates)</p>	<p>Conversion of binary number into BCD and Gray codes.</p> <p>Explain the use of alphanumeric codes (ASCII & EBCDIC)</p> <p>State different postulates in Boolean algebra.</p> <p>2. LOGIC GATES & DIGITAL IC FAMILIES</p> <p>2.1. Explain AND, OR, NOT gates with truth table.</p> <p>2.2. Explain the working of universal logic gates (NAND, NOR gates) using truth tables.</p> <p>Explain the working of an exclusive - OR gate with truth table.</p> <p>State and explain De-Morgan's theorems.</p> <p>2.5. Develop AND, OR, NOT operations using NAND, NOR gates.</p> <p>2.6. List different digital logic families.</p> <p>2.7. Explain the characteristics of digital IC such as logic levels, propagation delay, Noise margin, Fan-in, Fan-out, and Power dissipation.</p> <p>Compare the TTL, CMOS and ECL logic families.</p> <p>List the numbers of Digital IC Logic gates and understand the specifications</p> <p>Practical-20(Periods)</p> <p>1. Importance of Engineering Drawing</p> <p>2. Drawing instruments</p> <p>3. Free hand lettering & Numbering</p>
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<p>July 2023 No. of Working days:24</p>	<p>Theory-20 (Periods) 2. INDUCTORS&TRANSFORMERS Magnetic flux, Fluxdensity, Permeability, mmf,reluctance. Electromagnetic induction 2.3.Faraday’slawsandLenzlaw 2.4.Selfinductance 2.5.Mutualinductanceconcept 2.6.Co-efficientofcoupling 2.7.Inductorsin series and parallel 2.8.Ratingsandspecifications 2.9.Factoreffectingthe inductance 2.10.TRANSFORMER– working principle 2.11.Typesoftransformers:StepUP/DOW N,AF,RF& IF 2.12.Typesofcoresused and usage 2.13.Ratingsandspecifications</p>	<p>Theory-15 (Periods) 2. POWERSUPPLIES&FILTERS Drawthe block diagram of regulated DC power supply and explain the function of Each block. Draw and describe the working of half waverectifier with waveforms. Write the equations for RMS value, average value, ripple factor and efficiency forthe halfwaverectifier. Draw and describe the working of centretapped full wave rectifier with waveforms. Draw and describe the working of bridge rectifier with waveforms. Derive the equations for RMS value, average value, ripple factor and efficiency for the full waverectifier. Compare the above rectifier circuits. 2.8.Explain the need for a filter in power supplies and list different types of filters. Explain the operation of a rectifier circuitusing capacitor input, series in doctor and CLC filters. Define voltage regulation. Explain the operation of simple Zenerregulator</p>	<p>Theory-15 (Periods) 2. LOGICGATES&DIGITALICFAMILIES Explain AND,OR, NOT gates with truth table. 2.2.Explain the working of universal logic gates(NAND, NOR gates) using truth tables. Explain the working of an exclusive – OR gate with truth table. State and explain De-Morgan’s theorems. 2.5.DevelopAND,OR, NOT operations using NAND, NOR gates. 2.6.List different digital logic families. 2.7.Explain the characteristics of digitalICssuchaslogic levels, propagation delay, Noisemargin, Fan-in, Fan- out, and Power dissipation. Compare the TTL, CMOS and ECL logic families. List the numbers of Digital IC Logic gates and understand the specifications</p>
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	<p>3. CAPACITORS Theory-15 (Periods)</p> <p>Coulomb's Law, Electric flux, Field intensity, Flux density</p> <p>Working principle</p> <p>Types of capacitors: Fixed & Variable</p> <p>Types of Dielectrics used: air, paper, mica, glassceramic, electrolyte and its applications</p> <p>Types polarized and non-polarized</p> <p>Color codes</p> <p>Measurement of capacitance</p> <p>Capacitors in series and parallel</p> <p>Ratings and Specification</p>	<p>3. SMALL SIGNAL AMPLIFIERS Theory-15 (Periods)</p> <p>Explain the need for proper biasing in amplifier circuits and List the types of biasing circuits.</p> <p>Explain the need for stabilization</p> <p>Draw the different transistor configurations & list applications</p> <p>Know cut off, saturation and active region</p>	<p>3. COMBINATIONAL CIRCUITS Theory-15 (Periods)</p> <p>Give the idea of combinational logic circuits.</p> <p>Draw Half adder circuit using Exclusive OR gate AND gate and explain its function using truth table.</p> <p>Realize a Half-adder using NAND gates only and NOR gates only.</p> <p>Draw the full adder circuit and explain its operation with truth table.</p> <p>Show that two Half-adders and an OR – gate constitutes a full-adder.</p> <p>Draw and explain a 4 Bit parallel adder using full – adders.</p> <p>Draw and explain the operation 4 X 1 Multiplexer 3.8. Draw and explain the operation 1 to 4 demultiplexer.</p> <p>Draw and explain 3 X 8 decoder.</p> <p>List the applications of multiplexers and decoders.</p> <p>List some of the popular digital ICs and 7</p>
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	<p>Practical-18(Periods)</p> <p>4. Series Resonance Circuit and determination of its resonant frequency, bandwidth</p> <p>5. Parallel resonance circuit, determination of its resonant frequency, bandwidth</p> <p>6. PN Diode Characteristics- Forward and Reverse characteristics</p> <p>7. Zener Diode characteristics</p> <p>Assignment to be conducted on every week end & UNIT-I</p>	<p>Practical-18(Periods)</p> <p>4. Fulladder- Subtractor (Using IC Logic gates)</p> <p>5. Verification of truth tables of RS, RST, D, T</p> <p>6. To study details of counters IC's like 7490</p> <p>7. To study shift register IC's like 7495</p> <p>Assignment to be conducted on every week end & UNIT-I</p>	<p>Practical-18 (Periods) 4. Dimensioning Practices 5. Geometrical construction</p> <p>Assignment to be conducted on every week end & UNIT-I</p>
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<p>August 2023 No. of Working days: 25</p>	<p>Theory-20 (Periods)</p> <p>4. FUNDAMENTALS OF AC CIRCUITS</p> <p>AC Fundamentals : Sinusoidal ac, frequency</p> <p>Instantaneous values, peak values, average values, notations used</p> <p>AC power : real power & apparent power</p> <p>AC circuits containing RL, RC & RLC in Series & Parallel</p> <p>Series resonance, Parallel resonance</p>	<p>Theory-15(Periods)</p> <p>4. POWER AMPLIFIERS</p> <p>Explain why a voltage amplifier cannot be used as a power amplifier.</p> <p>Distinguish between voltage amplifiers and power amplifiers.</p> <p>Classify the amplifier circuits on the basis of frequency, period of conduction, and configurations.</p> <p>Define efficiency of a power amplifier.</p> <p>Draw the circuit of a class-A amplifier with resistor load at the collector and explain the operation.</p> <p>Write an expression for efficiency of the above circuit.</p>	<p>Theory-20(Periods)</p> <p>4. SEQUENTIAL CIRCUITS</p> <p>Give the idea of Sequential logic circuits.</p> <p>Explain NAND and NOR latches with truth tables</p> <p>State the necessity of clock and give the concept of level triggering and edge triggering,</p> <p>Draw and explain clocked SR flip flop using NAND gates.</p> <p>Study the need for preset and</p>
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		<p>Draw the circuit of a class-A amplifier with transformer at the collector and explain the operation.</p> <p>Write an expression for efficiency of the above circuit.</p> <p>List the advantages of pushpull power amplifier.</p> <p>Explain the operation of class-B push-pull amplifier and mention its disadvantages.</p> <p>Write an expression for efficiency of the above circuit.</p> <p>List the applications of power amplifiers.</p> <p>List different IC numbers for power amplifiers.</p>	<p>clear inputs.</p> <p>Construct level clocked JK flipflop using S-R flip-flop and explain with truth table</p> <p>Explain the level clocked D and T flip flops with the help of truth table and circuit diagram.</p> <p>Give only the truth tables of edge triggered D and T flip flops with their symbols.</p> <p>List the applications of flip flops.</p> <p>State the need for a Register and list the types of registers.</p> <p>Draw and explain working of 4bit shift left and shift right registers(7475)</p> <p>Draw and explain parallel in parallel out shift register</p> <p>Explain the working of Universal shift register (74194)</p> <p>Draw and explain</p>
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	<p>5. MISCELLANEOUS COMPONENTS Theory-30 (Periods)</p> <p>Wires : single core/multicore SWG's, ratings & wire joints Connectors & types Terminators & types Making terminations using tools Classify switches according to poles and throws (SPST, SPDT, DPST, DPDT, Multi-pole multi-throw), symbols and ratings Relays & MCB's: principle, types, symbols and ratings Contactors: principle, types, symbols and ratings Testing of all above components</p>	<p>5. FEEDBACK APLIFIERS & OSCILLATORS Theory-20 (Periods)</p> <p>Compare Negative and Positive feedback. Draw the block diagram of negative feedback amplifier and explain List the types of negative feedback amplifiers State the condition for an amplifier to work as an oscillator. Classify oscillator circuits. Draw and Explain the working of an R.C. phase shift oscillator Draw and Explain the working of tuned collector oscillator Draw and explain the working of Hartley oscillator. Draw and Explain the working of Colpitts oscillator</p>	<p>5. D/A & A/D CONVERTORS Theory-10 (Periods)</p> <p>State the need for A/Dand D/A converters. Explain the terms resolution, Accuracy, Monotonicity and settling timeof D/A converter. Explain D/A conversion using binary weighted resistors. Explain D/A conversion using R-2R ladder network. Explain A/D conversion using counter method. Explain A/D conversion using successive approximation method</p>
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		<p>Write the expressions for frequency of above oscillators</p> <p>Explain the disadvantages of RC and LC oscillators.</p> <p>List the advantages of crystal oscillators over other types</p> <p>Draw and explain the working of transistor crystal oscillator.</p> <p>State the reasons for instability in oscillator circuits.</p> <p>List the applications of oscillators.</p>	
	<p>Practical-17(Periods)</p> <p>8. Transistor characteristics- CE and CB</p> <p>9. FET Characteristics</p> <p>10. SCR Characteristics</p> <p>11. Zener Voltage regulators and measurement of percentage of regulation</p>	<p>Practical-17 (Periods)</p> <p>8. Observe the output of decade counter 7490 On an even segment display using a decoder</p> <p>9. A/D, D/A Converter</p> <p>10. Identify the various peripherals</p> <p>11. Know how to create A folder in specified location</p>	<p>Practical-17(Periods)</p> <p>6. Projection of points, Lines, Planes and solid</p>
	<p>Assignment to be conducted on every week end & Unit II</p>	<p>Assignment to be conducted on every week end & Unit II</p>	<p>Assignment to be conducted on every week end & Unit II</p>

<p>September 2023 No. of Working days:22</p>	<p>Theory-10 Periods)</p> <p>6.SOLDERING& PCBs 6.1.Solderingbasics 6.2.Soldering irons, desoldering pumps-types, soldering lead-types, ratings, fluxes Temperature controlled soldering/De-soldering stations PCB-types, single sided, double sided, multilayered 6.5.Solderingdrills 6.6.Stepsinpreparation of PCB</p>	<p>Theory-20(Periods)</p> <p>6. ANALOG IC's Explain the operation of transistor series voltage regulator. Explain the operation of transistor shunt voltage regulator List the types of IC regulatorsand give the advantage of IC regulators. Explain the operation of fixed positive and negative voltage regulators.(using 7800 series and 7900 series) Explain the operation of adjustable voltage regulator (LM317). Draw and explain the differential amplifier. State the function of an</p>	<p>Theory-20 (Periods)</p> <p>6. COMPUTER HARDWARE Study the layout of components in the motherboard. List different expansion slots available on the motherboard. Describe the functions of chipset & know chipset numbers in use. Know the specifications of processor. Know different types of semiconductor memories in use. Know about cache memory. Study about power supply connectors from smps with voltage details and external devices.</p>
		<p>operational amplifier. 6.8. Know the operational amplifier characteristics like Input impedance, Open loop</p>	<p>Know about Serial, parallel and USB ports(basics). Know the connector details for printer, serial port, mouse, keyboard and USB. Understand BIOS, Operating system, application software</p>

		Practical-16(Periods)	
	<p>Practical-16(Periods)</p> <p>12. RC coupled Amplifier : obtain the frequency response and calculate the gain</p> <p>13. Study of Push pull power Amplifier</p> <p>14. Half wave Rectifier, Full wave Rectifier with and without filter, calculate the ripple factor and percentage of regulation</p> <p>15. Measurement of frequency of Hartley and Colpitts oscillators</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Practical-16(Periods)</p> <p>12. Create a document using MS-word and save it</p> <p>13. Familiarise with spell checker facility of MS-Word</p> <p>14. Open MS-Excel and identify the components on the screen</p> <p>15. Create a Worksheet in MS-Excel and save it</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Practical-16(Periods)</p> <p>Orthographic Projection</p> <p>Assignment to be conducted on every week end & Quarterly Examinations</p>

	<p>Theory-15 (Periods)</p> <p>7. SMD COMPONENTS</p> <p>SMD components –types</p> <p>SMD soldering stations</p> <p>Surface Mount Technology (SMT).</p> <p>State the advantages of SMT over pinthrough hole (PTH) mounting</p>	<p>Theory-20(Periods)</p>	<p>Theory-25(Periods)</p>
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**October
2023 No.
of
Working
days:18**

7. POWER ELECTRONIC DEVICES

List different thyristor family devices.
Sketch the ISI circuit symbols for each device.
Describe constructional details of SCR.
Draw & Explain the Volt – Ampere characteristics of SCR.
Mention the ratings of SCR.
Give constructional details of DIAC & TRIAC
Draw & Explain the Volt-ampere characteristics of Diac & Triac under forward /reverse bias.
State the different modes of Triac triggering.
Draw & Explain SCR circuit triggered by UJT.
Explain power control circuits Diac, Triac & SCR's.
Briefly explain the working of Reverse conducting thyristor (RCT), Asymmetrical SCR (ASCR), Power BJT, Insulated gate bipolar transistor (IGBT), MOS-controlled thyristors (MCT) with characteristics.
Study of Manufacturer's data sheet of power electronic devices.
List the applications of all power electronic devices

POWER CONTROL SCHEMATIC

7.NETWORKING

Appreciate the need for networking of computers
Categorize the computer networks and its topologies
Types of transmission media.
Understand Wi – Fi & Bluetooth technology
Introduce tools and components used in computer networking
Brief note on TCP/IP and OSI Model.
Identify and troubleshoot the problems in computer network
appreciate the applications

	<p>Practical-16(Periods)</p> <p>12. RC coupled Amplifier : obtain the frequency response and calculate the gain 13. Study of Push pull power Amplifier 14. Half wave Rectifier, Full wave Rectifier with and without filter, calculate the ripple factor and percentage of regulation 15. Measurement of frequency of Hartley and Colpitts oscillators</p> <p>Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16(Periods)</p> <p>12.Create a document using MS-word and save it 13.Familiarise with spell checker facility of MS-Word 14. Open MS-Excel and identify the components onthe screen 15. Create a Worksheet in MS-Excel and saveit</p> <p>Assignment to be conducted on every week end & Unit III</p>	<p>Practical-16 (Periods)</p> <p>Orthographic Projection Assignment to be conducted on every week end & Unit III</p>
<p>November 2023 No. of Working days:25</p>	<p>Theory-10(Periods)</p> <p>UNIT-VIII 8. BATTERIES & CELLS Primary cells and secondary cells-uses Types: NiCad, Alkaline, Ni-ion, Li-ion,Li-polymer -Uses Charging and discharging of cells Cells in series and parallel-effect on current/voltage Testing of Cells Ratings & specifications Lead acid battery construction and working Testing of batteries Ratings & specifications</p>	<p>Theory-15(Periods)</p> <p>8. OPTO ELECTRONIC DEVICES Classify optoelectronic devices Explain the operation of LDR Explain the construction, working principle and characteristics of LED Understand the generation of different colour LEDs, their forward voltages, and specifications. Explain the construction and working principle of LCD. Explain the applications of LED and LCD in discrete displays, dot-matrix and seven segment displays.</p>	<p>Theory-15(Periods)</p> <p>8. MICROPROCESSOR AND PROGRAMMING History Draw the block diagram of 8085 and explain. Draw the pin out diagram of 8085 and explain. Understand the Instruction format, types of instructions Basic instruction set and programming Programs : (1) Simple programmes on arithmetic operation using 8bit. (2) Simple program to find the largest, smallest of the given numbers (3) Block transfer of data (4) Program to interface LED matrix</p>

		<p>Explain the construction, operation and characteristics of photo diode.</p> <p>Explain the construction, operation and characteristics of photo transistor.</p> <p>List the applications of photo diode and photo transistor</p> <p style="padding-left: 40px;">Give an idea of opto-coupler</p> <p>Explain the principle and working of photo conductive cells(LDR)</p> <p style="padding-left: 40px;">Principle and working of Solar Cell.</p> <p>Understand material usage, installation procedure of solar panels</p>	<p>(5) Program to interface 7 segment display etc.</p>
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	<p>Practical-17(Periods) 16. Measurement of frequency of Tuned Collector and Crystal Oscillators 17. Photo diode characteristics 18. Know the various cut-in voltages of different LEDs (All colors) 19. Study the Solar panel installation procedure. 20. Understand the usage of the Electronic workbench (Software)</p> <p>Assignment to be conducted on every week end & Unit IV</p>	<p>Practical-17(Periods) 16.Sort and filter data in a worksheet 17.Create a simple Power point presentation for a small unit 18.Programming on 8085 microprocessor using MASM software (MASM is open source software can be downloaded from the URL: https://www.microsoft.com/en-in/download/details.aspx?id=12654) a) Simple program on arithmetic operation using 8bit. b) Simple program to find the largest, smallest of the given numbers c) Block transfer of data d) Program to interface LED matrix e) Program to interface 7 segment display etc</p> <p>Assignment to be conducted on every week end & Unit IV</p>	<p>Practical-17 (Periods) 8. Sectional views 9. Development surfaces</p> <p>Assignment to be conducted on every week end & Unit IV</p>
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<p>December 2023 No. of Working days: 24</p>	<p>Assignment to be conducted on every week end & Half yearly Examinations</p>	<p>Assignment to be conducted on every week end & Half yearly Examinations</p>	<p>Assignment to be conducted on every week end & Half yearly Examinations</p>
<p>January 2024 No. of Working days: 20</p>	<p>Syllabus Revision Pre-Final Examinations</p>	<p>Syllabus Revision Pre-Final Examinations</p>	<p>Syllabus Revision Pre-Final Examinations</p>

February 2024 No. of Working days:24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024
March 2024 No. of Working days:21	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE- 2024	IPE Model Papers Practice Theory Examinations IPE- 2024

PREPARED BY:

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ANNUAL ACADEMIC PLAN – 2023-24 (SECOND YEAR)

ELECTRONICS ENGINEERING TECHNICIAN -320

Month & No. of working days	COMMUNICATION ENGINEERING- PAPER-I(VT-4) COMMUNICATION ENGINEERING LAB - PAPER-I(VP-4)	TV & MODERN COMMUNICATION SYSTEM(VT-5) PAPER-II TV SERVICING LAB PAPER-II(VP-5)	MEASURING INSTRUMENTS, CONSUME R & POWER ELECTRONICS- PAPER-III(VT-6) MEASURING INSTRUMENTS & SERVICING LAB - PAPER-III (VP-6)
June 2023 No. of Working days: 24	<p>Theory (25 Periods) 1. MODULATION Basic elements of a communication system. Block diagram of communication system. 1.3. Need for Modulation in communication systems. 1.4. Distinguish between Base band, carrier, and modulated Signals with waveforms. 1.5. Explain the relationship between Channel and width, baseband Band width and Transmission time 1.6. Define the modulation index of AM Signal 1.7. Measurement of modulation index using oscilloscope. 1.8. Significance of bandwidth in A communication system. 1.9. Write the time-domain equation for An FM signal. 1.10. Calculate bandwidth, sideband Frequencies of FM signal. Define modulation index for FM signal. Explain the merits and demerits of FM</p>	<p>Theory (25 Periods) 1. TV Transmitter Introduction to the TV transmitters 1.2. Draw the block diagram of basic TV system and explain the function of each block. 1.3. Explain formation of picture. 1.4. State the need for horizontal and vertical scanning. CCIR- B standards and specifications for Monochrome TV. Explain the interlaced scanning. 1.7. Sketch the composite video signal as per ISI specification. State the need for vertical synchronization, horizontal synchronization, blanking pulses, front porch, back porch and equalizing pulses. Name the different types of camera tubes. 1.10. Describe the construction and working of Image Orthicon tube</p>	<p>Theory (30 Periods) 1. MEASURING & TESTING OF COMPONENT SVT transmitter Measurement of AC/DC Voltages and currents using voltmeters and current meters 1.2. Study and use of various regulated power supply units 1.3. Measurement of voltages, currents and resistance using analogue and digital Multi meters and continuity test. 1.4. Test and measure the values of capacitor using R.L.C meter and compare with The marked/color code value 1.5. Test the given Transformer and Measure Primary and secondary DC resistance and Voltages by using Multi meter 1.6. Test the given Loudspeaker and measure the Voice coil resistance—using Multimeter 1.7. Test the Working of different types of switches, Relays, Connectors and Cables</p>

	over AM		
July 2023 No. of Working days: 24	<p>Theory (15 Periods) 2. TRANSMITTERS & BASICS OF DIGITAL COMMUNICATION</p> <p>Introduction to transmitters and receivers. List specifications of transmitters. 2.3. Distinguish between high level and low level modulation. Draw the block diagram of a Low level AM transmitter. Draw the block diagram of a High level AM transmitter. DIGITAL COMMUNICATION CONCEPT Compare analog and digital communication techniques. Describe pulse-code modulation. 2.9. Describe delta modulation. 2.10. Describe the basic types of digital modulation. 2.11. State the need for Digital modulation. 2.12. Briefly explain ASK, FSK and PSK.</p>	<p>Theory (20 Periods) 2. TV RECEIVER</p> <p>Draw the block diagram of a T.V. receiver and state the function of each block. Sketch the types of signals at various input and output stages in the block diagram. Introduction to Colour Television System. 2.4. Explain the main characteristic of human eye with regard to perception of colours. Distinguish between additive and subtractive mixing of colours. Explain complementary colours, hue, saturation, and Colour circle. 2.7. Explain compatibility and reverse compatibility in TV system. Mention the different standards of Colour transmission systems like NTSC, PAL and SECAM. Draw the block diagram of a Colour TV receiver and state the function of each block. State the different Colour receiver-operating & servicing controls. Describe constructional Features of Colour picture tubes</p>	<p>Theory (20 Periods) 2. CRO AND FREQUENCY GENERATORS</p> <p>Study and Use CRO (single trace and Dual Trace) for measuring frequency and amplitude (CRT type) Study and use of A.F./R.F. signal generators. 2.3. Study and use DSO for measuring frequency, Amplitude, Phase, Modulation Index Of A.M 2.4. Identify leads and testing of different diodes and transistors. 2.5. Study of data manuals/application manuals for diodes and transistors</p>
	<p>Practical-20 (Periods) 1. Study of Servicing tools and</p>	<p>Practical-20 (Periods) 1. Study of pattern generator and its use</p>	<p>Practical-20 (Periods) 1. Conversion of Ammeter into Voltmeter.</p>

	<p>Instruments (Soldering Iron, Screw Driver Set, Tweezers, Nose Plier, Cutter, Hammer, File, Desolder pump, Squeezer)</p> <p>2. Electronic Lab safety precautions (Regarding wiring, Flooring, First Aid Treatment)</p> <p>Assignment to be conducted on every weekend & Unit I</p>	<p>2. Study of operating controls and servicing controls of B/W T.V and typical voltages</p> <p>Assignment to be conducted on every week end & Unit I</p>	<p>2. Study and use of Analog Multimeter</p> <p>Assignment to be conducted on every week end & Unit I</p>
<p>August 2023 No. of Working days: 25</p>	<p>Theory (20 Periods)</p> <p>3. TRANSMISSION LINES, WAVE PROPAGATION & ANTENNAS</p> <p>3.1. Introduction to transmission Lines and different types.</p> <p>3.2. Know the losses in transmission lines.</p> <p>3.3. Explain the importance of impedance matching</p>	<p>Theory (20 Periods)</p> <p>3. LCD/LED TVs</p> <p>Understand the principle of LCD/LED monitor</p> <p>3.2. Understand block diagram of LCD/LED TVs</p> <p>3.3. List various ICs USED in the above with a typical schematic circuit</p> <p>3.4. List advantages of LCD/LED TV technology</p> <p>3.5. Discuss common faults in all the above with Servicing procedure to rectify</p>	<p>Theory (30 Periods)</p> <p>3. UPS AND INVERTERS</p> <p>Compare online UPS and OFFline UPS</p> <p>3.2. Classify inverters</p> <p>3.3. Explain the working of single-phase Bridge inverter using MOSFET</p> <p>3.4. Explain the working of voltage source inverter</p> <p>3.5. State the need for uninterrupted Power supply (UPS)</p>

	<p>with respect to transmission lines.</p> <p>3.4. Describe the nature and behavior of radio waves.</p> <p>3.5. Describe reflection, refraction and diffraction of EM waves.</p> <p>3.6. Describe the ground wave propagation of EM waves.</p> <p>3.7. Describe the space wave propagation of EM waves.</p> <p>3.8. Describe the sky wave propagation of EM waves.</p> <p>3.9. Know about the impedance of free space.</p> <p>3.10. Introduction to antenna systems.</p> <p>11. Sketch the radiation pattern of isotropic and half wave dipoles.</p> <p>3.12. Define radiation resistance.</p> <p>3.13. Define antenna gain, directivity, beam width, and front to back ratio.</p> <p> Explain the basic principles of operation of antenna systems.</p> <p> Explain the concept of grounding.</p> <p>3.16. Describe the principle of Marconi (monopole) antenna.</p> <p>3.17. Describe the operation and applications of folded dipole.</p> <p>3.18. Describe the operation and applications of loop, helical antennas.</p> <p>3.19. Explain radiation pattern and applications of Yagi antenna.</p> <p>3.20. Explain the principle of parabolic reflector.</p> <p>3.21. Explain the operation of Dish antenna system.</p>		
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	<p>Assignment to be conducted on every week end & Unit II</p>	<p>Assignment to be conducted on every week end & Unit II</p>	<p>Assignment to be conducted on every week end & Unit II</p>
	<p>Theory-15 (Periods)</p> <p>4. RADIO RECEIVERS Basic function of a Radioreceiver. 4.2. Define sensitivity, selectivity, fidelity of receiver. 4.3. Compare AM and FM receivers. 4. Explain the process of super heterodyning in radio receiver. Draw block diagram of super heterodyne receiver and explain its operation. Explain the need for AVC (AGC). 4.7. Explain the process of demodulation in FM receivers (Foster-Seely) List various ICs used in receivers with internal block diagrams List common faults and servicing techniques</p>	<p>Theory-10 Periods)</p> <p>4. CABLE TV/DTH SYSTEM Draw and explain the block diagram of CATV. 4.2. Explain the cable TV components such as amplifiers directional couplers and converters. Explain the necessity of midband and superb and channels State the need for satellite for TV broadcasting over wide area. Explain the DTH reception with block diagram. 4.6. List the deficiencies in the existing TV system. 4.7. Explain how the existing TV system can be improved in HDTV system</p>	<p>3.6. Explain the working of three-phase inverter 3.7. List different types of UPS 3.8. Draw and explain the block diagram of off-line UPS Draw and explain the block diagram of on-line UPS Discuss ICs used and servicing procedures</p>

	<p>Practicals (17 Periods)</p> <p>5. Study of power supply stage in Radio Receiver (Full wave Bridge Rectifier with Filter)</p> <p>6. Study of output stage, voltage measurement</p> <p>7. Study of Detector and AF Voltage Amplifier, Voltage measurement</p> <p>8. Study of IF Amplifier Stage and Voltage measurement</p>	<p>Practicals (17 Periods)</p> <p>5. Tracing of different stages of Colour T.V. receiver</p> <p>6. Familiarization of different stages with transistors, IC's used in Colour T.V. and Typical Voltages.</p> <p>7. Measurement of picture tube voltages of B/W, Colour</p> <p>8. T.V. and picture adjustments</p> <p>9. Assemble and erection of T.V. antenna</p>	<p>Practicals (17 Periods)</p> <p>5. Study and use of AMSSG</p> <p>6. Study and use of Digital R-L-C meter</p> <p>7. Measurement of DC and AC Voltage using CRO</p> <p>8. Measurement of Frequency and phase using CRO</p>
	<p>Assignment to be conducted one very week end & Quarterly Examinations</p>	<p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Assignment to be conducted on every week end & Quarterly Examinations</p>

<p>October 2023 No. of Working days: 18</p>	<p>Theory-15 Periods) 5 PUBLIC ADDRESS SYSTEM Define speech, music and noise. 5.2. Know the nature of sound, reflection, refraction, diffraction and absorption. Know the concept of Hi-Fi and Stereo. Know the need of bass, treble, balance, and volume control in stereo amplifier. Explain a simple circuit showing the above controls. Requirements of PA system 5.7. Basic PA system with block diagram</p>	<p>Theory-15 (Periods) 5. OPTICAL FIBRE COMMUNICATION FUNDAMENTALS Basic Introduction to Fibre Optic communication. Explain total internal reflection phenomena used in optical fibres. Define numerical aperture, modes, dispersion. 5.4. List various losses with reference to optical fibre. Explain the advantages of optical fibres in communication. Explain types of fibre optic cables, 5.7. Mention different splices and connectors, Optical couplers, switches and relays 5.8. Explain the operation of LED used in optical fibre communication Explain the operation of Laser diodes used in optical fibre communication. Explain the operation of PIN diode used as detector in optical fibre Communication 5.11. Explain the operation of APD used as a detector in optical fibre Communication</p>	<p>Theory-30 (Periods) 4. TELEPHONE AND CELLULAR COMMUNICATION Understand a basic telephone system 4.2. Explain the operation of basic telephone equipment 4.3. Understand the Working of digital dialing instrument (push button type) 4.4. Understand a simple intercom system 4.5. Basic concepts of Mobile Communications system Intelligent network concept Explain cellular concept 4.8. Describe cellular system operation Significance of frequency re-use and handoff features. Concepts of digital cellular mobile system. 4.11. Know GSM standards and service aspects 4.12. List the radio characteristics of GSM 4.13. Basic concepts of CDMA systems used in mobile communication.</p>
	<p>Practicals (16 Periods) 9. Study of RF Amplifier, Mixer, Local oscillator stage and voltage</p>	<p>Practicals (16 Periods) 9. Front panel controls and adjustments 10. T.V. picture, sound adjustments</p>	<p>Practicals (16 Periods) 9. Measurement of Modulation Index using CRO 10. Study and use of pattern</p>

	<p>measurement</p> <p>10. Study of FM receiver</p> <p>11. Study of IC version 2-band Radio AM/FM Radio receiver</p> <p>12. Mention typical faults in a Radio receiver and observe the effect on voltage data</p> <p>And performance of the Radio Receiver</p> <p>Assignment to be conducted one very week end & Unit III</p>	<p>using pattern generator</p> <p>11. Study the faults in various stages of B/W T.V. and rectification</p> <p>Assignment to be conducted on every week end & Unit III</p>	<p>generator</p> <p>11. Study of Battery Eliminator and Measurement of standard voltages at various points.</p> <p>12. Rectify the faults in the Battery Eliminator</p> <p>Assignment to be conducted on every week end & Unit III</p>
<p>November 2023</p> <p>No. of Working days: 25</p>	<p>Theory-20(Periods)</p> <p>6. MODERN DISCRECORDERS/PLAYERS</p> <p>List the types of optical recording.</p> <p>6.2. Explain the method optical recording of sound on film.</p> <p>Explain the method optical recording of sound on Compact Disc.</p> <p>List the advantages and disadvantages of CDs.</p> <p>6.5. Explain optical pick-up system.</p> <p>6. Explain working of compact disc player with block diagram.</p> <p>6.7. Know the MP3 format and differentiate this with audio CD.</p> <p>6.8. Differentiate CD and DVD.</p> <p>Explain the working principle of DVD player.</p> <p>Explain the concept of noise reduction using DOLBY system.</p> <p>6.11. Arrange the Public Address system and test the performance.</p> <p>6.12. Know the block diagram and understand with a typical schematic diagram</p>	<p>Theory-20(Periods)</p> <p>6. FIBRE COMMUNICATIONS SYSTEMS</p> <p>Explain basic fibre optic communication system with block diagram.</p> <p>Explain repeaters and optical amplifiers.</p> <p>6.3. Define wavelength division multiplexing.</p> <p>6.4. Explain the principle of DWDM.</p> <p>6.5. Discuss use of optical fibre in local area network.</p> <p>6.6. Discuss Ethernet on fibre and gigabit Ethernet.</p> <p>6.7. Mention the applications of optical fibres.</p> <p>Discuss the applications of optical fibres in local telephone and cable TV applications.</p> <p>Know the various tools used and methods for measurement of parameter son</p> <p>OFCs</p> <p>6.10. OTDR applications in servicing</p>	

	Assignment to be conducted on every week end & Unit IV	Assignment to be conducted on every week end & Unit IV	Assignment to be conducted on every week end & Unit IV
	<p>Practical-17(Periods)13.Study of PA system and measurement of standard voltage at various points</p> <p>14. Rectifying the faults in PA system</p> <p>15. Study of Tape Recorder, Two-in-one and Audio CD player</p> <p>16. Rectify the faults in Audio CD player</p> <p>17. Rectify the faults in DVD player</p> <p>18. Familiarization of SMD handling tools used for soldering/Disordering</p>	<p>Practical-15(Periods)12/13. Rectify the given faults in various stages of colour T.V.</p> <p>14. Study of SMPS and measurement of the output voltages</p> <p>15. Identify the stages of SMPS, and mention the faults in SMPS and rectification of the faults</p> <p>16. Study of different types of Tuners</p> <p>17. Study of LCD TV</p> <p>18. Familiarization of different voltages in LCD TV</p> <p>19. Familiarization of different voltages in LED TV</p> <p>20. Connection and Tuning of Cable TV</p>	<p>Practical-15(Periods)</p> <p>13. Study of Electronic Stabilizer and measurement of standard voltages at various points.</p> <p>14. Rectify the fault in the Electronic stabilizer.</p> <p>15. Study of Emergency Light and measurement of standard Voltages at various</p> <p>16. Rectify the fault in the TV remote control.</p> <p>17. Identify the different stages of TV remote control Transmitter and receiver.</p> <p>18. Identify the different faults in cardless telephone and cell phone</p>
<p>December 2023 No. of Working days: 24</p>	<p>Assignment to be conducted on every week end Half yearly Examinations</p>	<p>Assignment to be conducted on every week end Half yearly Examinations</p>	<p>Assignment to be conducted on every week end Half yearly Examinations</p>
<p>January 2024 No. of Working days: 20</p>	<p>Syllabus Revision Pre-Final Examinations</p>	<p>Syllabus Revision Pre-Final Examinations</p>	<p>Syllabus Revision Pre-Final Examinations</p>

February 2024 No. of Working days: 24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024
March 2024 No. of Working days: 21	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024	IPE Model Papers Practice Theory Examinations IPE-2024

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ANNUAL ACADEMIC PLAN – 2023-24 (FIRST YEAR)

ELECTRICAL TECHNICIAN COURSE

COURSE CODE – 321

Month and No. of working days	Elements of Electrical Engineering (VT-1) Elements of Electrical Lab (VP-1)	Electrical Engineering Materials and Wiring (VT-2) Electrical Wiring & Work Shop (VP-2)	Electrical Measuring Instruments and Electronic Devices (VT-3) Engineering drawing (VP-3)
<p align="center">June 2023 No. of Working days:24</p>	<p>Theory (20 Periods) <u>Fundamentals of Electricity</u> 1.1.ElectricCurrent–Conductors–SemiConductors–Insulators 1.2.Electricpotential–Resistance–Laws of resistance–Simple problems 1.3.EffectofTemperature– 1.4.Temperature Coefficient of Resistance–Simple Problems 1.5.OhmsLaw–Simple Problems 1.6.ResistanceinSeries– Parallel–simple Problems 1.7.Definitions–Network Elements– Junction–Branch–loop– Practicals (20Periods) 1 Verify the Ohms law by using ammeter, voltmeter in dc circuit 2 Verify the characteristics of DC series circuit</p>	<p>Theory (20 Periods) <u>Electrical Engineering Materials</u> 1.1.StructureofAtom 1.2.Atomicnumber– valence electrons–examples 1.3.Atomic Bonds 1.4.Classification of Electrical Engineering materials <u>Conducting & Semi-Conducting materials</u> 2.1.Conducting materials– Effect of Alloying– Temperature–Applications 2.2.Low resistance materials and applications 2.3.Properties of Aluminum and Copper 2.4.High resistance materials and applications 2.5.Properties of Eureka, Nichrome and Tungsten</p>	<p>Theory (20 Periods) <u>Measuring Systems and Measuring Instruments</u> 1.1.Fundamental unit, Derived unit, System of Units– S.I. 1.2.Multiplication factors, Electrical quantities and units 1.3.Classification of Measuring instruments <u>Indicating Instruments</u> 2.1.Classification of Ammeters and Voltmeters 2.2.Effects of current used in Indicating instruments 2.3.Torques/Forces required in indicating instruments 2.4.Permanent Magnet Moving Coil instrument Practicals (20 Periods) 1(A) WRITE THE FOLLOWING IN FREE HAND SINGLE STROKE VERTICAL</p>

	<p>Assignment to be conducted on every week end</p>	<p>2.6.Semi-Conducting materials–Types-Applications <u>Magnetic Materials</u> 3.1.Classification of magnetic materials 3.2.Permeability–Curie point-Susceptibility–Magnetostriction Practicals (20Periods) 1 Straight Joint 2 Married Joint Assignment to be conducted on every week end</p>	<p>UPPER-CASE LETTERS OF 10 mm HEIGHT – VOCATIONAL COURSE 1 (B) DIVIDE AN 8 cm STRAIGHT LINE INTO 10 EQUAL PARTS 2 (A) WRITE THE FOLLOWING IN FREE HAND SINGLE STROKE VERTICAL UPPER-CASE LETTERS OF 10 mm HEIGHT – ELECTRICAL ENGINEERING 2 (B) BISECT A STRAIGHT LINE OF 9 cm LENGTH Assignment to be conducted on every week end</p>
<p>July 2023 No. of Working days:24</p>	<p>Theory (18 Periods) 1.8.Kirchoff's laws– Current–Voltage 1.9.Calculation of Resistance using STAR to DELTA & DELTA to STAR formulae <u>Work–Power–Energy</u> 2.1.Systems of Units – SI 2.2.Work–Power–Energy definitions and Units 2.3.Conversion of Electrical Units to Thermal Units simple problems 2.4.EnergyConsumption and Monthly Billing Problems</p>	<p>Theory (18 Periods) 3.3.Soft and Hard magnetic materials– Properties and their applications 3.4.Properties of Pure Iron, Silicon Steel, Nickel, Cobalt, Alnico and their applications. 3.5.B-Hcurve–Hysteresis loop <u>Insulating Materials</u> 4.1.Insulatingmaterials – Classification-Applications 4.2.Factors affecting Insulation resistance– dielectric strength 4.3.Properties and Uses of</p>	<p>Theory (18 Periods) 2.5.Moving Iron Instruments–Attraction and Repulsion type–advantages& disadvantages 2.6.Difference between Moving coil and Moving iron instruments 2.7.Extension of Moving coil and Moving iron instruments 2.8.Measurement of Power - Dynamo meter type and Induction type 2.9.Different types of Errors in Indicating instrument</p>

	<p><u>Heating Effects of Electric Current</u> 3.1.Heating effect of Electric Current 3.2.Heat produced by flow of Current – Joules Law– Mechanical equivalent of Heat– Simple Problems Practicals (18Periods) 3 Verify the characteristics of DC parallel circuit 4 Verify the Kirchoff's voltage law by using series circuit Assignment to be conducted on every week end Unit I</p>	<p>Fibrous materials like Wood, paper and Textiles 4.4.Properties and Uses of Asphalt, bitumen 4.5.Properties and Uses of Ceramic, Mica 4.6.Insulating glass, rubber, PVC, Bakelite. 4.7.Applications of Insulating gases–Air, N, H2 and SF6 Practicals (18Periods) 3 Tee Joint for Single Core Cable 4 Tee Joint for Stranded Cable Assignment to be conducted on every week end Unit I</p>	<p>Integrating Instruments 3.1.Classification of Energy meters 3.2.Single phase and Three phase Induction Energy meters 3.3.Errors in Energy meters Assignment to be conducted on every week end Unit II to be conducted in this month Practicals (18Periods) 3 3 (A) CONSTRUCT AN EQUILATERAL TRIANGLE OF A 5 cm SIDE 3 (B) DRAW A PERPENDICULAR LINE TO A GIVEN STRAIGHT LINE OF 6 cm LENGTH 4 (A) DRAW A TANGENT TO A GIVEN CIRCLE OF 25 mm RADIUS 4 (B) DRAW A HEXAGON OF SIDE 50 mm LENGTH Assignment to be conducted on every week end Unit I</p>
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<p>August 2023 No. of Working days:25</p>	<p>Theory (17 Periods) 3.3. Applications of Heating effects of Electric Current. <u>Electro Magnetism</u> 4.1.Introduction to Magnets 4.2.Classification of magnets 4.3.Magnetic Pole–Magnetic Axis– Pole strength 4.4.Properties of Magnets 4.5.Shapes of Magnets 4.5.Rules to find Polarity 4.6.Magnetic Fields 4.7.Inverse Square Law <u>Magnetic effects of Electric Current</u> 5.1.Magnetic effect of Electric Current 5.2.Force on a Current carrying conductor–Fleming left hand rule 5.3.Field pattern of a Long straight conductor solenoid 5.4.Force between conductors Practicals (17Periods) 5 Verify the Kirchoff's current law by using series-parallel circuit 6 Perform the testing of battery by a hydrometer 7 Perform the measurement of power by a wattmeter</p>	<p>Theory (17 Periods) <u>Wiring Tools and Wiring Accessories</u> 5.1.Types of Wires 5.2.Types of Switches 5.3.Fuses–Types of Fuses – Fuse materials 5.3.Lamp holders, Sockets, Ceiling rose etc. 5.4.Main boards, Distribution boards and Switch boards 5.5.MCB,C Band 5.6.Wiring Tools Practicals (17Periods) 5 5 Extension Board Preparation 6 Installation of Electrical Distribution Board 7 Installation of Electrical Control/Switch Board</p>	<p>Theory (17 Periods) <u>Special Instruments</u> 4.1.Power factor meters– Single phase and Three phase Dynamo meter type PF meter 4.2.Frequency meters– Mechanical Resonance type – Weston type– Electro dynamic type –Electrical resonance type 4.3.Synchrosopes–Weston type–Moving iron type 4.4.Tongue tester– multi meter Hydrometer-Megger <u>Digital Instruments</u> 5.1.Need– Advantages and Disadvantages of Digital instruments 5.2.Digital Frequency meter - Digital Multi meter– Digital tachometer–block diagrams Practicals (17Periods) 5 (A) DRAW A COMMON INTERNAL TANGENT FOR TWO CIRCLES OF 40mm RADIUS 5 (B) DRAW A PENTAGON OF SIDE 40 mm LENGTH 6 (A) DRAW A REGULAR HEXAGON IN A GIVEN CIRCLE</p>
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	<p>Assignment to be conducted on every week end Unit II</p>	<p>Assignment to be conducted on every week end Unit II</p>	<p>OF 60 mm RADIUS 6 (B) DRAW A REGULAR HEXAGON ABOUT A GIVEN CIRCLE OF 60 mm RADIUS 7 DRAW A PARABOLA OF 40 mm BASE, 70 mm HEIGHT BY TANGENT METHOD</p> <p>Assignment to be conducted on every week end Unit II</p>
<p>September 2023 No. of Working days:22</p>	<p>Theory (16 Periods) 5.5.Magneti circuits– definitions of flux-MMF–flux density–magnetizing force – reluctance 5.6.Comparison between magnetic circuit and electric circuit <u>Electromagnetic Induction</u> 6.1.Electromagnetic induction– Lenz’s Law–Fleming’s right hand rule 6.2.Faradays laws of Electromagnetic induction – Types of induced EMF 6.3.Self and Mutual induction and their EMF’s 6.4.Energy stored in a magnetic field Lifting power of a electro magnet <u>Cells and Batteries</u> 7.1.Chemical effects of Electric</p>	<p>Theory (16 Periods) <u>Wire Joints & Wiring Systems</u> 6.1.Wiring Joints 6.2.Soldering, Tapping and termination of Wires 6.3.Wiring systems – Loop – Ring– Tree– Distribution box 6.4.House wiring methods 6.5.Comparison wiring methods Practicals (16 Periods) 8 Staircase Wiring in CTS System 9 Staircase Wiring in Surface Conduit System Assignment to be conducted on every week end Quarterly Examinations</p>	<p>Theory (16 Periods) <u>P-N Junction Diode</u> 6.1.P-type and N-type materials 6.2.P-N Junction Diode- Working principle- Characteristics of P-N Junction Diode 6.3.Zener Diode-Working principle-Characteristics of Zener Diode <u>Transistors</u> 7.1.Transistor 7.2.Types of Transistors– PNP and NPN. 7.3.Transistor Configurations Practicals (16 Periods) 8 DRAW THE PROJECTIONS OF A TRIANGULAR PRISM OF 20mm SIDE AND 60 mm LENGTH (Resting on one of its</p>

	<p>Current Faradays laws of Electrolysis</p> <p>7.2.Cells and their components– Battery–Primary cells–defects and remedies, Dry Cell– Secondary Cell– Comparison between Primary cell and Secondary cell</p> <p>Practicals (16Periods)</p> <p>8 Perform the measurement of power in a resistive load by using voltmeter and an Ammeter</p> <p>9 Perform the measurement of power by using voltmeter, ammeter and wattmeter</p> <p>Assignment to be conducted on every week end</p> <p>Quarterly Examinations</p>		<p>base on H.P. with a vertical face perpendicular to V.P)</p> <p>9 DRAW A PARABOLA OF 100 mm BASE, 80 mm HEIGHT BY RECTANGLE METHOD</p> <p>Assignment to be conducted on every week end</p> <p>Quarterly Examinations</p>
<p>October 2023</p> <p>No. of Working days: 18</p>	<p>Theory (17 Periods)</p> <p>7.3. Lead acid Cell–Principle and working–WH and AH efficiencies of a Cell</p> <p>7.4.Charging methods of Secondary Cells</p> <p>7.5.Maintenance and testing of Lead Acid Cell.</p> <p>7.6. Basic concepts of SMF Batteries and Solar Cell</p> <p><u>Electrostatics</u></p> <p>8.1.Electric Charge its units</p> <p>8.2.CoulombslawofElectrostatics</p>	<p>Theory (17 Periods)</p> <p><u>Wiring Circuits</u></p> <p>7.1.Simple lamp circuit and bed room lighting circuit</p> <p>7.2.Stair case wiring, Simple series and parallel circuits</p> <p>7.3.Master switch circuit and corridor wiring circuit</p> <p>7.4.Fluorescent tube light circuit, sodium vapor lamp and mercury vapor lamp circuits</p> <p><u>Earthing Systems</u></p> <p>8.1.Necessity of Earthing</p>	<p>Theory (17 Periods)</p> <p>7.4.Symbols of UJT, FET, SCR and Tunnel Diode</p> <p><u>Applications of Electronic Devices and I.C.'s</u></p> <p>8.1.Integrated Circuits– Advantages & Disadvantages</p> <p>8.2.Classification of I.C.'s</p> <p>8.3.Discrete Circuits</p> <p>8.4.Comparison between I.C and Discrete circuit</p> <p>8.5.Zener diode as Voltage Regulator</p>

	<p>8.3.Absolute & Relative Permeability 8.4.Field patterns of +ve, -ve, Like and Unlike Charges Field intensity 8.5.Capacitance– Dielectric loss-Capacitance in series and Parallel Simple Problems. Practicals (17 Periods) 10 Perform the error testing of an energy meter 11 Perform the measurement of energy by energy meter 12 Trace the magnetic lines of a bar magnet Assignment to be conducted on every week end Unit III</p>	<p>8.2.TypesofEarthing–Pipe – Strip–Rod–Plate earthing – 8.3.Measurement of earth resistance 8.4.Electric Shock–First aid Practical (17 Periods) 10 Godown / Corridor wiring 11 Tube Light Circuit 12 Master Circuit /Hostel Wiring Assignment to be conducted on every week end Unit III</p>	<p>8.6.Rectifiers–Half wave, Full wave and Bridge 8.7.Transistor as an Amplifier 8.8.Classification of Amplifiers 8.9.Block diagrams of Inverter & Uninterrupted power supply 8.10.Brief study on LED, LCD Practical (17 Periods) 10 DRAW THE PROJECTIONS OF A CYLINDER OF 40mm DIAMETER AND AXIS 50 mm LONG (Resting on one of its base on Horizontal Plane.) 11 DRAW PIPE EARTHING 12 DRAW PLATE EARTING 13 DRAW THE INTERNAL CONNECTIONS OF A FOUR POINT STARTER Assignment to be conducted on every week end Unit III</p>
<p>November 2023 No. of Working days: 25</p>	<p>Unit IV</p>	<p>Unit IV</p>	<p>Unit IV</p>
<p>December 2023 No. of Working days: 24</p>	<p>ON THE JOB TRAINING 1 MONTH Half-yearly Examinations</p>	<p>ON THE JOB TRAINING 1 MONTH Half-yearly Examinations</p>	<p>ON THE JOB TRAINING 1 MONTH Half-yearly Examinations</p>

