

Vocational Curriculum – 2018

(With effect from the academic year 2018-2019)

Curriculum of Intermediate Vocational Course In COMPUTER SCIENCE & ENGINEERING



State Institute of Vocational Education

**O/o the Commissioner of Intermediate Education,
Andhra Pradesh, Hyderabad**

&

**Board of Intermediate Education,
Andhra Pradesh, Hyderabad**

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1. INTRODUCTION

The objectives of Vocational Education System in the context of fulfillment of national goal are to train the students for employment in the growing sectors of economy both organized and unorganized, to provide an alternative channel for higher education and to prepare students for self-reliance and gainful employment. There has been a great improvement in the demand for computer professionals during the past few years. To cater to certain computer oriented requirements of the business sector the Computer science course syllabus has been drafted

2. OBJECTIVES OF COURSE

- To develop professional competence in the use of computers and related hardware, programming skills and techniques.
- To train the students to acquire skills and mastery in the use and development of different software.
- To prepare for self and wage employment.

3. SKILLS TO BE PROVIDED

- Skills to operate different computer hardware devices.
- Skills in maintenance procedures.
- Skills in configuring the system software and installation procedures.
- Skills in using specific packages and Languages.
- Skills in programming techniques and data processing.
- Skills in computer and data security.

4. JOB OPPORTUNITIES

(a) WAGE EMPLOYMENT:

- Junior Programmer
- Computer operator
- Computer Instructor
- Software marketing personal
- Computerized Accounts Assistant
- Networking technicians with service providers
- Drafting assistants

(b) SELF EMPLOYMENT:

- DTP operator.
- Internet and E-mail center maintenance
- Maintaining and establishment of small networks
- Image and Video editing
- Basic hardware & Trouble shooting technician.
- Web Designer

**5a .ANNUAL SCHEME OF INSTRUCTION AND EXAMINATION FOR
COMPUTER SCIENCE & ENGG COURSE**

Part-A		Theory			Practicals		Total	
		Periods	Marks		Periods	Marks	Periods	Marks
1.	English	150	50		-	-	150	50
2.	General Foundation course	150	50		-	-	150	50
Part-B								
3.	Paper-1 Computer Fundamentals & MS-Office	135	50	Paper-1 Windows & MS-Office	135	50	270	100
4.	Paper-II Programming in C	135	50	Paper-II C-Programming	135	50	270	100
5.	Paper-111 Accountancy and Tally	135	50	Paper-111 Engineering Drawing.	135	50	270	100
6.	OJT	-	-	OJT	365	100	365	100
7.	Total	705	250		770	250	1475	500

On the Job Training November and December

II year Computer Science & Engg

Part-A		Theory			Practicals		Total	
		Periods	Marks		Periods	Marks	Periods	Marks
1.	English	150	50		-	-	150	50
2.	General Foundation course	150	50		-	-	150	50
Part-B								
3.	Paper-1 OOPS & JAVA	110	50	Paper-1 OOPS & JAVA	115	50	225	100
4.	Paper-II Relational Data Base Management System	110	50	Paper-II SQL,Photoshop &flash player	115	50	225	100
5.	Paper-III Data Communication & Computer Net works.	110	50	Paper-III Internet Technologies.	115	50	225	100
6.	OJT	-	-	OJT	405	100	450	100
7.	Total	630	250		795	250	1475	500

1000

On the Job Training : August, September & October

EVALUATION OF ON THE JOB TRAINING:

The “On the Job Training” shall carry 100 marks for each year and pass marks is 50. During on the job training the candidate shall put in a minimum of 90 % of attendance.

The evaluation shall be done in the last week of January.

Marks allotted for evaluation:

S.No	Name of the activity	Max. Marks allotted for each activity
1	Attendance and punctuality	30
2	Familiarity with technical terms	05
3	Familiarity with tools and material	05
4	Manual skills	05
5	Application of knowledge	10
6	Problem solving skills	10
7	Comprehension and observation	10
8	Human relations	05
9	Ability to communicate	10
10	Maintenance of dairy	10
	Total	100

NOTE: The On the Job Training mentioned is tentative. The spirit of On the Job training is to be maintained. The colleges are at liberty to conduct on the job training according to their local feasibility of institutions & industries. They may conduct the entire on the job training periods of (363) I year and (450) II year **either by conducting classes in morning session and send the students for OJT in afternoon session or two days in week or weekly or monthly or by any mode which is feasible for both the college and the institution.** However, the total assigned periods for on the job training should be completed. The institutions are at liberty to conduct On the Job training during summer also, however there will not be any financial commitment to the department.

The syllabus is broken into discrete sections, which were rearranged, removed, or modified to best fit the career of the vocational students to make students skill ready to take up industry challenge in future.

Justification of introducing flash and web designing courses in the vocational curriculum

In the present scenario, Multimedia and web design technology play an important role in the field of education, agriculture, product launch, corporate development and enhanced business opportunities. The demand for the manpower in these fields has escalated. So, this syllabus has been envisaged with an objective to develop specialized manpower required for these activities.

Justification of introducing “Hardware troubleshooting” in the vocational curriculum

This course is an exploratory, first course in computer hardware systems and maintenance designed primarily for students in computer science to prepare them for a career in PC repair. Students will understand diagnostic procedures and troubleshooting techniques to personal computers, operating systems and computer peripherals.

SCHEME OF INSTRUCTIONS PER WEEK COMPUTER SCIENCE ENGINEERING COURSE

Part-A		Theory	Practicals	Total
1.	English	4	--	4
2.	G.F.C.	4	--	4
Part-B Vocational