January 2024 No. of Working days:20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations
February 2024 No. of Working days:24	IPE Model Papers Practice Practical Examinations IPE-2024	IPE Model Papers Practice Practical Examinations IPE-2024	IPE Model Papers Practice Practical Examinations IPE-2024
March 2024 No. of Working days:21	Theory Examinations IPE-2024	Theory Examinations IPE-2024	Theory Examinations IPE-2024

Prepared by:

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ANNUAL ACADEMIC PLAN 2023– 24

ELECTRICAL TECHNICIAN :: COURSE CODE :: 321 :: SECOND YEAR

Month & No. of working days / No. of Periods	Electrical Machines and Power Systems (VT-4) Electrical Machine Lab (VP-4)	Domestic Appliances and Rewinding (VT-5) Domestic Appliances Lab (VP-5)	Electrical Estimating and Utilization(VT-6) Electrical Estimation and Utilization lab (VP-6)
<p>June 2023 No. Of Days-24 No. of Theory Periods-20 No. of Practical Periods-20</p>	<p>Theory-20 1. D.C. Generators 1.1. Generator Principle, Simple loop Generator 1.2. Production of Induced EMF and its nature 1.3. Construction details of a D.C. Generator with diagram 1.4. Armature winding – Lap and wave winding 1.5. EMF equation 1.6. Simple Problems 1.7. Types of generators – Separately excited – Self excited – Series, Shunt and Compound with voltage and current equations. 1.8. Failure of building up of voltage in a Shunt generator 1.9. Losses of generators – iron, copper and mechanical and Efficiency of generators Applications of different types of Generators</p>	<p>Theory-20 1. Introduction to Domestic Appliances 1.1. Classification of Domestic Appliances General procedure for servicing - Tools used for repairing domestic appliances - Drives used in Domestic Appliances. 2. Non-motorized Heating Appliances 2.1. Construction, Working, Trouble shooting guide of Electric Room Heaters – Bowl and Rod type. 2.2. Construction, Working, Trouble shooting guide of Electric Irons – Ordinary, Automatic and Steam 2.3. Construction, Working, Trouble shooting guide of Electric Stove, Rice cooker 2.4. Construction, Working, Trouble shooting guide of</p>	<p>Theory-20 1. Domestic Wiring 1.1. Introduction 1.2. Types of House wiring and their comparison in tabular form 1.3. Types of Materials and Accessories used in House wiring with a detailed estimate 1.4. 1-phase and 3-phase Service- Selection of Mains 1.5. Designing number of Sub- circuits and distribution Boards 1.6. Load points in a domestic installation and IE Wiring rules Preparation of wiring Installation Plan / Wiring Layout 1.7. Selection of Main Switch 1.8. Calculation of length of cable and labour cost 1.9. Preparation of detailed estimate in a standard proforma for</p>

		<p>Electric Toaster and Hot Plate</p> <p>2.5. Construction, Working, Trouble shooting guide of Electric Water heaters – Immersion Type, Storage type</p> <p>2.6 Construction, Working, Trouble shooting guide of Electric Kettle and Coffee Percolator</p>	<p>Domestic wiring Estimation of wiring of small residential building, Office and Commercial establishments like Shops, sales counters, storesetc.</p>
	<p>Practical-20(Periods)</p> <p>1. Identify the terminals of given DC shunt machine and measure the resistance of Armature and Field windings by multimeter/ohm meter (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p> <p>2. Identify the terminals of given DC compound machine and measure the resistance of Armature and Field windings by multimeter/ ohm meter (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p>	<p>Practical-20(Periods)</p> <p>1.Test locate the rectify fault in given Electric room heater.</p> <p>2.Dismantle replace the heating element in given Ordinary electric iron.</p>	<p>Practical-20(Periods)</p> <p>1. Making connections of 1-ph service mains, main board and Distribution board (FOUR SUBCIRCUITS).</p> <p>2. Making connections of 3-ph service mains, main board and distribution board (SIX SUB CIRCUITS).</p>
<p>July 2023 No. Of Days-24 No. of Theory Periods-20 No. of Practical Periods-20</p>	<p>Theory-20(Periods)</p> <p>2. D. C. Motors</p> <p>2.1. Motor working principle -significance of back EMF</p> <p>2.2. Types of Motors -Series, Shunt and Compound with voltage and current equations.</p> <p>2.3. Losses of Motors - iron,</p>	<p>Theory-20(Periods)</p> <p>3. Motorised Heating Appliances</p> <p>3.1. Construction, Working, Trouble shooting guide of Electric Hair drier, Microwave Oven and Dish washer</p> <p>4. Motorised Appliances</p>	<p>Theory-20(Periods)</p> <p>Power Wiring</p> <p>2.1. Introduction to Power wiring</p> <p>2.2. Methods of Power wiring</p> <p>2.3. Types of Materials and Accessories used in Power wiring with a detailed estimate</p> <p>2.4. 1-phase and 3-phase Service –</p>

	<p>copper and mechanical and Efficiency of Motors</p> <p>2.4. Speed and Torque equations - Simple problems</p> <p>2.5. Speed control of motors- Field control method (for series and shunt motors Armature control method (for shunt motors only)</p> <p>2.6. D.C. motor starters – necessity – working of 3-point and 4-point starters</p> <p>2.7. Applications of different types of Motors</p> <p>3. A. C. Fundamentals</p> <p>3.1. Alternating current and voltage - different wave forms</p> <p>3.2. Definitions – Cycle, time period, Frequency, Amplitude, Instantaneous value, Maximum value, Average value and RMS value, Form factor, Peak factor of sinusoidal wave.</p>	<p>4.1. Classification of Motors used in Domestic Appliances</p> <p>4.2. Construction, Working, Trouble shooting guide of Ceiling fan and Tablefan</p> <p>4.3. Construction, Working, Trouble shooting guide of Electric mixer /Grinder</p> <p>4.4. Construction, Working, Trouble shooting guide of Washing machines – washer, Semi-automatic, Automatic –Top load and Front Load</p> <p>Construction, Working, Trouble shooting guide of Vacuum cleaner, Aircooler</p>	<p>Selection of Starters</p> <p>2.5. Designing number of Control panel Boards</p> <p>2.6. Preparation of wiring Installation Plan / Wiring Layout</p> <p>2.7. Selection of Main Switch</p> <p>2.8..Calculation of length of cable and labour cost</p> <p>2.9. Preparation of detailed estimate in a standard proforma for Domestic wiring</p> <p>2.10. Estimation of wiring of small Workshops and Irrigation pump sets etc</p> <p>3. Low Tension Distribution Lines and Village Electrification</p> <p>3.1. Types of OH distribution lines</p> <p>3.2. Major components of Overhead lines</p>
	<p>Practical-20(Periods)</p> <p>3. Study of 3-point starter (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p> <p>4. Study of 4-point starter. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p>	<p>Practical-20(Periods)</p> <p>3. Test, locate and rectify fault in given Automatic electric iron.</p> <p>4. Dismantle and replace the heating element given Electric stove.</p>	<p>Practical-20(Periods)</p> <p>3. Taking the measurement of college block and preparation of wiring layout.</p> <p>4. Install surface conduit wiring in a modelbuilding/classroom, make the list materials.</p>
	Assignment	Assignment	Assignment
	Unit-1	Unit-1	Unit-1

<p>August 2023 No. Of Days-25 No. of Theory Periods-20 No. of Practical Periods-20</p>	<p>Theory-20(Periods) 3.3. phase difference and Power factor - simple problems 3.4. Single phase AC through resistive/inductive/capacitive circuit 3.5. Calculation of Impedance, power and PF 3.6. Simple problems 3.7. Advantages of Polyphase and Single phase 3.8. Star & Delta connections - Voltage and Current relations (no derivations) 4. Transformers 4.1. Transformer working principle – EMF equation (no derivation) – Transformation ratio – Types of Transformers 4.2. Auto transformers – Instrument transformers (CT &PT) –Welding Transformer 4.3. Losses and efficiency of transformer 4.4. All day efficiency</p>	<p>Theory-20(Periods) 5. Other Appliances 5.1. Luminous Appliances – Incandescent Lamp, CFL lamps and Fluorescent Tube 5.2. Circuit diagram &working of Electric bell and Emergency Light/Rechargeable Torch Construction and Working of Voltage Stabilizer, UPS and Inverter.</p>	<p>Theory-20(Periods) 3.1. Types of Materials and Accessories used in Overhead lines with a detailed estimate 3.2. Estimation in a standard proforma for 1-phase and 3- phase Overhead lines – simple problems Preparation of detailed estimate for the quantity of materials required for Village Electrification 4.Distribution Substation 4.1. Types of Transformer Substations 4.2. Various components required in erection of a substation 4.3. Preparation of detailed estimate of the quantity of materials and accessories required for Pole mounted substation 4.4. Preparation of detailed estimate of the quantity of materials and accessories required for Plinth mounted substation 4.5. Preparation of detailed estimate in a standard proforma for Pipeand Plate Earthing</p>
	<p>Practical-20(Periods) 5. Identify the terminals of given 3-ph induction motor. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions). 6. Study of DOL starter/star delta starter. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p>	<p>Practical-20(Periods) 5. Test the given Immersion water heater and replace the power cord. 6. Dismantle, re-assemble and identify parts in given Electric geyser.</p>	<p>Practical-20(Periods) 5. Preparation of an estimate in standard proforma for installing 5-ph motor in a small work shop. 6. Preparation of estimate for main board, distribution board and motor and control panel for controlling of Two 1-ph motors.</p>

	Assignment	Assignment	Assignment
	Unit-II	Unit-II	Unit-II
<p>September 2023 No. Of Days-22 No. of Theory Periods-20 No. of Practical Periods-20</p>	<p>Theory-20(Periods) 4.5. Cooling systems of Transformers 4.6. maintenance of Transformers 4.7. Applications of various Transformers 5. Alternators 5.1. Alternator working principle 5.2. Relation between Speed, Frequency and no. of poles 5.3. Constructional details of alternator – Salient pole and smooth cylindrical type EMF equation (no derivation) simple problems 6. Three Phase Induction Motors 6.1. Classification of three phase motors 6.2. Three phase induction motor working principle 6.3. Relation between Speed, Frequency and no. of poles 6.4. Definition – Slip, Slip speed – simple problems 6.5. Constructional details of Induction motors – Squirrel cage and Slip ringmotors 6.6. Induction motorstarters - necessity – working of D.O.L., Star/Delta, Rotor resistance starters 6.7. Applications of various Induction motors</p>	<p>Theory-20(Periods) General procedure for Winding and Rewinding 6.1. Tools and special equipment required for winding /rewinding 6.2. Types of Conducting and Insulating materials used in armature winding 6.3. General procedure for rewinding Varnishing, Baking and reassembling of motor 7. D. C. Machine Winding 7.1. Fundamental terms used in Armature winding 7.2. Types of armature windings- Lap and wave 7.3. Comparison between Lap winding and wave winding 7.4. Methods to find common faults while testing DC armature</p>	<p>Theory-20(Periods) Theatre / Auditorium Wiring & Public address system (Field-visit) 5.1. Basic requirements of an Auditorium 5.2. General wiring layout of an auditorium 5.3. Preparation of detailed estimate for electrification of small auditorium in standard proforma 5.4. Public Address system - Major components of P.A. system Prepare a detailed estimate and layout of Public Address system for a Hall, Open ground</p>

	<p>Practical-20(Periods)</p> <p>7. Study of Star delta starter. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p> <p>8. Measurement of Insulation Resistance of a DC Shunt motor/Series motor/Compound motor using Megger (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p>	<p>Practical-20(Periods)</p> <p>7. Locate the fault in given Electric kettle.</p> <p>8. Dismantle and change armature of given Electric Table fan.</p>	<p>Practical-20(Periods)</p> <p>7. Preparation of estimate for main board, distribution board and motor control panel for controlling of a 1-ph motor and a 3-ph motor.</p> <p>8. Preparation of detailed list of materials and accessories of Plate Earthing</p>
	Half-Yearly Examinations	Half-Yearly Examinations	Half-Yearly Examinations
<p>October 2023 No. of days -18 No. of Theory Periods-15 No. of Practical Periods-15</p>	<p>Theory-15(Periods)</p> <p>7. Single Phase Induction Motors</p> <p>7.1. Single phase induction motor working principle</p> <p>7.2. Applications of all Single phase induction motors – (Split phase - Capacitor start- Capacitor start and capacitor run – Shaded pole – Universal - Repulsion - Reluctance - Schrage and Stepper motor)</p> <p>8. Power Systems – Generation –Transmission and Distribution</p> <p>8.1. Sources of Electrical energy – Conventional and Non – conventional</p> <p>8.2. Conventional sources – Hydro, Thermal and Nuclear Power stations</p>	<p>Theory-15(Periods)</p> <p>7.5. simple winding diagrams</p> <p>8. A. C. Machine Winding</p> <p>8.1. Types of A.C. windings</p> <p>8.2. Testing and Troubleshooting of A. C. Windings</p>	<p>Theory-15(Periods)</p> <p>6. I. E. Rules</p> <p>6.1. Extract from IE rules 1956</p> <p>6.2. IE rules connected with Domestic and Industrial wiring</p> <p>6.3. Testing of Electrical installation as per IE Rules Steps involved for obtaining a Domestic service Connection</p> <p>7. Contracting</p> <p>7.1. Tender, Tender form, Quotation, Earnest money deposit, Estimate, Estimation</p> <p>8. Utilisation of Electrical Energy</p> <p>8.1. Illumination</p> <p>8.2. Requirements of Good lighting</p> <p>8.3. Levels of Illumination for various applications</p>

	<p>Practical-15(Periods)</p> <p>9. Identify the terminals of given DC series machine and measure the resistance of Armature and Field windings by multimeter/ohm meter (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p> <p>10. Measure the power in RLC circuit (Consider capacitor type induction motor as load). (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).</p>	<p>Practical-15(Periods)</p> <p>9. Dismantle and change armature of given Electric ceiling fan.</p> <p>10. Dismantle re-assemble the Electric room cooler.</p>	<p>Practical-15(Periods)</p> <p>9. Preparation of detailed list of materials and accessories of Plate Earthing</p> <p>10. Preparation of detailed list of materials and accessories of plinth mounted transformer.</p>
	Unit-III	Unit-III	Unit-III
<p>November 2023 No. of days -25 No. of Theory Periods-15 No. of Practical Periods-15</p>	<p>Theory-15(Periods)</p> <p>8.3. Non - Conventional sources – Solar, Biomass and Wind power generation</p> <p>8.4 Types of Transmission and Distribution – Singleline diagram of a Power system</p> <p>8.5. Classification-Substation</p> <p>8.6. Transformer Substations - Plinth and Pole mounted</p> <p>8.7. Equipment in Substations Types of Fuses and Lightning Arresters</p>	<p>Theory-15(Periods)</p> <p>8.3. Comparison between Starting and running windings</p> <p>8.4. Common faults and remedies in 1-phase motors</p> <p>8.3. Common faults and remedies in 3-phase motors</p>	<p>Theory-15(Periods)</p> <p>Utilisation of Electrical Energy</p> <p>8.4. Illumination</p> <p>8.5. Requirements of Goodlighting</p> <p>8.6. Levels of Illumination for various applications</p> <p>8.7. Standard definitions in Lighting</p> <p>8.8. Laws of Illumination</p> <p>8.5. Inverse law and Lamberts cosinelaw</p> <p>8.6. Designing of lighting scheme</p> <p>8.7. Types of Lamps</p> <p>8.8. Neon Signlamps</p> <p>8.9. Flasher for movinglights Circuit diagram and working of a refrigerator and Airconditioner</p>

	Practical-15(Periods) 11.Study the relation of voltage components of RLC Parallel circuit. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions). 12.Study the relation of voltage components of RLC series circuit. (Aim, Tools and Materials, Circuit Diagrams, Procedure, Observations and Precautions).	Practical-15(Periods) 11. Test and rectify the fault given Emergency light. 12. Identify the fault and make proper connections and Fluorescent lamp.	Practical-15(Periods) 11. Prepare a detailed estimate for installation of PA system in college ground. 12. Preparation of detailed list of materials and accessories of pole mounted transformer.
December 2023 No of Days-24	OJT-(One month only)	OJT-(One month only)	OJT-(One month only)
	Unit-IV	Unit-IV	Unit-IV
January 2024 No. of Days-20	PREFINAL-1	PREFINAL-1	PREFINAL-1
February 2024 No. of Days-24	PREFINAL-2	PREFINAL-2	PREFINAL-2
March 2024 No. of Days-21	IPEMarch-2024	IPEMarch-2024	IPEMarch-2024

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ANNUAL ACADEMIC PLAN – 2023-2024

PRINTING TECHNOLOGY (PTG- 324)

I YEAR

Month & No. of working days /No. Of Periods	DTP&PREPRESS-I (VT1) DTP&PREPRESS OPERATIONS-I (VP1)	PRESS WORK & FINISHING-I (VT2) PRESS WORK & FINISHING-I (VP2)	INFORMATION TECHNOLOGY & C (VT3) INFORMATION TECHNOLOGY & C LAB (VP3)
<p align="center">June 2023</p> <p>No. of days-24</p> <p>No. of Theory Periods-24</p>	<p>Theory-24(Periods)</p> <p align="center">UNIT-I DESIGN FOR PRINTING</p> <p>1.1 Basic principles of Design 1.2 Typography 1.3 Layout –Different types</p>	<p align="center">Theory-24(Periods)</p> <p align="center">UNIT – I PRINTING PROCESSES</p> <p>1.1 Introduction to Letterpress Printing, Lithography / Offset Printing Gravure Printing, Flexography Printing 1.2 Principles of each of these processes 1.3 Classification of Offset Printing Machines</p>	<p>Theory-24(Periods)</p> <p align="center">UNIT – I (INTRODUCTION TO COMPUTER SYSTEM)</p> <p>1.1 Various components of a computer system 1.2 Difference between hardware and software 1.3 Function of each component of a computer system 1.4 Configuration of a computer system 1.5 Various peripherals-opening an application program 1.6 Create a folder in specified location.</p>
	<p align="center">Practical-24(Periods)</p> <p>1.Exercise on MS-Word 2.Exercise on Windows XP 3.Different styles of setting and Lettering for layouts</p>	<p align="center">Practical-24(Periods)</p> <p>1.Anatomy of Offset press 2.Plate and blanket fixing 3.Make ready on Offset machines</p>	<p align="center">Practical-24Periods)</p> <p>1.(a) State the configuration of a computer system (b) Know how to open an application program (c)Create a backup for a data using NERO similar CD writing software. Back up required files and folders to a CD ROM.</p>

			<p>2. Write and demonstrate the following</p> <p>(a) Create a folder named (PTG on desktop)</p> <p>(b) Create a word pad text file, enter the text and save the file in the above folder.</p> <p>(c) Rename the folder PTG with DTP</p> <p>(d) Delete the folder DTP</p> <p>(e) Restore the DTP back on desktop position.</p> <p>3. (a) Create a document using MS-Word and Save it.</p> <p>(b) Create and Demonstrate the table in MS-Word and save it.</p>
<p>July 2023</p> <p>No. of days -24</p> <p>No. of Theory Periods-23</p>	<p>Theory-23(Periods)</p> <p>1.4 Working with illustrations Identifying principles of Design with examples</p> <p style="text-align: center;">UNIT-II DESKTOP PUBLISHING</p> <p>2.1 Concept of DTP System</p> <p>2.2 Input Devices – Keyboard, Mouse, Scanner, OCR etc.</p>	<p>Theory-23(Periods)</p> <p>1.4 Sheetfed and Web Offset Machines</p> <p>1.5 Classification of Gravure Printing Machines</p> <p>1.6 Flexographic Printing Machines</p> <p>1.7 Screen Printing Machines</p>	<p>Theory-23(Periods)</p> <p>UNIT – II (Advance Windows Features)</p> <p>2.1 Installing a new software using control panel</p> <p>2.2 Uninstalling software using control panel</p> <p>2.3 Installing a new hardware using control panel</p> <p>2.4 Uninstalling a hard ware using control panel</p> <p>2.5 Finding out drive space system tool option of accessories group</p>
	<p>Practical-23 (Periods)</p> <p>4. Preparation of design for Visiting Card</p> <p>5. Preparation of design for Letter Heads</p>	<p>Practical-23 (Periods)</p> <p>4. Printing Single colour job</p> <p>5. Printing Two colour and Multi colour jobs</p>	<p>Practical-23 (Periods)</p> <p>4. Create a mailing letter using Mail Merge tool of MS-Word.</p> <p>5. (a) Exercise on creation of worksheet</p> <p>(b) Exercise on use of formulae and functions</p> <p>Write and demonstrate the following in MS-Excel</p> <p>(a) Creating a work sheet with rows and columns, compute</p>

	6.Preparation of design for Envelops		bonus as 20% of salary and total amount. (b)Insert a row between given employee no. and enter given data (c) Delete the row given employee no. (d)Rename the worksheet as ‘Employees salary’ (e)Insert the column” Designation” between Employee name and salary (6) Create a worksheet which is showing the marks obtained by 10 students in 3 subjects, Total, Percentage, Maximum marks and Minimum marks
	Assignment	Assignment	Assignment
	Unit-1	Unit-1	Unit-1
August 2023 No.ofdays-25 No. of Theory Periods-24	<p style="text-align: center;">Theory24 (Periods)</p> <p>2.3 Output Devices – Monitor, Printer (Laser Printer, Inkjet Printer, Dot- matrix Printer)</p> <p>2.4 Operating System – MS DOS, Windows XP, Text Manipulation</p> <p style="text-align: center;">UNIT-III</p> <p style="text-align: center;">(COLOUR SEPARATION)</p> <p>3.1 Basic Colour Theory</p>	<p style="text-align: center;">Theory-24 (Periods)</p> <p style="text-align: center;">UNIT – II</p> <p style="text-align: center;">OFFSET PRESS OPERATIONS</p> <p>2.1 Feeder Unit, Registration Unit, Printing Unit, Inking Unit, Dampening Unit and Delivery Unit of Offset Printing Process</p> <p>2.2 Single colour and Multi colour offset presses</p> <p>2.3 Web offset presses</p> <p>2.4 Single unit Web-offset presses</p>	<p style="text-align: center;">Theory-24 (Periods)</p> <p>2.6 procedure to disk defragmentation using system tools</p> <p>2.7 Installation procedures of a MODEM using control panel</p> <p>2.8 Installing a printer using control panel</p> <p>2.9 Procedures for changing resolution, color, appearance and screen saver options of the display</p> <p>2.10 Process of changing the system date and the time.</p> <p style="text-align: center;">UNIT-III</p> <p style="text-align: center;">(Features of Word processing package)</p> <p>3.1 Entering text using word-process of copying, cutting and pasting text within the same file</p> <p>3.2 Process of selecting text and symbol and special characters</p> <p>3.3 Saving a document</p>

	3.2 Light and Colour		3.4 Setting margins and indents 3.5 Formatting paragraphs 3.6 Introducing multiple columns 3.7 Creating a table 3.8 Printing a document 3.9 Spell checks 3.10 Headers and footers 3.11 Mail merge features of word.
	<p align="center">Practical-24 (Periods)</p> <p>7.Preparation of design for Invitation cards</p> <p>8.Preparation of design for Title Cover, Self Cover</p> <p>9.Preparation of designing monograms, trademarks</p> <p>10.Proof reading- Procedure of showing text and marginal marks-Spell Check – Merits and Demerits</p>	<p align="center">Practical-24 (Periods)</p> <p>6.Field visit to Offset Printing press and Newspaper presses for study of Web Offset printing</p> <p>7. Field visit to Gravure Printing press and study of Gravure printing presses for flexible packaging</p>	<p align="center">Practical-24 (Periods)</p> <p>(7) Generate the appropriate chart from the given table for the Statistical data using MS-Excel</p> <p>8. Exercise on creation and development of presentations</p> <p>(a)Write and demonstrate a power point presentation using the different design layout and animate the text and images</p> <p>(b)Use any five custom animation commands</p> <p>(9) Create a user account on the Internet and e-mail and sending a document to a given e-mail address. * Exercise on demonstrate C programmed structure, using of print f and scan f functions</p>
	Assignment	Assignment	Assignment
	Unit-II	Unit-1I	Unit-1I

<p style="text-align: center;">September 2023</p> <p style="text-align: center;">No. of days-22</p> <p style="text-align: center;">No. of Theory Periods-21</p>	<p>Theory21(Periods)</p> <p>3.3 Additive Colours</p> <p>3.4 Subtractive Colours</p> <p>3.5 Basic Separation Theory</p> <p>3.6 Colour Management</p> <p style="text-align: center;">UNIT – IV</p> <p style="text-align: center;">(Image Assembly)</p> <p>4.1 Stripping and Proofing</p>	<p>Theory21(Periods)</p> <p>2.5 Multi colour Web presses</p> <p>2.6 Perfect Printing (Back and Back)</p> <p style="text-align: center;">UNIT – III</p> <p style="text-align: center;">GRAVURE PRINTING</p> <p>3.1 Unwind unit</p> <p>3.2 Printing unit</p> <p>3.3 Doctor Blade</p> <p>3.4 Impression Roller</p> <p>3.5 Rewinding Unit</p> <p>3.6 Solvent Recovery</p>	<p>Theory 21(Periods)</p> <p style="color: red;">UNIT - IV</p> <p>Features of Excel package</p> <p>4.1 Concept of cell, row, column and worksheet in excel, inserting cells rows and columns</p> <p>4.2 Changing column width and row height</p> <p>4.3 Entering, editing and using formulas excel page setter features</p> <p>4.4 Working with multiple work sheets</p> <p>4.5 Concept of a function in excel</p> <p>4.6 Usage of function wizard</p> <p>4.7 Creating and editing charts</p> <p>4.8 Creating and placing graphic objects.</p> <p style="color: red;">UNIT - V</p> <p>Features of power point presentation package</p> <p>5.1 Purpose of power point software</p> <p>5.2 Readymade slide layout schemes available in the software</p> <p>5.3 Creating slides for each of slide layout schemes</p> <p>5.4 Entering and editing text</p> <p>5.5 Inserting pictures</p> <p>5.6 Changing the background of the slide</p> <p>5.7 Creating text animation in the slide</p> <p>5.8 Creating slide transition effects</p>
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	<p align="center">Practical-21(Periods)</p> <p>11. Correction of at least three proofs (Three Exercises)</p> <p>12. (a) Preparation of imposition schemes for two- and four-pages Sheet and Half Sheet methods (b) Preparation of imposition schemes for eight- and sixteen pages Sheet and Half Sheet methods</p>	<p align="center">Practical-21(Periods)</p> <p>8. Write stitching and spiral binding 9. Operation of ruling, cutting, stitching, gold foiling, varnishing and lamination machines</p>	<p align="center">Practical-21(Periods)</p> <p>10. Performing Addition, Subtraction, Multiplication, Division and Modulus operation on two integers.</p> <p>11. Find the area and circumference of a circle</p> <p>12. Calculate simple and compound interest. *Exercise on if, if-else, nested if else</p>
	Assignment	Assignment	Assignment
	Quarterly Examinations	Quarterly Examinations	Quarterly Examinations
<p align="center">October 2023</p> <p align="center">No. of days-18</p> <p align="center">No. of Theory Periods-18</p>	<p align="center">Theory-18(Periods) UNIT – IV IMAGE ASSEMBLY</p> <p>4.2 Imposition – Sheet and Half Sheet 4.3 Purpose of Stripping 4.4 Equipment & tools used for stripping</p>	<p align="center">Theory-18(Periods) 3.7 Applications of Gravure Printing 3.8 Modern trends.</p> <p align="center">UNIT – IV PRINT FINISHING FOR PUBLICATIONS</p> <p>4.1 Introduction – Binding Operations 4.2 Account Book Binding 4.3 Publisher’s Binding</p>	<p align="center">Theory-18(Periods) UNIT – VI USAGE OF INTERNET</p> <p>6.1 Introduction to internet 6.2 Creating a user account on the internet and email 6.3 Sending a document to a given email address 6.4 Searching engineering related units using search engines and downloading the content.</p> <p align="center">UNIT – VII PROGRAMMING BASICS</p> <p>7.1 Structure of a C program 7.2 Programming rules 7.3 Character set 7.4 Delimiters, Keywords, Constants, Variables, Data types. 7.5 Arithmetic, Logical, Relational operators and Precedence's Assignment, Increment, Decrement operators, Evaluation of expressions 7.6 Console I/O formatted and unformatted functions</p>

	<p>Practical-18 (Periods)</p> <p>13. Identification of image carriers for Letterpress</p> <p>14. Identification of image carriers for Flexography</p>	<p>Practical-18 (Periods)</p> <p>10. Preparation of Note books – Single rule, Double rule etc.</p> <p>11. Testing of GSM, Caliper and grain direction of paper</p>	<p>Practical-18 (Periods)</p> <p>13. Find a student's result is "pass" or "fail" based on marks.</p> <p>14. Find largest of given three numbers. * Exercise on ID Arrays</p>
	Assignment	Assignment	Assignment
	Unit-III	Unit-III	Unit-III
<p>November 2023 No. of days-25 No. of Theory Periods-25</p>	<p>Theory-25 (Periods)</p> <p>4.5 Elementary Stripping Techniques – Masking Sheets – Layout Pre-Printed Masking Sheets, attaching film Negatives, Opaquing and attaching the flat, Attaching film Positives</p> <p>4.6 Purposes of Proofing</p> <p>4.7 Digital Proofing</p>	<p>Theory-25 (Periods)</p> <p>4.4 Perfect Binding</p> <p>4.5 Book repairing work</p> <p>4.6 Materials used for Binding</p> <p>4.7 Equipment's and tools used for Binding</p> <p>4.8 Automation in Bindery</p>	<p>Theory-25 (Periods)</p> <p style="text-align: center;">UNIT - VIII</p> <p>Decision and Loop control statements</p> <p>8.1 If, If-else, Nested If else, Break, Continue, go to and Switch statements</p> <p>8.2 Loops: For, while Do while, Nesting of loops.</p> <p style="text-align: center;">UNIT - IX</p> <p style="text-align: center;">Arrays and Strings</p> <p>9.1 ID Array declarations</p> <p>9.2 Initialization, 2D Array declaration, initialization, Accessing of Array elements, character Arrays declaration and initialization of strings</p>

	Practical-25 (Periods) 15. Preparation of image carriers for Offset- albumin, Deep etch Wipe on, PS plates 16. Field visit to Gravure printing presses for studying, making of image carriers for Gravure Process	Practical-25 (Periods) 12. Use of densitometers 13. Use of control charts for recording and assessment of the quality	Practical-25 (Periods) 15. Add two single dimensional arrays. 16. Add two double dimensional arrays.
	Assignment	Assignment	Assignment
	Unit-IV	Unit-IV	Unit-IV
December, 2023 No. of Days-24	OJT-(One month only)	OJT-(One month only)	OJT-(One month only)
	Half-Yearly Examinations	Half-Yearly Examinations	Half-Yearly Examinations

January 2024 No. of Days-20	PREFINAL EXAMINATIONS	PREFINAL EXAMINATIONS	PREFINAL EXAMINATIONS
February 2024 No. Of Days-24	PRACTICAL EXAMS IPE – 2024	PRACTICAL EXAMS IPE - 2024	PRACTICAL EXAMS IPE - 2024
March 2024 No. of Days-21	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024

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ANNUAL ACADEMIC PLAN – 2023-2024

PRINTING TECHNOLOGY (324)

II YEAR

Month & No. of working days / No. Of Periods	DTP & PREPRESS-II (VT1) DTP & PREPRESS OPERATIONS-II(VL1)	PRESSWORK & FINISHING –II(VT2) PRESWORK & FINISHING-II(VL2)	BASIC ENGINEERING (VT3) ENGINEERING DRAWING(VL3)
<p>June 2023 No. of days-24</p> <p>No. of Theory Periods-20 No. of Practical-20</p>	<p>Theory-20 UNIT-1 Software for Graphic Arts</p> <p>1.1 Introduction 1.2 Basics of Page Maker 1.3 Job suitability 1.4 Overview of Tools in PageMaker 1.5 Setting up of printers and page setting 1.6 Paragraph, Bullets, Column, drop letter 1.7 Creating Style sheets 1.8 Importing of text and Graphics 1.9 Master Pages and Multiple Master Pages 1.10 Layers 1.11 Plug in operations</p>	<p>Theory-20 UNIT-1 UNDERSTANDING FLEXOGRAPHY PRESS OPERATIONS</p> <p>1.1 Printing Unit 1.2 Inking Unit 1.3 Inking System 1.4 Fountain roller, Anilox Roller 1.5 Materials used for Flexography Printing 1.6 Job suitability 1.7 Making of rubber and plastic carriers for flexography.</p>	<p>Theory-20 UNIT-I BASIC PRINCIPLES OF ELECTRICITY</p> <p>1.1 Define and state the units of Electricity Potential 1.2 Potential difference 1.3 Voltage – Electromotive force and Electric Current 1.4 Ohm’s Law 1.5 Compare resistance of a conductor for its given length – Area of cross section and its resistance 1.6 Kirchhoff’s laws 1.7 Series and Parallel Circuits – Definition of Electric field strength 1.8 Permeability and Reluctance 1.9 Faraday’s laws of Electromagnetic induction 1.10 Lenz’s law</p>
	<p>Practical-20(Periods)</p> <p>1. DTP software’s for Publishing industry – Study the applications PageMaker.(a) Photoshop(b) Illustrator.(c) Instant Artist.(d) Corel Draw.(e) QuarkXPress (f) In Design.</p>	<p>Practical-20(Periods)</p> <p>1. Anatomy of Flexography Press 2. Plate mounting and make ready</p>	<p>Practical-20 (Periods)</p> <p>1. Understand the importance of Engineering Drawing</p>

<p style="text-align: center;">July 2023 No. of days-24 No. of Theory Periods-20 No. of Practical-20</p>	<p>Theory-20(Periods)</p> <p>1.12 Imposition of Pages 1.13 Quark Basics 1.14 Setup preferences 1.15 Setup tool defaults 1.16 Setup colour palette 1.17 Setup clipping paths 1.18 Quark master pages 1.19 Fixing Corrupt files 1.20 Preserving Text flow 1.21 Quark tips 1.22 EPS Files 1.23 Excel graphics for Quark</p>	<p>Theory-20(Periods)</p> <p>UNIT-II</p> <p>PRESS DEVELOPMENT IN SCREEN PRINTING PROCESS</p> <p>2.1 Introduction 2.2 Classification of Screen Printing Presses 2.3 Understanding Screen Printing Operations 2.4 Preparation of Screen Printing tables 2.5 Materials used for Screen Printing presses and suitability of Jobs in Screen Printing 2.6 Preparation of Image carriers for Screen Printing Process</p>	<p>Theory-20(Periods)</p> <p>UNIT-II</p> <p>D.C.MACHINES</p> <p>2.1 D.C. Machine 2.2 D.C. Generator 2.3 Formula for EMF equation of D.C. Generator and solve simple equations 2.4 Types of D.G. Generator 2.5 Working Principle of D.G. Motor 2.6 Types of D.C. Motors 2.7 Uses of all D.C. Motors 2.8 Starter of a D.C. Motor</p> <p>UNIT-III</p> <p>A.C FUNDAMENTALS</p> <p>3.1 Define Alternating Quantity 3.2 Amplitude, Cycle – Periodic time – frequency – instantaneous value and angular velocity 3.3 Phase and Phase differences.</p>
	<p>Practical-20(Periods)</p> <p>2.Design visiting cards using page maker 3. Design Banner using Photoshop</p>	<p>Practical-20(Periods)</p> <p>3.Printing of Single Color Job by Flexo 4. Printing of Multi Color job by Flexo</p>	<p>Practical-20(Periods)</p> <p>2. Engineering Drawing Instruments.</p>
	<p>Unit-1</p>	<p>Unit-1</p>	<p>Unit-1</p>

<p>August, 2023 No. of days-25 No. of Theory Periods-18 No. of Practical-18</p>	<p>Theory-18(Periods) UNIT-II PHOTOSHOP BASICS 2.1 Overview of Tools 2.2 Capturing Image(Scanner) 2.3 Line Drawing 2.4 Shaded options 2.5 B&W -Colour Importing Image (from files, CD, Web) 2.7 Editing Images 2.8 Cloning 2.9 Stamping</p>	<p>Theory-18 (Periods) UNIT-III PRINT FINISHING FOR PACKAGING 3.1 Introduction 3.2 Purpose of packaging and its importance 3.3 Materials used for packaging 3.4 Paper board, metal, glass, plastics, timber and textiles 3.5 Plastic based Packaging materials 3.6 Flexible Packaging 3.7 Specialty Packaging 3.8 Plastic Corrugated boxes – Rigid Boxes</p>	<p>Theory-18(Periods) UNIT-IV A.C. MACHINES 4.1 Introduction 4.2 Working principle of Alternator(AC Generator) 4.3 Relation between frequency, speed and poles 4.4 EMF equation of Alternator and Solve simple problems 4.5 Working principle of Transformer 4.6 EMF equation of Transformer and Solve simple problems</p>
	<p>Practical-18(Periods) 4.Design greeting card Using Instant artist 5. Design logo using Corel draw</p>	<p>Practical-18(Periods) 5. Printing of Single color by Screen Printing 6. Printing of Multi or two color by Screen Printing</p>	<p>Practical-18(Periods) 3.Free hand Lettering & Numbering 4.Dimensions practice</p>
	<p style="text-align: center;">Assignment</p>	<p style="text-align: center;">Assignment</p>	<p style="text-align: center;">Assignment</p>
	<p style="text-align: center;">Unit-II</p>	<p style="text-align: center;">Unit-II</p>	<p style="text-align: center;">Unit-II</p>

<p style="text-align: center;">September 2023</p> <p style="text-align: center;">No.ofdays-22</p> <p style="text-align: center;">No. Of TheoryPeriods- 20</p> <p style="text-align: center;">No. Of Practical-20</p>	<p>Theory-20(Periods) 2.10 Resolution of the images lpi, dpi, Ppi</p> <p style="text-align: center;">UNIT-III</p> <p>ILLUSTRATOR AND CORELDRAW</p> <p>3.1 Illustrator 3.2 Creating various images(line/shading) 3.3 Creating Monograms/Logo 3.4 understanding vector graphics 3.5 Layers 3.6 Image Montage (combining images/photo collage) 3.7 Saving a file</p>	<p>Theory-20(Periods)</p> <p style="text-align: center;">UNIT-IV</p> <p>CONVERTING PROCESS</p> <p>4.1 Introduction 4.2 Principles of Carton Design 4.4 Sequence of operations involved in die making for cartons and envelopes 4.5 Die cutting and Creasing 4.6 Folding and Gluing</p>	<p>Theory-20(Periods)</p> <p style="text-align: center;">UNIT-V</p> <p>STORAGE BATTERIES AND SAFETY PROCEDURES</p> <p>5.1 Types of Cells 5.2 Active materials of Lead acid cell 5.3 – Nickel Iron cell 5.4 Uses of storage batteries 5.5 Electric shock and burns – its effects 5.6 Precautions for electrical shock</p> <p style="text-align: center;">UNIT-VI</p> <p>BASIC WORKSHOP TOOLS</p> <p>6.1 Classification – Hand tools 6.2 Marking and Measuring tools 6.2 Cutting tools – Striking tools – 6.3 Hand Tools Miscellaneous tools – Machine tools – Neat sketches With specifications and uses.</p>
	<p>Practical-20 (Periods)</p> <p>6. Preparation of any designs Bill using Quark Xpress. 7. Preparation of any design Title page using In Design. 8. Design a book using In design</p>	<p>Practical-20(Periods)</p> <p>7. Printing on different objects by Screen Printing 8. Die – Making for Cartons and Envelops</p>	<p>Practical-20 (Periods)</p> <p>5. Geometric constructions 6. Projections of points, lines and planes.</p>
	Quarterly Examinations	Quarterly Examinations	Quarterly Examinations

<p>October 2023 No.ofdays-18 No. of Theory Periods-15 No. of Practical-15</p>	<p>Theory-15(Periods)</p> <p>3.8 Corel draw 3.9 creating Gloss effect on a product photo 3.10 distributing selected objects in Corel draw 3.11 aligning selected objects 3.12 Basic drop shadow applied to text 3.13 Basic image shadow 3.14 creating borders for digital photos 3.15 Creating a perfect square and circle 3.16 merging photographs 3.17 Adding tint shape on a colour fill 3.18 copying text properties 3.19 Adding guidelines 3.20 creating image borders and fast cropping 3.21 shortcut key for the navigator 3.22 mirror effect 3.23 Rotate and change rotation centre 3.24 change outline color</p>	<p>Theory-15(Periods)</p> <p style="text-align: center;">UNIT-V</p> <p>MODERN DEVELOPMENTS</p> <p>5.1 Security printing 5.2 Digital printing ,concepts and applications 5.3 Computer to film(CTF) 5.4 Computer to plate (CTP) 5.5 Image Setter s-use and applications 5.6 Advantages and Disadvantages of CTP</p> <p style="text-align: center;">UNIT-VI</p> <p>MISCELLANEOUS PROCESSES</p> <p>6.1 Thermography 6.2 xerography 6.3 Die stamping and Embossing</p>	<p>Theory-15(Periods)</p> <p style="text-align: center;">UNIT-VII</p> <p>MECHANICAL WORKING OF METALS</p> <p>7.1 Hot working process 7.2 Cold working process 7.3 Advantages and disadvantages of both Processes and their comparison.</p> <p style="text-align: center;">UNIT-VIII</p> <p>SIMPLE STRESS AND STRAIN</p> <p>8.1 Introduction 8.2 Stress 8.3 Types of Stresses 8.4 Strain 8.5 Types of Strain 8.6 Hook's law 8.7 Modulus of Elasticity 8.8 Lateral Strain 8.9 Poisson's ratio 8.10 Relation among Elastic constant 8.11 dimensional changes in bodies due to stress and strain 8.12 Thermal stresses</p>
	Unit-III	Unit-III	Unit-III
	<p>Practical-15(Periods)</p> <p>9.Preparation of image carriers for Flexography Field visit to Study the image preparation</p>	<p>Practical-15(Periods)</p> <p>10.Folding and gluing of Cartons and Envelops.</p>	<p>Practical 15(Periods)</p> <p>7.Orthographic views 8. Sectional Views 9.Auxiliary Views</p>

<p>November 2023 No.ofdays-25 No. of Theory Periods-17 No. of Practical-17</p>	<p>Theory-17 (Periods) UNIT IV COMPUTER TO FILM</p> <p>4.1 Image Setter 4.2 Its principle and functions 4.3 Image recorder and RIP 4.4 Types and their working principles 4.5 Work Flow 4.6 Comparison with CTP</p>	<p>Theory-17 UNIT –VII PRINTER’S AND ESTIMATING AND COSTING</p> <p>7.1 Estimating 7.2 Introduction 7.3 Definition of Estimate 7.4 Differences between Estimate and Cost Preparation of Estimating 7.5 The fundamental principles of Estimating 7.6 Costing 7.6 Definition of an Costing 7.7 Objectives of Costing 7.8 Advantages of Costing 7.9 Costing Methods 7.10 Variable Cost, Direct and Indirect Cost</p>	<p>Theory-17(Periods) UNIT- IX FUNDAMENTALS OF THERMODYNAMICS</p> <p>9.1 Introduction 9.2 Heat, Temperature 9.3 Specific Heat, Internal Energy, 9.4 Laws of thermodynamics 9.5 Laws of Perfect gases 9.6 Thermodynamic Processes</p> <p>UNIT-X INTERNAL COMBUSTION ENGINES</p> <p>10.1 Introduction 10.2 definition –example 10.3 Classification of IC engines 10.4 IC engine construction 10.5 IC engine terminology 10.6 Four stroke petrol engine(SI Engine) 10.7 Two stroke petrol engine 10.8 Four stroke diesel engine(CI Engine) 10.9 Two stroke diesel engine 10.10 Differences between four stroke and two stroke engines 10.11 Differences between Petrol and Diesel engine 10.12 Fuel Supply system for Petrol engine 10.13 Fuel Supply system for Diesel engine 10.14 Cooling system for IC engine 10.15 Lubricating system for IC engine 10.16 Governing of IC engine and method of Governing</p>
	Unit-IV	Unit-IV	Unit-IV

	Practical-17 (Periods) 10.Preparation of screen for printing by direct method 11.Preparation of Screen for printing by transfer method	Practical-17(Periods) 11. Preparation of Quality checking of cartons 12.Slitting,rewinding pouch making and pouch Filling	Practical-17(Periods) 10. Pictorial drawings 11. Development of surfaces
December, 2023 No of Days-24	OJT-(One month only)	OJT-(One month only)	OJT-(One month only)
	Half-Yearly Examinations	Half-Yearly Examinations	Half-Yearly Examinations
January, 2024 No. of Days -20	PREFINAL-1	PREFINAL-1	PREFINAL-1
February, 2024 No of Days-24	Practical Examinations IPE- 2024	Practical Examinations IPE- 2024	Practical Examinations IPE- 2024
March 2024 No of Days-21	IPE March-2024	IPE March-2024	IPE March-2024

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Month & working days	WORKSHOP TECHNOLOGY –I (Theory Paper –I) 1457 WORKSHOP PRACTICE-I (Practical Paper –I) 1460	BASIC MECHANICAL AND ELECTRICAL ENGINEERING (Theory Paper –II) 1458 ENGINEERING DRAWING AND AUTOCAD (Practical Paper –II) 1461	AUTOMOBILE POWER PLANTS (Theory Paper –III) 1459 AUTOMOBILE ENGINE AND ELECTRICAL LAB (Practical Paper –III) 1462
June 2023, 24 days	<p>Theory: Unit 1. Engineering Materials Introduction- Classification of Engineering Materials, Mechanical Properties of Metals. Ferrous Metals, Non – Ferrous Metals, Non – Metals, Importance of Safety Precautions in Workshop.</p> <p>Practicals: 1. To file the given M. Spiece into a square shape. 2. To practice cutting with hacksaw on give M. Spiece. 3. To prepare T shape/square fit with given dimensions. 4. To prepare L shape with given dimensions 5. To prepare V fit with given dimensions 6. To prepare a square flat with a drilled hole and four tapped holes</p>	<p>Theory: Unit 1. Introduction to thermodynamics, Fuels Definitions of some properties, Laws of Thermodynamics, Zeroth law of Thermodynamics, First law of Thermodynamics, Second law of Thermodynamics, Third law of Thermodynamics, Gas laws -Boyle’s law, Charle’s law, Gay-Lussac law, Avogadro’s law, combined gas law, Ideal gas law, Thermodynamic Process - Constant volume process, Constant pressure process, Constant temperature process (Isothermal Process), Adiabatic process,</p> <p>Practicals: 1. Introduction to Engineering Drawing and Instruments-Introduction, Importance and Applications of Engineering Drawing, .Description of Drawing Instruments 2. Freehand Letterwriting: Freehand Letters, Numbers, Dimensions, Small letters and Numericals, practice on writing single stroke Capital, Types of Lines and their use 3. Dimensioning</p>	<p>Theory: Unit 2. I.C Engines Introduction, Types of engines, Classification of I.C Engine, Working principle of 2-Stroke Petrol engine, Working principle of 4-Stroke Petrol engine , Working principle of 4 Stroke Diesel engine , Comparison between 2 and 4 Stroke engines,, Comparison between petrol and diesel engine Scavenging of I.C. Engine , Detonation in IC Engine</p> <p>Practicals : 1. Dismantle and assemble the 2 stroke Petrol engine and identify the parts. 2. To dismantle and assemble the given four stroke petrol engine and to identify the parts. 3. To dismantle and assemble the given four stroke diesel engine and to identify the parts. 4. Draw the diagram of Fuel system of multi cylinder engines. Identify the components and study the function of each component.</p>

<p>July 2023, 24 days</p>	<p>Theory: Unit 2. Carpentry Introduction, Measuring Tools ,Marking Tools, Cutting Tools, Boring Tools ,Striking Tools, Holding Devices, Miscellaneous Tools ,Carpentry Processes ,Carpentry Joints ,Wood Working Machines Unit 3. Sheet Metal Work Introduction , Metals used in Sheet Metal Work ,Tools and Equipment , Sheet Metal Operations Practicals: 7. To perform Drilling, reaming and tapping operations on a mild steel flat work piece 8. To perform Drilling, reaming, boring, counter boring and countersinking operations on a mild steel flat work piece. 9. To perform surface grinding operation on the given (50 x 50 x 20) work piece. 10. To perform Cylindrical Grinding Operation on the given Work Piece. 11. To make a mortise and Tenon joint from the given reaper 12. To make a dovetail joint from the given reaper</p>	<p>Theory: Unit 1. Introduction to thermodynamics, Fuels Thermodynamic cycles -Carnot cycle, Otto cycle , Diesel cycle Introduction to Fuels, Desirable Qualities of Fuels , Types of fuels -Solid fuels ,Advantages of solid fuels ,Limitations of solid fuels ,Liquid fuels ,Merits & Demerits of liquid fuels ,Gaseous fuels ,Merits and demerits of gaseous fuels ,Calorific value, HCV and LCV Unit 2. Power Transmission Introduction to Power transmission, Types of power transmitting drives -Belt drive, Types of belt Drive, Rope drive, Chain drive, Gear drive, Gear trains ,Types of gear drive ,Belt fastener, Jockey pulley Practicals: 4. Geometrical construction -Division of Lines, Angles into equal parts , Quadrilateral, Polygons, Circle setc. Construction of regular Polygon, Ellipse, Parabola, and Hyperbola 5. Drawing scales: Introduction –Reduced and Enlarged Scales Plain Scales, Diagonal Scales, Vernier Scales.</p>	<p>Theory: Unit 1. Engine Construction, Inlet & Exhaust system Engine construction -Engine parts, Valve operating mechanisms, Cylinder arrangements, Valve timing diagrams, Timing gears ,Firing order Introduction to inlet & exhaust system - Necessity of manifolds, Types of manifolds, Consideration for a good manifold design, Muffler, Types of mufflers ,Air cleaner Practicals : 5. Draw the line diagram of Inlet and exhaust system of multi cylinder Engine. Identify the components and study the function of each. 6. Draw the line diagram of given cooling system (Air or water) of a multi cylinder Engine system. Identify the components and study the function of each component. 7. Draw the line diagram of given Lubricating system of multi cylinder engine. Identify the component in a Lubricating system. 8. Draw the line diagram of an Air conditioning system. Identify the components of the Air conditioning system. Study the function of each component.</p>
	UNIT TEST -1	UNIT TEST -1	UNIT TEST -1
<p>August 2023, 25 days</p>	<p>Theory: Unit 4. Fitting, Drilling and Grinding Introduction , Marking Tools ,Cutting Tools ,Striking Tools ,Holding Devices or Vice , Miscellaneous</p>	<p>Theory: Unit 3. Basic Electricity & Fundamentals of Electronics Introduction, Electrical potential, Potential</p>	<p>Theory: Unit 3. Fuel Supply System Introduction ,Fuel and supply system in petrol engine ,The components of fuel</p>

	<p>Tools , Checking and Measuring Instruments ,Fitting Operations Drilling Machines, Drilling Machine Operations , Grinding -types of grinding,shapes and size of a grinding wheel,Grinding Machines, Practicals: 13. Tomakeabuttjointfromthegivenreaper 14. Tomakeacornerjoint fromthegivenreaper 15. ToPracticeonwoodworkingmachines. 16. TomakeaCylinderusingthegivenG.I.Sheet. 17. ToprepareapipeElbowwithsheetmetal. 18. Tomakeafunnelusingthegivensheetmetal.</p>	<p>difference, Resistance, Current, Ohm’s law, Basic circuit components, Problems of Ohm’s law, Laws of resistance, Specific resistance, specific conductivity, Effect of temperature on resistance, Series and parallel connection of resistance, Series circuit, Parallel circuit, Resistance in series and parallel combination, series and parallel circuit simple problems. Kirchhoff’s laws, Wheatstone bridge, Introduction to Electronics,1)Conductor 2) Insulator 3) Semi-conductors, Electronic components, P-N Junction diode, N-P-N & P-N-P transistor, Integrated circuit and types, Binary system, Voltage levels required, Basic microprocessor(8085), Basic micro controller(8051), Electronic Navigation system in Automobile. Practicals: 6.ConceptofProjectionsandProjectionMethods DifferentanglemethodsofProjectionsandPlanesFirstangleandthird angle projections, ProjectionsofPointsinvariousquadrants, projectionorPoints, Projections of Straight LinesProjectionsofStraightLineswhenitisParallel to both the planesPerpendiculartoone plane Inclined to one plane andInclinedto boththeplanes,</p>	<p>supply system ,Fuel filters, Carburetion ,Spark plug , Supercharging , Scavenging ,Petrol fuel injection system in modern vehicles ,Diesel engine fuel supply system ,Requirements of fuel injection system ,Fuel feed pump, Fuel injection pump ,Fuel injector (atomizer) ,Fuel injection types ,Governors Fuel injection nozzles ,Turbocharger Practicals: 9.StudythetroubleshootingofgivencarAir conditioning system. 10.Giventhreeresistancesareconnectedin series,drawthecircuitdiagramandthendet erminethe currentatgivenvoltage. 11.Giventhreeresistancesareconnectedin parallel,drawthecircuitdiagramandthend etermine thevoltageatgivenvoltage. 12.Drawthecircuitdiagramand verifytheOhm’sLaw.</p>
	UNIT TEST -2	UNIT TEST -2	UNIT TEST -2
<p>September 2023, 22 Days</p>	<p>Theory: Unit 6. Foundry Introduction , Advantages and Limitations of Casting ,Foundry Equipment and Hand Moulding Tools Types of Moulding Sand and Properties , Moulding Sand Mixtures ,Classifications of Patterns</p>	<p>Theory: Unit 4. Magnetism, Electro Magnetism & Electro Magnetic Induction Induction to magnetism, Magnetic field, Magnetic axis, Magnetic poles, Magnetic lines of force, Magnetic field strength, Magnetic flux, Flux density, Magneto motive force, Magnetic</p>	<p>Theory: 4. Lubrication System Introduction ,Types of lubricants ,Properties of lubricants ,Requirements of engine lubrication ,SAE number ,Lubrication systems ,Oil filters ,Types of oil filters ,Positive crankcase ventilation</p>

	<p>Core and Types of Core , Moulding Process ,Defects in Casting</p> <p>Practicals: 19. Tomakeatrayusing thegivenG.I.Sheet. 20. TomakeanOpenScoop,usingthegivenGISheetmetal. 21.Topracticethejoiningofsheetmetalswithrivets. 22. Solderingametalpiece. 23. Making of square butt joint by arc welding process 24. TomakeaT-jointbyarcweldingprocess.</p>	<p>reluctance, Magnetic field around a straight conductor ,Properties of magnetic lines of force around straight Conductor, Rule for determining the direction of magnetic lines ,Magnetic field due to current in a circular coil, Comparison between electric circuit and magnetic circuit, Concept of electromagnetic induction, Faradays Laws of Electro Magnetic Inductions, Lenz’s Law, Flemings right hand rule, Types of induced E.M.F’s ,Dynamically induced E.M.F ,Statically induced E.M.F, Inductance , Self-inductance ,Uses of self-inductance, Mutual inductance, Uses of mutual inductance, Self induction, Mutual induction</p> <p>Practicals: 6.ConceptofProjectionsandProjectionMethods ProjectionsofPlaneslikeTriangular,Square,Pentagon,HexagonandCircularProjectionsofPlaneswhenthesurfaceis Parallel to one planeInclined to one plane andInclinedtoboththeplanes, ProjectionsofSolidsPrisms,Pyramids,CylinderandConeProjectionsofSolidswhentheyare having BaseinHPand AxisInclinedto oneplane</p>	<p>,Sludge formation effect.</p> <p>Practicals: 13.VoltmeterApplicationforMeasurement ofvoltage. 14.AmmeterApplicationforMeasurement ofCurrent. 15.MeasuretheresistancebyusingMultimeter. 16.OpentheD.Cmotorandidentifytheeachpartandexplainthem.</p>
	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS
<p>October 2023, 18 Days</p>	<p>Theory: Unit 7. Forging and Welding Introduction , Supporting Tools ,Hand Forging Equipment ,Forging Operations, Machine Forging Welding -Types of welding-Arc welding, Gas welding, Sub merged arc welding, TIG welding, MIG welding, Thermit welding, Plasma welding, Safety Precautions in Welding Shop Practicals: 25. Tomakelapjointbyarcweldingprocess. 26.To makeacornerjointusingthegiventwoM.S.piecesbyarcw</p>	<p>Theory: Unit 5. Electrical Machines D.C Generator, D.C Generator working principle, Parts of generator , Types of D.C generator, D.C Motor, D.C motor principle of working ,Parts of D.C Motor , Flemings left hand rule, Flemings right hand rule, Alternator , Construction of alternator - Parts Working , Working principle of A.C generator</p>	<p>Theory: Unit 5. Cooling System Introduction ,The necessity of providing cooling system ,Disadvantages of over cooling & under cooling ,Methods of cooling ,Radiator ,Water pump ,Anti-freeze solutions & Anti-rust solutions Comparison of Air cooling & water cooling systems ,Thermostat Practicals: 17. IdentifyingtheterminalsofaD.CMachine.</p>

	<p>elding. 27. To make Lap-welding using gas welding equipment. 28. To study the gas cutting technique and to remove the unwanted material from a given mild steel plate.</p>	<p>, Trouble shooting of motor Practicals: 7. Orthographic Projections Orthographic views from pictorial views. Orthographic views of simple Machine elements 8. Isometric Projections: Draw Isometric views from Orthographic views 9. Sections: Sections of Prisms, Pyramid, Cylinder, Cone in simple position.</p>	<p>18. Dismantle the Self motor and identify the components. 19. Dismantle the Dynamo and identify the components. 20. Study the Engine Starter circuit.</p>
	UNIT TEST -3	UNIT TEST -3	UNIT TEST -3
<p>November 2023, 25 Days</p>	<p>Theory: Unit 5. Mechanical Working of Metals Surface Heat Treatment and Finishing Operations Introduction. Hot Working Processes, Advantages and Disadvantages of Hot Working. Cold Working Processes. Advantages and Disadvantages of Cold Working. Surface Heat Treatment Processes. Super Finishing Operations Practicals: 29. To prepare a Lap Joint Using TIG Welding. 30. To prepare a sand mould casting of a solid bearing. 31. To prepare the sand mould casting of a split bearing. 32. To prepare a bottle of 200 ml using blow moulding machine. 33. Prepare the Gear wheel by using injection moulding.</p>	<p>Theory: Unit 6. Batteries Cell, Types of cells, Difference between primary cell and secondary cell, Battery - Types of batteries, Lead acid battery construction, Working principle of lead acid battery, Charging and Discharging of lead acid batteries, Chemical action during discharging, Chemical action during recharging, Methods of charging lead acid batteries, Constant current method, Constant voltage method, Trickle charge method, Application of lead acid cell, Care and maintenance of cell Unit 7. Auto Electrical System Auto lighting system, Working of head lamps, Working of side or parking lot, Working of tail or stop lights, Direction of signal lights, Horn system, Construction & working of horn circuit, Starter motor, Construction and working of starting motor, Wind screen wiper, Working of wiper, Ignition system, Basic ignition systems: Checking and replacement of fuses, Electrical symbols, Battery ignition, Magnet ignition, Electronic ignition system Practicals:</p>	<p>Theory: Unit 6. Auto Air Conditioning System Introduction, Factors effecting comfort air conditioning system, Classification of Air conditioning systems, Terminology of Air conditioning system, Equipment used in air conditioner, Auto air conditioning system 7. Performance of I.C Engines Introduction, Performance parameters of an IC engine, Sankey diagram, Performance curves, Methods to improve the performance of an IC engine, Sources of Automotive Emissions, Effect of automobile pollutants, Control of automobile pollution, S.I engine emissions, C.I engine emissions, Emission standards, PUC Certificate, Penalties for not obtaining a pollution certificate. Practicals: 21. Make the wiring connections of magnet ignition system. 22. Make wiring</p>

		<p>10. Assembly drawing and reading of drawing.</p> <p>i) Assembly drawing and reading of drawing.</p> <p>ii) Draw assembly drawing of simple machine assemblies.</p> <p>iii) Read and interpret Drawings/Blueprints of simple machine components.</p> <p>11. CAD : AUTOCAD Toolbars and Menus Dimensioning and Hatching, 2D Drawing Study the 3D Solids and Solid toolbar options</p>	<p>connection of a Battery Ignition system.</p> <p>23. Identify the problems in Electronic Ignition System and repair it.</p> <p>24. Servicing the wiper system of the car.</p>
	UNIT TEST -4	UNIT TEST -4	UNIT TEST -4
December 2023, 24 Days	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING
January 2024, 20 Days	PRE FINAL	PRE FINAL	PRE FINAL
February 2024, 24 Days	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024
March 2024, 21 Days	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024

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Month & workingdays	WORKSHOP TECHNOLOGY –II (Theory Paper –I) 2457 WORKSHOP PRACTICE-II (Practical Paper–I) 2460	AUTOMOBILE COMPONENTS AND OTHER SYSTEMS (Theory Paper –II)2458 AUTOMOBILE COMPONENTS AND OTHER SYSTEMS LAB (Practical Paper–II) 2461	AUTOMOBILE SERVICING AND MAINTENANCE (Theory Paper –III) 2459 AUTOMOBILE SERVICING AND MAINTENANCE LAB (Practical Paper–III) 2462
June 2023, 24 DAYS	<p>Theory: Unit-1. Lathe – Introduction - Working principle - Parts of Lathe - Types of Lathe - Lathe cutting tool - Operations on Lathe - CNC Lathe Introduction - Working Principle - G Code & M- codes - Part programming and CNC manual operations, CNC offsets and entering offsets - Advantages of CNC Lathe - Comparison between CNC & conventional machines.</p> <p>Practicals: 1.To perform the operation of Knurling on Lathe machine 2 To perform the operation of step turning on Lathe machine 3 To perform the operation of taper turning on Lathe machine 4 To perform the operation of thread cutting on Lathe machine</p>	<p>Theory: Unit 1. Chassis and body Introduction, Chassis and major components, Functions of the Chassis Frame, Types of Chassis Frame, Loads acting on Chassis and Frame, Types of bodies in Automobile, Requirements of Bodies for various types of vehicle</p> <p>Practicals: 1 Study of Transmission System in Automobile. Give report on the study of the transmission system. 2 Dismantle the Clutch unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 3 Dismantle the Gear box unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 4 Dismantle the Steering unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Theory: Unit 1. Service station and Garage Introduction, Service station equipment and tools, Car washing equipment, Vehicle hoist, Air compressor, Lubrication equipment, Grease guns, High pressure lubrication, Layout, Introduction, Tools and equipment used in garage, Layout of Auto Garage</p> <p>Practicals : 1 To study the constructional features of a petrol engine 2 To know about the Adjustment of Carburetor 3 Adjustment of MPFI(Multi-Point Fuel Injection) System using computer assistance 4 To study about the Fuel consumption test</p>

<p>July 2023, 24 days</p>	<p>Theory: Unit 2. Milling: Introduction, Working principle, Parts of milling machine, Types of milling machine, Cutting Tools, Operations on Milling Machine, CNC Milling and main components , Importance of CNC milling, CNC Milling operations (Face Milling, plain milling, Angular milling, Form Milling) Practicals: 5 To write a program to obtain the facing cycle in the CNC lathe 6 To write a program to obtain the step turning cycle in the CNC lathe 7 To write a program to obtain the Threading Cycle in the CNC Lathe 8 To make T slot in the given work piece using milling machine .</p>	<p>Theory: Unit 2. Transmission system, clutch and gear box Necessity of transmission system, Various components arrangement and functions in manual transmission, Functions of the clutch, Principles of operation of the clutch, Types of clutch, Single plate clutch, Multi plate clutch, Centrifugal clutch, Hydraulic clutch, Objectives of the gear box, Types of gear boxes, constant mesh gear box, Synchromesh gear box, Epicyclical gear box Practicals: 5 Servicing and Assembling and making adjustments of the steering wheel of an automobile. 6 Dismantle the Front axle unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle. 7 Dismantle the Rear axle unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 8 Dismantle the Universal joint unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Theory: Unit 2.Maintenance and Servicing Necessity and procedure for servicing and maintenance, Types of maintenance, Preventive maintenance, Importance of preventive maintenance, Breakdown maintenance, Purpose of operation maintenance, Quick service, Procedure for components cleaning, Greasing, Methods of lubricating springs, Engine tune-up, Maintenance role in trouble shooting, Advantages of good maintenance Practicals : 5 Identification of faults and rectification of petrol engine. 6 To study a Diesel Engine 7 To study the Engine tuning of the given diesel engine 8 Perform the Adjustment of RIP and Governor</p>
	<p>UNIT TEST -1</p>	<p>UNIT TEST -1</p>	<p>UNIT TEST -1</p>
<p>August 2023, 25 days</p>	<p>Theory: Unit 3. Shaper and Slotter Shaper, types of shaper and specifications, Construction and Working, Cutting Tools, Operations on Shaper, Slotter ,Types of Slotter and specifications, Construction and working, Cutting Tools, Operations on Slotter Practicals: 9 To prepare helical gear cutting on milling machine</p>	<p>Theory: Unit 3. Steering system Functions of steering system, Requirements of steering system, Steering components and Layout, Functions and types of steering gear box, Worm and wheel, Worm and sector, Worm and roller, Cam and level, Recirculating ball type, Rack and pinion type, Reversible and irreversible steering systems, Power steering, Steering linkage, Types of steering linkages, Turning Radius, Steering Geometry, Davis steering gear mechanism, Acker man mechanism, Steering Defects, Steering systems in various vehicles Practicals: 9 Dismantle the Propeller shaft unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle</p>	<p>Theory: Unit 3. Engine Maintenance Introduction, Inspection of engine, Washing of an engine, Tuning of fuel system, Tuning of Ignition system, Tuning of lubricating system, Tuning of cooling system, Tuning of Fasteners, Practicals: 9 Perform the Adjustment of CRID(Common Rail Direct Injection)</p>

	<p>10 To practice CNC milling operations 11 To make horizontal cutting on the given Shaper machine 12 To prepare KEY WAY in the given work piece using a slotting machine</p>	<p>10 Dismantle the Differential unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 11 Dismantle the Mechanical Braking unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle. 12 Dismantle the hydraulic Braking unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>10 To study the cooling system of the given car and state the suggestions for correct maintenance of cooling system of the car. 11 To study the Steering System Servicing and Maintenance 12 To study the Servicing and Maintenance of the Power Steering</p>
	UNIT TEST -2	UNIT TEST -2	UNIT TEST -2
<p>September 2023, 22 Days</p>	<p>Theory: Unit 4. Quality control and measuring tools Concept of Quality control and Concept of total quality management, Importance and Advantages of Quality control, Quality control process, Tools used in Quality control, List the Quality system and element of Quality system, List the pillars of Total Quality Management, Quality control process evolution of ISO standards list, ISO standards and ISO 9000 series of Quality systems, Beneficiaries of ISO 9000 and Concepts of ISO 14000, Tools used in Quality control</p> <p>Practicals: 13 To perform Auto components Reconditioning operations like De-carbonization with hand scraper 14 To Rebore the Cylinder using Reborng machine 15 To prepare Honing the Cylinder using Honing Machine (Obtain smooth and criss - cross hatch pattern on Cylinder)</p>	<p>Theory: Unit 4. Front and Rear axle Introduction, Front axle ,Types of front axles, Necessity of Front axle, Live axle and dead axles, Components of front axle assembly, Stub axle and types of stub-axles, Rear axle and types, Loads on the rear axle, Types of axle-housing, Universal joint types, Propeller shaft types, differential</p> <p>Practicals: 13 Dismantle the Hand brake from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 14 Dismantle the suspension system from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 15 Dismantle the independent suspension system from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Theory: Unit 4. Transmission system Introduction transmission system, Maintenance of clutch, Clutch adjustment, Lubricating of gear box, Setting of gear box,</p> <p>Practicals: 13 To study the Transmission System Servicing and Maintenance 14 To Study the Clutch Maintenance, Repair and Servicing 15 To Study the maintenance of Gear box</p>
	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS

<p>October 2023, 18 Days</p>	<p>Theory: Unit 5. Auto components reconditioning machines Reconditioning Machines, Cylinder Reboring Machine, Honing Machine, Line boring Machine, Valve seat cutting and grinding machine, Valve Refacing machine, Crank shaft grinding machine, Brake drum Lathe, Brake shoe riveting machine, Fuel injection pump test bench, Various servicing and testing procedures of fuel Injectors</p> <p>Practicals: 16 To perform Valve seat cutting, Grinding, Re-facing and Lapping 17 To perform Line-boring on Boring machine 18 To perform Crank shaft Grinding 19. To perform Brake drum Turning</p>	<p>Theory: Unit 5. Braking system Introduction, Functions, Stopping Distance, Stopping Time, Types of Braking, Disk brakes, Mechanical brakes, Hydraulic brakes, Construction of Master cylinder, Construction of Wheel cylinder,. Power Assisted brakes (Vacuum Servo assisted brakes, Air Brakes), Bleeding of brakes, Types of brakes used in various vehicles</p> <p>Practicals: 16 Dismantle the independent suspension system from the given automobile and find the faults of the suspension system. 17 Dismantle the Servicing and Assembling and making adjustments of the suspension of the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 18 Dismantle the Rigid Suspension System and making adjustments from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 19 Dismantle the Rigid Suspension Systems for fault finding and rectification and making adjustments from the given automobile.</p>	<p>Theory: Unit 5. Maintenance of other supporting system Steering maintenance, Inspection of steering linkage, Manual steering, Power steering, Steering system adjustment, Maintenance of brakes, Brakes overhauling and adjust, Precaution during servicing of Hydralic brakes, Mechanical brakes, Overhauling of master cylinder, Process of removing trapped air, Process for servicing, Disc brake, Parking brake, Maintenance of suspension system, Service and repair of leaf springs, Replacement of strut /shock absorber, Maintenance of wheels, tyres and tubes, Servicing of wheels, Hub greasing, Bearing play adjustment, Maintenance of tyres and tubes</p> <p>Practicals: 16 To study the braking system of the given car and state the suggestions for correct maintenance of braking system of the car. 17 To study the Servicing and Maintenance of Mechanical Brake. 18 To Study the Servicing and Maintenance of Hydraulic Brake 19 To Study the Servicing and Maintenance of Hand Brake</p>
		<p>UNIT TEST -3</p>	<p>UNIT TEST -3</p>
<p>November 2023, 25 Days</p>	<p>Theory: Unit 6. Measuring equipment & safety Direct and Indirect measuring equipment, Angular measuring equipment, Dial Indicator/gauge and</p>	<p>Theory: Unit 6. Suspension system Introduction, Function, Requirements of good suspension system, Types of suspension systems, Types of Independent suspension systems, Air suspension system, Types of</p>	<p>Theory: Unit 6. Maintenance of Auto Electrical System Introduction, Auto electrical maintenance ,Circuit diagram cables, specification and</p>

	<p>other gauges, Instruments on the dash board of a vehicle, Safety, Precautions in Handling of Tools, Safety precautions in Auto garage</p> <p>Unit 7. Denting and painting Common Dent causes, Denting Tools and materials, Denting process, Painting, Main constituent of paints, Methods of painting, Painting procedure, Reasons for Failure of paint</p> <p>Practicals: 20. To perform Brake Shoe Riveting 21. To perform Testing of Fuel Injection Pump 22. To Practice of water washing of vehicles 23. To practice painting procedure 24. To perform Denting of vehicles</p>	<p>springs, Leaf springs, Coil springs, Helical springs, Shock Absorbers, Types of shock absorbers, Telescopic type shock absorber working and construction, Hydraulic shock absorber working and construction, Stabilizer bar, Torsion Bar or Torsion spring, Air suspension system, Suspension systems used in various vehicles.</p> <p>Unit 7. Wheels and tyres Introduction, Functions of wheel and tyre, Wheel assembly, Construction and working of Disc and spoked wheel, Types of Rims, Construction and properties of tyres, Merits of radial tyre over cross play types, Different tyre patterns, Specification of Tyres, Tyre pressure and wear, Causes of Tyre wear, Tyre rotation, Tyre vulcanizing and retreading, Wheel Balancing, Tubeless tyre, Tubeless tyre Advantages, Procedure for Tubeless tyre repair.</p> <p>Practicals: 20. To Service and Assemble and making adjustments of Suspension Systems for fault finding and rectification and making adjustments from the given car. 21. Dismantle the Wheel and making adjustments from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 22. To study the maintenance of Wheels of the automobile. 23. To study the Wheel Bearing Maintenance of the automobile. 24. Perform tyre puncture for a tubeless tyre. Check the perfect puncture repair and report on the condition.</p>	<p>colour code, Electrical test equipment, Battery and its maintenance, Checking of connections of lighting system, Application and replacement of fuses, Checking of charging system, Checking of starter system, Checking of ignition system, Servicing of electrical accessories</p> <p>Unit 7. Road safety and legal aspects motor vehicles Road safety and importance, Safe and responsible driving, Road signs, Driving rules, Driving license, Vehicle registration, Motor insurance, Fitness certificate, Different policies and claim settlements.</p> <p>Practicals: 20. To study the servicing and maintenance of Lubricating System. 21. To study the Auto Electrical System Servicing and Maintenance.(Battery) 22. To Study the starting system 23. To study the Ignition system. 24. To study the electrical accessories from the Vehicle and service them</p>
	UNIT TEST -4	UNIT TEST -4	UNIT TEST -4
December 2023, 24 Days	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING
January 2024, 20 Days	PRE FINAL	PRE FINAL	PRE FINAL
February 2024, 24 Days	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024
March 2024, 21 Days	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024

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Month & working days	<p>WORKSHOP TECHNOLOGY –II (Theory Paper –I) 2457</p> <p>WORKSHOP PRACTICE-II (Practical Paper–I) 2460</p>	<p>AUTOMOBILE COMPONENTS AND OTHER SYSTEMS (Theory Paper –II)2458</p> <p>AUTOMOBILE COMPONENTS AND OTHER SYSTEMS LAB (Practical Paper–II) 2461</p>	<p>AUTOMOBILE SERVICING AND MAINTENANCE (Theory Paper –III) 2459</p> <p>AUTOMOBILE SERVICING AND MAINTENANCE LAB (Practical Paper–III) 2462</p>
<p>June 2023, 24 DAYS</p>	<p>Theory: Unit-1. Lathe – Introduction - Working principle - Parts of Lathe - Types of Lathe - Lathe cutting tool - Operations on Lathe - CNC Lathe Introduction - Working Principle - G Code & M- codes - Part programming and CNC manual operations, CNC offsets and entering offsets - Advantages of CNC Lathe - Comparison between CNC & conventional machines.</p> <p>Practicals:</p> <ol style="list-style-type: none"> 1.To perform the operation of Knurling on Lathe machine 2 To perform the operation of step turning on Lathe machine 3 To perform the operation of taper turning on Lathe machine 4 To perform the operation of thread cutting on Lathe machine 	<p>Theory: Unit 1. Chassis and body Introduction, Chassis and major components, Functions of the Chassis Frame, Types of Chassis Frame, Loads acting on Chassis and Frame, Types of bodies in Automobile, Requirements of Bodies for various types of vehicle</p> <p>Practicals:</p> <ol style="list-style-type: none"> 1 Study of Transmission System in Automobile. Give report on the study of the transmission system. 2 Dismantle the Clutch unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 3 Dismantle the Gear box unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 4 Dismantle the Steering unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle. 	<p>Theory: Unit 1. Service station and Garage Introduction, Service station equipment and tools, Car washing equipment, Vehicle hoist, Air compressor, Lubrication equipment, Grease guns, High pressure lubrication, Layout, Introduction, Tools and equipment used in garage, Layout of Auto Garage</p> <p>Practicals :</p> <ol style="list-style-type: none"> 1 To study the constructional features of a petrol engine 2 To know about the Adjustment of Carburetor 3 Adjustment of MPFI(Multi-Point Fuel Injection) System using computer assistance 4 To study about the Fuel consumption test

<p>July 2023, 24 days</p>	<p>Theory: Unit 2. Milling: Introduction, Working principle, Parts of milling machine, Types of milling machine, Cutting Tools, Operations on Milling Machine, CNC Milling and main components , Importance of CNC milling, CNC Milling operations (Face Milling, plain milling, Angular milling, Form Milling) Practicals: 5 To write a program to obtain the facing cycle in the CNC lathe 6 To write a program to obtain the step turning cycle in the CNC lathe 7 To write a program to obtain the Threading Cycle in the CNC Lathe 8 To make T slot in the given work piece using milling machine .</p>	<p>Theory: Unit 2. Transmission system, clutch and gear box Necessity of transmission system, Various components arrangement and functions in manual transmission, Functions of the clutch, Principles of operation of the clutch, Types of clutch, Single plate clutch, Multi plate clutch, Centrifugal clutch, Hydraulic clutch, Objectives of the gear box, Types of gear boxes, constant mesh gear box, Synchromesh gear box, Epicyclical gear box Practicals: 5 Servicing and Assembling and making adjustments of the steering wheel of an automobile. 6 Dismantle the Front axle unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle. 7 Dismantle the Rear axle unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 8 Dismantle the Universal joint unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Theory: Unit 2. Maintenance and Servicing Necessity and procedure for servicing and maintenance, Types of maintenance, Preventive maintenance, Importance of preventive maintenance, Breakdown maintenance, Purpose of operation maintenance, Quick service, Procedure for components cleaning, Greasing, Methods of lubricating springs, Engine tune-up, Maintenance role in trouble shooting, Advantages of good maintenance Practicals : 5 Identification of faults and rectification of petrol engine. 6 To study a Diesel Engine 7 To study the Engine tuning of the given diesel engine 8 Perform the Adjustment of RIP and Governor</p>
	<p>UNIT TEST -1</p>	<p>UNIT TEST -1</p>	<p>UNIT TEST -1</p>
<p>August 2023, 25 days</p>	<p>Theory: Unit 3. Shaper and Slotter Shaper, types of shaper and specifications, Construction and Working, Cutting Tools, Operations on Shaper, Slotter ,Types of Slotter and specifications, Construction and working, Cutting Tools, Operations on Slotter</p>	<p>Theory: Unit 3. Steering system Functions of steering system, Requirements of steering system, Steering components and Layout, Functions and types of steering gear box, Worm and wheel, Worm and sector, Worm and roller, Cam and level, Recirculating ball type, Rack and pinion type, Reversible and irreversible steering systems, Power steering, Steering linkage, Types of steering linkages, Turning Radius, Steering Geometry, Davis steering gear mechanism, Acker man mechanism, Steering Defects, Steering systems in various vehicles</p>	<p>Theory: Unit 3. Engine Maintenance Introduction, Inspection of engine, Washing of an engine, Tuning of fuel system, Tuning of Ignition system, Tuning of lubricating system, Tuning of cooling system, Tuning of Fasteners,</p>

	<p>Practicals: 9 To prepare helical gear cutting on milling machine 10 To practice CNC milling operations 11 To make horizontal cutting on the given Shaper machine 12 To prepare KEY WAY in the given work piece using a slotting machine</p>	<p>Practicals: 9 Dismantle the Propeller shaft unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 10 Dismantle the Differential unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 11 Dismantle the Mechanical Braking unit from the given automobile, disassembles, clean, inspect, assemble and mount on to the vehicle. 12 Dismantle the hydraulic Braking unit from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Practicals: 9 Perform the Adjustment of CRID(Common Rail Direct Injection) 10 To study the cooling system of the given car and state the suggestions for correct maintenance of cooling system of the car. 11 To study the Steering System Servicing and Maintenance 12 To study the Servicing and Maintenance of the Power Steering</p>
	UNIT TEST -2	UNIT TEST -2	UNIT TEST -2
<p>September 2023, 22 Days</p>	<p>Theory: Unit 4. Quality control and measuring tools Concept of Quality control and Concept of total quality management, Importance and Advantages of Quality control, Quality control process, Tools used in Quality control, List the Quality system and element of Quality system, List the pillars of Total Quality Management, Quality control process evolution of ISO standards list, ISO standards and ISO 9000 series of Quality systems, Beneficiaries of ISO 9000 and Concepts of ISO 14000,Tools used in Quality control</p> <p>Practicals: 13 To perform Auto components Reconditioning operations like De-carbonization with hand scraper 14 To Rebore the Cylinder using Reboring machine 15 To prepare Honing the Cylinder using Honing Machine (Obtain smooth and criss - cross hatch pattern on Cylinder)</p>	<p>Theory: Unit 4. Front and Rear axle Introduction, Front axle ,Types of front axles, Necessity of Front axle, Live axle and dead axles, Components of front axle assembly, Stub axle and types of stub-axles, Rear axle and types, Loads on the rear axle, Types of axle-housing, Universal joint types, Propeller shaft types, differential</p> <p>Practicals: 13 Dismantle the Hand brake from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 14 Dismantle the suspension system from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle 15 Dismantle the independent suspension system from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle.</p>	<p>Theory: Unit 4. Transmission system Introduction transmission system, Maintenance of clutch, Clutch adjustment, Lubricating of gear box, Setting of gear box,</p> <p>Practicals: 13 To study the Transmission System Servicing and Maintenance 14 To Study the Clutch Maintenance, Repair and Servicing 15 To Study the maintenance of Gear box</p>

	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS	QUARTERLY EXAMINATIONS
<p>October 2023, 18 Days</p>	<p>Theory: Unit 5. Auto components reconditioning machines Reconditioning Machines, Cylinder Reboring Machine, Honing Machine, Line boring Machine, Valve seat cutting and grinding machine, Valve Refacing machine, Crank shaft grinding machine, Brake drum Lathe, Brake shoe riveting machine, Fuel injection pump test bench, Various servicing and testing procedures of fuel Injectors</p> <p>Practicals: 16 To perform Valve seat cutting, Grinding, Re-facing and Lapping 17 To perform Line-boring on Boring machine 18 To perform Crank shaft Grinding 19. To perform Brake drum Turning</p>	<p>Theory: Unit 5. Braking system Introduction, Functions, Stopping Distance, Stopping Time, Types of Braking, Disk brakes, Mechanical brakes, Hydraulic brakes, Construction of Master cylinder, Construction of Wheel cylinder,. Power Assisted brakes (Vacuum Servo assisted brakes, Air Brakes), Bleeding of brakes, Types of brakes used in various vehicles</p> <p>Practicals: 16 Dismantle the independent suspension system from the given automobile and find the faults of the suspension system. 17 Dismantle the Servicing and Assembling and making adjustments of the suspension of the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 18 Dismantle the Rigid Suspension System and making adjustments from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 19 Dismantle the Rigid Suspension Systems for fault finding and rectification and making adjustments from the given automobile.</p>	<p>Theory: Unit 5. Maintenance of other supporting system Steering maintenance, Inspection of steering linkage, Manual steering, Power steering, Steering system adjustment, Maintenance of brakes, Brakes overhauling and adjust, Precaution during servicing of Hydralic brakes, Mechanical brakes, Overhauling of master cylinder, Process of removing trapped air, Process for servicing, Disc brake, Parking brake, Maintenance of suspension system, Service and repair of leaf springs, Replacement of strut /shock absorber, Maintenance of wheels, tyres and tubes, Servicing of wheels, Hub greasing, Bearing play adjustment, Maintenance of tyres and tubes</p> <p>Practicals: 16 To study the braking system of the given car and state the suggestions for correct maintenance of braking system of the car. 17 To study the Servicing and Maintenance of Mechanical Brake. 18 To Study the Servicing and Maintenance of Hydraulic Brake 19 To Study the Servicing and Maintenance of Hand Brake</p>

	UNIT TEST -3	UNIT TEST -3	UNIT TEST -3
<p>November 2023, 25 Days</p>	<p>Theory: Unit 6. Measuring equipment & safety Direct and Indirect measuring equipment, Angular measuring equipment, Dial Indicator/gauge and other gauges, Instruments on the dash board of a vehicle, Safety, Precautions in Handling of Tools, Safety precautions in Auto garage Unit 7. Denting and painting Common Dent causes, Denting Tools and materials, Denting process, Painting, Main constituent of paints, Methods of painting, Painting procedure, Reasons for Failure of paint</p> <p>Practicals: 20. To perform Brake Shoe Riveting 21. To perform Testing of Fuel Injection Pump 22. To Practice of water washing of vehicles 23. To practice painting procedure 24. To perform Denting of vehicles</p>	<p>Theory: Unit 6. Suspension system Introduction, Function, Requirements of good suspension system, Types of suspension systems, Types of Independent suspension systems, Air suspension system, Types of springs, Leaf springs, Coil springs, Helical springs, Shock Absorbers, Types of shock absorbers, Telescopic type shock absorber working and construction, Hydraulic shock absorber working and construction, Stabilizer bar, Torsion Bar or Torsion spring, Air suspension system, Suspension systems used in various vehicles. Unit 7. Wheels and tyres Introduction, Functions of wheel and tyre, Wheel assembly, Construction and working of Disc and spoked wheel, Types of Rims, Construction and properties of tyres, Merits of radial tyre over cross play types, Different tyre patterns, Specification of Tyres, Tyre pressure and wear, Causes of Tyre wear, Tyre rotation, Tyre vulcanizing and retreading, Wheel Balancing, Tubeless tyre, Tubeless tyre Advantages, Procedure for Tubeless tyre repair.</p> <p>Practicals: 20. To Service and Assemble and making adjustments of Suspension Systems for fault finding and rectification and making adjustments from the given car. 21. Dismantle the Wheel and making adjustments from the given automobile, disassemble, clean, inspect, assemble and mount on to the vehicle. 22. To study the maintenance of Wheels of the automobile. 23. To study the Wheel Bearing Maintenance of the automobile. 24. Perform tyre puncture for a tubeless tyre. Check the perfect puncture repair and report on the condition.</p>	<p>Theory: Unit 6. Maintenance of Auto Electrical System Introduction, Auto electrical maintenance ,Circuit diagram cables, specification and colour code, Electrical test equipment, Battery and its maintenance, Checking of connections of lighting system, Application and replacement of fuses, Checking of charging system, Checking of starter system, Checking of ignition system, Servicing of electrical accessories Unit 7. Road safety and legal aspects motor vehicles Road safety and importance, Safe and responsible driving, Road signs, Driving rules, Driving license, Vehicle registration, Motor insurance, Fitness certificate, Different policies and claim settlements.</p> <p>Practicals: 20. To study the servicing and maintenance of Lubricating System. 21. To study the Auto Electrical System Servicing and Maintenance.(Battery) 22. To Study the starting system 23. To study the Ignition system. 24. To study the electrical accessories from the Vehicle and service them</p>

	UNIT TEST -4	UNIT TEST -4	UNIT TEST -4
December 2023, 24 Days	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING	HALF YEARLY EXAMINATIONS ON THE JOB TRAINING
January 2024, 20 Days	PRE FINAL	PRE FINAL	PRE FINAL
February 2024, 24 Days	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024	PRACTICAL EXAMS IPE-2024
March 2024, 21 Days	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024	THEORY EXAMS IPE-2024

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ANNUAL ACADEMIC PLAN 2023-24
CIVIL ENGINEERING TECHNICIAN 326 (FIRST YEAR)

MONTH & NO. OF WORKING DAYS	BULIDING MATERIALS & BUILDING CONSTRUCTION THEORY (V.T – 1) CONSTRUCTION MATERIALS LAB PRACTICAL (VP – 1)	SURVEYING THEORY (VT – 2) SURVEYING LAB PRACTICAL (VP-2)	ENGINEERING MECHANICS THEORY ((VT – 3) ENGINEERING DRAWING PRACTICAL (V.P – 3)
	THEORY	THEORY	THEORY
	Syllabus dictation and model QP explanation	Syllabus dictation and model QP explanation	Syllabus dictation and model QP explanation
			1. SYSTEMS OF MEASUREMENTS AND UNITS
	1.1. Classification of Rocks	Concept of surveying	S.I. and M.K.S. Systems
	1.1.1. Geological Classification	Purpose of surveying	F.P.S. System
	1.1.2. Physical Classification	Linear and angular measurements	Fundamental and Derived Units
			Units of Physical Quantities used in Civil Engineering like Length, Area, Volume, Mass,
	1.1.3. Chemical Classification	Classification of surveying	Force, etc..
	1.2. Use of stones	Reconnaissance survey, preliminary location survey, final location survey	2. FORCES AND MOMENTS

Jun-2023 no. of Working days 24	1.3. Requirements of good building stones	2.CHAIN SURVEYING	Definition of Force, Moment and Resultant
	1.4. Characteristics of stones – Granite, Ba Salt,	Purpose and principle of chain survey	Equilibrant and Moment of a Couple
	Sand stones, limestone, Marble and slate		
		Equipment used and their function-chains, arrows, taps-ranging rods, pegs-plumb bob-cross	Resultant of Forces at a Point
	1.5.Selection of stones	staff	
	1.6.Artificial Stones	Conventional signs	Parallelogram Law of Forces
	1.7.Introduction of aggregates – grading of aggregates	Errors in chaining-corrections due to incorrect length of chain or tape	Triangle Law of Forces
	2. BRICKS	Types of survey lines-base line, tie line	Polygon Law of Forces
	2.1. Definition - Composition of good brick		
	earth - Manufacturing process		
	2.2. Classification of bricks		
	2.3. qualities of good bricks		
	2.4. Special types of bricks and their uses		
	2.5. Test for Bricks & Grade of bricks as per I.S.		
		2.Measurment of area by cross staff survey	Lettering and dimensioning

	Assignment to be conducted on every week end	Assignment to be conducted on every week end	Assignment to be conducted on every week end
	THEORY	THEORY	THEORY
	3. CEMENT	2.CHAIN SURVEYING	2. FORCES AND MOMENTS
	3.1. Definition - Composition of ordinary Portland cement - Functions of cement, ingredients		Distinguish between Scalar and Vector Quantities, Coplanar and Non-coplanar Forces, Parallel and Non-parallel Forces & Like and
		Check line	Unlike Forces
	3.2. Different types of cements	Types of survey stations	Conditions of Equilibrium of Rigid Bodies
	3.3. General Uses of Cement	Fixing of survey stations	3. CENTROID AND MOMENT OF INERTIA
	3.4. Admixtures - uses	Different operations in chain surveying-chaining-ranging setting out of right angles in chaining	Definition of Centroid and Centre of Gravity
	4. SAND	Principals used in chain triangulation	Position of Centroid of Rectangle, Triangle, Circle and Semicircle
July 2023 no. of working days 24		Recording field notes-field book-conventional signs	Determine Position of Centroid of Simple Built- up Sections made of Rectangle, Triangle, Circle and Semicircle
	4.1. Sources of sand		
	4.2. Characteristics of good sand	Obstacles in chain surveying	Definition of Moment of Inertia, First Moment of Area

4.3. Grading of sand	Calculation of areas-average ordinate, Simpsons	Determine the M.I. of Simple and Built-up
	rule	Sections by applying Parallel Axes Theorem
4.4. Bulking of sand		
MORTAR		
4.5. Definition - Properties and uses of mortar		
4.6. Types of mortar - Cement, Lime mortar		
4.7. Special Mortars		
4.8. Preparation of cement mortar		
4.9. Precautions in using mortar		
PRACTICALS	PRACTICALS	PRACTICALS
2. Field Tests on Bricks	2.Measurement of area by cross staff survey	Dimensioning rules and systems of
		dimensioning, dimensioning of a given drawing
3. Field Tests on Cement	3.Compass survey closed traverse	Tangents
	4.Compass survey closed traverse plotting	Tangent lines touching circles internally and externally.
Assignment to be conducted on every week end & UNIT-I	Assignment to be conducted on every week end & UNIT-I	Assignment to be conducted on every week end & UNIT-I
THEORY	THEORY	THEORY

August, 2023 no. of working days 25	5. CONCRETE	Calculation of area by trapezoidal method	3. CENTROID AND MOMENT OF INERTIA
	5.1. Definition - Constituents of concrete and their requirements	3. Compass surveying	Radius of Gyration, Polar M.I.
	5.2. Uses of Concrete - Types of Concrete		Solid and Hollow Circular Sections
		Purpose and compass survey-description, use and working of prismatic compass	
	5.3. Preparation of cement concrete - Hand mixing, Machine mixing	Concept of true-magnetic-arbitrary meridians	4. SIMPLE STRESS AND STRAINS
	5.4. Compaction of concrete - Methods	Bearing-representation of bearing-WCB, quadrantal bearing. Conversion of WCB to QB	Definition of Stress and Strains
	5.5. Curing of concrete - purposes	Compass traversing in field, local attraction- detecting and correcting bearings	Tensile, Compressive and Shear Stresses
	6. TIMBER	Calculation of included angles in compass traverse	Mechanical Properties of Materials – Elasticity, Plasticity, Ductility
	6.1. Common Varieties of Timber & Uses of Timber	Errors in compass surveying-natural and instrumental	Brittleness, Malleability, Stiffness, Hardness and Fatigue
	6.2. Defects in timber - Seasoning of timber		Stress- Strain Curves for Ductile Materials- Mild steel

6.3. Wood based products	4.Leveling	Elastic Limit, Yield Point, Ultimate Stress, Breaking Stress and Factor of Safety
6.4. Characteristics of good timber	Introduction-purpose of leveling	
7. PAINTS		
7.1. Definition - Objects of Paints	PRACTICALS	PRACTICALS
7.2. Types of Paints	4.Compass closed traverse plotting	Polygons
7.3. Failures of Paints	5.Differential leveling	Regular Polygons circumscribed and inscribed
7.4. Defects in Paints		in circles
7.5. Varnish - Objectives of Varnish - Characteristics of Varnish		Conic sections – parabola , ellipse and hyperbola
7.6. Types of Varnishes - Process of Varnish		
7.7. Distemper - Properties of Distemper - Process of Distemper		
PRACTICALS		
4. Fineness Test on Cement		
5. Consistency of Cement		
6. Initial Setting Time of Cement		

	Assignment to be conducted on every week end & UNIT-II	Assignment to be conducted on every week end & UNIT-II	Assignment to be conducted on every week end & UNIT-II
	THEORY	THEORY	THEORY
	8. MISCELLANEOUS BUILDING MATERIALS	4 Leveling	4. SIMPLE STRESS AND STRAINS
	8.1. Types of metals used in construction - cast iron - steel -Physical & magnetic properties of steel - Aluminum - Copper	Definition of terms, level surface, datum, bench marks, types of bench marks	Hooke's Law, Young's Modulus of Elasticity
		Types of leveling instruments-dumpy level-component parts-relationship between	Deformation under Axial Load
	8.2. Plastics	fundamental lines of instrument	
	8.3. Adhesives Uses of Adhesives	Types of leveling staff-description	Longitudinal and Lateral Strain
Sep-2023 no. of working days 22	8.4. Asbestos - Uses of asbestos	Temporary adjustments of dumpy level	Poisson's Ratio
	8.5. Glass	Field work-field book-reduction of levels by height of collimation method	Bulk Modulus, Shear Modulus
	8.6. Plaster of Paris	Rise and fall method	Relation between Three Elastic Constants
	8.7. Linoleum	Errors due to curvature and refraction-corrections	

	PRACTICALS	PRACTICALS	PRACTICALS
	7. Bulking of Sand	5. Differential leveling	Orthographic projections
			Definition – Isometric axes, lines and planes
	8.8. Wallpaper	5 Theodolite surveying	5. COLUMNS AND STRUTS
OCTOBER, 2023 No. of Working Day 18.	8.9. Bitumen and tar	Introduction	Effective Lengths for Different End Conditions
	8.10. Thermo Cole	Principles of Theodolite surveying-component	Columns- Long and Short Columns Comparison
		parts, technical terms-temporary adjustments	
	9. TYPES OF BUILDINGS	Measurement of horizontal angles by repetition	Slenderness Ratio of a Column
method and reiteration method-vertical angles			
	9.1 Classification of building as per NBC	Determination of heights and distances	Rectangular, Square and Circular Sections
	9.2. Component parts of building		Load Carrying Capacity by Euler's and Rankin's
			Formula – Simple Problems
	PRACTICALS	PRACTICALS	PRACTICALS
	8. Casting of Concrete Cubes	6. Fly leveling-involving invert staff readings	Drawing of isometric views of plane figures
	Compressive Strength of Concrete Cubes		

	Assignment to be conducted on every week end & Unit III	Assignment to be conducted on every week end & Unit III	Assignment to be conducted on every week end & Unit III
	THEORY	THEORY	THEORY
	10. FOUNDATIONS		6.SHEAR FORCE AND BENDING MOMENTS
			Definition of Beam
			Classification of Beams – Cantilever Beam, Simply supported Beam, Over hanging Beam,
			Fixed Beam, Continuous Beam
	10.1. Definition - Functions of Foundation	.Measurement of horizontal angle by repetition	Types of Loads – Concentrated, UDL & UVL
		method using theodolite	
	10.2. Types of Soil	Measurement of horizontal angle by reiteration	Definition of Shear Force and Bending Moment
		method using theodolite	– Sign Conventions for SF and BM
Nov 2023 No. of Working Day 25	10.3. Types of foundations - Shallow and deep	6. Total station	Determination of Shear Force and Bending
		Introduction	Moments for Cantilever Beam
	10.4. Bearing capacity of soil	Measurement of horizontal distance, slope	Determination of Shear Force and Bending
		distance, difference in height between two points	Moments for Simply Supported Beams

10.5. Requirements of good foundation	Elevation of a point	
10.6. Causes of failures of good foundations		
	Horizontal angle and distance between two stations	7. GRAPHIC STATICS
11. MASONRY		
11.1. Stone Masonry - Definition - Material required for stone masonry - types of stone	Setting out right angles at different points on a	
masonry- selection of stone masonry	base line	Representation of Forces Graphically – Bows Notation, Parallelogram Law of Forces,
	Setting out plan of a building on the ground, prolonging a straight line, Area of closed traverse,	Resultant and Equilibrants
	earthwork calculations	
	PRACTICAL	
11.2. Brick masonry-Definition - Types of brick	8.Measurement of horizontal angle by reiteration	Graphical Method of Determination of CG for
masonry	method using theodolite	T, I, L Sections
12. Building works maintenance and Solutions		Drawing SFD and BMD by Graphical Method for
		SSB and Cantilever Beams
12.1. Dampness in buildings - Sources of dampness - effects of dampness		PRACTICAL
12.2. Techniques and methods of damp		Identify various components of a computer

Dec 2023 No. of Working days 24	prevention (4)		Open Note pad, Paint and Word pad programs
	12.3. General measures of fire safety in building		
	PRACTICALS		
	9. Fineness of Modulus of Coarse Aggregate		
	10. Fineness of Modulus of Fine Aggregate		
	11. Slump Cone Test		
	OJT- (One month only)	OJT- (One month only)	OJT- (One month only)
	Half yearly Examinations	Half yearly Examinations	Half yearly Examinations
Jan - 2024 no. of Working Days 20	Syllabus Revision	Syllabus Revision	Syllabus Revision
	Pre-Final Examinations	Pre-Final Examinations	Pre-Final Examinations
Feb, 2024 No. of Working days, 24			
	Syllabus Revision	Syllabus Revision	Syllabus Revision

	Practical Examinations IPE-2024	Practical Examinations IPE-2024	Practical Examinations IPE-2024
Mar, 2024 no. of Working days 21	IPE Model Papers Practice	IPE Model Papers Practice	IPE Model Papers Practice
	Theory Examinations IPE-2024	Theory Examinations IPE-2024	Theory Examinations IPE-2024

Presented by:

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ANNUAL ACADEMIC PLAN 2023-24

COURSE: CIVIL ENGINEERING TECHNICIAN 326 (SECOND YEAR)

MONTH AND NO. OF WORKING DAYS / NO. OF PERIODS	THEORY : WATER SUPPLY ENGINEERING PRACTICAL : CIVIL ENGINEERING LABORATORY	THEORY :ESTIMATING AND COSTING PRACTICAL : AUTOCAD LAB	THEORY : HIGHWAYS AND CONSTRUCTION MANAGEMENT PRACTICAL : CIVIL ENGINEERING DRAWING
<p align="center">June 2023 24</p>	<p>THEORY Introduction: Importance and Necessity for planned water supplies Wholesome water Status of protected water supply in India supply Planning and Execution of Modern</p> <p>PRACTICAL Samples: Collection of samples, grab sample, composite sample, sample preservation. Solution: Preparation of normal solutions and standardization</p>	<p>THEORY 1. Introduction to the Subject - Definition of Estimation and costing - Need for Estimation and costing.</p> <p>PRACTICAL 1. Basic Concepts: Command window - Drop Down Menus - Tools bars.</p>	<p>THEORY 1. Introduction of Highways - Importance of Transportation Engineering - Classification of Roads - Cross Section of Road Structure – Sub – grade - Sub base – Base and Wearing Course – Width of Payment – Shoulder – Formation Width – Right of Way – Road Boundaries - Road widths for different classification of Roads - Traffic lane width - Camber – Recommended IRC values of Camber for different roads - Gradients – Ruling Gradients - Super elevation necessity</p> <p>PRACTICAL 1. Conventional signs: Conventional signs used in civil engineering Doors Panelled door Glass door Windows Panelled window , Footings</p>

<p>July 2023 24</p>	<p>THEORY Water Demands: Various types of water Demands Domestic Demand Industrial Demand Institutional and commercial water demand Demand for Public uses Fire demand Fire demand Losses and wastes</p> <p>Per capita demand Factors affecting per capita demand Variations in demand Seasonal variations Daily variations Hourly variations Design period Total requirement of water for a town or a city Population forecasting methods and problems Arithmetical increase method Geometrical increase method Incremental increase method, etc</p> <p>PRACTICALS Solution: Preparation of normal solutions and standardization</p>	<p>THEORY Measurement of materials and works -Units of measurement of various items of civil engineering works - Rules for measurement - Different methods of taking out quantities – Centre line method – Long and short walls method</p> <p>PRACTICALS 2. Practice on Basic Commands: Line command – Drawing the Box – Drawing Units – Drawing Size</p>	<p>THEORY Wearing Course – Width of Payment – Shoulder – Formation Width – Right of Way – Road Boundaries - Road widths for different classification of Roads - Traffic lane width - Camber – Recommended IRC values of Camber for different roads - Gradients – Ruling Gradients - Super elevation necessity</p> <p>PRACTICALS Square footing Rectangular footing Plan and section of single wall</p>
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August 2023
25

THEORY

Treatment of Water:

General Introduction
Treatment unit flow diagram
Screening
Sedimentation
Plain Sedimentation
Sedimentation aided with Coagulation
Filtration
Theory of filtration
Slow sand filters construction
Rapid sand filters
Disinfection
Methods of Disinfection
Chlorination, pre, post, Break-point
Chlorination and Dechlorination
Defluoridation - by Nalgonda technique

PRACTICAL

Assembling:
Assembling of a length of line with two joints
Assembling of a length with one turn
Preparation of line sketch of a pipe system:
Single storied building
Multi storied building

UNIT TEST 2
ASSIGNMENT 2

THEORY

4. Detailed and abstract estimate of buildings by using center line method/long

and short walls method - Single roomed building (Load bearing type structure) - Two roomed building (Load bearing type structure) - Single storied Residential building with number of rooms - Single stories Residential building (Framed Structure type) - Two storied residential building (Framed Structure type).

PRACTICAL

5. Drawing the Roof: Develop the drawing depicting the Reinforcement details of typical elements like column, footing, beams and slabs

6. Generating the elevations:

Drawing the front elevation - Putting the door, step, windows - Finishing touches - Hatching the front elevation.

7. Controlling the text in a drawing:

Setting up Text styles - - Placing Room Labels in the floor plan - Creating a Title Block and Border.

UNIT TEST 2
ASSIGNMENT 2

THEORY

4. Introduction of Construction Management

- Construction in India - Classification of construction work - Stages in construction work - Construction team - Resource of Construction - Functions of Construction management - Scientific methods of construction management.

5. Construction Planning

- Job planning - Technical Planning - Pretender and Construction Planning – scheduling – Procurement of Labour, material and equipment - Program of work

PRACTICAL

Detailed drawings of water supply and drainage connections to building:

Showing the position of various fittings like manhole, gully trap, etc.

UNIT TEST 2
ASSIGNMENT 2

<p>September 2023 22</p>	<p>THEORY Distribution System: General Introduction Requirements of a good distribution system Layouts of Distribution Networks Dead end system Grid in system King system Radial system Systems of Distribution Gravitational system Pumping system Combined system Types of pumps and their suitability Centrifugal pumps-Components PRACTICAL Pipe connections to pumps: Centrifugal pump Jet pumps Submersible Pumps</p> <p>Tracing leakages in water supply connections and their repairing: Removal of air lock HALF YEARLY EXAMINATIONS ASSIGNMENT 3</p>	<p>THEORY 5. Specifications and Analysis of Rates: Specifications for different items of work Cost of Labour – Types of Labour – Standard Schedule of rates Lead and Lift – Leads Statement Preparation of Unit rates for finished items of works Cement concrete in foundation R.C.C. Works Brick masonry in cement mortar C.R.S. masonry in cement mortar Plastering in cement mortar Pointing in cement mortar Cement concrete flooring Doors and windows – paneled PRACTICAL 8. Residential buildings: Plan, elevation, section of single roomed building - Single storied load bearing type residential building - One bed room house - Two bed room house</p> <p>HALF YEARLY EXAMINATIONS ASSIGNMENT 3</p>	<p>THEORY 6. Construction Labour - Types of Labour - Labour welfare - Human relation - Labour insurance - Payment of wages - Minimum wages Act – Workmen Compensation Act- Contract Labour Act.</p> <p>7. Inspection and Quality Control – Introduction - Functions of Inspection Department - Major items of controls. PRACTICAL 4. Layout of various water supply and sanitary connections in: Bathroom Water closet HALF YEARLY EXAMINATIONS ASSIGNMENT 3</p>
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<p>October 2023 No. of days : 18</p> <p>No. of theory periods :15 No. of practical periods :15</p>	<p>THEORY Requirements of pipe materials: Different types of pipes Laying and Testing Maintenance Pipe corrosion and Prevention Appurtenances is the distribution system Sluice valves Check valves or reflux valves Air valves Drain valves or Blow off valves Scour valve Water meter Fire Hydrants Water supply plumbing systems Plumbing System in Water Supplies The House Water Connection Stop Cocks Water taps and Bib cocks Pipe fittings Storage of water in buildings Estimating Storage Capacity Overhead Storage, Underground Storage tanks General requirements of domestic wa PRACTICAL Installation of Geysers: UNIT TEST 3 ASSIGNMENT 4</p>	<p>THEORY 6. Earthwork calculations - Trapezoidal - Primordial - Mid Ordinate – Mean sectional area rules for computing volume in level sections for roads -Taking out quantities from L.S. and C.S. in cutting and Embankment PRACTICAL 9. Layouts of Electrical, water supply and Sanitary Lines in Buildings: One bed room house - Two bed room house. UNIT TEST 3 ASSIGNMENT 4</p>	<p>THEORY 8. Contracts - Legality of Contracts - Types of Contracts - Piece work contracts - Item rate contract - Percentage contract - Merits and Demerits of each contract system PRACTICAL 5. Overhead tank: Detailed drawing overhead tank with complete pipe system UNIT TEST 3 ASSIGNMENT 4</p>
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<p>November 2023 25</p>	<p>THEORY Water piping systems in building Piping system using direct supply Piping system using overhead tanks Piping system using underground-overhead tank supply Pumped systems Liquids and Their Properties Mass Density – Specific Weight-Specific Gravity Adhesion – Cohesion – Surface Tension – Capillarity – Compressibility Dynamic Viscosity – Vapour Pressure Pressure Head and Measurement Atmospheric Pressure – Gauge Pressure – Absolute Pressure Pressure Measuring Instruments – Piezometer – Manometer and Differential Manometer Pressure Head - Datum Head and Kinetic Head Bernoulli’s Theorem Water Hammer PRACTICAL Carpentry: Use and setting of different tools Surface planning and finishing Making simple joints – Mortise, Tenon, Dovetail etc. Demonstration of wood working machine</p>	<p>THEORY 7. Detailed Estimates: Gravel Road Cement Concrete Road Septic tank with Soak pit</p> <p>PRACTICAL 10. Drawing to be submitted for approval to Corporation or Municipality showing required details in one sheet such as: Plan – showing dimensions of all rooms Section – showing specifications and typical foundation details Elevation Site Plan – showing boundaries of site and plinth area, car parking, passages and location of septic tank. Key Plan – showing the location of building Title Block showing the signature of the owner and licensed surveyors</p>	<p>THEORY 9. Tender and Tender Notice - Necessity of Tenders -Tender notice – EMD opening of tenders - Scrutiny of Tenders - Acceptance of tenders - Work Order - Contract agreement - Conditions of Contract.</p> <p>PRACTICAL 6. Pipe connections to: Septic tank Manhole</p> <p>7. Reinforcement Details of Single Room, Double Room Building: UNIT TEST 4 ASSIGNMENT 5</p>
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	<p>Fitters: Use and setting of different tools Marking, chiseling, hack sawing, filing, drilling</p> <p>Smithy: Use and setting of different hand tools Preparation of jobs involving bending, swaging, use of power hammers Demonstration of Arc and Gas welding, cutting, brazing, soldering</p> <p>Electrical Wiring: Introduction to Wiring Tools Types of Wires Switches and Switch Boards Lamp Holders Ceiling Roses Main Switches Fuses Accessories needed in Conduid Wiring Ear thing</p> <p>Tests on Metals: Tension test on mild steel Tension test on HYSD Bars UNIT TEST 4 ASSIGNMENT 5</p>	<p>Minimum set – backs and height stipulation for all types of norms high rise buildings UNIT TEST 4 ASSIGNMENT 5</p>	
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December 2023 24	OJT UNIT IV	OJT UNIT IV	OJT UNIT IV
January 2024 20	PRE FINAL 1	PRE FINAL 1	PRE FINAL 1
February 2024 24	PRE FINAL 2	PRE FINAL 2	PRE FINAL 2
March 2024 21	IPE MARCH 2024	IPE MARCH 2024	IPE MARCH 2024

Prepared by:

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HOME SCIENCE COURSES & OTHER COURSES
<i>COMMERCIAL GARMENT TECHNOLOGY [CGT] – 409</i>
<i>FASHION GARMENT MAKING [FGM] – 410</i>
<i>HOTEL OPERATIONS [HO] – 411</i>
<i>PRE-SCHOOL TEACHER TRAINING [PSTT] – 412</i>
<i>COMPUTER GRAPHICS & ANIMATION [CGA] – 505</i>
<i>TOURISM & TRAVEL TECHNIQUES [TTT] – 506</i>

ANNUAL ACADEMIC PLAN 2023-2024.

CGT 1ST YEAR , COURSE CODE – 409

Months &No of working days/No of periods.	PAPER – 1 PRINCIPLES OF GARMENT MAKING THEORY & PRACTICALS	PAPER–2 TEXTILE SCIENCE THEORY & PRACTICALS	PAPER – 3 GARMENT CONSTRUCTION THEORY & PRACTICALS
June– 2023 No of Working Days– 24	<p align="center">THEORY – 20 P <u>UNIT – 1</u></p> <p>Terminology, Fabric Garment, selvedge, sloper, bodice block, pattern, commercial pattern, grain, bias, tools and equipment’s, measuring tools, marking tools, cutting tools, pressing tools, basic stiches – temporary & permanent stiches.</p>	<p align="center">THEORY – 20 P <u>UNIT – 1</u></p> <p>Classification & general properties of textile fibers, Definition of terms – staple filament, general properties, texture, resiliency, lustre, static electricity, crimp & elasticity, difference between vegetable and synthetic fibers.</p>	<p align="center">THEORY – 20 P <u>UNIT – 1</u></p> <p>Taking body measurements: Points to remember while taking Body measurements. Taking and recording measurements for different garments : Children, Women and Men.</p>
	<p align="center">PRACTICALS – 20P <u>SECTION – 1</u></p> <p><u>BASIC STICHES:</u> Preparation of samples : *Even taking, uneven taking,diagonal,slip taking, running stitch, back stitch</p> <p align="center"><u>ASSIGNMENT - 1</u></p>	<p align="center">PRACTICALS – 20P <u>SECTION – 1</u></p> <p><u>IDENTIFICATION OFFIBERS AND BLEACHING:</u> *Identification of cotton fiber , silk fiber, wool fiber.</p> <p align="center"><u>ASSIGNMENT - 1</u></p>	<p align="center">PRACTICALS – 20P</p> <p>*Recording Body measurements for children’s upper garment, lower garment.</p> <p align="center"><u>ASSIGNMENT - 1</u></p>
July – 2023	THEORY – 20 P	THEORY – 20 P	THEORY – 20 P

<p>No of Working Days– 24</p>	<p align="center"><u>UNIT – 2</u></p> <p>Sewing machines: Types – Domestic and Industrial machines. Parts and functions . Machine troubles – it causes and remedies. Care of sewing machine.</p>	<p align="center"><u>UNIT – 2</u></p> <p>Manufacture and properties of cellulose fibres – cotton. Manufacturing process – Hand made - Manufacturing process – machine made – Properties of cotton : Microscopic appearance - Burning test - Composition -Physical Properties - Chemical properties - Uses of cotton.</p>	<p align="center"><u>UNIT – 2</u></p> <p><u>TYPES OF MATERIAL:</u> -Study on different types of material available in the market for children’s Garments. -Supportivefabrics The importance of selection of material and supportive fabrics</p>
	<p align="center">PRACTICALS – 20P *run and back stitch,over casting, whipping,hemming,knottedhemming and slip hemming . UNIT TEST–1 ASSIGNMENT –2</p>	<p align="center">PRACTICALS – 20P *Identification of polyester fiber , rayon fiber.Bleaching. UNIT TEST–1 ASSIGNMENT –2</p>	<p align="center">PRACTICALS – 20P *Recording Body measurements for women’s upper garment. UNIT TEST–1 ASSIGNMENT –2</p>

<p>August– 2023 No of Working Days– 25</p>	<p>THEORY 18P <u>UNIT – 3</u> <u>PATTERN MAKING :</u></p> <ul style="list-style-type: none"> - Draping - Drafting - Flat pattern - Content of paperpattern - Merits anddemerits - Uses of paperpatterns - Commercialpatterns. <p><u>UNIT – 4</u> <u>PREPARATION OF MATERIAL FORCUTTING :</u></p> <ul style="list-style-type: none"> - Strengthening offabric grain <ul style="list-style-type: none"> - Offgrain - Preshrinking andpressing ofmaterial 	<p>THEORY 18P <u>UNIT – 3</u> <u>MANUFACTURE AND PROPERTIESOF PROTIENFIBRES:</u> <u>Silk & Wool:</u></p> <ul style="list-style-type: none"> - Introduction andhistory ofsilksilk - Life history of silkmoth - Processing of silkfibre - Manufacturing processof wool - Physical and chemical properties ofwool <p><u>UNIT – 4</u> <u>MANMADE AND REGENERATED –RAYON &POLYESTER :</u></p> <ul style="list-style-type: none"> - Manufacturing ofrayon - Properties ofrayon <ul style="list-style-type: none"> - Uses ofrayon - Manufacturing of polyester - Properties ofrayon <ul style="list-style-type: none"> - Uses ofrayon. 	<p>THEORY 18P <u>UNIT – 3</u> <u>SELECTION OF MATERIALSFOR VARIOUS GARMENTS :</u></p> <ul style="list-style-type: none"> - Jhangia <ul style="list-style-type: none"> - Jalda - Romber - A-line Frock - Baby frock with bib Skirt wrapround
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	<p style="text-align: center;">PRACTICALS – 18 P SECTION – 2</p> <p><u>SEAMS AND SEAMFINISHES :</u> <i>Preparation of samples:</i> Plain seam, run and fell seam, French seam, lapped seam, piped seam, slot seam, pinked finish, edge stitched finish, double stitch finish, over cast finish,herriengebone finish and bound seam edge stitch.</p> <p style="text-align: center;">UNIT TEST – 2 & ASSIGNMENT - 3</p>	<p style="text-align: center;">PRACTICALS – 18 P <u>IDENTIFICATION OF YARNS</u> <u>AND FABRIC COUNT :</u></p> <p>Identification of single yarn, ply yarn, cord yarn, novelty/complex yarn and textured yarn. Fabric counting.</p> <p style="text-align: center;">UNIT TEST – 2 & ASSIGNMENT - 3</p>	<p style="text-align: center;">PRACTICALS – 18 P</p> <p>*Recording Body measurements for women’s lower garment, men’s upper garment and men’s lower garment.</p> <p style="text-align: center;">UNIT TEST – 2 & ASSIGNMENT - 3</p>
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<p>September – 2023 No of Working Days– 22</p>	<p>THEORY 20 periods <u>UNIT – 5</u> <u>SEAM AND SEAM FINISHES</u> <u>SEAM :</u> Plain, French, Run and Fell, Lapped, Slot seam and Piped seam. SEAM FINISHES: Pinked, Edge stitch, Double Stitch, Herringbone seam finish and over cast seam finish. <u>UNIT – 6</u> <u>FULLNESS IN GARMENT :</u> DART - Single dart and Double dart. TUCKS – Pin, Plain and Cross tucks. PLEATS – Knife, Box and Inverted box pleats. GATHERS – Shirring, Flare and Godet.</p>	<p>THEORY 20 periods <u>UNIT – 5</u> <u>SPINNING AND YARNS SPINNING:</u> Chemical and Mechanical classifications of yarns – Types of yarns, Twist in yarns, Balance of cloth, Yarn count, Novelty yarns. <u>UNIT – 6</u> <u>FABRIC CONSTRUCTION METHODS :</u> - Weaving - Knitting - Non - woven.</p>	<p>THEORY 20 periods <u>UNIT – 4</u> <u>CLOTHING SELECTION :</u> Factors influencing selection of clothing according to age, occasion. Factors influencing Figure type, Fashion and Color.</p>
	<p>PRACTICALS – 20 P <u>SECTION – 3</u> <u>NECKLINE FINISHES:</u> Preparation of Neckline with baisfacing, shaped facing. Preparation of Single bias binding, Double bias binding, single dart, Double dart, Pin tucks, plain and Cross tucks.</p>	<p>PRACTICALS – 20 P <u>SECTIONS – 3</u> <u>PREPARATION OFWEAVES:</u> Preparation of plain weave, Basket weave, Rib weave, Twill weave, Satin weave, Sateen weave.</p>	<p>PRACTICALS – 20P <u>SECTION – 2</u> <u>CONSTRUCTION</u> <u>OFCHILDREN’S GARMENTS:</u> Fabric estimation, Drafting, Cutting and Stitching of BIB, JHANGIA and JABLA.</p>

HALF YEARLY EXAMINATIONS

<p>October– 2023 No of Working Days– 18</p>	<p style="text-align: center;">THEORY 17 P UNIT – 7 <u>PLACKET OPENING :</u></p> <p>Standards of good placket, Tailored placket, Zipper placket, Narrow bound placket, placket for kalidarkurtha; Selection & choice of plackets on various garments</p>	<p style="text-align: center;">THEORY 17 P UNIT – 7 <u>LOOM :</u></p> <p>Steps in weaving –weaving process; Kinds of Weaves – Plain weave and its variations, Twill and Satin; Examples of fabrics with such weaves.</p> <p style="text-align: center;">UNIT – 8</p> <p style="text-align: center;">STAINS :</p> <p>Definition – classifications – types of stains – general rules to be observed in removal of stains on various fabrics</p>	<p style="text-align: center;">THEORY 17 P UNIT – 5 PREPARATION OF MATERIAL FOR CUTTING & PATTERN LAYOUT :</p> <p><i>Marking, Different layouts:</i> Different methods of Marking and Laying a Fabric and Cutting</p>
	<p style="text-align: center;">PRACTICALS – 17P SECTION – 4 <u>FULLNESS IN GARMENT :</u></p> <p>Preparation of Pinched pleat, Knife pleat, Box pleat, Inverted Box pleat, Gathers and Ruffles.</p> <p style="text-align: center;">ASSIGNMENT - 4</p>	<p style="text-align: center;">PRACTICALS – 17 P SECTION – 4 <u>IDENTIFICATION OFFABRICS :</u></p> <p>Identification of Poplin, Satin, Voile, Chiffon, Crepe and Terry Rubia, Casement, Cotton, Wool, Silk, Rayon and Drill fabrics.</p> <p style="text-align: center;">ASSIGNMENT - 4</p>	<p style="text-align: center;">PRACTICALS – 17P</p> <p>Frabric estimation, Drafting, Cutting and Stitching of Romper. Drafting basic bodies block and sleeve block for a child. Drafting of basic skirt block.</p> <p style="text-align: center;">ASSIGNMENT - 4</p>

<p>November - 2023 No of Working Days– 25</p>	<p>THEORY – 20P <u>UNIT – 8</u> <u>NECKLINE FINISHES :</u> Facings – Fitted and decorative binding – single and double</p> <p><u>UNIT – 9</u> <u>FASTNERS :</u> Buttons and button holes, shank buttons, metal buttons, Zippers, Hooks and Eyes</p>	<p>THEORY – 20 P <u>UNIT – 9</u> <u>FINISHES :</u> Calendering, Singeing, Tentering, Chemical finish – Mercerising, Bleaching, and Dry cleaning.</p> <p><u>UNIT – 10</u> <u>IDENTIFICATION OF FABRIC DEFECTS :</u> Major defects in weaving, Fabric inspection methods, Fabric rating.</p>	<p>THEORY – 20P <u>UNIT – 6</u> <u>CRITERIA OF WELL FINISHED GARMENTS :</u> Ease, Line, Grain, Set, Balance.</p> <p><u>UNIT – 7</u> <u>ESTIMATION AND COST OF MATERIAL REQUIRED FOR GARMENT:</u> Estimation of raw materials, Fasteners and cost, method of costing.</p>
	<p>PRACTICALS – 20 P <u>SECTION – 5</u> <u>PLACKET OPENING AND FASTENERS :</u> Preparation of Tailored placket, Zipped packet, Narrow bound placket. Preparation of Button hole vertical and horizontal, Shank button and press button, Hook and eye.</p> <p><u>UNIT TEST – 3 & ASSIGNMENT - 5</u></p>	<p>PRACTICALS – 20 P <u>SECTION – 5</u> <u>STAIN REMOVAL ON COTTON FABRICS AND DRY CLEANING OF FABRICS :</u> Stain removal of Ball pen and Tea/coffee, Blood and scorch, oil and curry, Paint and pan, Rust and Haldi. Dry cleaning the given sample by immersion or spot dry cleaning.</p> <p><u>UNIT TEST – 3 & ASSIGNMENT - 5</u></p>	<p>PRACTICALS – 20 P Fabric estimation, Drafting, Cutting and Stitching of A – Line frock. Fabric estimation, Drafting, Cutting and Stitching of Box pleated skirt for a child. Cost of all the above garments.</p> <p><u>UNIT TEST – 3 & ASSIGNMENT - 5</u></p>

December - 2023 No of Working Days- 24	ON THE JOB TRAINING UNIT TEST - 4
January -2024 No of Working Days- 20	REVISION PRE FINAL -1
February - 2024 No of Working Days- 24	PRE FINAL - 2 IPE – PRACTICALS - 2024
March -2024 No of Working Days- 21	IPE – THEORY EXAMINATIONS - 2024

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ANNUAL ACADEMIC PLAN – 2023-2024

COMMERCIAL GARMENT TECHNOLOGY [C.G.T - 409]

II YEAR

Month & No. of working days	Apparel Manufacture (Theory paper-1) Apparel Manufacture (Practical paper-1) No. Of Periods	Fabric Embellishment (Theory paper – II) Fabric Embellishment. (Practical paper - II) No. Of Periods	Apparel and Fashion Designing. (Theory paper -III) Apparel and Fashion Designing. (Practical paper – III) No. Of Periods
June2023 / working days 24	Theory-20 1.Adaptation of Basic Sleeve 1.1 Introduction 1.2 Sleeve Terminology 1.3 Standards of well fitted Sleeve 1.4 Sleeve styles 1.5 Basic sleeve types 1.6 Set - in sleeves - types 1.7 Added fullness and cap variations 1.8 Two piece sleeves 1.9 Sleeve /bodice combination	Theory-30 1.Embroidery 1.1 Introduction 1.2 Materials required 1.3 Selection of fabrics and threads 1.4 Techniques of transferring designs a. Direct drawing method b. Carbon paper method c. Using tracing sheet 1.5 Begining and ending of embroidery stitches 1.6 Types of hand embroidery stitches 1.6.1 Stem 1.6.2 Chain 1.6.3 Feather 1.6.4 Satin stitch 1.6.5 Button hole 1.6.6 Fish bone 1.6.7 Couching 1.6.8 Herring bone 1.6.9 Roumanian stitch 1.6.10 French knot 1.6.11 Double knot 1.6.12 Bullion knot 1.6.13 Seed stitch 1.6.14 Pekinese stitch 1.6.15 Fly stitch	Theory -20 1.Introduction to Design Elements 1.1 Elements of design 1.2 Line 1.3 Form /Shape 1.3.1 Basic shapes a. Trapeze b. Tent c. A-Line d. Pencil e. Bell f. Balloon g. Mermaid i. Empiredj. Charleston k.Sheath l. Fit 'n'Flare 1.3.2 Visual effects of shapes 1.4 Colour 1.4.1 Visual effects of colour The common meanings of the colour 1.5 Texture 1.5.1 Types of texture 1.5.2 Determinants of texture 1.5.3 Effects of texture

	Practical-20 1.Drafting ,cutting and stitching of set - in- sleeves 2.Drafting ,cutting and stitching of Kimono sleeve 3. Drafting ,cutting and stitching of Raglan sleeve 4. Drafting ,cutting and stitching of Peter pan collar	Practical-20 Embroidery stitches 1.Stem 2. Chain 3. Magic chain 4.Twisted chain 5. Open chain 6.Button hole	Practical-20 Elements and Principles of Designing 1.Line and form 2. Texture 3. Balance 4. Rhythm 5.Emphasis
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working days July 2023, 24	Theory-10 2. Creating Design Variety 2.1 Introduction to Collars 2.2 Terminology related to collars 2.3 Types of collars a.Flat collars b. Full roll c. Convertible d. Partial roll 2.4 Classification of collars 2.5 Designing collars 2.6 Introduction to yoke 2.7 Selection of yoke designs 2.8 Creating variety in yoke designs 2.9 Pockets - Introduction 2.10 Types of pockets a. Applied pockets b. Structural pockets c. Inserted pockets 2.10A A Selection of pocket designs 2.11 Creating variety in pocket design	Theory-20 2. Study of Handling different fabrics 2.1 Introduction 2.2 General considerations while handling different fabrics a. washing b.Drying c. Ironing 2.3 Handling different fabrics 2.2.1 Crepe 2.2.2 Felt fabrics felts facts Tips for sewing with felt 2.2.3 Lace Advantages Care of fabrics 2.2.4 Metallic yarns properties of metallic yarns Use of metallic yarns Care and maintenance 2.2.5 Jersey 2.2.6 Pile fabric	Theory-20 2.Principles of Design 2.0 Introduction 2.1 Principles of design 2.2 Balance 2.2.1 Types of Balance i. Symmetrical balance ii. Asymmetrical balance iii.Radial balance 2.3 Rhythm 2.3.1 Types of Rhythm in clothing Design i. Rhythm through Repetition ii. Rhythm through Gradation or Progression iii. Rhythm through Radiation iv. Rhythm through Transition 2.4 Emphasis 2.4.1Different ways to create Emphasis in garment 2.5 Proportion 1. Proportion applied to clothing design 2.Proportion and body 2.6 Unity/Harmony
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		Basting 2.2.7 Plastic fabrics Characteristics of plastic fabrics 2.2.8 Sheer fabrics Characteristics of sheer fabrics 2.2.9 Synthetic fabrics Characteristics of synthetic fabrics 2.2.10 Finished fabrics	
	Practical-20 5. Drafting ,cutting and stitching of Mandarin collar 6. Drafting ,cutting and stitching of Sailor collar 7. Drafting ,cutting and stitching of Patch pocket 8. Drafting , cutting and stitching of Bound pocket	Practical-20 7.Long and Short 8. Satin 9.French knot 10. Double knot 11. Bullion knot 12. Herring bone	Practical-20 6.Prpportion and Harmony 7.Prang colour chart 8. Monochromatic colour Harmony 9. Analogous colour Harmony 10. Complementary colour Harmony
	Assignment - I	Assignment - I	Assignment- I
	Unit-1	Unit-1	Unit-1

working days Aug 2023, 25	Theory-10 3.Grading 3.1 Introduction 3.2 Definition of grading 3.3 Importance of grading 3.4 Principles of grading 3.5 Grading techniques 3.6 Method of grading a. Shifting method	Theory-15 3. Fabric painting 3.1 Introduction 3.2 Materials required for fabric painting 3.3 Procedures for painting 3.3.1 Pre wash the fabric 3.3.2 Press fabric 3.3.3 Transfer pattern 3.3.4 Paint	Theory-10 3. Colour 3.0 Introduction 3.1 Characteristics of colours 3.2 Colour wheel/ colour systems 3.3 Colour schemes 1.Monochromatic colour scheme 2.Analogous colour scheme 3.Triad colour scheme
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	<p>b.Second method.</p> <p>3.7Grading procedures.</p> <p>3.7.1Grading the back bodice</p> <p>3.7.2 Grading the front bodice</p> <p>3.7.3 Grading Sleeve pattern</p> <p>3.8 Machines used for Grading.</p> <p>A.Machine grading.</p> <p>B.Computerised grading technology</p>	<p>3.3.5 Post treatment</p> <p>3.4 Basic techniques for painting</p> <p>3.4.1 Brunch control.</p> <p>3.4.2 Brush control</p> <p>3.5 Techniques used in painting.</p> <p>3.5.1 Wet brush technique</p> <p>3.5.2 Dry brush technique</p> <p>3.5.3 Tipping</p> <p>3.5.4 Dot work</p> <p>3.5.5 Comma stroke</p> <p>3.3.6 Chisel stroke</p> <p>3.5.7 Flat comma</p> <p>3.5.8 S stroke</p> <p>3.5.9 Tear Drop</p> <p>3.5.10 Line work</p> <p>Non brush techniques</p> <p>3.5.11 Spray</p> <p>3.5.12 Impressions</p> <p>Shading</p>	<p>4.Complementary colour scheme</p> <p>5.Split – Complementary colour scheme</p> <p>3.4 Warm colours, cool colours and Neutral colours. 3.5 Colour Expression/colour Definitions</p> <p>3.6 Use of colour in designing</p> <p>3.7 Visual Effects of colour</p>
	<p>Practical-20</p> <p>9.Drafting , cutting and Stitching of In seam pocket</p> <p>10. Drafting , cutting and Stitching of Saree petticoat (Six Gore)</p>	<p>Practical-20</p> <p>13.Fish bone</p> <p>14.Couching</p> <p>15.Pekinese</p> <p>16.Fy</p> <p>17. Feather</p> <p>18. Rumanian stitches</p>	<p>PPractical-20</p> <p>11.Split Complementary colour harmony</p> <p>12.Triad colour harmony</p> <p>13.Design Development-Sketching of Normal and Fashion Figure-8-Head</p> <p>14.Design Development- Sketching of Normal and Fashion Figure-9-Head</p> <p>15.Design Development-Sketching of Normal and Fashion Figure-10-Haed</p> <p>16. Application in Collar variations</p>
	Assignment-II	Assignment -II	Assignment-II
	Unit-II	Unit-II	Unit-II

Sep 2023,
working days
22

Theory-30
4. Commercial sewing machines
 4.1 Introduction
 4.2 Classification of sewing machines
 4.3 Different types of sewing machines
 a. Lock stitch machines
 b. Overlock Machines
 c. Safety stitching machine
 d. Blind stitch machine
 e. Button hole machine
 f. Bar tacking machine
 g. Button sewing machine.
 h. Label sewing machine
 4.4 Sewing machine Shapes
 a. Flat bed
 b. Cylinder bed
 c. Post bed
 d. Feed-off-The arm
5. PRODUCTION PROCESS IN INDUSTRY
 5.1 Introduction
 5.2 Design/Sketch
 Sample making
 Production pattern
 Grading
 5.7 Marker making
 5.8 Spreading
 5.9 Cutting
 5.10 Sorting/bundling
 5.11 Sewing/assembly
 5.12 Inspection
 5.13 Pressing/finishing
 5.14 Final inspection
 5.15 Packing

Theory-15.
4. Patch work, Applique work, Quilting
 4.1 Introduction
 4.2 Patchwork
 4.2.1 Materials. Required.
 4.2.2 Designing patchwork
 4.2.3 Boarders and dividers
 4.2.4 Influence of colour on patchwork
 4.2.5 Method of working patchwork.
 4.2.6 Types of patchwork
 4.3 Applique
 4.3.1 Introduction
 4.3.2 Materials required.
 4.3.5.5 Types of applique.
 4.4 Quilting
 4.4.1 Materials required
 4.4.2 Suitable fabrics
 4.4.3 Designing a quilt
 4.4.4 Method of Quilting
 4.4.5 Types of Quilting designs

Theory-20
4. Basic principles of fashion Design 4.0 Introduction
 4.1 Factors to be considered in drawing dress designs for women and children
 a. Current fashion trends.
 b. Label and brands available
 c. design of the garment
 d. Quality of garment collection available in the market
 e. Fiber, fabric and garment composition
 f. Value addition techniques employed
 g. Price of the garments.
 h. Maintenance and care required for the garment
 4.1.1 factors to be considered in women's dress design
 4.1.2 Factors to be considered in children's dress design
 4.2 Structural lines
 4.3 Choosing a right fabric for different types of figures
 4.3.1 Types of women Shapes/figures
 4.3.2 Fashion and fabrics for various female figures / Shales
 4.4 Selecting style lines for different types of figures

	<p>Practical-20 11.Drafting, cutting and Stitching of Saree blouse. 12.Drafting, cutting and Stitching of princess line blouse</p>	<p>Practical-20 19.Cut work. 20.kasuti work 21.Banjara Mirror work. 22. Dry technique. 23. Wet technique 24.Shading</p>	<p>Practical-20 17. Application in Necklines 18.Application in sleeve variation 19.Accessory designing-Hand bags. 20.Accessory designing -Hats. 21.Accessory designing- Shoe. 22.Accesdory designing - Jewellery -Bangles</p>
	<p>Quarterly Examinations Assignment -III</p>	<p>Quarterly Examinations Assignment -III</p>	<p>Quarterly Examinations Assignment -III</p>
<p>October 2023, working days 18</p>	<p>Theory-15 6.Establishment of Garment costing and Garment Retailing 6.1 Introduction 6.2 Garment costing 6.3 Components of Garment costing 6.4 CMT (Costing of Making) 6.5 Value added services. 6.6Methods of costing. 6.7 Garment Retailing. 6.8. The concept of Retailing</p>	<p>Theory-15 5.Study of Traditional Embroidered Textiles 5.1 Introduction 5.2 kantha work 5.3 Phulkari work 5.4 kasheedha work 5.5 Chikankari work 5.6 Mirror work 5.7Kasuti work</p>	<p>Theory-20 5.Accessories Used in Fashion Designing. 5.0 Introduction 5.1 Hats 5.2 Bags 5.3 Shoe. 5.3.1The History of shoes 5.3.2 Parts of shoe. 5.3.3The types of shoe 5.4 Scarves 5.6 Belts 5.7Jewellery. 5.7.1Various jewellery found commonly around the world. 5.7.2 Wide variety of Indian jewellery Adorned by women 5.7.3 Different types of making the jewellery</p>

	Practical-17 13.Drafting , cutting and Stitching of Kameez. 14.Drafting, cutting and Stitching of Salwarpyjama	Practical-17 25.Filling 26. Plain patchwork 27.Applique work	Practical-17 23.Accessory designing – jewellery – Earrings 24.Accessory designing – jewellery – Necklaces 25.Application of computers in Fashion Designing 26.List of computer capacity and accessories required to design in a computer
	Assignment –IV Unit - III	Assignment –IV Unit - III	Assignment –IV Unit - III
November 2023 / working days 25	Theory-25 7.Quality Control 7.1introduction 7.2 Importance of quality control in the garment industry 7.3 Quality control department 7.4 Product Standards specifications and quantity control. 7.5Use of specifications 7.6 Writing specifications for Apparel manufacturing. 7.7 Phases of Apparel specifications Department 8.FAMILY CLOTHING, BUDGET AND WARDROBE PLANNING 8.1Introduction 8.2 Definition of a family budget 8.3 Benefits of budget 8.4 Family Expenses 8.5 Clothing budget for a family 8.6 Clothing expenditure of a family. 8.7 Divisions of clothing budget 8.8 Wardrobe planning	Theory-15 6.Printing Methods 6.1 Introduction 6.2 General theory of printing 6.3 Types of Printing. A. Hand printing i.Block printing. ii. Screen printing iii. Stencil printing B.Machine printing. i .Direct roller printing. ii . Duplex printing. iii . Discharge printing iv.Resist printing v.Pigment printing vi.photo printing. Vii.Transfer printing viii.Digital printing ix.Flock printing	Theory -20 6.Apparel Industry Terminology 6.0Introduction 6.1 General Terminology used in designing and their explanation 6.1 .1 Accessories. 6.1.2 Bespoke. 6.1.3Brand 6.1.4 Braid 6.1.5 Boutique. 6.1.6 Camouflage 6.1.7 Classic 6.1.8 Contour. 6.1.9 Costume. 6.1.10 Custom made 6.1.11 Couture/ Haute couture 6.1.12 Darts. 6.1.13 Designer. 6.1.14 Fad 6.1.15 Frill 6.1.16 Fringe 6.1.17 Illusion

	8.9 Tips for shopping		6.1.18 Mannequin. 6.1.19. Sheath. 6.1.20 Silhouette. 6.1.21 Texture 7.FASHION MEDIA 7.0 Introduction 7.1 Fashion magazine its role and importance 7.2 Fashion videos its role and importance 7.3 Fashion forecasting services 7.3.1 The importance of casting 7.3.2 People involved in forecasting 7.3.3 Activities in fashion forecasting 7.3.4 The fashion forecasting process 7.4 The fashion forecasting in Indian Scenario
	Practiac-18 15. cutting and stitching of chudidar pyjama 16. Drafting ,cutting and stitching of plazzo	Practical-18 28.Quilting 29.Block printing 30 . Screen printing	Practical-18 27.Types of Software used for Fashion Designing in computer 28.Rastet and Vector Images – Importance in fashion Designing. 29. Use of Coral Draw in Fashion Designing. 30. Use of Photoshop in Fashion Designing
	Assignment –V Unit-IV	Assignment –V Unit-IV	Assignment –V Unit-IV
December 2023, working days 24	OJT- (One month only)	OJT- (One month only)	OJT- (One month only)
	Half yearly examinations	Half yearly examinations	Half yearly examinations

January 2024 / working days 20	Revision / Assignment – VI / Pre-Final Examinations - 1	Revision / Assignment – VI / Pre-Final Examinations - 1	Revision / Assignment – VI / Pre-Final Examinations - 1
February 2024/ working days 24	REVISION / PREFINAL-2/ PRACTICAL EXAMINATIONS	REVISION/ PREFINAL-2/ PRACTICAL EXAMINATIONS	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS
March 2024/ working days 21	IPE March-2024	IPE March-2024	IPE March-2024

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	<p>minor defects and repair, care of machine cleaning and oiling.</p> <p><u>Practical Stitches:</u> (10) Basting- even, uneven, running back, run and back hemming , slip hemming, knotted him.</p> <p><u>SEAM AND SEAM FINISHES:</u>(20) Plain, French, Rum&Fell, Lapped, Solt seam, Bound & Counter seam seam finishes- Pinked, Edge stitch, Herring Bone, Double stitch</p>	<p>Preparation of weaves -plain, twill, rib, basket: (25)</p>	<p>Complementary, Split Complementary, Analogous, Traid; Use of color in designing.</p> <p><u>Practical Apparel Designs and their analysis :</u> (20) Collection of different dress designs from magazines papers, and other publications and analysis for design principles and elements.</p>
	<p>Assignment, Unit Test - 1</p>	<p>Assignment, Unit Test - 1</p>	<p>Assignment, Unit Test - 1</p>
<p>Aug, 2023 25</p>	<p><u>Theory</u> <u>3.Hand sewing techniques:</u> Temporary stitches - uneven and even; permanent stitches - running ,back stitch , hemming - slip, knotted hemming ; suitability of stitches for various fabric types <u>4.seams and seam</u></p>	<p><u>Theory</u> <u>4.Origin manufacture manmade & regenerated:(15)</u>polyester,nylon,rayon,glass,ace tate. <u>5.Types of yarns:(15)</u> simple yarns,double,ply,cord novelty, and fancy yarns, yarntwist, count. <u>Practical</u> Identification of weaves - plain , twill and stain: (25)</p>	<p><u>Theory</u> <u>3. Introduction to elements of fashion:(25)</u> Classification of fashion, Definition of fashion Fashion Terminology- Fashion, style ,Gardments, silhouette,, Avant Garde, fad, taper, classic couture, Knock - offs; empire line</p>

	<p><u>finishes:(15)</u> Importance, and types - plain, french, flat and fell , lapped , Bound , Counter seam; Suitability of seams to various fabric types and end uses Seam finishes - importance; types - pinking , Double stitch, Edge stitch finish; suitability on different fabrics <u>Practical</u> <u>FULLNESS:(15)</u> Tucks, Pleats,Gathers, Shirring, Ruffles & Godets, Smocking <u>PLACKETS:(15)</u> Continuous, Bound , Zipper, Kalidar Kurta Placket</p>		<p>,gusset , ravel ric, rac, sag vent wadding, Fashion theories- trickle down , bottom up ,Trickle across; silhouettes and their types. <u>4. Designing process: (20)</u> Theme based - designing fashion illustrations, colors and Texture. <u>Practical</u> <u>Exercises on color:(25)</u> Prang color chart - preparation of prang color chart, creation of colors for hue and intensity, color value and shades charts; creation of harmonies.</p>
	Assignment, Unit Test - 2	Assignment, Unit Test - 2	Assignment, Unit Test - 2
September, 2023 22	<p><u>Theory</u> <u>5. Creating fullness in garments:(15)</u>Methods: Tucks - pin,pleats- Knife , Bos , inverted bos: gathering ; shirring ; Ruffles and godets; smoking <u>6.Placket openings:(15)</u></p>	<p><u>Theory</u> <u>6.LOOM & its parts:(15)</u> parts of the loom - working process of loom, Hand looms power looms. <u>Practical</u> Identity the fabric defects: (20)</p>	<p><u>Theory</u> <u>5. Designers of India:(10)</u> Famous designers of india - any ten designers and their work for the fashion industry. <u>Practical</u> <u>Sketching croqui:(25)</u></p>

	<p>Standard of a good placket ; types - continuous, Bound and faced, zipper , tailored.</p> <p><u>Practical</u> <u>FASTENERS:(20)</u> Types of fasteners used for various garments, their selection and application methods.</p> <p><u>NECKLINE FINISHES:(10)</u> Making bias strip; Bias facing and Binding, Fitted facing</p>		<p>Sketching of normal and fashion croqui - planning page and proportions; drawing 10 head figure; drawing stick figure, drawing geometric figure, fleshing out</p>
	<p>Assignment, Quarterly in September</p>	<p>Assignment, Quarterly in September</p>	<p>Assignment, Quarterly in September</p>
<p>October, 2023, 18</p>	<p><u>Theory</u> <u>7. Neckline finishes: (15)+(10)</u> Bias binding & Various methods,bias facings single & double bias facing.</p> <p><u>8.</u> Types of fasteners functional & non functional Types - buttons and buttonholes; Hooks and eyes and metal, thred ; press buttons ; fancy buttons; suitability , positioning,</p>	<p><u>Theory</u> <u>7. Fabric finishes & fabric defects:(15)</u> Mechanical, chemical, calendaring bleaches & mercerization.</p> <p><u>Practical</u> Identity the stain and their removal process:(20)</p>	<p><u>Theory</u> <u>6.Fashion and fabric information:(15)</u> Through different media like films, newspapers,magazines, fashion services, advertisements.</p> <p><u>Practical</u> <u>Drawing facials features: Front view, profile view: (25)</u> Placing hairline, mouth, eyes, nose on different levels</p>

	<p>stitching of fasteners</p> <p><u>Practical</u> <u>EMBROIDERY:(15)</u> Chain, Stem Feather, Buttonhole, Fishbone, Couching, Herringbone, Rumanian, French knot, Double Knot, Bullion knot, Seed stitch, fly laizydaizy, shadow satin</p>		<p>and finishing them.</p> <p><u>Drawing hairstyles:</u> Sketching basic silhouette, drawing clusters and filling in hair</p>
	<p>Assignment , Unit Test-3</p>	<p>Assignment,Unit Test-3</p>	<p>Assignment, Unit Test-3</p>
<p>November, 2023 25</p>	<p><u>Theory</u> <u>9.IMPORTANCE OF PAPER PATTERNS:(10)</u> Types of paper patterns, contents of patterns and its uses <u>10.Body measurements:(10)</u> Principles and rules in Measuring ; Direct and standard system of measurements <u>Practical</u> <u>TAKING BODY MEASUREMENTS AND MAKING PAPER</u></p>	<p><u>Theory</u> <u>8. Stain Removal:(30)</u> Fresh & dry stain removal, remedies <u>9. Dry cleaning process, Fabric rolling, storage of fabrics</u> <u>Practical</u> Collection of different types of finishes and their analysis:(20)</p>	<p><u>Theory</u> <u>7. Fashion trims: (15)</u> Surface ornamentation , laces, rhimes stones, mirrors, kundans beads, shells, tassels. <u>8. Basics in computer designing:(10)</u> Introduction about the computers in designing. <u>Practical</u> <u>Figure analysis:(20)</u> Explanation of figure analysis about proper placement of style Lines;</p>

	<u>PATTERNS:(15)+(15)</u> Basic bodice, sleeve patterns; marking patterns, Drafting, cutting, stitching of children's wear Jhangia, Jhabla		Moving the figure for various poses. <u>Analysis of Hand, legs and feet:(20)</u> Rectangle formula of hands, drawing geometric form , drawing front view, profile view, feet formula.
	Assignment, Unit Test - 4	Assignment, Unit Test - 4	Assignment, Unit Test - 4
December, 2023/24	On the Job training Half-yearly	On the Job training Half-yearly	On the Job training Half-yearly
January, 2024 20	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice
	Assignment PREFINAL	Assignment PREFINAL	Assignment PREFINAL

February, 2024 24	PRACTICAL EXAMINATION	PRACTICAL EXAMINATION	PRACTICAL EXAMINATION
March, 2024 21	INTERMEDIATE PUBLIC EXAMINATION	INTERMEDIATE PUBLIC EXAMINATION	INTERMEDIATE PUBLIC EXAMINATION

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ANNUAL ACADEMIC PLAN 2023-2024
FASHION AND GARMENT MAKING (F.G.M) Course Code: 410
Second Year

Month & No. of working days / No of periods	Advanced Dress Designing Theory & Practical Paper - I	Traditional Textiles Theory & Practical Paper - II	Fashion Garment Designing Theory & Practical Paper - III
June, 2023 24	<p><u>1.Principles Of Garment Making (Theory 10)</u> Drafting , Draping and Flat Pattern Designing advantages and disadvantages of each type.</p> <p><u>1.Designing Yoke Designs (Practical 20)</u> Cutting and Stitching record samples with various yoke designs.</p>	<p><u>1.Study Of Motifs (Theory 10)</u> Types of motifs :- Geometric, Natural Abstract, Stylized. Types of layouts :- side and half drop, Border all over.</p> <p><u>1.Motifs (Practical 15)</u> Collection of designs and Identification of different types of motifs and draw above for record samples.</p>	<p><u>1.Design Through Flat Pattern Technique (Theory 10)</u> Dart manipulation principles terminology, Material wed techniques followed.</p> <p><u>1.Sketching Of Garment Details (Practical 15)</u> Necklines, Collars, Sleeves, Skirts.</p>
	Assignment	Assignment	Assignment

<p>July, 2023 24</p>	<p><u>2.Dealing with various types of Fabrics (Theory 10)</u> Handling of chiffon, georgette, pile, velvete, Lace fabrics, one way design fabric and satin. Fabric preparation techniques. Types of Layout cutting methods. <u>2.Creating Different Sleeve Styles (Practical 20)</u> Plain, Puff and its types, Bell, Bishop, Kimono, Raglan, Leg-o-Mutton, umbrella. Prepare record samples.</p>	<p><u>2.Motifs of India (Theory 15)</u> Motifs of India - Styles and color combinations. <u>2.Stencil Printing (Practical 20)</u> Traditional and stylized motifs for pillow and tray cloth end. Fabric painting.</p>	<p><u>2.Style lines (Theory 20)</u> Classic princess line, arm hole princess line, Panel style lines.. <u>2.Sketching (Practical 10)</u> Pants, Blouses, Overcoats, cowls.</p>
	<p>Assignment, Unit Test - 1</p>	<p>Assignment, Unit Test - 1</p>	<p>Assignment, Unit Test - 1</p>
<p>August, 2023 25</p>	<p><u>3.Selection of Clothing (Theory 10)</u> Selection of fabrics and garment styles. According to age, occasion, figure types, fashion, color suitability for children, adolescents, adults and old people. <u>3.Creating different collars (Practical 20)</u> Peter pan mandarin, Scalloped cape. Prepare record samples.</p>	<p><u>3.Hand Woven Fabric of India (Theory 15)</u> Dance nuslin, chanderi, Patole, Paithane Pitambari, Himuss, Amru. <u>3.Simple Dyeing (Practical 20)</u> Dyeing fabrics with direct dyes.</p>	<p><u>3.Designing through draping (Theory 20)</u> Different drapes, Saree drapes on a body form. <u>4.Status of Indian Apparel Industry Fashion Accessories (Practical 25)</u> Sketching - bags, hats, shoes, Scarves, belts, buckles.</p>
	<p>Assignment, Unit Test - 2</p>	<p>Assignment, Unit Test - 2</p>	<p>Assignment, Unit Test - 2</p>

<p>September, 2023 22</p>	<p><u>4.Types of Sleeves (Theory 20)</u> Basic Sleeved and its adaptation into different sleeve types. Bell puff, Bishop, Kimono, Raglan, umbrella, Leg-o-Mutton Suitability of sleeve types to figure types. <u>4.Women Wear (Practical 30)</u> Drafting, cutting and stitching six gore petticoat, blouse, kameez, salwar, churidar, plazzo, nighty apron.</p>	<p><u>2(b)Hand woven fabric (Theory 15)</u> Balu Chai Buttedar, Pochempalli, uppada, kote doria of rajasthan. Brocades of banaras, Motifs and colors used in these textiles. <u>4.Tie and dye (Practical 25)</u> Tie and dye techniques. Making 10 samples.</p>	<p><u>5.Fashion Accessories (Theory 20)</u> Bags,shoes, jewellery, hats, Scarves, Ties, belts and buckles. Terminology used in each various designs. <u>4.Theme Profiles (Practical 25)</u> Various themes and designing garment lines with swatch, color board based on fore cast adopting traditional costume.</p>
	<p>Assignment, Quarterly in September</p>	<p>Assignment, Quarterly in September</p>	<p>Assignment, Quarterly in September</p>
<p>October, 2023 18</p>	<p><u>5.Drafting of Yokes (Theory 15)</u> Definition, types of yokes, selection of yoke design for different dresses creating variety. <u>6.Drafting of Collars (Theory 15)</u> Introduction to different collar types, terms used in collars, creating variety in collar design. <u>5.Designing of Garments of different Age groups (Practical 20)</u> Designing garment styles, suitable for children, adolescents, men, women,</p>	<p><u>3.Tradition on dyed, painted and printed textiles of India (Theory 35)</u> Bandhani, kalamkari, Madhubani, Batik and Resist dyed textiles, Printed textiles of Rajasthan, Process Designs and colors used of different types. <u>5.Embroidered Textiles (Practical 25)</u> Creating traditional designs for different end use - samples of any type of traditional embroideries for record.</p>	<p><u>6.Different costumes of India (Theory 20)</u> Andhra Pradesh, Tamil nadu, Karnataka, Maharastra, Punjab, Rajasthan, Kashmir, Gujarat, Kerala, Assam, Manipur, Meghalaya. <u>5.Designing through Flat Pattern Technique (Practical 20)</u> Principles, terminology, Materials, techniques drafting on the brown sheet Dart manipulation Style line.</p>
	<p>rendering with colors. Collection of dress design and adaptation to new design.</p>		
	<p>Assignment, Unit Test-3</p>	<p>Assignment, Unit Test-3</p>	<p>Assignment, Unit Test-3</p>

November, 2023 25	<p><u>7. Pattern grading (Theory 15)</u> Introduction to grading principles, methods of grading, grading machine, grading procedure for basic slopers.</p> <p><u>8. Importance of Bulk production in garment industry (Theory 15)</u> Importance of laying, cutting, sewing and finishing. Equipment and costery of the garment.</p> <p><u>7. Garment Costing (Practical 15)</u> Estimating the material requirement for different garments, stitched and calculating cost of finished garments.</p>	<p><u>4. Traditional Embroidered Textiles (Theory 20)</u> Banjara, Kutch, Kasheeda, Kasuti, Kantha, chikankari, Chamba Rumal, Phulkari.</p> <p><u>6. Market Survey to Study different kinds of Textiles (Practical 5)</u></p>	<p><u>7. Fashion Merchandising and Marketing (Theory 20)</u> Basic terminology, core concept, product development, product pricing, Branded vs Unbranded items.</p> <p><u>6. Designing through Flat Pattern Technique (Practical 15)</u> Basic tools, Principles of draping experimenting with different medium paper, plastic or any recycled things.</p>
	Assignment, Unit Test-4	Assignment, Unit Test - 4	Assignment, Unit Test - 4

December, 2023 24	On the Job training Half-yearly exams	On the Job training Half-yearly exams	On the Job training Half-yearly exams
January, 2024 20	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice	<u>Theory:</u> Revision <u>Practical:</u> Revision or Practice
	Assignment PREFINAL EXAMS	Assignment PREFINAL EXAMS	Assignment PREFINAL EXAMS
February, 2024 24	PRACTICAL EXAMINATION	PRACTICAL EXAMINATION	PRACTICAL EXAMINATION
March, 2024 21	INTERMEDIATE PUBLIC EXAMINATION	INTERMEDIATE PUBLIC EXAMINATION	INTERMEDIATE PUBLIC EXAMINATION

Prepared By:

ANNUAL ACADEMIC PLAN – 2023-24 FIRST YEAR)

HOTEL OPERATIONS–411

<p align="center">MONTH No. of Working Days</p>	<p align="center">FOOD PRODUCTION VT1 & VP1</p>	<p align="center">FOOD AND BEVARAGE SERVICE VT2 & VP2</p>	<p align="center">ACCOMMODATION OPERATIONS–I VT3 & VP3</p>
<p align="center">June 2023 No. of Working days:24</p>	<p><u>Theory-20 (Periods)</u> Unit -I: Introduction to Cookery: <u>History and evolution of cookery:</u> Introduction to culinary preparation the arts & science origin, and evolution, modern developments. Aims and objectives of cooking, Limitations of cooking.</p> <ul style="list-style-type: none"> • <u>Raw materials:</u> Introduction, classification of raw materials. • <u>Preparation of Ingredients:</u> Introduction, sub-division and fractionalization combining and mixing in the preparation of food, texture • Principals of cooking & menu planning <p><u>Methods of cooking:</u> Introduction, methods of heat transfer, basic methods of cooking, effects of heat</p>	<p><u>Theory-20 (Periods)</u> Introduction to Hospitality Industry: Introduction hospitality definition</p> <ul style="list-style-type: none"> • Growth and development of catering industry • Origin of food and beverage industry. Career opportunities. • Classification of catering industry <ul style="list-style-type: none"> • primary catering and secondary catering format. • On premise catering & off premise • Types of catering establishments • Types of service operation. F & B service organisation:- • Organisation structure of F & B Department • Job Description of F & B service staff • Outlets of food and beverage service • F & B service coordination with other departments. • Attributes of F & B service staff. 	<p><u>Theory-20 (Periods)</u></p> <ul style="list-style-type: none"> • INTRODUCTION TO HOSPITALITY INDUSTRY <ul style="list-style-type: none"> • Hospitality Definition <ul style="list-style-type: none"> Evolution and growth of hospitality industry • Indian • International • Classification of hotels <ul style="list-style-type: none"> • Size • Star System • Ownership • Other Category <ul style="list-style-type: none"> Target Market Cliental & Location • Types of Hotels <ul style="list-style-type: none"> Types of rooms • ROOMS DIVISION–INTRODUCTION <ul style="list-style-type: none"> • Rooms Division–Meaning • Front Office & House Keeping- Definition • Organization chart of an all service hotel • Types of Departments • Organization chart of front office department. • Job description of front office department • Layout of front office

	<p>on food</p> <p>B) <u>Principals of food storage:</u></p> <p>Introduction, Layout of store room, storage zones, weights and measures.</p> <p>Practical-20 (Periods)</p> <p>1. Identification of various kitchen equipment, the utility precautions in handling maintenance</p> <p>2. Identification of various kitchen equipment, there utility, precautions in handling maintenance</p> <p>3. Introduction to raw materials - Identification & uses of perishable and non-perishable materials</p> <p>Assignment to be conducted on every week end</p>	<ul style="list-style-type: none"> • Various positions of restaurant brigade in French, American, and British. • Attributes of Sommelier, Do, s and don'ts of waiter <p>Practical-20 (Periods)</p> <ul style="list-style-type: none"> • Introduction to various terms used in F&B Service • Display of commonly used cutlery, crockery, flatware, hollowware, glassware, furniture <p>Display of special equipment</p> <p>Assignment to be conducted on every week end</p>	<ul style="list-style-type: none"> • department • Organization chart of housekeeping department • Job description of housekeeping department • Layout of housekeeping department. • Attributes & qualities of Housekeeping & Front office staff • Housekeeping coordinates with other departments. 1) Front office coordinates with other departments <p>Practical-20 (Periods)</p> <ul style="list-style-type: none"> • Grooming for hotel front office & housekeeping staff • Understanding various forms used at Front office and filling with Relevant data <p>Assignment to be conducted on every week end</p>
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<p>July 2023 No. of Working days: 24</p>	<p>Theory-18 (Periods) A) <u>Principals of menu:</u></p>	<p>Theory-18 (Periods) Restaurant Operations:</p>	<p>Theory-18 (Periods)</p> <ul style="list-style-type: none"> • FRONT OFFICE OPERATIONS • Guest cycle • Formats and equipment used in front office • Categorization of guests <ul style="list-style-type: none"> • sFIT
	<p>Introduction, planning a menu point</p> <p>to be considered while planning.</p>	<ul style="list-style-type: none"> • Introduction Restaurant equipment; Types, standards, sizes, Care & maintenance and cleaning 	
	<p>B) Kitchen operations:</p>	<ul style="list-style-type: none"> • Still room equipment 	

Kitchen Organization: -	C). Mise-en- scene & Mise - en -place	<ul style="list-style-type: none"> • Groups • Crews etc...
Introduction, classical kitchen	D) Rules to be observed while laying a table Waitingatable E) Guest	<ul style="list-style-type: none"> • Basis of charging room tariff
brigade & their duties &	Cycle for foodservice	<ul style="list-style-type: none"> • Check in check out basis
responsibilities	• Napkin Folding, Types of folding – Drawings(picture)	<ul style="list-style-type: none"> • 24hrbasis • Packages
C) Grooming & personal hygiene.	• Types of Styles of Food & Beverage Service	<ul style="list-style-type: none"> • Different types of tariff
A) <u>Sections of Kitchen & their</u>	• Silverservice	<ul style="list-style-type: none"> • Rack rate/printed tariff
<u>coordination with their</u>	• Americanservice	<ul style="list-style-type: none"> • Discounted rates
<u>departments: Introduction, Various</u>	• Englishservice	<ul style="list-style-type: none"> • CVGR
section of kitchen, kitchen	• Frenchservice	<ul style="list-style-type: none"> • Governmentrate.
stewarding liaison with other	• Russianservice	<ul style="list-style-type: none"> • Group rate.
departments.	• Gueridonservice	<ul style="list-style-type: none"> • Hospitality membership
B) <u>kitchen equipment:</u>	• Selfservice	c. Food plans
Introduction,	• carvery	<ul style="list-style-type: none"> • EuropeanPlan
points to be considered while	• Buffet	<ul style="list-style-type: none"> • Bermuda Planetc...
purchasing kitchen	• Counterservice	
equipment,	• Freeflow	
classification of kitchen	• Echelon	
equipment.		
C) <u>Kitchen safety: Introduction,</u>		
safe		
work place prevention of		
cuts,		
burns injuries from		
machines and		
equipment, falls, strains		
from lifting fire safety.		

		<p>Practical-18 (Periods) Basic vegetable cutting-Fish cuts, chicken cuts Menu-1: Plain rice cabbage foogath, tomato dal, cucumber salad Menu-2: Plain Rice, Rasam, Sambar, Bhendi fry.</p> <p>Assignment to be conducted on every week end & UNIT-I</p>	<ul style="list-style-type: none"> • Single pointservice <ul style="list-style-type: none"> • take away • Fastfood • Vending • Kiosk • Foodcourt • Specializedservice <ul style="list-style-type: none"> • Tryservice • Trolly • Homedelivery • Lounge • Room service Drive in side station, items placed inuse <p>Practical-18 (Periods): - MISE – EN – Scene and Mise – EN – Place Cleaning and polishing of cutlery crockery, flatware, hollw ware, glassware, furniture</p> <ul style="list-style-type: none"> • Setting up the sidestation • Laying and relaying tablecloth • Laying different types ofcovers • Napkin folds <p>Assignment to be conducted on every week end & UNIT-I</p>	<ul style="list-style-type: none"> • Basis for pricing aroom Rule of thumb <ul style="list-style-type: none"> • Dayrate. • Hourlyrate <p>Practical-18 (Periods) :</p> <ul style="list-style-type: none"> • Understanding various forms used at Housekeeping and fillingwith Relevant data • Drafting layout of Front Office department–Front & backareas <p>Assignment to be conducted on every week end & UNIT-I</p>
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<p style="text-align: center;">August 2023 No. of Working days:25</p>	<p>Theory-17 (Periods) Understanding Major Cooking Ingredients</p> <ul style="list-style-type: none"> • <u>Vegetables And Fruits:-</u> Introduction to vegetables and fruits Classification of vegetables and fruits cuts of vegetables, composition and nutritive value of vegetables and fruits • <u>Cereals and pulses:-</u> - Introduction, structure and composition, role of cereals & pulses in cookery • <u>Egg cookery:-</u> Structure, composition selection of egg, uses egg in cookery & methods of cooking egg. <p>Practical-17 (Periods)</p>	<p>Theory-17 (Periods) Meals & Menu Planning: -</p> <ul style="list-style-type: none"> • Origin and function of menu • objectives of menu planning • Types of menus • courses of French classical menu • Types of meals <ul style="list-style-type: none"> • Breakfast (Continental, English, American, Indian) • Brunch <p>3. Lunch</p> <ul style="list-style-type: none"> • Afternoon / High tea • Dinner • Supper <p>F. Cover for breakfast, lunch & dinner Beverage: - Definition of Beverage</p> <p>a). Non-alcoholic beverages 1. Classification (Nourishing, Stimulating & Refreshing)</p> <p>2. Tea: Origin, manufacturing, types & brands</p> <p>3. Coffee: Origin, types & brands Aerated & non</p> <p>4. Aerated Beverages drinks: Brand names of juices, soft drinks, mineral water, tonic</p>	<p>Theory-17 (Periods)</p> <ul style="list-style-type: none"> • RESERVATIONS <ul style="list-style-type: none"> • Definition & Functions of Reservations format & uses • Functions of Reservations • Method of taking Reservations d) Telephone etiquettes <ul style="list-style-type: none"> • Telephone equipment used • Standard phrases • Handling calls for reservations • Handling calls for enquiries • Handling reservations • Understanding CVGR and credit lists • Modes & sources of Reservations • Confirmation of Reservations • Cancellations/amendments of Reservations • No Show – Definition procedure <p>Practical-17 (Periods)</p> <ul style="list-style-type: none"> • Drafting layout of House Keeping department • Bed making practical <p>Assignment to be conducted on every week end & Unit II</p>

	<p>MENU 3: Puli hora /Limo rice, Tomato peanut chutney</p> <p>MENU 4: Tomato, rice, cucumber raita, Aloo, Jeera, Chapati</p> <p>MENU 5: Jeera rice, Dal fry, Egg curry, Roti, Green Salad.</p> <p>Assignment to be conducted on every week end & Unit II</p>	<p>water, energy drinks</p> <p><u>Practical-17 (Periods)</u></p> <ul style="list-style-type: none"> • Welcoming • Escorting • Seating • WaterService • Placing thenapkin • Presenting themenu • Ordertaking • Soup service andclearance i) Main course service (Platter to plate and pre—plated) and clearance • Crumbing downprocedure • Service ofdessert • Settling thebill • Farewell <p>Assignment to be conducted on every week end & Unit II</p>	
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**September
2023
No. of Working
days:22**

<p>Theory-16 (Periods)</p> <ul style="list-style-type: none"> • <u>Fish Cookery:</u> - • Introduction, composition, <p>Selection of fish, Cuts of fish & Methods of cooking fish.</p> <ul style="list-style-type: none"> • <u>Poultry and Game:-</u> <p>Introduction, Composition, Classification, Selection, Cutting of chicken and cooking methods.</p> <ul style="list-style-type: none"> • <u>Meat Cookery: -</u> <p>Introduction, Structure and Composition. Factors affect the quality of meat factors that make meat tender, veal & pork & cooking of meat Products.</p>
<p>Practical-16 (Periods)</p> <p>Menu 6: Vegetable pulao, boondi raita, Bagara Baingan, Rava Kesari.</p> <p>Menu 7: Egg Preparation (Boiled egg, fried egg, Scrambled egg, Omlette, Poached egg)</p> <p>Menu 8: Preparation of Stock.</p>

<p>Theory-16 (Periods)</p> <p>Simple Control Systems</p> <p>A) Introduction: -</p> <ul style="list-style-type: none"> • Necessity of control system in a restaurant • Functions\ Objectives of a control system Salient features of control system • Method of order Taking • Triplicate – Format – KOT & BOT • Duplicate • Service with order • Preordered • F & B Control Method • Billing Methods, Sale summary sheet • Operational & Statistics. • modes of payment • Cash Handling Equipment <p>Record Keeping</p> <p>Practical-16 (Periods)</p> <p>Service Of Non—Alcoholic Beverages: -</p> <ul style="list-style-type: none"> • Try setup for tea and coffee service • Service of juice and aerated water

<p>Theory-16 (Periods)</p> <p>5. HOUSEKEEPING</p> <ul style="list-style-type: none"> • Formats & Registers Used • Occupancy Report—Format • Discrepancy Report—Format • Cleaning Equipment and its uses • Classification of equipment • Mechanical and Manual equipment • Containers, brushes, mops & brooms • Machines Equipment <p>Use & store of equipments</p> <ul style="list-style-type: none"> • Cleaning agents and their uses • Classification of cleaning agents • Types & examples, Selection of cleaning agents • Guest Supplies placed in bedroom & bathroom • Bedmaking • Various formats used in Housekeeping
<p>Practical-16 (Periods)</p> <ul style="list-style-type: none"> • Uses of various cleaning equipment—brooms, mops, vacuum Cleaners etc... • Telephone etiquettes

	<p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Assignment to be conducted on every week end & Quarterly Examinations</p>	<p>Assignment to be conducted on every week end & Quarterly Examinations</p>
<p>October 2023 No. of Working days: 18</p>	<p>Theory-17 (Periods) Basic Preparations:</p> <p>Stocks: - Definition, Types & preparation.</p> <ul style="list-style-type: none"> • Sauces: - Introduction & importance, components, classification & Preparation. <p>Practical-16 (Periods) Menu—9. Preparation of basic mother sauces</p> <ul style="list-style-type: none"> • Menu Cream of Spinach soup, parsley potato, Vegetable au gratin, Fruitsalad • Assignment to be conducted on every weekend & Unit III 	<p>Theory-17 (Periods) Simple Control Systems</p> <p>A) Introduction: -</p> <ul style="list-style-type: none"> • Necessity of control system in a restaurant • Functions\ Objectives of a control system Salient features of control system <p>Practical-17 (Periods)</p> <ul style="list-style-type: none"> • Method of order Taking: - <ul style="list-style-type: none"> • Triplicate – Format – KOT & BOT • Duplicate • Service with order • Preordered <p>Assignment to be conducted on every weekend & Unit III</p>	<p>Theory-17 (Periods)</p> <ul style="list-style-type: none"> • LOBBY & BELLDESK <ul style="list-style-type: none"> • Layout of Lobby • Organization of Bell Desk • Role of Bell Desk during check in & check out of guests. • <p>Practical-17 (Periods)</p> <ul style="list-style-type: none"> • Taking reservations—phone, Travel agents, Companies, Groups, Crew setc <p>Assignment to be conducted on every weekend & Unit III</p>

<p>November 2023 No. of Working days: 25</p>	<p>Theory-17 (Periods)</p> <ul style="list-style-type: none"> • Soups: - Introduction, classification, international soups, • Salads: - Introduction, parts of salad, classification & types dressings. • Accompaniments and garnishes. Culinary Terms of Food Production <p>Practical-17 (Periods)</p> <ul style="list-style-type: none"> • Menu Cream of tomato soup, Glazed Vegetables, potato croquettes, Roast chicken. <p>Assignment to be conducted on every week end & Unit IV</p>	<p>Theory-17 (Periods)</p> <ul style="list-style-type: none"> • F & B Control Method <ul style="list-style-type: none"> • Billing Methods, Sales summary sheet • Operational & Statistics. • modes of payment • Cash Handling • Equipment Record Keeping <p>Practical-17 (Periods)</p> <p>ROOM SERVICE</p> <p>a) Tray setup for breakfast lunch, dinner, tea etc</p> <p>b) Order taking, service and clearance.</p> <p>Assignment to be conducted on every week end & Unit IV</p>	<p>Theory-17 (Periods)</p> <ul style="list-style-type: none"> • COMPUTERIZATION OF HOTELS <ul style="list-style-type: none"> • Role of Computers in Hotels • Names of software used at Hotel • Advantages & disadvantages of computers <p>Parts of Computer Glossary Terms used at Front Office & House Keeping Department</p> <p>Practical-17 (Periods)</p> <ul style="list-style-type: none"> • Bell desk responsibilities <p>Assignment to be conducted on every weekend & Unit IV</p>
<p>December 2023 No. of Working days: 24</p>	<p>OJT- (One month only)</p> <p>Half yearly Examinations</p>	<p>OJT- (One month only)</p> <p>Half yearly Examinations</p>	<p>OJT- (One month only)</p> <p>Half yearly Examinations</p>
<p>January 2024 No of working Days 20</p>	<p>Syllabus Revision</p> <p>Pre-Final Examinations</p>	<p>Syllabus Revision</p> <p>Pre-Final Examinations</p>	<p>Syllabus Revision</p> <p>Pre-Final Examinations</p>

February 2024 No. of Working days: 24	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024	Syllabus Revision Practical Examinations IPE-2024
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March 2024 No. of Working days: 2 1	Theory Examinations IPE-2024	Theory Examinations IPE-2024	Theory Examinations IPE-2024
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ANNUAL ACADEMIC PLAN – 2023-24 (SECOND YEAR)

HOTEL OPERATIONS – 411

Month & No. of working days	FOOD PRODUCTION VT4 & VP4	FOOD & BEVERAGE SERVICE VT5 & VP5	ACCOMIDATION OPERATIONS(V3)
<p align="center">June 2023 No. of Working days:24</p>	<p>Theory-20 1. INDIAN CUISINE 1.1. Introduction to Indian foods 1.2. Spices used in Indian cookery 1.3. Masala mix used 1.4. Basic gravies 1.5. Famous cuisines of India-(concise)</p> <ul style="list-style-type: none"> • Kashmiri • Punjabi • Mughlai & Awadhi • Hyderabadi • Gujarati • Rajasthani • Marati • Bengali • Goan • Chettinad • Kerala • Andhra 	<p>Theory-20 ALCOHOLIC BEVERAGES 1.1 Introduction & definition 1.2. Production of alcoholic Fermentation process Distillation process 1.3. Definition & History of wines 1.4. Wine classification with examples 1.5. Production of wines 1.6. Food & Wine harmony 1.7. Storage of wines 1.8. Wine terminology (English & French) 1.9. Beer Introduction & Definition 1.10. Types of beer 1.11. Storage 1.12. Spirits Introduction & Definition 1.13. Production of spirits pot-still method patent-still method 1.14. Different proof spirit American proof British proof Gay lussac proof)</p>	<p>Theory-20 1. REGISTRATION 1.1 Registration Definition 1.2 Registration form 1.3 Pre-registration of guests 1.4 Relation Between Reservation & Registration 1.5 Check in procedure 1.6 Various steps followed during check in</p> <p>2. RESPONSIBILITIES DURING GUEST STAY</p> <p>3. CHECK OUT AND SETTLEMENT OF BILLS</p> <p>4. INTRODUCTION TO GUEST ACCOUNTING</p> <ul style="list-style-type: none"> • Vouchers • Folios • Ledgers

<p>August 2023 No. of Working days:25</p>	<p>Practical-17(Periods)</p> <ul style="list-style-type: none"> • Moong dal halwa • Macher jhol • Galouti kabab <p>Assignment to be conducted on every week end & Unit II</p>	<p>3.8. Banquet protocol &toasting 3.9. BUFFET: 3.9.1. Introduction & types 3.9.2. Factors to plan buffet 3.9.3.Equipments</p> <p>Practical-17(Periods)</p> <p>1.Planning &organizing formal &informal banquets 2.Outdoor caterings Various types of buffets</p> <p>Assignment to be conducted on every week end & Unit II</p>	<p>Practical-17 (Periods) Guest Accounting, Vouchers, Folios & Ledgers</p> <p>Assignment to be conducted on every week end & Unit II</p>
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<p>September 2023 No. of Working days:22</p>	<p>Theory-16(Periods) 4.INTRODUCTION TO BAKERY &CONFECTIONERY 4.1. Basic principles of bakery 4.2. Sugar 4.3. Bread 4.4.Cakes</p>	<p>Theory-16(Periods) 4.FOOD COST CONTROL 4.1. Introduction to cost control 4.2. Define cost control 4.3. Objectives& advantages of cost Control 4.4. Basiccosting 4.5. Food costing 4.6. FOOD CONTROL CYCLE 4.6.1 Stages in food control cycle</p>	<p>Theory-16(Periods) 7. DIFFERENT SURFACES AND FABRICS USED IN HOTELS AND THEIR CARE 7.1 Wood &laminates 7.2 Stone & ceramics hard floor 7.3 Leather, rubber& rexine 7.4 Metals 7.5 Glass 7.6 Construction of cloth 7.7 Uniforms 7.8 Upholstery 7.9 Softfurnishings 7.10 Laundry Washing Process</p>
	<p>Practical-16(Periods) 1.Prawn pulao 2.Mutton vindaloo 3.Paneer pasanda</p>	<p>Practical-16(Periods) 1.Matching wines with foods</p>	<p>Practical-16 (Periods) 1.Checkout Procedure at Front Office and Intimation to House Keeping</p>

	Assignment to be conducted on every week end & Quarterly Examinations	Assignment to be conducted on every week end & Quarterly Examinations	Assignment to be conducted on every week end & Quarterly Examinations
October 2023 No. of Working days: 18	Theory-17 (Periods) 5.ADVANCED BAKERY 5.1. Pastry 5.1.1. Short crust 5.1.2. Laminated 5.1.3. Choux 5.1.4. Puff 5.2. Icings & Pastry creams	Theory-17 (Periods) 5.KITCHEN STEWARDING 5.1. Importance 5.2. Duties & responsibilities 5.3. Staffing 5.4. Record keeping 5.5. Inventory	Theory-17 (Periods) 8 SAFETY & SECURITY 8.1 Theft by employee & guests 8.2 Fire, Bomb threats 8.3 Types of Keys & Key control guestroom keys, department keys 8.4 First aid
	Assignment to be conducted on every week end & Unit III	Assignment to be conducted on every week end & Unit III	Assignment to be conducted one very week end & Unit III
November 2023 No. of Working days: 25	5.ADVANCED BAKERY 5.1.3. Choux 5.1.4. Puff 5.2. Icings & Pastry creams Assignment to be conducted on every week end & Unit-IV	5.KITCHEN STEWARDING 5.3. Staffing 5.4. Record keeping 5.5. Inventory Assignment to be conducted on every week end & Unit-IV	8 SAFETY & SECURITY 8.3 Types of Keys & Key control guestroom keys, department keys 8.4 First aid Assignment to be conducted on every week end & Unit-IV
December 2023 No. of Working days: 24	OJT- (One month only) Half yearly Examinations	OJT- (One month only) Half yearly Examinations	OJT- (One month only) Half yearly Examinations
January 2024 No. of Working days: 20	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations	Syllabus Revision Pre-Final Examinations

February 2024 No. of Working days:24	IPE Model Papers Practice Practical Examinations IPE-2024	IPE Model Papers Practice Practical Examinations IPE-2024	IPE Model Papers Practice Practical Examinations IPE-2024
March 2024 No. of Working days: 21	Theory Examinations IPE-2024	Theory Examinations IPE-2024	Theory Examinations IPE-2024

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ANNUAL ACADEMIC PLAN - 2023 – 2024

I YEAR

PRE – SCHOOL TEACHER TRAINING (P.S.T.T - 412)

MONTH AND NO. OF WORKING DAYS	SUBJECT - 412/21 INTROCUCTION TO CHILD DEVELOPMENT PAPER - 1 (THEORY & PRACTICAL)	SUBJECT - 412/22 ORGANIZATION AND MANAGEMENT OF CRECHES PAPER II (THEORY & PRACTICAL)	SUBJECT – 412/23 HEALTH AND NUTRITION PAPER – III (THEORY & PRACTICAL)
<p align="center">JUNE2023 No of days-24</p>	<p>THEORY:- (24 Periods)</p> <p>1.INTROUDUCTION TO PRE – SCHOOL TEACHER TRAINING: Philosophical basis of pre- school teacher training . 1.2 Need and purpose of pre – school teacher training. Development of pre – school educationin India. Contribution of philosophers –Frobel , Maria Montessori, Rabindranath Tagor and Margarate Sisters.</p> <p>PRACTICALS:- (16 Periods)</p> <p>1.Anthropometric measurement of crèche children. 2. Preparation of growth chart.</p>	<p>THEORY:- (24 Periods)</p> <p>1. INTRODUCTION TO CRECHE STRUCTURE : 1.0 Introduction to Child Care a. quality day care , b. Types of child care programmes. Meaning of crèche Aims and objectives of crèche.</p> <p>PRACTICALS:- (16 Periods)</p> <p>4.Visit to different crèches and objectives of crèches 11. Factores to keep in mind while a selecting a crèches building. 12. Points to keep in mind while preparing a plan for a crèche.</p>	<p>TTHEORY :- (24 Periods)</p> <p>1.CHILD HEALTH AND IMMUNIZATION: 1.1 . Meaning, significance and factors influencing health 1.2. Importance of personal and environmental Cleanliness1.3.Need and importance of immunization 1.4.Immunization schedule 1.5.Care before and after vaccination</p> <p>PRACTICALS:- (16 Periods)</p> <p>11. Need and importance of immunization. 1. Immunization schedule</p>

<p>JULY2023 No of days-24</p>	<p>THEORY:- (24 Periods)</p> <p>2. CONCEPT IN CHILD DEVELOPMENT:</p> <p>Growth and Development- Introduction and principles. Maturational and learning - Meaning, Inter relationship Hereditary and environment – Meaning and importance. Developmental needs Developmental tasks of children (Birth - 3 Years)</p> <p>PRACTICALS:- (16 Periods)</p> <p>11. Recording of gross motor skills 12. Recording of fine motor skills 16. Sensory motor skills in crèche children.</p> <p>ASSIGNMENT -I UNIT TEST – I</p>	<p>THEORY:- (24 Periods)</p> <p>1.3 Types of crèches (24 Periods) I . Based on Location Rural , Urban, Tribal and mobile crèche. II. Based on Organization</p> <p>2. IMPORTANCE OF CRECHE STRUCTURE:</p> <p>Need for crèche Role of crèche</p> <p>PRACTICALS:- (16 Periods)</p> <p>1. Building plan for urban crèche. 2. Model building plan for rural crèche 13. Points to keep in mind during visit.</p> <p>ASSIGNMENT -I UNIT TEST – I</p>	<p>THEORY:- (24 Periods)</p> <p>2. WEANING:-</p> <p>Importance of weaning 2.2. Supplementary feeding stages of (6 Months to 2 Years). a. Liquid b. Semi solid. c. Solid 2.3. Principles to be followed while introducing supplementary foods.</p> <p>PRACTICALS:- (16 Periods)</p> <p>12. Principles while introducing Supplementary Foods 2. Preparation of Liquid Foods 3. Preparation of Semi Solid Foods 4. Preparation of Solid Foods</p> <p>ASSIGNMENT -I UNIT TEST – I</p>
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<p>AUGUST 2023 No of days-25</p>	<p>THEORY:- (22 Periods)</p> <p>3. AREAS OF DEVELOPMENT - DEVELOPMENT DURING INFANCY :</p> <p>Physical development - Meaning and pattern Motor development - Meaning and types Emotional development _Meaning and types Social development - Meaning and stages Cognitive development - Meaning and stages Language development - Meaning, listening, Speaking and Expressing skills</p> <p>PRACTICALS:- (16 Periods)</p> <p>13. Recording of Positive emotions in crèche children 14. Recording of Negative emotions in crèche children 03. Social skills in crèche children 15. Cognitive skills in crèche children 04. Vocabulary skills in crèche children</p> <p>ASSIGNMENT -II UNIT TEST - II</p>	<p>THEORY:- (22 Periods)</p> <p>3.PHYSICAL SET UP OF CRECHE: (20)</p> <p>Location of the crèche Building requirements of crèche Space requirement of crèche (outdoor and indoor) Selection and care of equipment</p> <p>PRACTICALS:- (16Periods)</p> <p>14. Experience during visit 15. Indoor Play and Indoor Equipment 16. Outdoor Play and Outdoor Equipment</p> <p>ASSIGNMENT -II UNIT TEST - II</p>	<p>THEORY:- (22 Periods)</p> <p>3. NUTRITIONAL NEEDS OF CHILDREN : (Birth-3years)</p> <p>Importance of nutrition 3.2 Nutritional requirements of children. 3.3. Planning of balanced diets</p> <p>PRACTICALS:- (16Periods)</p> <p>13. Recommended Dietary Allowances (RDA) for Children of 1 to 3 Years</p> <p>ASSIGNMENT -II UNIT TEST - II</p>
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<p>SEPTEMBER 2023 No of days-22</p>	<p>THEORY:- (20 Periods)</p> <p>4. DEVELOPMENT OF EXCEPTIONAL CHILDREN:</p> <p>Gifted children Meaning & definition, characteristics and related problems of children who are gifted and talented, identification. Children with delayed development - meaning, differently abled children, identification , role of teacher. mentally challenged children – meaning, causes, categories and identification Physically challenged children - Blind and deaf. Services available for differently abled children.</p> <p>PRACTICALS:- (16 Periods)</p> <p>05. Pronunciation of skills in crèche children 06. Identification of gifted children. 07. Causes of mentally challenged. 08. Identification of visually impaired 17. Visit to Exceptional Children Institute and Writing Records. A. Blind School B. Deaf and Dumb C. Mentally Challenged</p> <p>Assignment -III Quarterly Examinations</p>	<p>THEORY:- (20 Periods)</p> <p>4. CRECHE STAFF : (20)</p> <p>4.1 Staff pattern 4.2. Responsibilities of crèche supervisor 4.3 Responsibilities of crèche ayah/care taker</p> <p>PRACTICALS:- (16 Periods)</p> <p>18. Points to follow while preparing soft toys. 9. Drafting a Sketch for a soft toy. 8. Preparation of soft toy. A. Balance B. Mouse C. Sock doll D. Tabala</p> <p>Assignment -III Quarterly Examinations</p>	<p>THEORY:- (20 Periods)</p> <p>4. NUTRITIONAL DEFICIENCY DISEASES:</p> <p>4.1 Meaning of nutritional deficiency diseases. 4.2. Some of the nutritional deficiency diseases. 1. Protein energy malnutrition 2. Kwashiorkor. 3. Nutrition marasmus 4. Vitamin “A” deficiency 5. Vitamin “B” deficiency 6. Vitamin “C” deficiency 7. Vitamin “D” deficiency 8. Iron deficiency</p> <p>PRACTICALS:- (16 Periods)</p> <p>14. Diet plan for kwashiorkor child 6. Diet plan for Thiamine Deficiency 7. Diet plan for Vitamin “C” Deficiency 8. Diet plan for Vitamin “D” deficiency 9. Diet plan for Iron deficiency</p> <p>Assignment -III Quarterly Examinations</p>
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<p style="text-align: center;">OCTOBER 2023 No of days-18</p>	<p>THEORY:-(14 Periods)</p> <p>5.A.NEW BORN BABY:</p> <p>5.1 Infancy period (Birth to 2 years) Characteristics of new born baby and care. Adjust mental problems of new born baby. Sensory capabilities of new born baby Care of umbilical cord</p> <p>PRACTACALS:- (12 Periods)</p> <p>9. Assessment of APGAR Score 10. Sensory capabilities of New Born Baby</p> <p style="text-align: center;">UNIT TEST III ASSIGNMENT- IV</p>	<p>THEORY:-(14 Periods)</p> <p>5. PLANNING ACTIVITIES FOR CRECHE:</p> <p>Importance of planning daily activities A sample programme for a day care centre/ crèche. 5.3. Activities of a crèche a. Free play. b. Feeding (Points to remember while feeding the children) c. Toilet training (points to remember in toilet training) d. Bathing and washing e. Sleeping</p> <p>PRACTACALS:- (12 Periods)</p> <p>17. Steps preparing charts for crèche 7. Preparation of Wild Chart 10. Sample programme for a Crèche 19. While Planning a programme for crèche</p> <p style="text-align: center;">UNIT TEST III ASSIGNMENT IV</p>	<p>THEORY:- (14 Periods)</p> <p>5 COMMON AILMENTS IN CHILDREN:</p> <p>Introduction Meaning Common ailments in Children- Symptoms, Causes and Prevention of 1. Red sore buttocks 2. Constipation 3. Diarrhoea 4. Ear ache 5. Cold and Cough</p> <p>PRACTICALS:- (12 Periods)</p> <p>14. Report on red sore buttocks 15. Report on Diarrhoea 16. Report on Ear ache 17. Report on Cold and Cough</p> <p style="text-align: center;">UNIT TEST III ASSIGNMENT IV</p>
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NOVEMBER 2023
No of days-25

THEORY:- (24 Periods)

5.B. PREMATURE BABY : (10)

meaning and Identification
characteristics of premature baby
causes of prematurity
care of premature baby feeding methods.

THEORY PERIODS:- (14)

6.. POST-NATAL CARE :

Care of mother
Diet of the mother
Bathing and Clothing of the mother
care of Sore nipples
Challenges faced by a new mother

PRACTICALS:- (18 PERIODS)

18. Importance of breast milk
19.Characteristics of Premature baby
20. Feeding methods of premature baby

ASSIGNMENT -V
UNIT TEST - IV

THEORY:- (24 Periods)

6.MAINTENANCE OF RECORDS:

Importance of maintaining records.
Types of Records/Reports/Registers
A. Admission register
B. Attendance register
C .Health record
D. Individual case record
E. Stock register
F. Account register
G. Menu registers
H. Visitor register
I. Worker register
6.3 Advantages of record keeping.

PRACTICALS:- (18 Periods)

6. Maintenance Procedure of
Records/Register.
A. Admission register
B. Attendance register
C. Health register
D. Individual case record
E. Stock register
F. Account register
G. Menu registers
H. Visitor register
I. Worker register
3. Importance of Observation Report
4. Advantages of record keeping.
20. Experiences during participation

ASSIGNMENT -V
UNIT TEST – IV

THEORY :- (24Periods)

6. Fever
7.Vomiting
8.Colic
9. Teething, problems, in teething
10. Precautions for treating a sick
child

6.HABIT FORMATION:-

Introduction, Definition
Importance of habit Formation
6.3.Eating habit
6.4.Sleeping habit
6.5.Toilet training
6.6. Dressing habit

PRACTICALS:- (18 Periods)

18. Reports on fever
19.Reports on vomiting
20. Reports on colic
21. Preparation of Charts on good
habits

ASSIGNMENT -V
UNIT TEST - IV

DECEMBER 2023 No. of days -24	ON THE JOB TRAINING(OJT) Half Yearly Examinations	ON THE JOB TRAINING(OJT) Half Yearly Examinations	ON THE JOB TRAINING(OJT) Half Yearly Examinations
JANUARY 2024 No. of days -20	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT - VI	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT - VI	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT – VI
FEBRUARY 2024 No. of days - 24	Syllabus Revision IPE Practical Examinations -2024 PRE-FINAL EXAMINATIONS - 2	Syllabus Revision IPE Practical Examinations -2024 PRE-FINAL EXAMINATIONS - 2	Syllabus Revision IPE Practical Examinations -2024 PRE-FINAL EXAMINATIONS – 2
MARCH 2024 No. of days - 21	ANNUAL THEORY EXAMINATIONS - 2024	ANNUAL THEORY EXAMINATIONS - 2024	ANNUAL THEORY EXAMINATIONS - 2024

Presented by:

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ANNUAL ACADEMIC PLAN – 2023-2024 II YEAR

PRE-SCHOOL TEACHER TRAINING (P.S.T.T-412)

<p>Month & No. of workingdays / No. Of Periods</p>	<p>EARLY CHILDHOOD CARE & EDUCATION(THEORY AND PRACTICAL) PAPER 2 (VT4 AND VP4)</p>	<p>ORGANIZATION AND MANAGEMENT OF PRESCHOOL (THEORY AND PRACTICAL) PAPER 2 (VT5 AND VP5)</p>	<p>PARENT EDUCATION NUTRITION AND HEALTH (THEORY AND PRACTICAL) PAPER2 (VT6 AND VP6)</p>
<p>June 2023 NO.OF WORKING DAYS-24</p>	<p>THEORY-NO.OF PERIODS 20 UNIT 1 ECCE(Early childhood care and Education)- 1.1 Meaning and concept – main features, the strategy of Implementation. 1.2 Pre school period – significance of pre school years characteristics of pre school children – 1.3 developmental needs and developmental tasks 1.4 Interest in self- identity, surroundings, and culture</p> <p>PRACTICALS NO.OF PERIODS 20 Plan and write activities for physical and motor development</p> <ol style="list-style-type: none"> 1. Plan different activities for physical development 2. Plan activities to promote sensory motor development 3. Plan different activities for gross and fine motor development <p>14. write about some activities for motor development in children 19. write outdoor play equipment which promotes gross motor skills in children 20. write indoor play equipment which promote fine motor skills in children Assignment 1</p>	<p>THEORY – NO. OF PERIODS-20 UNIT 1 Pre-school planning programs 1.1 Principles involved in planning preschool programmes – types short-term and long term planning 1.2 Importance of stories, 1.3 Importance of creative activities 1.4 Importance of science experiences 1.5 Importance of field trips 1.6 Puppet show, dramatization</p> <p>PRACTICALS NO. OF PERIODS 15 1. Visit and study different types of pre school programmes – kinder garten, Montessori, pre-Basic etc. to observe the methods equipment and materials</p> <ol style="list-style-type: none"> 1. What is a pre school programme ? what are the points to be followed by you during your visit to pre school 2. What are the points to be kept in mind while visiting preschool. 3. What were the activities observed in a pre school programme 11. what were the experiences to you during your visit to pre school <p>Assignment 1</p>	<p>THEORY – NO.OF PERIODS 20 UNIT 1 Parent Education 1.1 Meaning and importance of parent Education 1.2 Methods of Parent Education 1.3 Parent-teacher meetings</p> <p>PRACTICALS NO.OF PERIODS 30</p> <ol style="list-style-type: none"> 1a. visit to children home and have informal talk with the parents. b. planning and organizing parent education programme <ol style="list-style-type: none"> 1. what is meant by home visit ? what are the points to be kept in mind during home visit 13. write about the importance of informal talk what were the observations made by you during home visit ? what were the techniques to educate parent 14. write about small group techniques 4. what were your experiences regarding parent teacher meetings 5. write the feedback and Evaluation of parent teacher meeting 12. write the importance of observation report in a pre school 15. Briefly write the importance of parent education <p>Assignment 1</p>

<p>July 2023 No. of working days 24</p>	<p>Theory: no. of periods 25 Unit – ii Development during early childhood period (4to 6 years) 2.1Physical development- pattern and factors influencingphysical development 2.2Motor development – pattern and factors influencingmotor development. 2.3Emotional development- pattern and factors influencing emotional development 2.4social development -pattern and factorsinfluencing social development 2.5Cognitive development -pattern and factors influencing cognitive development 2.6speech development -pattern and factors influencing speech development</p> <p>PRACTICALS NO OF PERIODS:20 2. Plan and write activities for emotional and social development 4. Plan activities for emotional development. 5. Plan activities such as role play anddrama to development emotional development in children 15. Write about the positive emotionsobserved in children. 16.. Write about the negative emotionsobserved in children. 6. Plan activities such as role play and drama to develop social development in children 7. Plan activities for socio – emotionaldevelopment in children 17. Suggest activities to enhance socialdevelopment in children</p> <p>ASSIGNMENT-II UNIT TEST – I</p>	<p>Theory: no. of periods15 Unit – ii 2. Infrastructural facilities forpreprimary schools: 2.1 Physical set up -selectionof site- 2.2 Building requirement. 2.3Selection and care of equipment.</p> <p>PRACTICALS NO OF PERIODS:20 2. Prepare a proforma and report different preschool programmes 12. Write the importance of observation report on a preschool</p> <p>ASSIGNMENT-II UNIT TEST – I</p>	<p>Theory no. of periods 20 Unit -ii 2.Nutrition for preschool children 2.1Need and importance nutritional 2.2 Requirements of pre school children</p> <p>PRACTICALS NO OF PERIODS :20 3. Visiting rural areas and giving demonstration on low cost nutritional recipes 6.What are the steps involved in demonstration 7.Write the importance of preparinglow cost nutritional recipes 16. Write about some low costnutritious recipes</p> <p>ASSIGNMENT-II UNIT TEST – I</p>
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<p style="text-align: center;">August, 2023</p> <p style="text-align: center;">No of working days: 25</p>	<p>Theory No of periods : 20 Unit -3 3. Concept development :- 3.1 Importance and learning of various concepts a. size (b).Shape, c.colour, d..weight e,time f,number g.season h,human body i.social concepts</p> <p>PRACTICALS: NO OF PERIODS: 20 3) plan activities and prepare materials for cognitive and speech development 8. plan activities to promote cognitive development in children 9. plan activities to develop seriation in children. 18) suggest activities to enhance memory and observation in children 10) plan activities for speech development in children</p>	<p>Theory No of periods : 15 Unit -3 Methods of pre school education. 3:1 importance of method of Teaching 3:2 methods of preschool education 3:2:1 kindergarten 3:2:2 Montessori 3:2:3 playway 3:2:4 story telling</p> <p>PRACTICALS: NO OF PERIODS:20 Planning and preparation of lesson plans plan and prepare a daily lesson plan plan and prepare lesson plan 13) what were the Themes / topics that can be selected for preschool program 14)write the feedback & evaluation of the preschool program 15(write the objectives of lesson plan 16)what were the points to be kept in mind while planning a program</p>	<p>Theory No of periods:20 Unit-3 3. Dental health 3.1 Importance of dental care in children- 3.2care of teeth – 3.3 prevention of dental carries</p> <p>PRACTICALS:NO OF PERIODS : 20 Preparation of charts on dental health 8) draw and label an infected tooth 9) prepare a dental chart 17) write about the care of teeth 18) write the importance of dental care in children</p>
	<p>ASSIGNMENT -III UNIT TEST - II</p>	<p>ASSIGNMENT -III UNIT TEST - II</p>	<p>ASSIGNMENT -III UNIT TEST - II</p>

<p style="text-align: center;">September, 2023</p> <p style="text-align: center;">No of working days 22</p>	<p>Theory No of period =20 Unit -4 4.1 creative talents – various types 4.2 definition, categories and stages of play.Factors influencing play</p> <p>PRACTICAL: NO OF PERIOD: 15 4. Plan and write games organized play and activities. 11. Plan activities for organized play 12. Plan outdoor and indoor games for children</p> <p>Assignment -III Quarterly Examinations</p>	<p>Theory No of period = 20 Unit – iv 4 Management of. Preschool 4.1 staff pattern and qualifications. 4.2 Importance of records and reports. 4.3 Budget – income and expenditure</p> <p>PRACTICAL: NO. OF PERIOD: 10 4.1 Market survey of equipment and material available for 4.2 Preparation of equipment with indigenous / inexpensive material</p> <p>18) What is the equipment available for motor development</p> <p>Assignment -III Quarterly Examinations</p>	<p>Theory No of period = 20 Unit – iv 4 Health of preschool child role of preschool in promoting child’s health 4.1 common Communicable diseases symptoms, causes and prevention of a) pneumonia b) malaria- c) typhoid d) diphtheria- e) measles f) mumps- g) chicken pox – h) whooping cough- i) tuberculosis- j) conjunctivitis k) scabies</p> <p>PRACTICAL: NO. OF PERIOD-10 Prepare a report for a child suffering from communicable diseases</p> <p>10) Write the causes and symptoms and prevention of one of the communicable diseases</p> <p>Assignment -III Quarterly Examinations</p>
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<p style="text-align: center;">October, 2023 No of working days 18</p>	<p>Theory: No of periods 10 Unit 5 5. Preschool education 5.1 Importance and need for preschool education 5.2. Aims and objectives of preschool education</p> <p>PRACTICALS:NO OF PERIODS 20</p> <p>Plan and prepare teaching aids for developing concepts</p> <ul style="list-style-type: none"> a) Colour b) Size c) Shape d) Number <p>13) plan and prepare teaching aid for developing concepts in children</p> <p>UNIT TEST III ASSIGNMENT- IV</p>	<p>Theory: No of periods 20 Unit 5 5. Preschool teacher</p> <p>5.1 Characteristics of preschool teacher</p> <p>5.2 Responsibilities of preschool teacher</p> <p>5.3 Need for parent teacher co operation</p> <p>PRACTICALS:NO OF PERIODS 10</p> <ul style="list-style-type: none"> a) Conversation b) Story AIDS <p>6) Plan and prepare a conversation chart</p> <p>7) Narrat a story using flash cards</p> <p>17) What are the objectives of teaching AIDS</p> <p>UNIT TEST III ASSIGNMENT- IV</p>	<p>Theory: No of periods 20 Unit 5 5. Behaviour problems common behaviour problem symptoms, causes and prevention of</p> <ul style="list-style-type: none"> a) aggression – b) jealousy – c) thumb sucking – d) nail biting – e) Pica – f) hair pulling- g) negativism – h) tempertantrums i) stealing – j) masturbation – k) bed Wetting <p>5.2–role of parents in dealing with behaviour problems</p> <p>PRACTICALS:NO OF PERIODS 10</p> <p>Prepare a report for a child suffering from communicable diseases</p> <p>10) Write the causes and symptoms and prevention of one of the communicable disease</p> <p>UNIT TEST III ASSIGNMENT- IV</p>
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<p style="text-align: center;">November, 2023 No of working Day 25</p>	<p>Theory: No of period- 10 Unit – vi 6. Disciplining children 6.1 Importance of discipline 6.2 methods of disciplining the child</p> <p>PRACTICAL : NO OF PERIOD 20 Plan and prepare teaching aids for developing concepts e) weight f) Time g) Social Concept</p> <p>ASSIGNMENT -V UNIT TEST - IV</p>	<p>Theory: No of period- 20 Unit – vi 6. Organization working for preschool education a .NIPCCD – Objectives and activities b. NCERT – Objectives and activities c. ICDS - Objectives and activities d .UNICEF – Objectives and activities e. CARE – Objectives and activities</p> <p>PRACTICAL : NO OF PERIOD 5 c) Rhymes d) Puppets</p> <p>ASSIGNMENT -V UNIT TEST - IV</p>	<p>Theory: No of period- 10 Unit – vi 6. First aid and safety measures 6.1 Importance of first aid 6.2 contents offirst aid box 6.3 providing child safe preschool environment</p> <p>PRACTICAL : NO OF PERIOD: 25 Prepare and individual case report for a preschool child with Behavioural problems</p> <p>ASSIGNMENT -V UNIT TEST - IV</p>
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December, 2023 No of working days 24	On the job training(OJT) Half yearly Examinations	On the job training(OJT) Half yearly Examinations	On the job training(OJT) Half yearly Examinations
JANUARY, 2024 No. of days -20	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT - VI	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT - VI	Syllabus & practical Revision PRE-FINAL EXAMINATIONS - 1 ASSIGNMENT – VI
FEBRUARY2024 No. of days - 24	Syllabus Revision IPE Practical Examinations – 2024 PRE-FINAL EXAMINATIONS - 2	Syllabus Revision IPE Practical Examinations -2024 PRE-FINAL EXAMINATIONS - 2	Syllabus Revision IPE Practical Examinations -2024 PRE-FINAL EXAMINATIONS – 2
MARCH 2024 No. of days - 21	ANNUAL THEORY EXAMINATIONS - 2024	ANNUAL THEORY EXAMINATIONS - 2024	ANNUAL THEORY EXAMINATIONS - 2024

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COMPUTER GRAPHICS AND ANIMATION FIRST YEAR
ANNUAL ACADEMIC PLAN WINDOWS AND MS-Office

Month & no. of workingDays	Topics to be covered test/exams/assignment to be conducted	Periods allotted for each topic
	Syllabus dictation & Q.P Model explanation	1 st period
	Unit 1 Introduction to computer systems and hardware	10 (periods)
JUNE 2023 (24)	1.1 What is computer	01
	1.2 Characteristics of computers	01
	1.3 Generations of computer	01
	1.4 Classification of computers	01
	1.5 Block diagram of computer	01
	1.6 Number of systems	01
	1.7 Input and output devices	01
	1.8 Memory	01
	1.9 What is software & types What is language & types	01
	1.10 Virus	01
	UNIT-2 Introduction to Operating System	10 (Periods)
JULY 2023 (24)	2.1 What is OS	01
	2.2 Basic functions of OS	02
	2.3 Types of operating systems	02
	2.4 Functions of OS	01
	2.5 Features of Windows	01
	Introduction	

	FeaturesofDOS	01
	ComponentsofWindows	02
	Multitasking	
	Filesystem	
	Working withfiles&folders	
	Findingfiles	
	Copying and	
	movingfilesandfolders	
	Creating&deletingfiles&folders	
	Opening & existing files&folders	
	DesktopComponents	
	Controlpanel	
	TheTaskBar	
		01
	ASSIGNMENT-1 (UNIT-1)	01
	PRACTICALS: USESOFINPUT	02
	ANDOUTUTDEVICES	
	PRACTICALS:WORKIMG WITH	
	WINDOWS	25(practicals)
		Unit test - I
AUGUST 2023 (25)	UNIT-3 MS-WORD	40(PERIODS)
	3.1 MS-WORDRibbontool	04
	3.2FindingaDocument	03
	3.3Move& copytext	03
	3.4 FormattingText and	03
	Paragraph	
	3.5Findandreplacetext and	04
	Spellchecking	
	3.6Usingtabs	03
	ASSIGNMENT-2 (UNIT-2)	01
	UNITTEST-2	02

	PRACTICALS:WORKING WITH	
	WINDOWS MS-WORD	10 (practicals) 10 (practicals) Unit test II
SEPT 2023 (22)	3.7 tables	04
	3.8 Using graphics, templates and wizards	05
	3.9 Symbols & Special characters	03
	3.10 Using Mail Merge	05
	UNIT-4 MS-EXCEL	30(PERIODS)
	4.1 Introduction to spreadsheet	02
	4.2 Worksheet functions	10
	4.3 Excel lists, list terminology	02
	4.4 Filtering a list	02
	4.5 Pivot tables	02
	ASSIGNMENT-3 (UNIT-3) PRACTICALS:MS-WORD	01 20(practicals)
QUARTERLY EXAMINATIONS FOLLOWED BY FIRST TERM HOLIDAYS (DUSSEHRA)		
OCT 2023 (18)	4.6 Charts	08
	4.7 Formatting	01
	cells	01
	4.8 Other Excel	01
	featuring	01
	4.9 Proofing tools	
	4.10 Working with macros	
	UNIT-5	20(PERIODS)
	MS-POWER	

	POINT	
	5.1Introduction To power point	01 03
	5.2Powerpoint new interface	06
	5.3creating presentation usingblank slide, template and fromnew existing	01
	5.4 Saving presentation	
	ASSIGNMENT-	01
	4(UNIT-4)	
	PRACTICALS:	10
	MS-WORD	15
	MS-EXCEL	
		UNIT TEST III
NOV 2023 (25)	5.5Working with slides	01 01
	5.6 Working With content	01 01
	5.7Graphics	02
	5.8Slide	01
	Transition and animation	01
	5.9Slideshow options	
	5.10printing	
	UNIT-6	20(PERIODS)
	MS-ACCESS	
	6.0Introduction to msaccess	02 02
	6.1 Concept of	

	Data and information	03
	6.2 introduction To data management	03 03 02
	system creating a database constraints types of relationships	
	UNIT TEST-III ASSIGNMENT-5(UNIT-5) PRACTICALS:MS-EXCEL MS-POWER POINT	02 01 15 (practicals) 10 (practicals)
DEC 2023(24)	UNIT TEST-IV OJT PRACTICALS: MS-POWERPOINT	01 15 HALF YEARLY EXAMINATIONS
JAN 2024(20)	6.6 use of query, type of query and creating a query	02 03
	6.7 forms and reports	
	ASSIGNMENT-6 (UNIT-6) PRACTICALS:MS-ACCESS	01 20 (practicals)

	SECOND TERM HOLIDAYS	
	PREFINAL-I	05
FEB 2024(24)	REVISION OF SYLLABUS	
	PREFINAL-II	
MAR 2024 (21)	INTERMEDIATE	
	PUBLIC	
	EXAMINATIONS- MARCH-2024	
	LAST WORKING DAY 28.03.2024	

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COMPUTER GRAPHICS AND ANIMATION
FIRST YEAR ANNUAL ACADEMIC PLAN PROGRAMMING IN C

Month & no. of working Days	Topics to be covered test/exams/assignments to be conducted	Periods allotted for each topic
JUNE 2023 (24)	Syllabus dictation & Q.P Model explanation	
	Unit-1 Introduction to problem solving	10 theory (periods)
	Introduction	01
	Procedure (steps involved in problem solving)	01
	Algorithm	03
	Flowchart	03
JULY 2023 (24)	Symbols used in flowcharts	01
	Pseudocode	01
	Unit-2 Features of 'c'	45 Theory (periods)
	2.0 introduction	03
	2.1 character set	02
	2.2 structure of a 'c' program	02
	2.3 Data type in 'c'	03
	2.4 Operators	02
2.5 Expressions	02	
AUGUST 2023 (25)	ASSIGNMENT-1 (UNIT-1)	01
	UNIT TEST-1	02
	PRACTICALS: I/O STATEMENTS	20
	2.6 I/O statement	05
AUGUST 2023 (25)	Conditional statements	10
	Structure for looping statement	10

	ASSIGNMENT-2(UNIT-2) UNITTEST-2 PRACTICALS:PROGRAMSINCONTOL STATEMENTS	01 02 20
SEPT 2023 (22)	2.9Nestedloopingstatements	02
	2.10Multibranchingstatement (switch),break andcontinue	02
	2.11Differentbetweenbreakand Continue	01
	2.12Unconditionalbranching(goto statement)	01
	Unit-3 Functions	45THEORY(PERIODS)
	3.0introduction	01
	3.1function	02
	3.2difference betweenfunction and Procedure	03
	3.3advantagesoffunctions	02
	3.4userdefined,libraryfunction, mainfunction,passingarguments	15
	PRACTICALS:PROGRAMSIN	01 10

COMPUTER GRAPHICS AND ANIMATION FIRST YEAR
ANNUAL ACADEMIC PLAN PROGRAMMING INC

	CONTROL STATEMENTS PROGRAMS AND FUNCTIONS	10
QUARTERLY EXAMINATIONS FOLLOWED BY FIRST TERM HOLIDAYS (DUSSEHRA)		
OCT 2023 (18)	recursion builtin functions	07 15
		UNIT TEST III
NOV 2023 (25)	UNIT-4 ARRAYS IN "C"	20 THEORY PERIODS 20 PRACTICALS PERIODS
	introduction	01
	definition of array	01
	types of array	08
	declare, initialize array of char type string handling function	02
	file operations	03 03
	UNIT-5 STRUCTURES IN "C"	15 (PERIODS) 20 PRACTICALS
definition and declaration	01	
operations on structure	02	
array with structure	02	
structure as data type	05	
ASSIGNMENT-3 (UNIT-4) UNIT TEST-3 PRACTICALS: PROGRAMS AND FUNCTIONS	01 02 20 UNIT TEST 4	

DEC 2023(24)	ASSIGNMENT-5(UNIT-5) UNITTEST-4 PRACTICALS: PROGRAMS IN ARRAYSSTRUCTURES	01 02 15 HALF YEARLY EXAMINATIONS
JAN 2024 (20)	5.4 pointers5.5unions 5.6File operations	03 02 05
	ASSIGNMENT-6(UNIT- 5)PRACTICALS:FILEOPERATIONS	01 20
	SECONDDTERMHOLIDAYS	
	PREFINALEXAMINATIONS	
FEB 2024 (24)	REVISIONOFSYLLABUS	
	PREFINAL-I	
MAR 2024 (21)	INTERMEDIATE PUBLICEXAMINATIONS- MARCH-2024	
	LASTWORKINGDAY28.03.2024	

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COMPUTER GRAPHICS AND ANIMATION ANNUAL ACADEMIC PLAN-2023-24
FUNDAMENTALS OF COMPUTER GRAPHICS & ANIMATION FIRST YEAR

Month & No. of Working Days	Topic to be covered Test/Exams/Assignment to be conducted	Periods allotted for each topic
JUNE 2023 (24)	UNIT: I INTRODUCTION TO MULTIMEDIA (10)	
	Definition	1
	Multimedia elements	2
	Text	
	Graphics	
	Audio	
	Video	
	Animation	
	Interactivity	4
	Where to use	
Business		
Schools		
Home		
	Public Places	
	Virtual reality	
	Delivering multimedia	3
	CDROM, DVD, Flash Drives	
	Internet	
JULY 2023 (24)	UNIT-II ALL ABOUT TEXT (10)	
	About Fonts & Faces	2
	Using Text in Multimedia	
	Computers and text	
	The power of text with examples (Ads)	2
		3
		3

	ASSIGNMENT-I & II (Unit-I&II) PRACTICAL: WorkingwithFontdesign&tools 10 CreatinganMultimediacontent 10 EngineeringDrawingIntroduction 6 UNIT TEST-I	
AUGUST 2023 (25)	Unit-III ALLABOUTIMAGES(10)	
	Makingstillimages(4) Bitmaps 1 Vectordrawing 1 Vectorvs.bitmap 1 2d-3ddrawing 1 Color(3) Understandingnaturallightandcolor 1 Computerizedcolor 1 Colorpalettes 1 Imagefileformats 1 3	
	UNIT-IV ALLABOUTSOUNDS(10)	

SEPTMBER2023 (22)	SoundTheory	1
	Digitalaudio	2
	Midi audio	1
	Midivs.digitalaudio	1
	Soundinmultimedia	2
	Audiofileformats	1
	Thepowerofsound(examples)	2
ASSIGNMENT-III,IV (Unit-III & IV) PRACTICAL: ExportingImagestodifferent fileformatsWorking withdigitalaudiofilesEngineering Drawing(Lettering& Dimensioning)	25 7 8 10	
UNIT-V ALLABOUTANIMATIONS(10)		
Aboutmotionalgraphics Principlesofanimation Animationbycomputer Animationtechniques Animationfileformats Displayofanimatedcontent	2 2 4 2	
UNIT TEST II UNIT-VI ALLABOUTVIDEO(15)		

	Using video	1
	Analog video	1
	Digital video	1
	Characteristics of video	4
	Digital video containers	2
	Codec	
	Video format converters	
	Video formats	
	How to get video clips	1
	Shooting and editing video	5
	Shooting platform	
	Storyboarding	
	Lighting	
	Chroma keys	
	Composition	
	Titles and text	
	Nonlinear editing (NLE)	
	ASSIGNMENT-V, VI (Unit-V & VI) PRACTICAL:	
	Working on Tween Animation	25
	Digital Video	
	Editing Geometrical Construction	
	QUARTERLY EXAMINATIONS	
OCTOBER 2023 (18)	UNIT-VII CREATING MULTIMEDIA CONTENT (20)	20
	Stages of multimedia project	02
	Creativity & Observations skills	02
	Organization of MM Assets	02
	Communication process	02
	SMR in detail	
	Hardware	02
	Windows vs. Macintosh	

memoryandstoragedevices	02
inputdevices	02
outputdevices	
connectors(ports)	
Software	02
wordprocessors	
OCRsoftware	01
Painting/drawingtools	01
2d / 3d modeling and animationsoftware	03
Imageeditingtools	
Soundeditingtools	
Animation, video and digital movietools	
Otherhelpfultools(currenttrends)	
Whatisauthoring?	
UNIT-VIII	
JOBS IN MULTIMEDIA INDUSTRY (15)	15
ProjectManager	
MultimediaDesigner	
Interfacedesigner	
Writer	
Videospecialist	
Audiospecialist	
Multimediaprogrammer	
Multimediaproducerforweb	
Animator(specialization)	
ASSIGNMENT-VII,VIII (Unit-VII & VIII) PRACTICAL:	
EngineeringDrawing	25
Projections(Points)	
UNIT TEST III	

NOVEMBER20 23 (25)	UNIT-XI PLANNINGANDCOSTING(10)	
	Idea Prototypedevlopment Alphatesting Betatesting Delivery Scheduling Estimating	1 1 1 1 1 1 4
	UNIT-X MULTIMEDIAANDINTERNET(25)	
	DesigningandProducing FromLayouttoProduction Contentandtalent Researchskills What exactly industry requires (skill-set) TheinternetandMultimedia RichMediaContentexamples DesigningforWWWusing Text Graphics Audio Video Animation Interactivity/authoring DeliveringMultimediacontent Online Offline	5 5 5 5 5

	ASSIGNMENT:P RACTICAL: Engineering DrawingProjections(Lines, Planes)UsingAuto-CAD UNIT TEST IV	30 5
DECEMBER202 3 (24)	HALF YEARLY EXAMINATIONS OnJobTraining(onemonth)	
JANUARY2024 (20)	REVISIONOFSYLLABUS PRACTICAL: UsingAuto-CAD PREFINAL-I	25
FEBUARY2024 (24)	IPEModelPapersPracticing PRACTICALEXAMS	
MARCH2 024 (21)	INTERMEDIATE PUBLIC EXAMINATIONS- MARCH2024	

PreparedBy:

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	ASSIGNMENT-I & II (UNIT-I & UNIT-II) UNIT-TEST-I PRACTICAL: Practice on various types of designs 1. Brouchers 2. Flyers 3. Business Cards 4. Architectural Design 5. Engineering Design	10
JULY 2023(24)	Practice on various types of Cameras(Analog &Digital) Identifying the parts in camera Practicing on Camcorder, Practicing Photography	15
AUGUST 2023 (25)	Unit-III COLOR THEORY	6
	How color works	1
	Colors of light & pigments	1
	Primary, Secondary, & tertiary Color mixing techniques	1
	3.5. Psychology of color	2
	UNIT-IV ELEMENTS AND PRINCIPLES OF DESIGN	6
	4.1. Elements of design	3
	4.2. Principles of design	3
	UNIT-V DRAWING FOR DESIGNERS	
	5.1. Define drawing & sketching	2
	5.2. Basic drawing & sketching practices	3
	UNIT-VI INTRODUCTION TO TYPOGRAPHY	
	6.1. What is Typography	1
	6.2. The Anatomy of Fonts	2

	ASSIGNMENT-III, IV, V, VI (UNIT-III, IV, V, VI) UNIT TEST-II PRACTICAL: Practicing on various color schemes <ol style="list-style-type: none"> 1. Monochromatic 2. Complimentary 3. Triadic 4. Tetradic Practicing basic drawing skills Practicing on font design tools	10
		5
		10
	UNIT-VII	
	INTRODUCTION TO ILLUSTRATOR	
SEPTEMBER 2023 (22)	7.1. Getting started	1
	7.2. Setting Up the Document	1
	7.3. Toolbox	1
	7.4. Toolbox Description	1
	7.5. Making selections	1
	7.6. Working with layers	1
	7.7. Creating basic shapes	1
	Inserting and formatting text	1
	Placing images	3
	7.10. Working with objects	1
	7.11. Arranging	1
	7.12. Grouping	2
	7.13. Locking	1
	7.14. Applying Transparencies	2
	7.15. Applying Styles, Effects and Appearances	3
	7.16. Working with symbols	2
	7.17. Saving	2
	ASSIGNMENT-VII (UNIT- VII) QUARTERLY EXAMS PRACTICAL: Creating logos, Creating Posters, Box Template,Package Design	25

<p>OCTOBER 2023 (18)</p>	<p>UNIT-VIII INTRODUCTION TO PHOTOSHOP</p>	<p>25</p>
	<p>8.1. getting started 8.2. interface layout 8.3. palettes 8.4. toolbox 8.5. selection tools 8.6. alteration tools 8.7. drawing and selection tools 8.8. assisting tools 8.9. color boxes and modes</p>	<p>1 1 1 6 1 1 1 1 3</p>
	<p>basic image editing cropping resizing correcting sharpening/softening saving</p>	<p>1 2 1 2 1 2</p>
	<p>ASSIGNMENT-VII I(UNIT- VIII)PRACTICAL: Design a geometric poster Creating Envelope Business card Flower pot Metallic text effects Infography, Web layouts, Manipulation of photos, Facial Retouching, Adding Effects to Photos UNIT TEST III</p>	<p>25</p>
<p>NOVEMBER2023 (25)</p>	<p>UNIT-XI INTRODUCTION TO INDESIGN</p>	

	Getting Started Toolbox Organizing the Document Column Specifications Rulers Guides Inserting/Formatting Text Type Menu Using Colors Working With Objects (Images, Graphics, andElements) Placing Images Enabling Text Wraps Layers and Arranging Grouping Locking Saving Exporting to PDF	1 2 2 1 1 1 1 1 1 1 1 6 1 1 1 1 1 1 2 1
	ASSIGNMENT-XI (UNIT-XI)UNIT TEST-IV PRACTICAL: Working on Paragraph styles Changing fonts Working on layers and arranging the objects Creating menu card, Catalogues etc	25
DECEMBER 2023 (24)	HALF YEARLY EXAMINATIONS On Job Training(one month)	
JANUARY2024 (20)	REVISION OF SYLLABUSPREFINAL-I	

FEBUARY 2024 (24)	IPE Model Papers Practicing	
	PRACTICAL EXAMS	
MARCH 2024 (21)	INTERMEDIATE PUBLIC EXAMINATIONS	

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COMPUTER GRAPHICS AND ANIMATION
 SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
 INTERNET TECHNOLOGIES- SECOND YEAR

COMPUTER GRAPHICS AND ANIMATION SECOND YEAR
 ANNUAL ACADEMIC PLAN-2023-24 3D ANIMATION

Month & No.of Working Days	Topics to be covered Test/Exams/Assignments to be conducted	Periods allotted for each topic
JUNE 2023 (24)	UNIT: I FUNDAMENTAL MODULE(5)	
	Animation principles and history	1
	Animation process	1
	Importance of drawing in animation context	1
	Types of animation Animation software tools	1 1
JULY 2023 (24)	UNIT-II INTRODUCTION TO MAYA(5)	
	2.1. Learn the basics of 3D computer graphics using Autodesk Maya. Lectures will cover the application of Maya in the film, television and game industries.	5
	Unit-III MODELLING(14)	
JULY 2023 (24)	Surface Modelling This course offers in-depth training of advanced modelling tools, as well as specific techniques for modelling architecture, vehicles, and environments.	7
	Polygon Modelling This course is a comprehensive look at the complete suite of Maya's polygonal and subdivision surface modelling tools.	7

COMPUTER GRAPHICS AND ANIMATION
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	UNIT-IV TEXTURE MAPPING / SHADING(1)	
	4.1. Introduction to texture mapping/shading	1
	ASSIGNMENT-I,II,III (Unit-I, II, III):	
	UNIT-TEST-I PRACTICAL: Maya Interface, Transformation tools, Hyper graph, Customising Maya screens(Channel box, Shelves etc), Creating objects(Polygons, NURBS),Working with curves, Introduction to views, Working with tumbling, tracking and dollying options, view port,	25
	UNIT-IV TEXTURE MAPPING / SHADING(15)	
	4.1. Learn to use texturing techniques as tools for achieving a level of complexity that would be difficult or too computationally expensive by modelling alone.	1
AUGUST 2023 (25)	UNIT-V LIGHTING AND RENDERING(10)	
	5.1. This course covers how to achieve successful lighting effects with the Maya renderer through a mix of technical and aesthetic lessons.	10

COMPUTER GRAPHICS AND ANIMATION
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 INTERNET TECHNOLOGIES- SECOND YEAR

	<p>ASSIGNMENT- IV, V(UNIT-IV&V) UNIT TEST-II PRACTICAL: Bump Mapping, Texture Mapping, Color Mapping, Transparency Map, Reflection Map, UVMapping, Hyper Shade, Working on nodes, Normal Map, Projection Mapping, Stencil Mapping, Working on different lighting techniques(Directional, Ambient, three point, Volume, Spot, Area lights) Adjusting Lighting such as intensity, propagation direction, frequency and wave length</p>	25
SEPTEMBER2023 (22)	<p>UNIT-VI Rigging(15)</p>	
	<p>Set up a character for a wide range of complex body movement, with controls that are intuitive and flexible. Learn advanced Units related to body and head deformations in Maya, including rigid/soft binding, stitching and advanced facial deformation Various Anatomys (Human, Animals)</p>	10
	<p>UNIT-VII ANIMATION(40)</p>	5
	<p>ASSIGNMENT-VI QUARTERLY EXAMINATIONS PRACTICAL: Setting up a character, Applying rigs to the joints, Working on IK & FK</p>	10
<p>ASSIGNMENT-VI QUARTERLY EXAMINATIONS PRACTICAL: Setting up a character, Applying rigs to the joints, Working on IK & FK</p>	25	
OCTOBER2023 (18)	<p>UNIT-VII ANIMATION(40)</p>	

COMPUTER GRAPHICS AND ANIMATION
SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
INTERNET TECHNOLOGIES- SECOND YEAR

	Key frames and Graph Editor	5
	Setting the Playback range	3
	Setting Key frames	2
	Setting the time attribute	5

	PRACTICAL: Animating different kinds of objects, Setting up path animation UNIT TEST III	25
NOVEMBER 2023 (25)	UNIT-VII ANIMATION(40)	
	Changing the timing of an attribute Fine tuning and Animation Deleting extra key frames and static channels	15
DECEMBER 2023 (24)	Using playback and play blast	
	UNIT-VIII DYNAMIC EFFECTS & VISUAL EFFECTS(6)	6
	ASSIGNMENT-VII,VIII(UNIT-VII & VIII)UNIT TEST-III PRACTICAL: Setting up Path Animation Animating the object along the motion path UNIT TEST IV	25
JANUARY 2024 (20)	On Job Training(one month) HALF YEARLY EXAMINATIONS REVISION OF SYLLABUS PREFINAL-I	

COMPUTER GRAPHICS AND ANIMATION
SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
INTERNET TECHNOLOGIES- SECOND YEAR

FEBUARY 2024 (24)	IPE Model Papers Practicing	
	PRACTICAL EXAMS	
MARCH 2024 (21)	INTERMEDIATE PUBLIC EXAMINATIONS	

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COMPUTER GRAPHICS AND ANIMATION
SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
INTERNET TECHNOLOGIES- SECOND YEAR

Month & no. of working Days	Topics to be covered test/exams/assignments to be conducted	Periods allotted for each topic
JUNE 23 (24)	Syllabus dictation & Q.P Model explanation	01
	Unit-1 Basics of Internet	10 theory (periods)
	What is Network Types of Networks Internet Browsing Search Engines Social Media Sites & Online Forums	01 04 01 01 01 02
	Unit-2 Basics of Web-Designing	10 Theory (periods)
	JULY 23 (24)	2.0 Where to get start for WEB-Designing
2.1 The creative process form design to execution		01 01
2.2 What software you should use		01
2.3 What is HTML and do you need to know it		01
2.4 How to layout a webpage		01
2.5 How to style text with DHTML		01
2.6 How to create buttons and other images with adobe photoshop		01
2.7 Why and how you save images as GIF or JPEG		01

COMPUTER GRAPHICS AND ANIMATION
 SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
 INTERNET TECHNOLOGIES- SECOND YEAR

	2.8 Proper ways to name your files(coding standards)	01
	ASSIGNMENT-1 (UNIT-1 & 2) UNIT TEST-1 PRACTICALS: FILE FORMATS AND BUTTON CREATION IN PHOTOSHOP	02 02 03
AUGUST 23 (25)	2.9 Maintaining good file structure with in your website	01
	UNIT-3 INTRODUCTION TO HTML	03 periods 55 (HTML practical's)
	3.1 What is html	01
	3.2 Tag syntax	02
	UNIT-4 HTML DOCUMENT	03 periods
	4.1 HTML document	01
	4.2 metadata	01
	4.3 Basic content	01
	4.4 HTML lists	01
	UNIT-5	03 periods
	HYPER LINKS	
	5.1 HYPERLINKS	01
	5.2 Hyper link options	01
	5.3 URL	01
	UNIT-6 Embedded content	03 periods
	6.1 Videos	02
	6.2 Audio	01

COMPUTER GRAPHICS AND ANIMATION
 SECOND YEAR ANNUAL ACADEMIC PLAN-2023-2024
 INTERNET TECHNOLOGIES- SECOND YEAR

	ASSIGNMENT-2 (UNIT-3,4,5 & 6) UNIT TEST-2 PRACTICALS: HTML BASICS	03 02 25
SEPT 23 (22)	UNIT-7 TABLES	10 periods
	7.1 TABLE TAG AND ATTRIBUTES	10
	UNIT-8 HTML FORMS	10 periods
	html forms	01
	HTML form controls html text input controls 8.2.2check box control 8.2.3 radio button control 8.2.4select box control file box control(uploading) hidden form controls clickable button submit and reset button	01 01 01 01 01 01 01 01 01
QUARTERLY EXAMINATIONS FOLLOWED BT FIRST TERM HOLIDAYS(DUSSEHRA)		
	UNIT-9 SECTIONS	05 periods
	9.1 <div>tag	05
	ASSIGNMENT-3 (UNIT-7,8 & 9) PRACTICALS: TABLES AND FORMS	02 30
OCTOBER 23 (18)	UNIT-10 STYLE AND SCRIPT	03 periods 60(CSS) practicals
	10.1 style sheets 10.2 script	01 02

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INTERNET TECHNOLOGIES- SECOND YEAR

	UNIT-11	10 periods
	INTRODUCTION TO CSS	
	11.1 what is css	02
	11.2 css syntax	03
	11.3 selectors	02
	11.4 create css	03
	ASSIGNMENT-4 (UNIT-7,8,9, 10 & 11)	03
	PRACTICALS: STYLE SHEETS	02
	UNIT TEST III	20
NOVEMBER 23 (25)	UNIT-12 STYLING	10 periods
	CSS Text	02
	FONTS	03
	CSS lists	05
	UNIT-13 BOX MODEL	10 periods
	box model	01
	padding and margins	04
	background	05
	ASSIGNMENT-5 (UNIT-12 & 13) UNIT TEST IV PRACTICALS: CSS lists, styling & box model	02 02 30
DECEMBER 23 (24)	HALF YEARLY EXAMINATIONS PRACTICALS: OJT	02
JANUARY 2024 (20)	Unit-14 LAYOUT	10 periods

COMPUTER GRAPHICS AND ANIMATION
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 INTERNET TECHNOLOGIES- SECOND YEAR

	What is webpage layout floating	05 05
	UNIT-15 ADVANCED CSS	10 periods
	inheritance property level selector	05 05
	ASSIGNMENT-6 (UNIT-14 & 15) PRACTICALS: web page layout	02 10
	SECOND TERM HOLIDAYS	
	PRE FINAL EXAMINATIONS	
FEBRUARY 2024 (24)	REVISION OF SYLLABUS	
	PREFINAL-II	
MARCH 2024 (21)	INTERMEDIATE PUBLIC EXAMINATIONS-MARCH-2024	
	LAST WORKING DAY 28.03.2024	

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TOURISM AND TRAVEL TECHNIQUES (TTT-506)

**ANNUAL ACADEMIC PLAN – 2023-2024
I YEAR**

<p>Month & No. of working days No. of Periods</p>	<p>Fundamentals of tourism & Travel (VT1) Fundamentals of tourism & Travel (VP1)</p>	<p>Tourism Geography & Cultural Heritage (VT2) Tourism Geography & Cultural Heritage (VP2)</p>	<p>Tourism Products (VT3) Tourism Products (VP3)</p>
<p>June 2023 No. of days-24 No. of Theory Periods-20 No. of Practical-20</p>	<p>Theory-20(Periods) 1. INTRODUCTION TO TOURISM 1.1 Definition of Tourism 1.2 History/Evaluation of Tourism 1.3 Types/Forms of Tourism 1.4 Differentiation between Tourism and Travel 1.5 Nature of Tourism</p>	<p>Theory-20(Periods) INTRODUCTION TO GEOGRAPHY 1.1 Meaning of Geography with definitions 1.2 Geographical importance of Tourism Aspects 1.3 Weather & Climate Variations</p>	<p>Theory-20(Periods) 1 INTRODUCTION TO TOURISM PRODUCTS 1.1 Introduction 1.2 Special Characteristics of Tourism Products 1.3 Classification of Tourism Products 1.4 Difference between Tangible & Intangible Tourism Products 1.5 Promotion of Tourism Products</p>

	Practical-20(Periods) 1.History & Evolution of tourism 2.Culinarytourism	Practical-20(Periods) 1.Geographical of importance of tourism	Practical-20(Period) 1.Characteristics of Tourism products
July 2023 No. of days-24 No. of Theory Periods-20 No. of Practical-20	Theory-20(Periods) 2. ROLE OF TOURISM 2.1 :Introduction to Role of Tourism 2.2: Income Generation 2.3: Employment Generation 2.4: Exchange of Cultures 2.5: Engine for society development	Theory-20(Periods) 2. Time zones & Dateline 2.1 Study of Maps 2.2 Time Zones 2.3 IATA-Geographical areas 2.4 Latitude & Longitude 2.5 International Dateline	Theory-20(Periods) 2.NATURE BASED TOURISM PRODUCTS 2.1 Flora and Fauna 2.2 Geography based Products 2.3 Rivers, Beaches, Islands and Valleys 2.5 Forest, Wildlife Sanctuaries and National Parks
	Practical-20(Periods) 3. Nature and scope of tourism 4 Differentiation between Tourism and Travel	Practical-20(Periods) 1.Scope of Geography 2.Factors Determining Indian Culture 3.Weather and climate	Practical-20(Period) 1 .Classification of Tourism Products 2. Differences between Tangible and Intangible Tourism Product 3.Promotion of Tourism Product

	Assignment	Assignment	Assignment
	Unit-1	Unit-1	Unit-1
August 2023 No. of days-25 No. of Theory Periods-20 No. of Practical-20	Theory-20(Periods) 3.TOURISM AS AN INDUSTRY 3.1 :Tourism and Entrepreneurship 3.2 :Role of Government towards Tourism 3.3:Subsectors of Travel 3.4 :Hospitality 3.5:Entertainment and Shopping	Theory-20(Periods) 3.Indian Geography 3.1 Physical Geography of India 3.2 Political features of Indian Geography 3.3 Duration of Seasons	Theory-20(Periods) 3.CULTURE BASED TOURISM PRODUCTS 3.1 Significance of Historical Monuments 3.2 Historical Monuments 3.3 Art Galleries 3.4 Religious Places and Educational Institutions
	Practical-20(Periods) 1.Introduction of Role of Tourism 2.Income Generation 3.Exchange of culture	Practical-20(Periods) 1.Study of Maps 2.Time Zones 3.Latitude and Longitude	Practical-20(Periods) 1.Geography based Products 2.Forests, wild life Sanctuaries and national Parks 3 Historical Monuments

	Assignment	Assignment	Assignment
	Unit-II	Unit-II	Unit-II
September 2023 No.ofdays-22 No. of Theory Periods-20 No.ofPractical-20	Theory-20(Periods) 4. GLOBAL TOURISM ORGANIZATIONS 4.1 :WTO 4.2 :IATA 4.3 : PATA 4.4 :ICAO 5. NATIONAL AND STATE ORGANIZATIONS OF TOURISM 5.1 :ITDC 5.2 APTDC	Theory-20(Periods) Geography of Andhra Pradesh 4.1 Physical features of AP 4.2 Political features of AP 4.3 Climatic Conditions of AP 5. TOURISM RESOURCES OF ANDHRA PRADESH 5.1 Nature based tourism resources /products Man –Made tourism resources /products	Theory-20(Periods) 4. CULTURE BASED TOURISM PRODUCTS 4.1 Dances and Music 4.2 Traditional Fairs and Festivals 4.3 Traditional Playlets 5. RECREATION BASED TOURISM PRODUCTS 5.1 Theatre 5.2 Cinema Halls
	Practical-20 (Periods) 1.Engine for Society Development 2.Tourism and Entrepreneurship 3.Sub sectors of Travel	Practical-20(Periods) 1.International Date Line 2.Physical Geography of India 3.Duration of Seasons	Practical-20 (Periods) 1.Art Galleries 2.Dance and Music 3.Traditions Playlets
	Quarterly Examinations	Quarterly Examinations	Quarterly Examinations

<p>October 2023 No. of days- 18 No. of Theory Periods- 15 No. of Practical- 20</p>	<p>Theory-15(Periods) 5. NATIONAL AND STATE ORGANIZATIONS OF TOURISM 5.3: Travel Agents Association of India (TAAI) 5.4 : Federations of Hotels and Restaurants 5.5: IRCTC 6. ACCOMMODATION FOR TOURISTS 6.1 : Forms of accommodations 6.2: Mainstream accommodations</p>	<p>Theory-15(Periods) 6. GLIMPSES OF INDIAN CULTURE AND HERITAGE 6.1 Tourism & Culture – Relationship 6.2 Values of Culture 6.3 Promotion of Tourism Culture 6.4 Cultural Exchange 6.5 Fairs and Festivals</p>	<p>Theory-15(Periods) 6. ADVENTURE BASED TOURISM PRODUCTS 6.1 Land Adventure Sports 6.2 Mountain Adventure Sports 6.3 Water Adventure Sports 6.4 Air Adventure Sports</p>
	<p>Practical-20(Periods) 1. World Tourism Organization (W.T.O) 2 Indian Tourism development Corporation (I.T.D.C) 3. Forms of Accommodation</p>	<p>1. Practical-20(Periods) 1. Physical Geography of Andhra Pradesh 2. Climate Conditions of Andhra Pradesh 3 Nature based Tourism</p>	<p>Practical-20 (Periods) 1. Theme and amusement parks 2. Resorts 3. Land Adventure Sports</p>
	<p>Unit-III</p>	<p>Unit-III</p>	<p>Unit-III</p>
<p>November 2023 No. of days- 25 No. of Theory Periods- 15 No. of Practical- 15</p>	<p>Theory-15(Periods) 6. ACCOMMODATION FOR TOURISTS 6.3 : Supplementary accommodations 6.4 : Alternative accommodations 6.5: Chain of Hotels 7. DEVELOPMENTAL BASIC SKILLS OF TOURISM STUDENTS 7.1 Attending and Receiving tourists 7.2: Know the Customers Needs 7.3: Preparing to handle customer with due care 7.4: Tour Escort Manager 7.5 . Customer Satisfaction</p>	<p>Theory-15(Periods) 7. CONSERVATION AND PRESERVATION OF CULTURAL HERITAGE OF INDIA 7.1 Role of Archaeological Survey of India (ASI) 7.2 Educate the public on conservation & preservation of cultural heritage of India 7.3 Participation of local Fairs & Festivals (village Based Festivals) 7. Role of govt. towards Conservation & Preservation of Cultural Heritage of India</p>	<p>Theory-15(Periods) HEALTH TOURISM 7.1 Yoga and Meditation 7.2 Ayurveda 7.3 Naturopathy 7.4 Super Speciality Hospitals 7.5 Health Fitness Centres (SPAs)</p>

	Practical-15 (Periods)1.Supplementary Accommodation2.ReceivingandAttending tourists3.Customersatisfaction	Practical-15 (Periods) 1.Manmade Tourism2.Promotion of tourism Culture3.Participation of local fairs and festivals	Practical-15(Periods) 1.Air Adventure Sports2.YogaandMeditation 3.HealthFitnessCentre(SPA”S)
	Unit-IV	Unit-IV	Unit-IV
December 2023 No. Of Days-24	OJT-(One month only)	OJT-(One month only)	OJT-(One month only)
	Half-Yearly Examinations	Half-Yearly Examinations	Half-Yearly Examinations
January 2024 No. of Days-20	PREFINAL-1	PREFINAL-1	PREFINAL-1
February 2024 NoOfDays-24	PREFINAL-2	PREFINAL-2	PREFINAL-2
March 2024 NoOfDays-21	IPEMarch-2024	IPEMarch-2024	IPEMarch-2024

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Month & No. of working days No. Of Periods	Tourism Profile in AP (VT4) Fundamentals of tourism & Travel (VP4)	Travel Agency, Tour Operations (VT5) Travel Agency, Tour Operations (VP5)	Application Of Computer for Tourism & Travel (VT6) Application of Computer for Tourism & Travel (VP6)
June 2023 No. of days-24 No. of Theory Periods-20 No. of Practical-20	Theory-20 (Periods) 1. EVOLUTION OF Andhra Pradesh Tourism 1.1 Ancient Andhra History 1.2 Eastern Chalukyas of vengi 1.3 Kakatiya Empire & Kondaveedu Reddy Kingdom 1.4 The Empire of Bijayanagara & Bahamani Kingdom – Golkonda Rulers	Theory-20 1. Introduction to Travel Agency 1.1 Introduction 1.2 Meaning of Travel Agency 1.3 Role and Importance of Travel Agency in Tourism Development 1.4 Types of Travel Agencies	Theory-20 1. Computers in the Travel & Tourism Industry 1.1 Introduction to Computers 1.2 History of Computers 1.3 Components of Computers 1.4 Types of Computers 1.5 Computer Terminology
	Practical-20 (Periods) 1. Early History of Andhra Pradesh 2. Medieval history of Andhra Pradesh	Practical-20 (Periods) 1. Meaning of a Travel Agency	Practical-20 (Period) 1. Meaning and definition of computer

<p>July 2023 No. of days-24 No. of Theory Periods-20 No. of Practical-20</p>	<p>Theory-20(Periods)</p> <p>2. Modern Andhra History 2.1 Coming Up Europeans- Andhra Under the East India Company 2.2 Andhra under the British Crown and Awakening of Andhra 2.3 Political Conditions leading to Andhra Rashtra Avatarana</p> <p>Practical-20(Periods) 1. Modern history of Andhra Pradesh</p>	<p>Theory-20(Periods)</p> <p>2. History of Travel and Tour Operations 2.1 Introduction 2.2 History of travel, world Scenario 2.3 Travellers who visited India 2.4 History of Tour Operations</p> <p>Practical-20(Periods) 1. Role and Importance of travel agency in Tourism Development 2. Types of Travel Agency</p>	<p>Theory-20(Periods)</p> <p>2. Computers – Hardware & Software 2.1 Introduction to Hardware 2.2 Introduction to Software 2.3 GDS- Global Distribution System 2.4 E-Tourism 2.5 Role of ICT Application in Tourism & Hospitality Industries</p> <p>Practical-20(Period) 1. Computers Terminology 2. Role of computer in services sector</p>
	<p>4. Tourist Flows to Andhra Pradesh 5. Tourist Attractions of the state 6. Types and forms of tourism in Andhra Pradesh</p>	<p>4. History of travel, World Scenario 5. Travellers who visited India 6. History of Tour Operations</p>	<p>4. Applications of computers in tourism industry 5. Components of MS-Office 6. MS-Word documents preparation</p>
	<p>Assignment</p>	<p>Assignment</p>	<p>Assignment</p>
	<p>Unit-1</p>	<p>Unit-1</p>	<p>Unit-1</p>

<p>August 2023 No. of days-25 No. of Theory Periods- 20 No. of Practical-20</p>	<p>Theory-20(Periods) 3. Tourist Destinations in Andhra Pradesh 3.1 Visakhapatnam 3.2 Vijayawada 3.3 Pancharama 3.4 Tirupathi 3.5 Rayalaseema</p>	<p>Theory-20(Periods) 3. Functions and Structure of a Travel Agency 3.1 Introduction 3.2 Functions of a Travel Agency 3.3 Structure of a Travel Agency 3.4 Department in a Travel Agency 3.5 Revenue Source of a Travel Agency 3.6 Linkage of Travel Agency with other service Providers</p>	<p>Theory-20(Periods) 3. MS-Office in Computers 3.1 Introduction 3.2 History of MS-Office 3.3 Design of MS-Office 3.4 Application of MS-Office – Word, Excel, PowerPoint Presentation 3.5 Advantages of MS-Office 3.6 Keyboard Shortcuts used in MS-Office-Word, Excel, Power point Presentation</p>
	<p>Practical-20(Periods) 1. Tourist Spots in Andhra Pradesh 2. Types of Tourist destinations in Andhra Pradesh 3. Impacts of Tourism</p>	<p>Practical-20(Periods) 1. Functions of a travel Agency 2. Revenue Sources of a travel Agency</p>	<p>Practical-20(Periods) 1. Using Word Commands 2. Preparation of MS-Excel Sheet 3. Power Point Presentation</p>
		<p>3. Function of a tour Operator</p>	
	<p style="text-align: center;">Assignment</p>	<p style="text-align: center;">Assignment</p>	<p style="text-align: center;">Assignment</p>
	<p style="text-align: center;">Unit-II</p>	<p style="text-align: center;">Unit-II</p>	<p style="text-align: center;">Unit-II</p>

<p>September 2023 No.ofdays-22 No.ofTheoryPeriods-20 No.ofPractical-20</p>	<p>Theory-20(Periods) 4. Sources of Income of the AP Tourism 4.1 IRCTC 4.2 APSRTC 4.3 Airlines 4.4 Hotels 4.5 GST</p>	<p>Theory-20(Periods) 4. Functions of Tour Operators 4.1 Introduction 4.2 Function of a Tour Operator 4.3 Types of Tour Operators 4.4 Major Tour Operators in India</p>	<p>Theory-20(Periods) 4. Digital Services in Tourism Industry 4.1 Mobile Applications 4.2 Travel Websites 4.3 Travel Blogs 4.4 Social Media 4.5 E-Visa 4.6 Payment gateway</p>
	<p>Practical-20 (Periods) 1. Andhra Pradesh Culture 2. Tourism Accommodation 3. Super Structure</p>	<p>Practical-20(Periods) 1. Major Tour Operators in India 2. Criterion to be Followed for starting travel agency 3. Need and benefits for recognition of a Travel Agency</p>	<p>Practical-20 (Periods) 1. PowerPoint Commands 2. Types of Networking 3. LAN Networks</p>
	<p>Quarterly Examinations</p>	<p>Quarterly Examinations</p>	<p>Quarterly Examinations</p>

<p>October 2023 No.ofdays-18 No. of Theory Periods-15 No. of Practical-20</p>	<p>Theory-15(Periods) 5. Tourism System in Sun-Rise AP 5.1 MICE 5.2 Eco Tourism 5.3 Beach Tourism 5.4 Culinary Tourism 5.5 Establishment of Star Hotels</p>	<p>Theory-15(Periods) 5. Recognition of travel agency and Tour Company 5.1 Introduction 5.2 Criterion to be Followed for Recognition of a Travel Agency 5.3 Need and Benefits for Recognition of a Travel Agency 5.4 Approval of travel Agency and tour company by MOT 5.5 Approval of travel Agency and tour company by IATA</p>	<p>Theory-15(Periods) 5. Utility of Networking 5.1 Introduction 5.2 Components of Network 5.3 Types of Networking 5.4 Characteristics , Advantages & Disadvantages of LAN & WAN 5.5 Network Topology</p>
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	Practical-20(Periods) 1.State Level agencies associated with tourism 2.Tourism Related festivals	Practical-20(Periods) 1.Approval of Travel Agency and tour company by MOT,DOPT and IATA 2.Types of Package Tour	Practical-20 (Periods) 1.NetworsofWAN 2.History and development of Internet
	Unit-III	Unit-III	Unit-III
November 2023 No.ofdays-25 No.ofTheoryPeriods-15 No.ofPractical-15	Theory-15 (Periods) 6.New Tourism Policy of AP (2015-20) & Tourism Planning 6.1 Tourism Planning 6.2 Tourism Policy 6.3 Role of APTDC 6.4 PPP In Tourism	Theory-15(Periods) 6.Package of Tour Operations 6.1 Introduction 6.2 Meaning of a Package Tour 6.3 Types of Package Tours 6.4 Preparations and Costing of Various Package tours 6.5 Various Package tours of APTDC	Theory-15(Periods) 6.CRS & Internet 6.1 Introduction to CRS 6.2 Functions and advantages of CRS 6.3 Introduction to the Internet 6.4 Types of Internet Connections 6.5 Advantages of Internet 6.6 Search Engines 6.7 Web Browsers 6.8 Virtual Voice Assistants
	Unit-IV	Unit-IV	Unit-IV

	Practical-15 (Periods) 1.Tourism Planning 2.Tourism Policy	Practical-15 (Periods) 1.Preparation and costing of various package tours 2.Various packages of APTDC	Practical-15(Periods) 1. Role of Internet in Tourism Industry 2. Computer reservation system and practices
December 2023 No of Days-24	OJT-(One month only)	OJT-(One month only)	OJT-(One month only)
	Half-Yearly Examinations	Half-Yearly Examinations	Half-Yearly Examinations

January 2024 No of Days-20	PREFINAL-1	PREFINAL-1	PREFINAL-1
February 2024 NoOfDays-24	PREFINAL-2	PREFINAL-2	PREFINAL-2
March 2024 NoOfDays-21	IPEMarch- 2024	IPE March-2024	IPE March-2024

Prepared by:

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HEALTH & PARA-MEDICAL COURSE
<i>MEDICAL LAB TECHNICIAN [MLT] – 616</i>
<i>OPHTHALMIC TECHNICIAN [OT] – 617</i>
<i>PHYSIOTHERAPY [PT] – 618</i>
<i>MULTIPURPOSE HEALTH WORKER [FEMALE] [MPHW] [F] – 619</i>

BEHIND EVERY GREAT DOCTOR IS AN EXHAUSTED MEDICAL LAB TECHNICIAN

ANNUAL ACADEMIC PLAN 2023-2024 MEDICAL LAB TECHNICIAN (MLT-616) I YEAR				
Month & No of working days/No of Periods	BIOCHEMISTRY THEORY & PRACTICALS	MICROBIOLOGY & PATHOLOGY THEORY & PRACTICALS	ANATOMY & PHYSIOLOGY THEORY & PRACTICALS	Assignments/ unit tests
JUNE, 2023 NO OF WORKING DAYS-24	THEORY-24 Periods 1.Introduction to Bio-Chemistry- Code and conduct of Medical lab Technician , Medical lab organization 2.Reception, Registration- Reception, Registration, models of stock registers and laboratory safety PRACTICALS-20 1.Reception and registration 6.Stock registers- Consumable and Non consumable Model lab order forms, Lab registers and stock registers.	MICROBIOLOGY THEORY-12Periods 1.History of Microbiologists 2.Microscopy Compound Microscope-principle, working mechanism Types of microscopes-Fluorescent principle PRACTICALS-10 Periods 2.Handling and care of Compound Microscope PATHOLOGY THEORY: 12 Periods 1.Urine analysis- Types of urine samples, physical, biochemical and microscopic examination of urine. PATHOLOGY PRACTICALS-10 Periods 17.Collection, preservatives and physical examination of urine 18.Strip method for urine	THEORY-24 Periods 1.Introduction to human anatomy and physiology: Various Positions and planes of human body, organ systems included in human body 2. The Cell : Types of cells, structure of cell, cytoplasmic organelles and properties of cell. PRACTICALS-20 Periods Spotters- Tissue slides Epithelial tissue, connective tissue,	Assignment I

<p>JULY, 2023 NO OF WORKING DAYS-24</p>	<p>THEORY-24 Periods 3.Glass ware- Types of glass and composition Types of glassware used in the lab and their identification, uses Cleaning, drying, storage of glassware Plastic ware used in Biochemistry Laboratory 4.Basic Lab operations Centrifugation-Principle, Types of centrifuges, Construction, working mechanism of electrical centrifuge, care and maintenance, applications. Weighing- Types of Balances, Simple balance operation, care and maintenance, Electronic balance Evaporation Distillation PRACTICALS-20 Spotters-Identification of different glassware used in the lab-Test tubes, Reagent bottles Dropper bottles, Watch glass, Measuring cylinder, Volumetric pipettes, Serological pipettes, Burettes, Plastic wash bottles 7.Construction and working of electrical centrifuge 8.Operation, care and maintenance of Simple balance.</p>	<p>MICROBIOLOGY THEORY-18 Periods 3.Sterilization –classification and methods of sterilization 4.Glassware & biomedical waste Cleaning ,drying and sterilization of glassware, Disposal of contaminated material, handling and disposal of biomedical waste PRACTICALS- 10Periods 3.Operation of an Autoclave 4.Operation of a Hot air oven 1.Cleaning, drying care and maintenance of glassware, syringes and other apparatus PATHOLOGY THEORY – 06 Periods 2.Preparation of Reagents ,procedures, principles and interpretation Preparation of various reagents-principle, composition and uses PATHOLOGY PRACTICALS-10 11.Preparation of anticoagulants and various reagents MICROBIOLOGY THEORY-14 Periods 5.Morphology and classification of</p>	<p>THEORY-24 Periods 3.Tissue:Classification of tissues and their structure 4.Respiratory system:anatomy and physiology of respiratory system 5.Digestive system: Parts of digestive system, permanent teeth formuls, salivary glands, stomach and its layers, anatomy and functions of different parts of digestive system, accessory organs of digestive system. PRACTICALS: 20 PERIODS Spotters- Muscular tissue, Nervous tissue 13.Lungs 12.Stomach Spotters-Spleen, Pancreas, Tonsils, Stomach layers, Small intestine, Large intestine.</p>	<p>UNIT TEST -I</p> <p>Assignment II</p>
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<p>AUGUST, 2023 NO OF DAYS-25</p>	<p>THEORY –24 PERIODS 5.Instrumental methods of Bio-Chemical Analysis- Colorimetry- Types, components of Photoelectric colorimeter, principle, working mechanism, applications, care and maintenance. Spectrophotometry-principle, components, types, applications 6.Water, Chemicals and related substances</p> <p>PRACTICALS: 20 PERIODS 9.Construction and working of photoelectric colorimeter Spotter-Spectrophotometer identification uses Spirit lamp, Bunsen burner, Mortar and pestle. Basic steps in cleaning of glassware</p>	<p>Bacteria: Morphology and classification of bacteria, structure of bacterial cell, bacterial spore 6.Microbiological investigation: Methods of collection of clinical specimens for microbiological investigation</p> <p>PRACTICALS- 10 7.Methods of collection of clinical specimens for microbiological investigation and its importance. PATHOLOGY THEORY-10 Periods 3.Sputum analysis: Physical examination, preparation of sputum smear, staining of sputum smear, mounting and microscopic examination of sputum smear PATHOLOGY PRACTICALS-10 19.Collection and processing (preparation and making the smear) Staining of sputum smear and microscopic examination.</p>	<p>THEORY-24 PERIODS 6.Cardiovascular system: Anatomy and physiology of heart, different types of circulation 7.Lymphatic system: components and functions of lymphatic system, anatomy, and physiology of spleen, thymus and tonsils. 8.Bones and Joints: Functions of skeletal system, composition and functions of bone and bone marrow, types of bones ,classification of bones, bones of skull, face, sinuses, bones of trunk vertebral column, appendicular skeleton, joints – types. PRACTICALS-20 Periods 14.Heart 16.Liver Human Skeleton-bones of skull, 1.Bones of cranium, 2.Bones of face</p>	<p>Assignment III</p> <p>Unit test II</p>
<p>SEPTEMBER, 2023 NO OF DAYS-22</p>	<p>THEORY-22Periods 7.Collection of specimens Phlebotomy, Types of blood specimens, types of blood collection-capillary, venous and arterial blood collection</p>	<p>MICROBIOLOGY THEORY-11 Periods 7.Processing of clinical specimen collected for Isolation and identification of organism: Preparation of Direct smear,</p>	<p>THEORY-22 Periods 9.Nervous system: Neuron and its types, anatomy and physiology of brain, classification of cranial nerves and functions, types of nervors</p>	

	<p>Novel blood collection system, preservation of blood. Urine: Types of urine samples ,method of collection of 24 hours urine sample, preservation.</p> <p>8.Solutions Solution, Types of solutions, Methods of expressing concentration of a solution- Percentage, Molarity, Normality, Molality, Formality, Mole fraction Preparation of percentage solutions Preparation of Molar solutions Preparation of Normal solutions</p> <p>PRACTICALS:18 2.a) Collection of capillary blood 2 b).Collection of venous blood. 3. Separation of Serum from blood 4.Separation of plasma from blood 5.Preparation of protein free blood filtrate.</p>	<p>different techniques of inoculation for isolation of bacteria, Hanging drop preparation.</p> <p>PRACTICALS: 18 periods 6.Hanging drop method</p> <p>PATHOLOGY THEORY-11 Periods</p> <p>4.Semen analysis: Collection and composition of semen, physical examination, microscopic examination of semen and its clinical significance</p> <p>5.Body fluids: Collection of peritoneal, pericardial, pleural and cerebrospinal fluids.</p>	<p>system.</p> <p>10.Excretory system: Different excretory organs, urinary system, structure of kidneys and functions</p> <p>PRACTICALS-18 Periods</p> <p>Bones of trunk- 3.Ribs 4.sternum 5.vertebral column</p> <p>Bones of upper limb- 6.Bones of shoulder girdle 7.Bones of arms</p> <p>Bones of hind limb- 8.Bones of pelvic girdle 9.Bones of legs</p>	<p>QUARTERLY EXAMINATIONS</p>
<p>OCTOBER, 2023 NO OF DAYS-18</p>	<p>THEORY-18 9.Carbohydrates and lipids -10 Classification, biological importance of carbohydrates, qualitative tests Lipids: Classification, biological importance, fatty acids types,</p>	<p>MICROBIOLOGY THEORY-18 Periods 8.Staining techniques: Composition and preparation of staining reagents and different methods of staining. 9. Culture media:</p>	<p>THEORY- 18 Periods 11.Endocrine system: Exocrine glands, different endocrine glands structure and functions 12.Reproductive system: Structure, hormones and</p>	<p>Assignment IV</p>

	<p>clinical significance of lipids 10.Amino Acids and proteins-08 Important functions, classification of aminoacids, qualitative tests for identification of aminoacids. Proteins- Biological importance, classification , qualitative identification tests for proteins. PRACTICALS:15 10.Preparation of Percentage solutions 11. Preparation of Normal Solutions 12.Preparation of Molar Solutions</p>	<p>Classification of Media, Composition, preparation and uses. PRACTICALS: 15 8.Simple staining 9.Gram staining 5.Preparation of nutrient agar medium</p>	<p>functions of Male reproductive system Structure, hormones and functions of Female reproductive system PRACTICALS- 15 Periods 11.Brain 15.Kidney Spotters-Testes, Ovary, Uterus.</p>	<p>Unit test III</p>
<p>NOVEMBER, 2023 NO OF DAYS-25</p>	<p>THEORY-24 11.Diagnostic Tests: Determination of uric acid, serum creatinine, blood urea, serum calcium 12.Vitamins and Minerals: water soluble vitamins-dietary sources, daily requirements and deficiency diseases 13. Blood glucose level :Diabetes mellitus-types, determination of blood glucose by GOD-POD method, Glucose tolerance test procedure , importance. PRACTICALS-20 13.Qualitative identification test for sugar by Benedict's test. 14.Qualitative identification test</p>	<p>PATHOLOGY THEORY-24 Periods 6.Hematology: Collection of blood Preparation of anticoagulants RBC Count, WBC Count Platelet Count Reticulocyte count Estimation of Hemoglobin- Different methods Estimation of Erythrocyte Indices Estimation of ESR- Different methods 7.Disposal of hospital waste: Classification of hospital waste, management programme, disposal of cotton swabs, blood, urine and body fluids. 8.Glass slides, cover slips:</p>	<p>THEORY- 24 Periods 13.Sense organs: Different sense organs anatomy and functions 14.Blood: Composition, functions, different forms of blood, RBC count, WBC count, Hb estimation, platelet count disorders related to their normal values, classification of leucocytes, clotting mechanism of blood, ABO Grouping and Rh typing and its clinical significance. 15.Stress, types and its regulation methods PRACTICALS-20 Periods 10.Skin 17.Estimation of Blood pressure</p>	<p>Assignment V</p> <p>Unit test IV</p>

	for proteins in urine by boiling test. 15. Quantitative determination of Blood Sugar by GOD-POD method	Use and cleaning of glass slides and cover slips, dry and wet mounts. PATHOLOGY PRACTICALS-20 Periods 10. Collection of blood, universal precautions 12. RBC Count 13. WBC Count 14. Platelet Count 15. ESR estimation 16. Estimation of Hemoglobin by Sahli's method.	18. T.P.R. [Temperature, pulse, respiration] chart 19. ABG gas analysis	Assignment VI
DECEMBER 2023 NO OF DAYS-24	ON THE JOB TRAINING		HALFYEARLY EXAMINATIONS	
JANUARY 2024 NO OF DAYS-20	REVISION		PRE-FINAL EXAMINATIONS	
FEBRUARY 2024 NO OF DAYS-24	PRACTICAL EXAMINATIONS			
MARCH 2024 NO OF DAYS-21	THEORY EXAMINATIONS			

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ANNUAL ACADEMIC PLAN- 2023-24

MEDICAL LAB TECHICIAN (MLT), COURSE CODE: 616

II Year

Month & No of working days	BIOCHEMISTRY THEORY & PRACTICALS (VT – 4) & (VP – 4)	MICROBIOLOGY THEORY & PRACTICALS (VT – 5) & (VP – 5)	PATHOLOGY THEORY & PRACTICALS (VT – 6) & (VP – 6)
June 2023 (24)	<p>THEORY-20 Periods</p> <p>Unit-1 Metabolism 1.a Carbohydrate Metabolism 1.1 Glycolysis 1.2 TCA Cycle 1.b Lipid Metabolism 1.b.1 Beta oxidation of fatty acids 1.c Protein Metabolism 1.c.1 Urea cycle</p> <p>Unit-2 Instrumental methods of Bio-Chemical Analysis 2.1 Flame Photometry-Principle-Theory 2.2 Construction of Flame Photometer 2.3 Clinical Applications 2.4 Study of Electrolytes 2.5 Clinical importance of determination of electrolytes.</p>	<p>THEORY-20 Periods</p> <p>Unit-1 Normal Flora of Microorganisms in the human body</p> <p>Unit-2 Introduction to Immunology 2.1 Brief outline of Immunity 2.2 What are antigens & antibodies? 2.3 Different types of antigen and antibody reactions, their applications in the diagnostics – agglutination, precipitation, complement fixation, Neutralization, Principle and Method of Elisa test & RIA.</p>	<p>THEORY-20 Periods</p> <p>Unit-1 Preparation of Blood Smear Examination. a) Making of an ideal blood smear methods + slide method, cover slip method. b) Staining – composition, procedure of making Leishman stain. c) Counting – DLC- Counting methods, Normal values, Clinical significance.</p> <p>Unit-2 Bone marrow Aspiration/trephine biopsy a) Setting up of tray for bone marrow aspiration and biopsy. b) Preparing smears – staining, clinical significance.</p>

<p>July 2023 (24)</p>	<p>THEORY-20 Periods Unit-3 Separation techniques 3.a Chromatography 3.a.1 Definition, Basic principles 3.a.2 Different types and techniques 3.a.3 General & Clinical Applications 3.b Electrophoresis 3.b.1 Definition, Principle, Types 3.b.2 General & Clinical Applications 3.b.3 Electrophoretic separation of serum proteins 3.b.4 Electrophoretic fractionation of lipo proteins</p> <p>Unit-4 Nutrition 4.1 Balanced Diet 4.2 Food Calories</p> <p>Practical's - 20</p> <p>1. Separation of serum proteins by Electrophoresis 2. Separation of amino acids by paper chromatography</p> <p>Assignment to be conducted at every weekend.</p> <p>Unit test- 1</p>	<p>THEORY-20 Periods Unit-3 Collection and processing of fecal samples, concentration techniques of stool for microscopic examination Pathology - Histolyticum Plasmodium Species Ascaris Lumbricids Taeniasolium Anclylostoma Wucheraribancrofti Unit-4 Antibiotic sensitivity Test – Preparation of antibiotic discs and resistant methods. Unit-5 Preparation of stock cultures and their importance, principle and procedure. Practical's - 20</p> <p>1. Collection of clinical samples like blood, urine stool, sputum, swabs etc. 2. Parasitology (Faecal Analysis) a) Collection, preservation and transportation of faecal material for examination of parasites. b) Concentration techniques of stool for ova & cys. c) Wet preparation of faecal sample for ova & Cysts. 3. Procedure, processing of sputum for AFB. 4. Procedure of skin clipping of leprae bacilli 5. Identification of organisms with Biochemical reactions of common organisms like staphylococcus, E.coli, Klebsiella, Shigella, Salmonella, Proteins, Pseudomonas.</p> <p>Assignment to be conducted at every weekend</p> <p>Unit test- I</p>	<p>THEORY-20 Periods Unit-3 Identification of Hemiparasites. a) Morphology of malaria parasite, Microfilaria. - Sample collection, making thick and thin smear. - Staining the smears, identification of parasites. - Quantitative Buffy coat(QBC)</p> <p>Unit-4 Absolute Eosinophil Count: - Materials required, dilution fluids, procedure and counting method of cells.</p> <p>Practical's - 20</p> <p>1. Bone marrowsmear –preparation and staining–procedure. 2. Platelet count of given blood sample. Procedure and explanation. 3. Determination of coagulation tests. a) Bleeding time –by Duke's Method. b) Clotting Time –by capillary tube method.</p> <p>Assignment to be conducted at every weekend</p> <p>Unit test- I</p>
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<p>AUG, 2023 (25)</p>	<p>THEORY-17 Periods</p> <p>Unit-5 Immuno-Analysis 5.a RIA 5.a.1 Definition & Description 5.a.2 Instrumentation 5.a.3 Clinical Importance 5.b Elisa 5.b.1 Definition & Description 5.b.2 Instrumentation 5.b.3 Clinical Importance</p> <p>Unit-6 Distribution of water & Electrolytes 6.1 Percentage of water 6.2 Input & Output roots in human body 6.3 Types of Electrolytes & it's role in metabolism (Na & K)</p> <p>Unit-7 Liver Function Test(LFT) 7.1 Classification of LFT 7.2 Basic concepts including normal & abnormal bilirubin 7.3 Determination of Serum bilirubin- Malloy & Evelyn Method, Vander Bergh Method 7.4 Determination of total serum proteins & A/G Ratio. 7.5 Estimation of enzymes</p>	<p>THEORY-17 Periods</p> <p>Unit-6 Brief outline of Morphology cultural characteristics & lab diagnosis of important pathogens. a) cocci – Staphylococcus, streptococcus, pneumococcus, gonococcus, Meningococcus. b) Bacilli – Coryne bacterium diphtheriae, mycobacterium tuberculosis, m.leprae, Enterobacteriaceae – E.coli, Klebsiella, Salmonella, Shigella, vibrio, pseudomonas. c) Spirochetes – Treponema, Leptospira.</p> <p>Practicals - 17 6. Antibiotic Sensitivity test 7. Preservation of stock cultures 8. Mycology – Collection of specimen for fungal examination like skin scrapings CSF and Nail clippings. 9. Fungal examination by wet mount preparation.</p> <p>Assignment to be conducted at every weekend</p>	<p>THEORY-17 Periods</p> <p>Unit-5 Sickle cell preparation: - Principle, procedure, methods, materials required, clinical significance.</p> <p>Unit – 6 Osmotic fragility test: - Methods used, material required, procedure.</p> <p>Unit – 7 Coagulation tests: a) Bleeding Time – Methods – Dukes & IVY's method, procedure, b) Clotting time : methods – Lee & white, capillary methods – procedure, materials, Normal values, clinical significance. c) Prothrombin Time – (PT), APTT</p> <p>Unit – 8 L E Cell test – Principal, material required reporting, clinical significance.</p> <p>Practicals - 17 4. Buffy coat preparation – procedure, principle, method.</p>
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	<p>Transaminases(SGOT,SGPT) Phosphatases(ACP,ALP)</p> <p>Practicals - 17 3. Determination of plasma- Pro-Thrombin time 4.How to calculate serum calcium in blood 5.HDL Cholesterol Estimation 6. Malaria Test (Rapid Diagnostic Test)</p> <p>Assignment to be conducted at every weekend</p> <p>Unit test -II</p>	<p>Unit test-II</p>	<p>5.Preparation of sickle cell slide – procedure, principlesmethod 6. Fixationof tissues – principle, procedure.</p> <p>Assignment to be conducted at every weekend</p> <p>Unit test-II</p>
<p>SEP, 2023 (22)</p>	<p>THEORY-17 Periods</p> <p>Unit-8 Kidney Function Tests (KFT/RFT) 8.1 Basic concepts & classification of KFT 8.2 Estimation of serum creatinine Jaffe's Method/Alkaline Picrate Method 8.3 Clearance Tests (Urea, Creatinine) 8.4 Concentration & Dilution Tests 8.5 Urine Examination in Assessing KFT Protein, Sugars, Blood (Qualitative)</p> <p>Unit-9 Gastric & Pancreatic Function Tests</p>	<p>THEORY-17 Periods</p> <p>Unit-7 Bacteriological examination of water, milk and food.</p> <p>Unit – 8 Mycology – Morphological, cultural characteristics and lab diagnosis of a) candida b) Cryptococcus c) Dermatophytes d) spergillus e) Pencillium</p> <p>Practical's - 17 10. Serological Tests: CRP, ASO, RA, VDRL</p>	<p>THEORY-17 Periods</p> <p>Unit-9 Basics of automated cell counter: - Dilution fluids, Maintenance of counter</p> <p>Unit -10 HISTOPATOLOGY- Maintenance of registers – receiving registers - Gross register, slide register and report issueregister. - Specimen collection, Fixatives, processing, Dehydration, cleaning, impregnation.' - Paraffine embedding and block</p>

	<p>9.1 Introduction & Basic Concepts 9.2 Estimation of free HCl and Combined Acids- Clinical Significance 9.3 Determination of Serum Amylase</p> <p>Unit-10 Thyroid Function Tests(TFT) 10.1 Introduction & Basic Concepts 10.2 Estimation of Thyroid Hormones (T3, T4, TSH) RIA & Chemiluminiscence methods 10.3 Clinical Significance</p> <p>Practical's - 17 Qualitative identification of urine proteins Qualitative identification of bile salts Qualitative identification of Bile Pigments Determination of Occult Blood in Urine</p> <p>Quarterly examinations</p> <p>Assignment to be conducted at every weekend</p>	<p>Quarterly examinations</p> <p>Assignment to be conducted at every weekend</p>	<p>making. - Trimming of blocks. - Preparation of staining solutions (Hematoxyl in and Eosin) - Staining of the sections. - Mounting and labelling. - Decalcification of bone and calcified tissue. - Filing of slides, storing of block, sections.</p> <p>Practical's - 17 7. PAS staining of Tissue sample– Principle, procedure and preparation. Staining method. 8. Determination of ABO blood group method and Rh factor by slide method of the given blood sample</p> <p>Quarterly examinations</p> <p>Assignment to be conducted at every weekend</p>
<p>OCT, 2023 (18)</p>	<p>THEORY-16 Periods</p> <p>Unit-11 Clinical Enzymology</p>	<p>THEORY-16 Periods</p> <p>Unit-9 VIROLOGY : Classification , General</p>	<p>THEORY-16 Periods</p> <p>Unit-11 Microtome & Knives: -</p>

	<p>11.1 Introduction & Basic concepts of enzymes 11.2 Co-enzymes & Iso-enzymes 11.3 Gamma Glutamate Transaminase (GGT) 11.4 Cardiac enzymes (CPK, LDH, SGOT)</p> <p>Practical's – 16</p> <p>11.Determination of serum bilirubin 12. Determination of serum SGOT Assignment to be conducted at every weekend.</p> <p>Unit Test – III</p>	<p>Properties and morphology, pathogenesis and Lab diagnosis of viruses such as a)Arbovirus – Dengue, Chikungunya, b) STD – HIV, Hepatitis-B, c) Influenzae – viruses – swine flu, polio and rabies</p> <p>Practical's - 16 11. Serological Test – ELISA, WIDAL, and Chikungunya Test.</p> <p>Assignment to be conducted at every weekend.</p> <p>Unit Test – III</p>	<p>Type of Microtomes –Maintenance. - Sharpening of knives, honing & stropping. - Advantages and disadvantages.</p> <p>Unit-12 Cytology: - FNAC- Guided aspiration. - Papsmear, making smears, staining and mounting, labelling.</p> <p>Unit – 13 Museum Techniques: - Labeling & Storage of specimens, preservation of specimen, mounting, labelling and cataloguing the specimen. - Maintenance and cleanliness of the museum.</p> <p>Practical's - 16</p> <p>9. Comb’s test: Principle, Procedure, determination of test by direct and Indirect test. 10. Cross matching test of the given blood samples. Find out the compatibility.</p> <p>Assignment to be conducted at every weekend.</p> <p>Unit Test – III</p>
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<p>NOV, 2023 (25)</p>	<p>THEORY-17</p> <p>Unit-12 Body Fluids 12.1 Outlines of formation of different body fluids 12.2 Composition & Analysis of CSF including CSF Sugar Estimation, Protein estimation, CSF Chlorides estimation 12.3 Interpretation of result</p> <p>Unit-13 Automation & Quality control of Bio-Chemistry labs 13.1 Usage of computers in lab 13.2 Internal & External Quality Control</p> <p>Unit-14 Interpretation of common clinical Bio-Chemistry Investigations 14.1 Lipo proteins- Types 14.2 Lipid profile-Serum Total Cholesterol, HDL Cholesterol 14.3 HB Estimation Methods 14.4 Dengue fever identification methods 14.5 Blood gas Analysis (PCo₂ & PO₂)</p>	<p>THEORY-17</p> <p>Unit-10 Quality control in Laboratory</p> <p>Unit-11 Automation in clinical laboratories in brief.</p> <p>Unit-12 Vaccination: Classification and Immunisation schedule.</p> <p>Practical's - 17 12 Virology : Incubation of fertile eggs and inoculation by various routes. Spotters 1. Staphylococci 9. Cultivation of viruses 2. Strep to cocci 10. Tenia Solium 3. Corynebacterium 11.E.Histoytica 4. Lactose Fermentation 12. As pergillus niger 5. MBRT 13.Candida Albicaw 6. Agar slant 14. Widal Kit 7. Rabis Virus 15.VDRT Kit 8. HIV Virus 16.WestromBlotTechnque.</p>	<p>THEORY-17</p> <p>Unit-14 Autopsy: Basics, cleaning the autopsy instruments, table and rooms, preservation of organs.</p> <p>Unit – 15: Immuno Haemotology and blood banking: - Human blood group antigens, their inheritance and antibodies. - ABO blood grouping systems. - Rh Blood grouping systems. - Techniques of grouping and cross matching. - Blood collection, screening of donor, preservation and maintenance of records.</p> <p>Practical's - 17</p> <p>Spotters: 1. Blood cell counter 2. stopwatch 3. ESR stand and ESR tubes 4. Syringe dispenser to crush needles. 5. Refrigerator. 6. Microtome knives. 7. Buffy coat 8. Paraffin embedding and block making. 9. Zeuker's fluid</p>
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	Practical's - 17 Spotters- Identification Characteristics Uses Unit test-4 Assignment to be conducted at every weekend.	Unit test - 4 Assignment to be conducted at every weekend	10. Sickle cells. 11. Microfilaria larva 12. Ring stage of malaria parasite. Unit test- 4 Assignment to be conducted at every weekend.
DEC, 2023 (24)	ON THE JOB TRAINING / Half yearly examinations	ON THE JOB TRAINING /Half yearly examinations	ON THE JOB TRAINING /Half yearly examinations
JAN, 2024 (20)	REVISION & PRE FINAL EXAMINATIONS	REVISION & PRE FINAL EXAMINATIONS	REVISION & PRE FINAL EXAMINATIONS
FEB, 2024 (24)	REVISION & PRACTICAL EXAMS IPE - 2024	REVISION & PRACTICAL EXAMS IPE - 2024	REVISION & PRACTICAL EXAMS IPE - 2024
MAR, 2024 (21)	IPE THEORY MODEL PAPER PRACTICING & IPE THEORY EXAMINATIONS – 2024	IPE THEORY MODEL PAPER PRACTICING & IPE THEORY EXAMINATIONS – 2024	IPE THEORY MODEL PAPER PRACTICING & IPE THEORY EXAMINATIONS – 2024

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ACADEMIC ORGANISAR

OPHTHALMIC TECHNICIAN (OT)

PAPER – I: ANATOMY, PHYSIOLOGY & PHARMACOLOGY (THEORY)

Total-110

marks 50

MONTH & No of working days	Topics to be covered Test/Exam /Assignments to conducted	Periods allotted
	Syllabus dictation and QP model explanation	01
	UNIT -1 Anatomy of the Eye	14
June 2023 (24)	Conjunctiva ,Cornea and Sclera Iris and Ciliary body Lens and Vitreous Retina and Choroid Ocular Muscles Cranial Nerves I, II, III, IV, V and VII Practical : Drawing of different parts of the Eye Assignment -1 (UNIT-1)	
	Cranial Nerves I, II, III, IV, V and VII Lacrimal Apparatus Orbit and its immediate relations	30

<p style="text-align: center;">JULY-2023 (24)</p>	<p style="text-align: center;">Unit -2 PHYSIOLOGY</p> <p>General Physiology of the Eye and Introduction</p> <p>Cornea and Lens</p> <p>Pupillary Reflexes</p> <p>Assignment -2 (UNIT-2)</p> <p style="text-align: center;">UNIT TEST -2</p> <p>Practical : Recording of distance vision</p>	
<p style="text-align: center;">August , 2023 25</p>	<p>Visual Acuity and form sense</p> <p>Night vision</p> <p>Colour vision</p> <p>Accommodation</p> <p>Convergence</p> <p>Production of Aqueous</p> <p>Aqueous dynamics</p> <p>Visual Fields</p>	<p style="text-align: center;">20</p>

	Assignment -III (UNIT -3)	
SEP 2023 22	<p>Visual Fields</p> <p>Extrinsic muscles , Actions and Ocular Movements</p> <p>UNIT -3</p> <p>Ocular pharmacology and pathology</p> <p>Mode of therapy Eg. Drops, Oral Injection etc</p> <p>Commonly used Drugs in Ophthalmology</p> <p>Assignment -4 (UNIT-4)</p>	30
Oct-2023 18	<p>Commonly used Drugs in Ophthalmology</p> <p>Antibiotics</p> <p>Anti-inflammatory</p> <p>Anti-Allergic</p> <p>Mydriasis & Miotic's</p> <p>Antiseptics</p> <p>Methodology of applying medication to the Eye</p>	20

	UNIT TEST-3	
NOV 2023 25	Aseptic Techniques, Complete Urine Examination, General Information on Infection, Inflammation, Hypersensitivity, Hypertension and Diabetes	20
DEC 2023 24)	OJT UNIT TEST-4	
	OJT Half yearly	20
JAN-2024 20	Second term Holidays Pre final exams-I Assignment VI	
FEB-2024 24	Revision of Syllabus	
MARCH -2024 21	INTERMEDIATE PUBLIC EXAMINATIONS March -2023 Last working day 28-03-23	

OPHTHALMIC TECHNICIAN
I YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – II: PHYSICAL & PHYSIOLOGICAL ASPECTS OF SPECULATED.
[THEORY]

TOTAL 110

Marks 50

MONTH & No of working days	Topics to be covered /Assignments to conducted Test/Exam to conducted	Periods allotted for topic
	UNIT -1 Elementary basics of light and vision	TOTAL 10
June 2023 (24)	Principles of Refraction Retinoscopy, Principles & Practice Eye as refractive apparatus Myopia and correction Hypermetropia and its correction Practical : Diagrams of refraction Assignment -1 (UNIT-1)	20

<p style="text-align: center;">July-2023 (24)</p>	<p>Astigmatism and its correction</p> <p>Presbyopia and its correction.</p> <p>Assignment -2</p> <p>UNIT TEST -2</p> <p>Practical :</p> <p>Myopia</p> <p>Astigmatism</p>	<p style="text-align: center;">25</p>
<p style="text-align: center;">August, 2023 (25)</p>	<p style="text-align: center;">Aphakia and Pseudophakia and its correction</p> <p style="text-align: center;">Low Visual Aids</p> <p style="text-align: center;">Unit -2 Optics</p> <p style="text-align: center;">Ophthalmic Glasses</p> <p style="text-align: center;">Prescription of Glasses.</p> <p style="text-align: center;">Physical forms and sizes and shapes [spherical – concave and convex]</p>	<p style="text-align: center;">20</p>

	<p>Assignment -III (UNIT -3)</p> <p>Practical</p> <p>Aphakia Prism Reflection, refraction of light</p>	
<p>Sep, 2023 22</p>	<p>Astigmatic lenses [cylindrical and toric lenses] Visual Acuity and form sense</p> <p>Prisms and its uses</p> <p>Prismatic effect</p> <p>Assignment -4 (UNIT-4)</p> <p>Practical demonstration of Refraction through prism Refraction through convex lens</p>	<p>20</p>
<p>Oct-2023 18</p>	<p>Chemistry of lens Optical aberrations Chemistry of frames Measurement of power [lens meter and . Refraction through concave lens</p>	<p>20</p>

	UNIT TEST-3	
NOV 2023 25	Geneva lens measure General Introduction of contact lens. OJT UNIT TEST-4	20
DEC 2023 24	OJT Half yearly	
JAN-2024 20	Second term Holidays Pre final exams-I Assignment VI	
FEB-2024 24	Revision of Syllabus Practical examinations	
MARCH -2024 21	INTERMEDIATE PUBLIC EXAMINATIONS March -2023 Last working day 28-03-23	

OPHTHALMIC TECHNICIAN
I YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – III: COMMUNITY OPHTHALMOLOGY AND HEALTH EDUCATION

MONTH & No of working days	Topics to be covered Test/Exam /Assignments to conducted	Periods allotted for each topic
	UNIT -1 Examination of the Eye	TOTAL 10
June 2023 (24)	Unit-2 Practical Demonstration of Eye problems and their management and referral Conjunctivitis Cataract Vitamin-A Deficiency Practical : Out Door Work – Conducting Eye Camps Assignment -1 (UNIT-1)	20
	Injuries and Occupational hazards	30

<p style="text-align: center;">JULY-2023 (24)</p>	<p>Refractive Errors.</p> <p>Eye Donation</p> <p>Assignment -2</p> <p>UNIT TEST -2</p> <p>Practical :</p> <p>Conducting Eye camps At Schools</p>	
<p style="text-align: center;">August, 2023 25</p>	<p>Certain terms Incidence prevalence Epidemics Endemics</p> <p>Unit-III Community Ophthalmology</p> <p>Screening and Survey of the School Children</p> <p>Eye Screening of the Industrial workers.</p> <p>Practical: Old Age Homes, Computer Institutes</p>	<p style="text-align: center;">20</p>

	Assignment -III (UNIT -3)	
SEP 2023 22	<p>Eye Camps</p> <p>Detection of the Blind and their rehabilitation, and with note on preventable, Permanent and reversible blindness and visually handicapped.</p> <p>Reading problems in children. Statistical evaluation of the surveys</p> <p>Practical Eye Camps</p> <p>Assignment -4 (UNIT-4)</p>	20
Oct-2023 18	<p style="text-align: center;">UNIT -3</p> <p>Detection of eye diseases due to Nutritional disorders</p> <p>Industrial hazards and protection from Industrial Hazards Governmental and Non-Governmental agencies serving the Community in the field of Ophthalmology.</p> <p>Practical At Industries.</p> <p>UNIT TEST-3</p>	25

<p style="text-align: center;">NOV 2023 25</p>	<p style="text-align: center;">Unit-IV Health Education.</p> <p>Blindness and Causes Nutrition Environmental Sanitation and water supply, sewage, disposal. Specific Measures for prevention of Blindness Cataract Conjunctivitis T r a c h o m a Xerosis</p> <p>UNIT TEST-4</p> <p>OJT Hal yearly</p>	<p style="text-align: center;">26</p>
<p style="text-align: center;">DEC-2023 24</p>	<p style="text-align: center;">Second term Holidays Pre final exams-I Assignment VI</p>	
<p style="text-align: center;">JAN-2024 20</p>	<p style="text-align: center;">Revision of Syllabus Practical examinations</p>	
<p style="text-align: center;">FEB-2024 24</p>	<p style="text-align: center;">INTERMEDIATE PUBLIC EXAMINATIONS March -2023 Last working day 28-03-23</p>	
<p style="text-align: center;">MARCH -2024 21</p>		

Presented by:

Dr, N, Sarath Chandra Bose

ACADEMIC ORGANISAR
 OPHTHALMIC TECHNICIAN (OT)
 OPHTHALMIC TECHNICIAN (617)
 II YEAR
 PART B – VOCATIONAL SUBJECTS
**PAPER – I SPECTACLE LENS GRINDING & DISPENSING OF SPECTACLES
 (THEORY)**

Theory: 110 hours

Marks: 50

MONTH &No of working days	Topics to be covered Test/Exam /Assignments to conducted	Periods allotted for topic
	UNIT -1 Spectacle Lens Grinding	TOTAL 50
JUNE 2023 (24)	a)Types of Lens b)Principles of Grinding c)Bifocal Grinding Practical : Work-shop practice Cutting and Fitting of Glasses Assignment -1 (UNIT-1)	

<p>JULY- 23 (24)</p>	<p>d)Cylindrical Grinding e)Prismatic Lens Grinding f)Aberrations and base curves g) Aphakic Glasses</p> <p>Assignment -2 (UNIT-2)</p> <p>UNIT TEST -2</p> <p>Practical : Grinding</p>	
<p>August-23 (25)</p>	<p>h)Ingredient of Material [Grinding Powder, Pads, Tools, Laps etc.]</p> <p>Unit -2 Dispensing of Spectacles Ophthalmic Glasses</p> <p>a)Human Eye and Spectacles, Intrapupillary distance b)Bifocals and Multifocal requirements, types cantering</p> <p>Practical: Finishing</p> <p>Assignment -III</p>	<p>60</p>

<p>September-23 (22)</p>	<p>C)Protective Glasses</p> <p>D)Lens form and thickness effective equivalent and vertex power</p> <p>E)Trial lenses and Frames</p> <p>Practical</p> <p>Polishing</p> <p>Assignment -4 (UNIT-4)</p>	
<p>October-23 18</p> <p>Nov-23 (25)</p>	<p>i)cylindrical</p> <p>j)Measurement of spectacle lens, Power and foci meter.</p> <p>Practical</p> <p>Dispensing Spectacles [Optical)</p> <p>OJT</p>	

<p>DEC-23 (24)</p>	<p style="text-align: center;">OJT</p> <p style="text-align: center;">UNIT TEST-4</p>	
<p>JAN-24 20</p>	<p style="text-align: center;">Second term Holidays Pre final exams-I Assignment VI</p>	
<p>FEB-24 24</p>	<p style="text-align: center;">Revision of Syllabus Pre final exam –II Practical examinations</p>	
<p>MAR-24 21</p>	<p style="text-align: center;">INTERMEDIATE PUBLIC EXAMINATIONS March - 2023 Last working day 28-03-23</p>	

OPHTHALMIC TECHNICIAN
II YEAR
PART B – VOCATIONAL SUBJECTS

PAPER – II COMMON OCULAR DISEASES & PRIMARY OPERATION THEATRE
PROCEDURES (THEORY)

Theory: 110 hours

Marks: 50

MONTH & No of working days	Topics to be covered Test/Exam /Assignments to conducted	Periods allotted for topic
JUNE 2023 (24)	UNIT -1 Introduction of common EYE Diseases Practical Common Eye Diseases – Detection and management Conjunctivitis	TOTAL 40

<p>JULY- 23 (24)</p>	<p>Introduction of common EYE Diseases Unit-2</p> <p>Routine Investigations Tension Taking [Tonometer]</p> <p>Colour vision visual fields Various instrument andtheir principles.</p> <p>Practical : Lid infection</p> <p>Assignment -1 (UNIT-1)</p>	<p>30</p>
<p>August-23 (25)</p>	<p>Fluorescence staining and techniques.</p> <p>Lacrimal test</p> <p>Urine – 1. Albumin 2. Sugar</p> <p>Assignment -2 (UNIT-2)</p> <p>UNIT TEST -2</p> <p>Practical Styas. Sub-Conjunctival Haemorrhage.</p>	

<p style="text-align: center;">September-23 (22)</p>	<p style="text-align: center;">UNIT-3</p> <p style="text-align: center;">Operation Theatre Procedure</p> <p style="text-align: center;">O.T Minor Surgery [Introduction to Techniques and preparation of the patient]</p> <p style="text-align: center;">a)Asepsis – How to achieve and sterilization</p> <p style="text-align: center;">d) Bandaging the Eye.</p> <p style="text-align: center;">f) Syringing</p> <p style="text-align: center;">Practical: Eye-Allergy</p> <p style="text-align: center;">Cataract Swab Smears and Cultures.</p> <p style="text-align: center;">Assignment -III</p>	<p style="text-align: center;">30</p>
<p style="text-align: center;">October-23 18</p>	<p style="text-align: center;">b) Anesthetic agents and where indicated.</p> <p style="text-align: center;">c) Carrying out pre-operative and post-operative instructions.</p> <p style="text-align: center;">Practical's</p> <p style="text-align: center;">Injuries</p> <p style="text-align: center;">Practice of Retinoscopy</p> <p style="text-align: center;">Swab Smears and Cultures.</p>	

<p style="text-align: center;">NOV-23 (25) & DEC-23 (24)</p>	<p style="text-align: center;">OJT</p> <p style="text-align: center;">UNIT TEST-4</p>	
<p style="text-align: center;">JAN-24 20</p>	<p style="text-align: center;">Second term Holidays Pre final exams-I Assignment IV</p>	
<p style="text-align: center;">FEB-24 24</p>	<p style="text-align: center;">Revision of Syllabus Pre final exam –II Practical examinations</p>	
<p style="text-align: center;">MAR-24 21</p>	<p style="text-align: center;">INTERMEDIATE PUBLIC EXAMINATIONS March -2023</p> <p style="text-align: center;">Last working day 28-03-23</p>	

OPHTHALMIC TECHNICIAN
II YEAR
PART B – VOCATIONAL SUBJECTS
PAPER – III REFRACTIVE ERRORS, MAINTENANCE OF INVESTIGATIVE INSTRUMENTS
& EQUIPMENT [THEORY]

Theory: 110 hours

Marks: 50

MONTH & No of working days	Topics to be covered Test/Exam /Assignments to conducted	Periods allotted for topic
<p style="text-align: center;">JUNE 2023 (24)</p>	<p style="text-align: center;">UNIT -1</p> <p style="text-align: center;">Refractive Errors</p> <p>1)Symptomatology and Management of Hypermetropia 2) Symptomatology and Management of Myopia. 3) Symptomatology and Management of Astigmatism</p> <p style="text-align: center;">Practical Estimation of Refractive Errors</p> <p>Symptomatology and Management of Hypermetropia</p>	<p style="text-align: center;">TOTAL 30</p>
<p style="text-align: center;">JULY- 23 (24)</p>	<p>4) Presbyopia.</p> <p>5)Aphakia</p> <p>6)Squint</p> <p>7) Contact lens: prescription and practice</p> <p style="text-align: center;">Unit-2</p>	

	<p align="center">Explanation and Maintenance of Equipment</p> <p align="center">Trial Set</p> <p align="center">Torches</p> <p align="center">Ophthalmoscope</p> <p align="center">Practical : Symptomatology and Management of Myopia Assignment -1 (UNIT-1)</p>	30
<p>August-23 (25)</p>	<p align="center">Slit lamps Kerato meters.</p> <p align="center">Surgical Instruments Foci meter [Lensometer] Assignment -2 (UNIT-2)</p> <p align="center">UNIT TEST -2</p> <p align="center">Practical</p> <p align="center">Symptomatology and Management of Astigmatism. Symptomatology and management of Squint</p>	
	<p align="center">UNIT-3</p> <p align="center">Special Investigations</p> <p align="center">Visual Acuity Charting</p> <p align="center">Distant</p>	30

JAN-2024 20	Second term Holidays Pre final exams-I Assignment IV	
FEB-2024 24	Revision of Syllabus Pre final exam –II Practical examinations	
MAR-2024 21	INTERMEDIATE PUBLIC EXAMINATIONS March - 2024	

Prepared by

Dr. N.SARATH CHANDRA BOSE
GVJC GUNTUR

ANNUALACADEMICPLAN-2023-2024

PHYSIOTHERAPY (PT-618)

I YEAR

Month & No. Of Working Days	Anatomy & Physiology (Theory Paper – I) Anatomy & Physiology (Practical Paper – I)	Psychology & Abnormal Psychology (Theory Paper – II) Psychology & Abnormal Psychology (Practical Paper – II)	Bio – Mechanics & Exercise Therapy (Theory Paper – III) Bio – Mechanics & Exercise Therapy (Practical Paper – III)
June 2023 No. of Days-24	<p>Theory-09 Unit-1 Introduction 1.1 Introduction 1.2 ,Systems of the body Anatomy 1.3 Cell structureand Functions</p> <p>Unit - 2 Osteology / skeletal system 2.1 Classification of skeletal system(axial and appendicular) 2.2 Bones- Types of bones, Functions 2.3 Structure of long bone 2.4 Structure of vertebral column 2.5 structure of thorax 2.6 Description of upper limb, lower limb, skull and facial bones.</p>	<p>Theory-10 Unit-1 Psychology 1.1 Introduction 1.2 Scope 1.3 Branches</p> <p>Unit - 2 Perception, Illusion , Thinking, Reasoning and Problem solving 2.1 Perception 2.2 Illusion 2.3 Thinking 2.4 Reasoning 2.5 Problem solving</p>	<p>Theory-10 Unit-1 Biomechanics 1.1 Introduction 1.2 Kinematics and Kinetics 1.3 Axis and Planes 1.4 Basic components of Biomechanics</p> <p>Unit – 2 Gait Analysis 2.1 Introduction 2.2 Phases of Gait 2.3 Pathological gait</p>
	<p>Practical-09 Identify The following with a labelled diagram Heart Cerebrum Cerebellum Spinalcord Neuron Broncho Pulmonary Segments Respiratory Tract Digestive System</p>	<p>Practical-09 Principles Of Perception Intelligence Tests</p>	<p>Practical-09 Explain and demonstrate the following: Basic conditions for relaxation Postural drainage Goniometry measurements for upperlimb Goniometry measurements for upperlimb</p>

<p>July 2023 No. of Days-24</p>	<p>Theory-20 Unit - 3 Arthrology (Continued.) 3.3 Movements of joints 3.4 Articular surfaces of joints</p> <p>Unit – 4 / Myology 4.1 Types of Muscle tissue & its functions 4.2 Phenomenon of muscle contraction 4.3 Muscles of upper extremity, lower extremity, trunk, eye and face etc.</p>	<p>Theory-15 Unit - 3 Motivation and Attention 3.1 Introduction 3.2 Needs, drives and motives 3.3 Theories 3.4 Attention 3.5 Types of attention</p> <p>Unit - 4 Learning and Individual differences 4.1 Introduction 4.2 Types of learning 4.3 Theories of learning 4.4 Individual differences</p>	<p>Theory-18 Unit-3 Exercise therapy 3.1 Introduction to Exercise therapy 3.2 Techniques of exercise therapy 3.3 Goniometry</p> <p>Unit- 4 Starting positions 4.1 Introduction 4.2 Fundamental positions –descriptions, muscle work, effects and uses</p> <p>Unit - 5 Passive Movements 5.1 Introduction 5.2 Classification 5.3 Principles 5.4 Effects and uses of passive movements</p>
	<p>Practical-23 Identify the following with a labeled diagram Liver Urinary Tract Nephron Skin Clinical evaluation of the following: Recording Of Systemic Arterial blood pressure Effect Of Posture On Blood Pressure Effect Of Exercise On Blood Pressure</p>	<p>Practical-23 Measuring Of Intelligence Projective Technique -Rorshach Ink Blot</p>	<p>Practical-12 Crutches and its measurements PRE Frenkles exercises Massage Transfer techniques</p>
	<p>Assignment– I Unit-I</p>	<p>Assignment – I Unit-I</p>	<p>Assignment – I Unit-I</p>

<p>August 2023 No. of Days-25</p>	<p>Theory-15 Unit – 5 / Blood 5.1 Composition and functions of blood and plasma 5.2 Cellular elements of blood 5.3 Coagulation phenomenon, and clotting factors 5.4 Blood groups</p> <p>Unit - 6 Cardio-vascular system 6.1 Structure and functions of the heart 6.2 Properties of heart muscles 6.3 Cardiac cycle and heart sounds 6.4 Heart sounds, ECG, Vital signs 6.5 Lymphatic circulation</p>	<p>Theory-20</p> <p>Unit-5 Memory, Remembering, Forgetting and Aptitude 5.1 Memory, Remembering 5.2 Forgetting 5.3 Aptitude</p> <p>Unit – 6 Intelligence 6.1 Introduction 6.2 Measuring of Intelligence and IQ 6.3 Intelligence test 6.4 Mental Retardation</p>	<p>Theory-20</p> <p>Unit -6 Active Movements 6.1 Introduction 6.2 Classification 6.3 Techniques 6.4 Effects and uses of active movements.</p> <p>Unit -7 Relaxation 7.1 Introduction 7.2 General relaxation techniques 7.3 Local relaxation techniques</p> <p>Unit - 8 Mobilisation 8.1 Introduction 8.2 Limitation of the Joint range of movement 8.3 Prevention of Joint stiffness 8.4 Mobilizing methods.</p>
	<p>Practical-20</p> <p>Clinical evaluation of the following: Recording Temperature Recording Pulse Cardiac Efficiency Test</p>	<p>Practical-20</p> <p>Describe the following Projective Technique -C.A.T Projective Technique - T.A.T Ebdinhaeus Curve Of Forgetting</p>	<p>Practical-12</p> <p>Muscle grading Pathological gaits Muscle strengthening</p> <p>Spotters: Suspension Therapy Reeducation Board Shoulder Wheel Finger Ladder Parallel Bars</p>

	Assignment- II Unit-II	Assignment- II Unit-II	Assignment- II Unit-II
September 2023 No. of Days-22	<p>Theory -08</p> <p>Unit – 7 Nervous System 7.1 Classification and function of Nervous System 7.2 Nerve tissue- neuron 7.3 Structure and functions of Brain and Spinal cord 7.4 Peripheral and cranial nerves 7.5 Cerebro spinal fluid</p> <p>Unit -8 Respiratory System 8.1 Respiration and parts of respiratory tract 8.2 Mechanism of breathing 8.3 Lung volumes and capacities.</p>	<p>Theory-25</p> <p>Unit-7 Personality 7.1 Introduction 7.2 Theories of personality 7.3 Assessment of personality</p> <p>Unit – 8 Abnormal psychology 8.1 Introduction 8.2 Scope 8.3 Importance of Abnormal psychology</p>	<p>Theory-18</p> <p>Unit-9 Muscle strength 9.1 Introduction 9.2 Types of muscle work 9.3 Ranges of muscle work- MMT 9.4 Group action of muscles 9.5 Muscular weakness and paralysis, prevention of muscle wasting.</p> <p>Unit -10 / Stretching 10.1 Introduction 10.2 Classification 10.3 Effects and uses.</p> <p>Unit - 11 Neuromuscular coordination 11.1 Introduction 11.2 Co-ordination 11.3 Inco-ordination and causes 11.4 Frankel’s Exercises.</p>
	<p>Practical-13</p> <p>Spotters Clavicle Scapula Humerus Radius Ulna Hip Bone</p>	<p>Practical-13 Describe the following Trail And Error Theory Of Learning Theory Of Classical Conditioning Theory Of Insightful Learning</p>	<p>Practical-24 Spotters: Ankle Exerciser Medicine Ball Equilibrium Board Wrist Wheel</p>
	Assignment – III	Assignment –III	Assignment - III
	Quarterly Examinations	Quarterly Examinations	Quarterly Examinations

<p>October 2023 No. of Days-18</p>	<p>Theory-15</p> <p>Unit – 9 Digestive system 9.1 Gastro intestinal tract 9.2 Process of digestion 9.3 Digestive glands</p> <p>Unit - 10 Excretory system 10.1 Anatomy of urinary organs, functions of kidney 10.2 Composition of urine 10.3 Skin functions and temperature regulation</p>	<p>Theory-15</p> <p>Unit - 9 Frustration , Conflicts, Defense mechanism Stress management 9.1 Frustration 9.2 Conflicts 9.3 Defense mechanism 9.4 Stress management</p> <p>Unit - 10 Psychoneurotic and Psychosomatic disorders 10.1 Psycho neurotic 10.2 Psychosomatic disorder</p>	<p>Theory-17</p> <p>Unit – 12 / Hydro Therapy 12.1 Introduction 12.2 Indications 12.3 Contraindications, 12.4 Dangers and precautions</p> <p>Unit-13 Breathing exercises 13.1 Introduction 13.2 Types of breathing exercises 13.3 Postural drainage.</p> <p>Unit - 14 Posture 14.1 Introduction 14.2 Classification 14.3 Postural training.</p>
	<p>Practical-11 Spotters</p> <p>Femur Tibia Fibula Sternum Rib Bone</p>	<p>Practical-17 Describe the following Measurement Of Aptitude Maslows View Point/ Humanistic Theory</p>	<p>Practical-18 Spotters: Thera Bands Shoulder Pulley C.P.M Goniometer</p>
	<p>Assignment - IV</p>	<p>Assignment –IV</p>	<p>Assignment - IV</p>
	<p>Unit - III</p>	<p>Unit - III</p>	<p>Unit - III</p>

November-2023 No. of Days-25	Theory-24 Unit – 11 Endocrine system 11.1 Introduction 11.2 Structure and functions of endocrine glands Unit - 12 Reproductive system 12.1 Male and female reproductive organs, 12.2 Family planning and contraceptive methods.	Theory-15 Unit - 11 Geriatric Psychology 11.1 Introduction 11.2 Depression 11.3 Management Unit - 12 Alcoholism and Drug addiction 12.1 Alcoholism 12.2 Effects of Alcoholism 12.3 Drug addiction 12.4 Completions of Drug addiction	Theory-15 Unit- 15 Walking aids and Gait training 15.1 Introduction 15.2 Crutches 15.3 Preparation for Crutch walking Unit- 16 Massage 16.1 Introduction 16.2 Techniques 16.3 Indications and Contra-Indications Unit -17 Exercise therapy equipments 17.1 Description of equipment, Indications and uses
	Practical-24 Shoulder Joint Elbow Joint Wrist joint Hip Joint Knee Joint Ankle Joint	Practical-18 Subjective Method Of Assessment Of Personality	Practical-24 Spotters: Axillary Crutches Elbow Crutches Gutter Crutches Stick Walker Quadriceps Table
	Assignment - V	Assignment - V	Assignment - V
	UNIT- IV	UNIT- IV	UNIT- IV

December 2023 No of Days-24	OJT-(One Month Only)	OJT-(One Month Only)	OJT-(One Month Only)
	Half yearly Examinations	Half yearly Examinations	Half yearly Examinations

January 2024 No of Days-20	Theory-19 Revision / Assignment – VI / Pre-Final Examinations - 1	Theory-10 Revision / Assignment – VI / Pre- Final Examinations - 1	Theory-12 Revision / Assignment – VI / Pre-Final Examinations - 1
	Practical– 15 REVISION	Practical – 15 REVISION	Practical-16 REVISION
February 2024 No of Days-24	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS
March 2024 No of Days-21	IPEMarch-2024	IPEMarch-2024	IPEMarch-2024

Prepared By:

Dr. Priyadarshini.PDS, JL in PT Govt. Vocational Junior College, VISAKHAPATNAM, Ph: 91 9948564584

ANNUAL ACADEMIC PLAN–2023-2024

PHYSIOTHERAPY (PT-618)

IIYEAR

Month & No. of Working Days	Medical And Surgical Conditions (VT4) Medical And Surgical Conditions (VP4) No. OfPeriods (Theory And Practical)	ORTHOPAEDICS & NEUROLOGY(VT5) ORTHOPAEDICS & NEUROLOGY (VP5) No. OfPeriods (Theory And Practical)	ELECTROTHERAPY (VT6) ELECTROTHERAPY (VP6) No. OfPeriods (Theory And Practical)
<p>June 2023 No. of Days-24</p>	<p>Theory-10 Unit-1 1. Nutritional Disorders 1.1 Nutrition - Vitamins 1.2 Protein Energy Malnutrition 1.3 Rickets 1.4 Scurvy 1.5 Osteomalacia 1.6 Osteoporosis</p> <p>Unit - 2 2. Common Health Problems 2.1 Fever - Viral Fever, Malaria, Typhoid, Dengue, 2.2 Common Cold 2.3 Cough 2.4 Conjunctivitis 2.5 Dermatitis 2.6 Anaemia 2.7 First Aid Management</p>	<p>Theory-15 Unit-1 1. Fractures, Sprain, Strain And Dislocations 1.1 Fractures 1.2 Sprain 1.3 Strain 1.4 Dislocation- Recurrent Dislocation Of Shoulder</p> <p>Unit - 2 1. Upper Limb Conditions 1.1 Periarthritis Of Shoulder 1.2 Tennis Elbow 1.3 Dequerevain Disease 1.4 Trigger Finger 1.5 Carpal Tunnel Syndrome</p>	<p>Theory-15 Unit-1 1. Physics And Basic Electronic Compounds 1.1 Electrotherapy ➤ Low Frequency Currents ➤ Medium Frequency Currents ➤ High Frequency Currents 1.2 Basic Physics 1.3 Electromagnetic Radiation 1.4 Transmission Of Heat ➤ Conduction, ➤ Convection ➤ Radiation 1.5 Physical Effects Of Heat 1.6 Dangers Of Electricity ➤ Electric Shock ➤ Earth Shock</p>
	<p>Practical-09 ➤ First AidManagement ➤ Osteoporosis</p>	<p>Practical-09 ➤ Ankle Sprain ➤ Recurrent dislocation of shoulder ➤ Tennis Elbow ➤ Periarthritis Of Shoulder</p>	<p>Practical-09 ➤ Quadriceps Inhibition</p>

<p>July 2023 No.ofDays-24</p>	<p>Theory-20 Unit - 3 3 Respiratory Disorders C.O.P.D 3.1 Asthma 3.2 Bronchitis 3.3 Bronchiectasis 3.4 Emphysema 3.5 Tuberculosis Unit – 4 4 Cardio Vascular Disorders 4.1 Coronary Artery Disease 4.2 Hypertension 4.3 Cardiac Arrest</p>	<p>Theory-15 Unit - 3 3. Lower Limb Conditions 3.1 Osteoarthritis Of Knee 3.2 Chondromalacia Of Patella 3.3 Meniscal Injury 3.4 Plantar Fasciitis Unit - 4 Spinal Conditions 4.1 Cervical Spondylosis 4.2 I.V.D.P</p>	<p>Theory-18 Unit-2 2 Low Frequency Currents 2.1 Faradic Currents ➤ Motor Points ➤ Quadriceps Inhibition ➤ Faradic Foot Bath 2.2 Galvanic Current 2.3 Strength Duration Currents 2.4 Ionotophoresis 2.5 T.E.N.S ➤ High T.E.N.S ➤ Low T.E.N.S</p>
	<p>Practical-23 ➤ Asthma ➤ Bronchitis ➤ Cardiac Rehabilitation ➤ Hypertension</p>	<p>Practical-23 ➤ Osteoarthritis Of Knee ➤ I.V.D.P ➤ Cervical Spondylosis</p>	<p>Practical-12 ➤ Faradic Foot Bath ➤ T.E.N.S</p>
	<p>Assignment– I Unit-I</p>	<p>Assignment – I Unit-I</p>	<p>Assignment – I Unit-I</p>

<p>August 2023 No. of Days-25</p>	<p>Theory-15</p> <p>Unit – 5</p> <p>5.Endocrinal Disorders</p> <p>5.1 Hyper Thyroidism</p> <p>5.2. Hypo Thyroidism</p> <p>5.3 Diabetic Mellitus</p> <p>Unit - 6</p> <p>6.Cardio Pulmonary Resuscitation</p> <p>6.1 C.P.R</p> <p>6.2 Basic Life Support</p> <p>6.3 Advanced Life Support</p> <p>6.4 Prolong Life Support</p>	<p>Theory-20</p> <p>Unit-5</p> <p>5.Deformities</p> <p>5.1spinal Deformities</p> <ul style="list-style-type: none"> ➤ Scoliosis ➤ Lordosis ➤ Kyphosis <p>5.2 Knee Deformities</p> <ul style="list-style-type: none"> ➤ Genu Varum ➤ Genu Valgum ➤ Genu Recurvatum <p>5.3 Foot Deformities</p> <ul style="list-style-type: none"> ➤ C.T.E.V ➤ EquinoVarus ➤ Flat Foot <p>Unit – 6</p> <p>6.Central Nervous Conditions</p> <p>6.1parkinsonism</p> <p>6.2ataxia</p> <ul style="list-style-type: none"> ➤ Cerebral ➤ Sensory ➤ Vestibular <p>6.3motor Nerve Disease</p> <ul style="list-style-type: none"> ➤ Amyotrophic Lateral Sclerosis ➤ Progressive Bulbar Palsy ➤ Progressive Muscular Atrophy ➤ Primary Lateral Sclerosis 	<p>Theory-20</p> <p>Unit -3</p> <p>3.Medium Frequency Currents</p> <p>3.1 Inter Ferential Therapy</p> <ul style="list-style-type: none"> ➤ Quadripolar Technique ➤ Bipolar Technique ➤ Physiological Effects <p>4.Superficial Heating Methods</p> <p>4.1 Physiological And Therapeutic Effects Of Heat</p> <p>4.2Paraffin Wax Bath therapy</p> <p>4.3 Hot Packs</p> <p>4.4 Contrast Bath</p> <p>4.5 Infra-Red Radiation</p> <ul style="list-style-type: none"> ➤ Non Luminous Generators ➤ Luminous Generators
	<p>Practical-20</p> <ul style="list-style-type: none"> ➤ Diabetic Mellitus ➤ C.P.R 	<p>Practical-20</p> <ul style="list-style-type: none"> ➤ Plantar Fascitis ➤ Parkinsons Disease 	<p>Practical-12</p> <ul style="list-style-type: none"> ➤ I.F.T ➤ Paraffin Wax Bath ➤ Hot Packs ➤ Infrared Radiation

	Assignment- II Unit-II	Assignment- II Unit-II	Assignment- II Unit-II
September 2023 No. of Days-22	Theory -15 Unit – 7 7 Obesity 7.1 Introduction 7.2 B.M.I 7.3 Body Fat Distribution <ul style="list-style-type: none"> ➤ Android Fat Distribution ➤ Gonoid Fat Distribution 7.4 Management 7.5 Life Style Modification	Theory-20 Unit-7 7.PNS CONDITIONS 7.1 Types Of Nerve Injuries 7.2 Diabetic Neuropathy 7.3 G.B.S 7.4 Facial Palsy 7.5 Trigeminal Neuralgia 7.6 Foot Drop	Theory-18 Unit-4 4.Superficial Heating Methods 4.1 Physiological And Therapeutic Effects Of Heat 4.2 Paraffin Wax Bath therapy 4.3 Hot Packs 4.4 Contrast Bath 4.5 Infra-Red Radiation <ul style="list-style-type: none"> ➤ Non Luminous Generators ➤ Luminous Generators
	Practical-13 <ul style="list-style-type: none"> ➤ Obesity 	Practical-13 <ul style="list-style-type: none"> ➤ Foot Drop ➤ Fracture Neck Of Femur 	Practical-24 <ul style="list-style-type: none"> ➤ Paraffin Wax Bath ➤ Hot Packs ➤ Infrared Radiation
	Assignment – III	Assignment –III	Assignment - III
	Quarterly Examinations	Quarterly Examinations	Quarterly Examinations

<p>October 2023 No. of Days-18</p>	<p>Theory-14</p> <p>Unit – 8</p> <p>8.Incisions, Anaesthesia And Burns</p> <p>8.1 Incisions- Definition</p> <p>Types</p> <ul style="list-style-type: none"> ➤ Vertical ➤ Transverse ➤ Oblique ➤ Abdominal And Thoracic ➤ Chest, Head And Neck <p>8.2 Anaesthesia</p> <ul style="list-style-type: none"> ➤ Local ➤ General ➤ Regional <p>8.3 Burns</p>	<p>Theory-15</p> <p>Unit - 8</p> <p>8 Injuries Of Brain And Spinal Cord</p> <p>8.1Head Injury</p> <p>8.1 Coma</p> <p>8.2 Hemiplegia</p> <p>8.3 Paraplegia</p>	<p>Theory-17</p> <p>Unit – 5</p> <p>5.High Frequency Currents</p> <p>5.1 S.W.D</p> <p>5.2 Ultra Sound Therapy</p> <p>5.3 LASER Therapy</p>
	<p>Practical-11</p> <ul style="list-style-type: none"> ➤ Burns 	<p>Practical-17</p> <ul style="list-style-type: none"> ➤ Hemiplegia 	<p>Practical-18</p> <ul style="list-style-type: none"> ➤ S.W.D ➤ Ultrasound ➤ LASER
	<p>Assignment - IV</p>	<p>Assignment –IV</p>	<p>Assignment - IV</p>
	<p>UNIT- III</p>	<p>UNIT- III</p>	<p>UNIT- III</p>

<p>November-2023 No. of Days-25</p>	<p>Theory-17 Unit – 9 9.Pediatrics 9.1 Developmental Mile Stones 9.2 Cerebral Palsy 9.3 Poliomyelitis</p>	<p>Theory-15 Unit - 9 9. Other Conditions 9.1 Rheumatoid Arthritis 9.2 Amputations 9.3 Ankylosing Spondylitis 9.4 Orthopaedics Appliances ➤ Cervical Orthosis ➤ Shoulder Orthosis ➤ Lumbo Sacral ➤ Lumbo Sacral Orthosis ➤ Elbow Orthosis ➤ Elbow Wrist Hand ➤ Finger Orthosis ➤ Thumb Spicas ➤ Upper Extremity Peripheral Nerve Palsy Orthosis</p>	<p>Theory-10 Unit- 6 6.Cryotherapy And Traction 6.1 Cryotherapy 6.2 Traction</p>
	<p>Practical-24 ➤ Cerebral Palsy ➤ Poliomyelitis</p>	<p>Practical-18 ➤ Rheumatoid Arthritis ➤ Below Knee Amputation</p>	<p>Practical-24 ➤ Cryotherapy ➤ Traction</p>
	<p>Assignment - V</p>	<p>Assignment - V</p>	<p>Assignment - V</p>
	<p>UNIT - IV</p>	<p>UNIT - IV</p>	<p>UNIT- IV</p>

<p>December 2023 No. of Days-24</p>	<p>OJT-(OneMonthOnly)</p>	<p>OJT-(OneMonthOnly)</p>	<p>OJT-(OneMonthOnly)</p>
	<p>Half Yearly Examinations</p>	<p>Half Yearly Examinations</p>	<p>Half Yearly Examinations</p>

January 2024 No of Days-20	Theory-19 Revision / Assignment – VI / Pre-Final Examinations - 1	Theory-10 Revision / Assignment – VI / Pre- Final Examinations - 1	Theory-12 Revision / Assignment – VI / Pre-Final Examinations - 1
	Practical– 15 REVISION	Practical – 15 REVISION	Practical-16 REVISION
February 2024 No of Days-24	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS	REVISION /PREFINAL-2 PRACTICAL EXAMINATIONS
March 2024 No. of Days-21	IPEMarch-2024	IPEMarch-2024	IPEMarch-2024

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ANNUAL ACADEMIC PLAN-2023-2024, First Year
Multipurpose Health Worker (Female) - 619

Month & No. of working days	VT-1 Community Health Nursing	VT-2 Health Promotion	VT-3 PRIMERY HEALTH CARE
June, 2023 No of Working days- 24	UNIT-I THEORY – (20 Periods) CONCEPT OF HEALTH Dimension of Health Determinant of Health Primary Health Care Level of Prevention	UNIT -I THEORY – (20 Periods) ESSENTIAL NUTRIENTS 1. Introduction, 2. History of Nutrition, 3. Concepts of Nutrition, 4. Keywords, 5. Essential Nutrients, 6. Importance of Nutrition in Health & Sickness, 7. Essential Nutrients by Functions, Sources & Requirements for Different Age Groups, 8. Classification of Foods & Their Nutrit	UNIT -I THEORY – (20 Periods) Hospital 1.0-Introduction 1.1-Definition 1.2-Functions 1.3-Classification 1.4- Admission and discharge procedure 1.5- Nursing as profession
	UNIT-II-STRUCTURE AND ORGANIZATION OF COMMUNITY	UNIT-II NUTRITIONAL PROBLEMS	UNIT-II PREPARATION OF PATIENT
	2.1 Meaning/Definitions of Community Rural community, characteristics and problems Urban community characteristics and problems Structure and functions of Panchayat Raj Role of Panchayat Raj in health Social Organization-Groups The Family PRACTICAL – (20 Periods)	1. Nutritional deficiency 2. correction, treatment and referral anemia, in women 3. The role of MPHWF in planning supplementary foods 4. Special diet of individuals for different age. PRACTICAL - (20 periods)	UNIT –Definition –Principles – Optimum healing environment for patient -Factors affecting safety of patient -Patient unit –Bed making –Different types of Bed PRACTICAL – (20 periods) 1 . procedure of admission

	1. Prepare a chat for community problems 2. Identify the spotters & write its uses	List the essential nutrients, function sources and requirements, water soluble vitamins, fat soluble vitamins, different diet plans. 1.spotters	2. procedure of discharge 3. occupied bed making 4.spotters
	UNIT- TEST-1 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND	UNIT- TEST-1 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND	UNIT- TEST-1 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND
July, 2023 No. of days- 24	Unit -III Theory-17(Periods) COMMUNITY BASED ASSESSMENT and methods of community based assessment 3.2 Health assessment 3.3 Health assessment and history taking 3.4 Care of sick and referral system	Unit -III Theory-17(Periods) NUTRITIONAL ASSESSMENT 1. Methods of nutritional assessment of individual and family mother and child, 2. food fads, taboos, customs and their influence on Health	Unit -III Theory-17(Periods) OPTIMAL FUNCTIONING OF HYGIENE 3.2- Definition; Personal hygiene 3.3- Care of mouth 3.4- Care of skin 3.5- Care of hair and nails 3.6- Care of eye 3.7- Care of ear 3.8- Care of bowel and bladder 3.9- sexual hygiene 3.10- Comfort, needs of sick 3.11- Care of pressure points 3.12- Positioning 3.13- Handwashing 3.14- Basic human needs 3.15- Rest and sleep 3.16- Activity, exercises and posture 3.17- Habits; food, eating and drinking 3.18- Participation in social activities 3.19- Self-actualization and spiritual needs 3.20- Interpersonal and human relations 3.21- Lifestyle and healthy habits

	<p>UNIT- IV HOME VISIT 4.1 Concept, Importance, Principles and Planning 4.2 Bag Technique- Equipment, usage of bag at home 4.3 Disinfection of equipment</p>	<p>UNIT-IV PROMOTION OF NUTRITION 1. Lifestyle and food habits 2. Planning diets and special diets for a family- 3. methods of using locally- 4. available foods for special diets- 5. principles and methods of cooking 6. Promotion of kitchen garden- 7. Food hygiene and safe preparation storage and preservation 8. Food adulteration precautions during festivals and Melas Practical – (17 PERIODS) 1. Nutritional assessment 2. Procedure methods of nutritional assessment 3. Cooking methods 4. Principals of you follow while cooking 5. spotters</p>	<p>UNIT-IV COLLECTION OF SPECIMEN COLLECTION OF SPECIMEN 4.1- Definition and Principles of collection of specimen 4.2- Methods of collection and handling of body discharges 4.3- Collection of specimen of blood 4.4- Collection of specimen of sputum 4.5- Collection of specimen of urine 4.6- Collection of specimen of stool 4.7- Labelling of specimen 4.8- Collection of other specimen</p>
	<p>UNIT- V HEALTH PROBLEMS AND POLICIES Overview of health problems in India 5.2 Trends and developments in National Health Policies 5.3 National Population Policy & Five years' plans 5.4 National health Programmes Practical – (17 PERIODS) 1. History taking procedure 2. Physical examination proforma 3. Home visit 4. Bag technique 5. Spotters</p>		<p>UNIT- V DISINFECTION AND STERILIZATION Definition 5.2- Principles 5.3- Methods of disinfection and sterilization 5.4- Methods of disinfecting different equipment 5.5- Methods of sterilizing different equipment Practical – (17 PERIODS) 1. collection of specimen 2. urine specimen 3. spotters</p>
	<p>UNIT- TEST-2 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>	<p>UNIT- TEST-2 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>	<p>UNIT- TEST-2 ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>

<p>August 2023 No. of working days-25</p>	<p>Theory-17(Periods) UNIT -VI HEALTH COMMUNICATION AND HEALTH EDUCATION 6.1 Principles, Methods and process of Communication. 6.2 Interpersonal relationship and communication with different groups and health team members. 6.3 Health Education- Definition, uses, principles, scope, approaches 6.4 Use of AV Aids, role of mass media. 6.5 BCC, IEC, Role and responsibilities of MPHWF in IEC</p>	<p>Theory-17(Periods) UNIT -V THE HUMAN BODY 1. Structure and functions of the human body 2. Body systems and their functions- Digestive system, 3. Respiratory system, 4. Genitourinary system, 5. Cardiovascular system, 6. Nervous system. 7. Musculoskeletal system, 8. Endocrine system, 9. Special sensory organs</p>	<p>Theory-17(Periods) UNIT VI BIOMEDICAL WASTE MANAGEMENT 6.1- Definition 6.2- Categories of biomedical waste 6.3- Principles 6.4- Methods of waste disposal 6.5- Hazards of hospital waste 6.6- Dos and Don'ts of waste management in the Hospital</p>
	<p>UNIT- VII CONCEPT OF DISEASE 7.1 Identification of illness. 7.2 Disease causation 7.3 Classification of diseases</p>	<p>UNIT- VI MENTAL HEALTH 1. Concept of mental health- Body mind relationship- factors influencing mental health 2. Characteristics of a mentally healthy person, 3. Developmental tasks of different age groups, 4. Mental health services 5. Different defense mechanisms- Emotions 6. motivation 7. Learning 8. Memory 9. Thinking</p>	<p>UNIT- VII MALADJUSTMENT 1. Features of a maladjusted individual- Common causes for maladjustment, 2. Relevance of Adjustment to Nursing Practical –(17 PERIODS) 1. Identify spotters</p>

	<p>UNIT -VIII</p> <p>INFECTION 6.1 8.1 Meaning and types of Infection and causes of Infection 8.2 Classification and characteristic of microorganisms, pathogenic and non - Pathogenic. 8.3 Incubation period and spread of infection - Transmission 8.4 Factors affecting growth and destruction of Microbes</p> <p>Practical –(17 PERIODS) 1. AV AIDS 2. Identify spotters</p>		<p>UNIT-VIII</p> <p>OPERATION THEATRE NURSING 8-1 – Structure of O.T 8-2- Supplies and equipment of the O.T 8-3- Function of scrub nurse and circulatory nurse 8-4- Pre and post operative care of a patient post op for surgery</p> <p>Practical –(17 PERIODS) 1. TPR procedure 2. Cold compress 3. Ice cap 4. Hot water bottle 5. Steam inhalation 6. spotters</p>
	<p>Quarterly Examinations &</p> <p>ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>	<p>Quarterly Examinations</p> <p>ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>	<p>Quarterly Examinations</p> <p>ASSIGNMENT TO BE CONDUCTED AT EVERY WEEKEND</p>
<p>September 2022 3 No. of working days - 22</p>	<p>Unit-IX</p> <p>Theory-16(Periods)</p> <p>IMMUNITY 9.1 Body defence mechanism, Immunity concept 9.2 Hypersensitivity, antigen and antibody reaction 9.3 Classification or types of immunity 9.4 Types of vaccines 9.5 Storage and cold chain system</p>	<p>UNIT - XIII</p> <p>Theory-16(Periods)</p> <p>MENTAL ILLNESS 1. Definition, Mis-conceptions about mental illness, Symptoms of poor mental health, Causes of Mental illness, Classification of Mental Illness: Types of Mental Disorders, Treatment of the Mentally ill: Abnormal Behaviour,</p>	<p>UNIT -IX</p> <p>Theory-16(Periods)</p> <p>CARE OF PHYSICALLY AND MENTALLY CHALLENGED 9-1- Types of physically challenged 9-2- Understanding of mentally challenged 9-3- Counselling for challenged 9-4- Helping family to ensure need based care</p>

	<p>UNIT X-IMMUNIZATION 10.1 Immunization against different infections 10.2 Revised immunization schedule 10.3 Injection safety, methods of administering vaccine 10.4 Sterilization of syringes and needles 10.5 Immunization in the community 10.6 Immunization hazards, precautions while giving vaccines 10.7 Special immunization drives and programmes, records and reports</p>	<p>Psychiatric Emergencies Practical - (16 PERIODS) 1. Assessment of mental illness 2. Identification of spotters</p>	<p>10.1- Different systems of medicine 10.2- Classification of drug forms 10.3- Characteristics of drugs 10.4- Abbreviations used in medication 10.5- Administration of drugs- policies and regulations as per protocol 10.6- Classification of drugs 10.7- Routes of administration 10.8- Rights of drug administration 10.9- Principles of safety measures 10.10- Role of MPHWF in the administration of drugs</p>
	<p>UNIT-XI- ENVIRONMENTAL SANITATION</p> <p>Environment and ecology of health living basic sanitary needs Air, Sunlight and ventilation Home Environment- Smoke and animals, drains and toilets Practical - (16 PERIODS) 1. Immunization schedule 2. Cold chain 3. Methods of administration of vaccine. 4. Spotters</p>		<p>PRIMARY HEALTH CARE UNIT-XI EMERGENCY DRUGS IN O.T. AND OTHER AREAS EMERGENCY DRUGS IN O.T. AND OTHER AREAS - Drugs used in O.T. - I.V fluids, injections - Anterabies vaccine - Anter snake venom Practical - (16 PERIODS) 1. Administration of oral medication 2. Intramuscular injection 3. Spotters</p>
	Unit TEST-3	Unit TEST-3	Unit TEST-3

	Assignment to be conducted every weekend	Assignment to be conducted every weekend	Assignment to be conducted every weekend
October 2023 No. of days-18	UNITXII-SAFEWATER Theory-17(Periods) 12.2Sources and characteristics of safe water. Sources of contamination and prevention. Purification of water for Drinking- Methods Small and Large Scale Disinfection of well- Tube well, Tank and Pond in a village Water borne diseases	UNIT-IX GERIATRICNURSING Theory- 17(Periods) GERIATRIC NURSINGE 1. Definition, 2. Aging process and changes, 3. Healthassessment of Elderly, 4. National policy on Elderly, Nurses Responsibilities	UNIT- XII Theory-17(Periods)FIRST AID AND REFERRAL Principles of first aid - First aid kit and supplies - Bandages and types - Principles and methods of Bandaging
	UNIT- XIII DISPOSAL OF EXCRETA AND WASTE Methods of excreta disposal Types of Latrines Handling of animal excreta Methods of waste disposal Hazards due to waste Maintenance of village drains, ponds and wells	UNIT - X COUNSELLING AND GUIDANCEE 1. Definition of Guidance, 2. Characteristics, 3. Types of Guidance, 4. Counselling, 5. Goals ofCounselling:6. Principles, 7. Process of Counselling: 8. Counselling skills, 9. Characteristics of Counsellor, 10Types of Counselling, 11Role of Nurse in Counselling	UNIT -XIII MINOR INJURIES AND AILMENTS wounds - First aid for foreign bodies - Burns and scalds - Snake bite - Dog bite - Health education UNIT-XIV FRACTURE 14.1-Skeletalsystem 14.2- Different types of bone fracture 14.3-causesandsignsandsymptoms 14.4-firstaidforfracture 14.5-Methods of immobilization and transportation

	<p>UNIT XIV- INTRODUCTION TO COMMUNICABLE DISEASES</p> <p>Introduction Childhood Seven Target killer diseases</p>	<p>Practical –(17 PERIODS)</p> <ol style="list-style-type: none"> 1. Assessment of oldage people 2. Diet plan of oldage people 3. Spotters 	
	<p>UNIT XV OCCUPATIONAL HEALTH</p> <p>List the occupational diseases Prevention of occupational hazards</p> <ul style="list-style-type: none"> • Role & responsibilities of M PHW(F) in prevention of occupational diseases 		<p>UNIT -XV LIFE THREATING CONDITION</p> <p>15.1-Bleeding 15.2-Drowning 15.3-Strangulation 15.4 suffocation and asphyxia 15.5-Loss of consciousness 15.6-Cardio respiratory arrest 15.7-Convulsion 15.8-Chest injuries 15.9-Shock and allergic conditions 15.10-Poisoning 15.11 Bites and stings 15.12-Stroke 15.13-Heatstroke 15.14-Burns and scalds</p>
	<p>UNIT -XVI Disaster Management</p> <ul style="list-style-type: none"> • Concept & DEFINATION • Types & management of disaster • Role & Responsibility of MPHWF in disaster management 		<p>Practical –(17 PERIODS)</p> <ol style="list-style-type: none"> 1. First aid kit 2. Roller bandage 3. Simple spiral 4. Reverse spiral 5. Application of triangular bandage 6. Surgical dressing 7. CPR TECHNIQUE 8. Spotters

	Practical-17(Periods) 1.Procedure of water purification 2.Disposal methods 3.Identify spotters		
	Half yearly examination Assignments to be conducted every weekend	Half yearly examination Assignments to be conducted every weekend	Half yearly examination Assignments to be conducted every weekend
November-2023 no.of Days-25	OJT-(One monthonly) IV UNIT TEST	OJT-(One monthonly) IV UNIT TEST	OJT-(One monthonly) IV UNIT TEST
December2023 No.of Days-24	REVISION PRE-FINALEXAMINATION	REVISION PRE-FINALEXAMINATION	REVISION PRE-FINALEXAMINATION
January 2024 No.OfDays-20	Revision IPEMARCH- 2023-24PRACTICAL EXAMS	Revision IPEMARCH-2023-24PRACTICAL EXAMS	Revision IPEMARCH-2023-24 PRACTICAL EXAMS
February, 2023 No.ofDays- 24	IPETheory model paper Practicing & IPE theory Examination-2024	IPETheory model paper Practicing & IPE theory Examination-2024	IPETheory model paper Practicing & IPE theory Examination-2024
March, 2024 Working days 21	IPE theory Examination 2023-24	IPE theory Examination2023-24	IPE theory Examination2023-24

Preparedby:

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ANNUAL ACADEMIC PLAN – 2023-2024
Multipurpose Health Worker (Female) - Second year (619)

Month & No. of working days	Midwifery VT4	Child Health Nursing VT5	Health Centre Management VT6
<p style="text-align: center;">June 2023 No. of working days-24</p>	<p>Theory:(20 periods) UNIT-1 HUMAN REPRODUCTIVE SYSTEM 1.0-Introduction 1.1-Female reproductive organ 1.2- Structure and Functions 1.3- Menstrual cycle 1.4-Male reproductive organs 1.5- Structure and Functions process of fertilization Assignment Practical – (20 Periods) 1. Identify spotters <b style="color: red;">UNIT TEST -1 & Assignment to be conducted every weekend</p>	<p>Theory:(20 periods) UNIT – I . GROWTH AND DEVELOPMENT Introduction to Growth and Development Factors influencing growth and development Growth and development of different stages of children Under Five Clinic Play, hygiene, emotional needs, toilet training Causes and prevention of accidents in children Practical – (20 Periods) 1. Assesment of growth and development 2. Identify spotters <b style="color: red;">UNIT TEST -1 & Assignment to be conducted every weekend</p>	<p>Theory:(20 periods) UNIT-1 CONCEPT OF MANAGEMENT Introduction Management Concept Definition Characteristics of management Functions or Elements of Management Principles of Management Role of Nurse as Manager Line of Authority Practical – (20 Periods) 1. Identify spotters <b style="color: red;">UNIT TEST -1 & Assignment to be conducted every weekend</p>
<p>July 2023 No. of working days-24</p>	<p>Theory-17 (Periods) UNIT – II . FEMALE PELVIS AND FEOTALSKULLY 2.1-Structure of pelvic bone 2.2-</p>	<p>Theory- 17 (Periods) UNIT – II . NEW BORN CARE Assessment of New Born Care APGAR Score-Resuscitation Management of new born,</p>	<p>Theory-17 (Periods) UNIT – II HEALTH ADMINISTRATION IN IND Organisation and Administration of Health SIndia at</p>

	<p>Types of pelvis 2.3-Pelvic diameter 2.4-Muscles and ligaments of pelvic floor 2.5- Foetal skull: suture, size and shape</p> <p>UNIT-III - FOETUS AND PLACENTA</p> <p>FOETUS AND PLACENTA</p> <p>3.1- Growth and development of foetus, foetal sac and amniotic fluid 3.2- Foetal circulation 3.3- Physiological changes after birth -Structure, types and functions of placenta -Umbilical cord abnormalities</p> <p>Practical - (17 Periods)</p> <ol style="list-style-type: none"> 1. Female pelvis 2. Diameters of pelvis 3. Types of pelvis 4. Fetal skull 5. Identify spotters <p>UNIT TEST -2 Assignment to be conducted every weekend</p>	<p>prevention of infection and cord care Kangaroo mother care 2.5 Immunization 2.6 Care of new born baby with jaundice 2.7 Common infections and respiratory Problems 2.8 Congenital anomalies 2.9 Care of premature baby, small for age, post maturity</p> <p>Practical - (17 Periods)</p> <ol style="list-style-type: none"> 1. Procedure of weight checking 2. Height and Weight new born of infant 3. Measurement of circumference 4. Assessment of new born 5. New born resuscitation 6. Identify spotters <p>UNIT TEST -2 Assignment to be conducted every weekend</p>	<p>National Level Organisation and Administration of Health SIndia at State Level Organisation and Administration of Health SIndia at District/ Local Level</p> <p>UNIT - III HEALTH CENTRE</p> <p>Theory-17 (Periods) HEALTH CENTRE</p> <p>3.1 Sub centre Organisation, Functions, Facilities and Reports, Centre activity plans, Conduct of Clinics and special programmes Primary Health centre Organisation, Function Records and Reports, Centre activity plans, Conduct of special programmes Community Health centre Organisation, Facilities, Records and Reports, Centre activity plans, Clinics and special programmes Referral System Conducting meetings Information Education and Communication.</p> <p>Practical - (17 Periods)</p> <ol style="list-style-type: none"> 1. Antenatal clinic 2. Community health action program 3. Spotters <p>UNIT TEST -2 Assignment to be conducted every weekend</p>
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<p style="text-align: center;">August 2023 No. of days-25</p>	<p>UNIT-IV - NORMAL PREGNANCY Theory-17 (Periods) 4.1- Signs and symptoms of pregnancy 4.2-Diagnostic test for confirmation of pregnancy 4.3-Physiological changes during pregnancy 4.4-Minor ailments during pregnancy and their management 4.5-Anemia in pregnancy 4.6-Pregnancy induced hypertension</p> <p>UNIT-V - ANTENATAL CARE 5.1Antenatal period and Registration 5.2-Taking history of pregnant women 5.3-Physical examination, investigations 5.4-Routine and prophylactic medications 5.5-Need based health information and guidance 5.6-Nutrition in pregnancy 5.7- Special needs of pregnant women- involvement of husband and family 5.8- Identification of high risk cases and referral, preparation of mother for delivery</p> <p>Practical - (17 Periods) 1. History taking 2. Antenatal examination 3. Urine testing 4. Pregnancy test 5. Vaginal examination 6. conducting delivery (delivery kit) 7. Spotters</p> <p>Quarterly Examinations & Assignment to be conducted at every weekend</p>	<p>UNIT - III . NUTRITION OF INFANTS AND CHILDREN Theory-17 (Periods) Assessment of nutritional status, nutritional requirement Exclusive breast feeding, expressed breast milk Weaning, problems of feeding Infant feeding in HIV</p> <p>UNIT - IV . SOCIAL AND BEHAVIOURAL PROBLEMS IN CHILDREN 4.1 Nail biting, thumb sucking, enuresis Temper tantrum heading, Child abuse-Child labour Battered child syndrome – Juvenile delinquency Protection of child rights Female infanticides</p> <p>Practical - (17 Periods) 1. Assessment of nutritional status 2. exclusive breast feeding 3. weaning chart an infant 4. Spotters</p> <p>Quarterly Examinations Assignment to be conducted at every weekend</p>	<p>UNIT - IV HEALTH TEAM Theory-17 (Periods) Definition Concept of Health Team Importance of Team Approach Staffing Pattern in SC/PHC/CHC Roles and Responsibilities of each member</p> <p>UNIT - V HEALTH PLANNING Definition Health Committees Five Year Plans National Health Policy National Population Policy Ambulance Services Arogya sri Services</p> <p>Practical - (17 Periods) 1. School health clinic 2. Under five clinic 3. Mobile health clinic 4. Identify spotters</p> <p>Quarterly Examinations Assignment to be conducted at every weekend</p>
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<p>September 2023 No. of working days-22</p>	<p>UNIT-VI - NORMAL LABOUR Theory-16 (Periods) 6.1-Onset and stages of labour, 6.2- Changes in uterine muscles and cervix – lie,attitude, position, denominator and Presentation of foetus 6.3- Mechanism of labour6.4- Identification of highrisk cases Foetal distress and maternal distress during Labour 6.5- Partograph in the management of NormalLabour – History of labour –Importance of 6 ‘c’ , preparation for delivery 6.6-Care of mother in first, second, third and fourthstage of labor – assist and Conduct child birth 6.7- Immediate care of new born & resuscitation.6.8- Initiate breast feeding. 6.9-Perineal tear - appropriate care and referral 6.10- LSCS – Pre and post-operative care of motherwith LSCS, 6.11-Immediate management of mother duringabnormal Labor and Referral – Role of MPHW (F)</p>	<p>UNIT – V . CARE OF SICK CHILD Theory-16 (Periods) 5. 0 Common childhood diseases, signs/symptomsand management. Fever-Viral fever, Typhoid, Malaria, Dengue,AcuteRespiratory Tract infections Diarrheal diseases, Vomiting, Constipation,Jaundice. Infectious diseases (7killer diseases) Diphtheria(Pertusis), Whooping cough, Tetanus, Measles, Tuberculosis, Polio and Hepatitis B Tonsillitis, Ear infections, C</p> <p>Practical – (16 Periods) 1. Acute respiratory tract infections 2. acute diarrhoeal diseases 3. spotters ..</p> <p>UNIT TEST -3 Assignment to be conducted</p>	<p>UNIT – VI MAINTENANCE OF STOCK Theory-16 (Periods) Maintenance of Equipment and Supplies Drug storage and maintenance Stock Indenting, calculation of indents as perequirement Management Information and Evaluation Sy Maintenance of Stock Registers UNIT- VII DEMOGRAPHY AND FAMILY WELFARE Introduction Definition Population Trends in India Vital/ Health Statistics Important Rates and Indicators Contraceptive Methods Role of MPHW (F) in Family Welfare Progra The Role of IEC and Mass media in FamilyProgramme Practical – (16 Periods) 1. conducting antenatal clinic 2. spotters.</p>
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	<p style="text-align: center;">Unit -VII</p> <p>PUERPERIUM</p> <ul style="list-style-type: none"> ✓ Introduction ✓ Postnatal assessment ✓ Minor aliements during puerperium and their management ✓ Care of postnatal mother ✓ Important & advantages of Breast feeding ✓ Postpartum haemorrhage & its management ✓ Breast complications during lactation & its management ✓ Family planning <p>Practical - (16 Periods)</p> <ol style="list-style-type: none"> 1. Pantograph 2. New born resuscitation 3. Post natal examination 4. Spotters <p>UNIT TEST -3 Assignment to be conducted every weekend</p>	<p>every weekend</p>	<p>UNIT TEST -3 Assignment to be conducted every weekend 8</p>
<p>October 2023 18- working days</p>	<p>UNIT-VIII - DRUGS IN MIDWIFERY Theory-17 (Periods)</p> <p>8.1 Pain relieving drugs 8.2- Anaesthetic drugs</p> <p>8.3- Uterine contraction drugs 8.4- Drug for controlling bleeding 8.5- Drug for preeclamsia</p> <p>8.6- Antibiotics</p> <p>8.7- I.V.Fluids</p>	<p>UNIT - VI . SCHOOL HEALTH SERVICES Theory-17 (Periods)</p> <p>Concept - objectives and components of schoolhealth programmes</p> <p>Health assessment, regular check-ups- Dentalhygiene Eye health</p> <p>Nutritional problems and supplementation</p> <p>Treatment of minor ailments</p>	<p>UNIT - VIII INTERSECTORALCOORDINATI Theory-17(Periods)</p> <p>Definition</p> <p>Coordination between ASHAs, Anganwadi(AWWs) and ANM</p> <p>Coordination between teacher, Students and Non Governmental Agencies</p> <p>NATIONAL HEALTH PROGRAMMES: MPHW (F) ROLE</p>

	<p>ABORTION 9.1-Types of abortion 9.2-causes of abortion 9.3- Complications of abortion and referral 9.4-Medical termination of pregnancy 9.5- Care of women with abortion</p> <p>GYNAECOLOGICAL CONDITIONS STRUCTURE - Menopause - Breast Carcinoma - Cervical Carcinoma - Infertility - Counselling</p> <p>CARE OF MOTHER WITH HIV, STI AND HEPATITIS B STRUCTURE 11.1- Causes and signs and symptoms and Systemic approach for HIV treatment - Causes and signs and symptoms and Systemic approach for STI treatment - Causes and signs and symptoms and Systemic approach for Hepatitis B treatment 11.4- Standard safety measures - Voluntary counselling and testing centre – Integrated counselling and testing centre (ICTC) activities</p>	<p>referral services Nutritional programmes, ICDS, midday meal applied Nutrition– Special Nutrition programme, Anganwadi. Maintenances of school health records & reports Role of MPH W (F) in school health</p> <p>CARE OF PHYSICALLY AND MENTALLY CHALLENGED Concept – Objectives Physically challenged, Causes, Types, Burden on family and Community Management Mentally challenged, Causes, IQ types, Myths and facts, Burden on family and Community –Management Role of government and private agencies in caring of physically and mentally challenged Role of MPH W (F) – Rehabilitation</p> <p>CARE OF ADOLESCENTS Growth Monitoring – Physical, Emotional and Behavioral changes in Girls and Boys Special needs of adolescents Behavioral problems of adolescents.</p>	<p>9. Introduction National Health Programmes Role of MPH W (F) in Organising National Health Programmes: UNIT -IX STAFF DEVELOPMENT 10.1 Definition 10.2 Methods of Staff Development</p> <ul style="list-style-type: none"> □ Continuing Education □ In Service Education □ Induction Training □ Training for Specific Function <p>Skill Training Practical – (17 Periods) 1. RN TCP PROGRAM 2. National malaria control program 3. spotters Half yearly examinations Assignment to be conducted every weekend</p>
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	<p>- Prophylaxis and breast feeding guidelines TRENDS IN MIDWIFERY 12.1- Family welfare programme - C.S.S.M and M.C.H. - RCH I & II - NRHM, SBA - JSY -102(mother and child express), 104, 108 ambulance services - Sishu Suraksha Yojana and Painless Labour Practical – (17 Periods) 1. Perineal care 2. IUD insertion procedure 3. Oxytocin 4. spotters</p> <p>Half yearly examinations Assignment to be conducted every weekend</p>	<p>Sex education, guidance and counseling CARE OF ADOLESCENT GIRLS Secondary sexual characteristics Menstruation and Menstrual cycle Special nutritional needs Preparing for safe motherhood, premarital counselling Role of MPHWF in care of adolescent girls UNIT-X RECENT TRENDS IN CHILD HEALTH NURSING Baby friendly hospital initiative CSSM – RCH I & II NRHM – IMNCI JSY – NSSK – NRC Bangaaruthalli Pathakam Practical – (17 Periods) 1. national nutritional programs 2. spotters Half yearly examinations Assignment to be conducted every weekend</p>	
November 2023 No.of Days-25	OJT- (One month only) IV UNIT TEST	OJT- (One month only) IV UNIT TEST	OJT- (One month only) IV UNIT TEST
December 2023 No.of Days-24	REVISION PRE-FINAL EXAMINATION	REVISION PRE-FINAL EXAMINATION	REVISION PRE-FINAL EXAMINATION
January 2024 No. Of Days-20	REVISION IPE MARCH-2023-2024 PRACTICAL EXAMS	REVISION IPE MARCH-2023 – 2024 PRACTICAL EXAMS	REVISION IPE MARCH-2023 – 2024 PRACTICAL EXAMINATION

February 2024 No. of Days- 24	Theory Model paper Practicing IPE MARCH -2023-2024 Examination	Theory Model paper Practicing IPE MARCH -2023- 2024Examination	Theory Model paper Practicing IPE MARCH -2023-2024 Examination
March 2024 No. of Days- 21	IPE MARCH -2023-2024 Examination	IPE MARCH -2023-2024 Examination	IPE MARCH -2023-2024 Examination

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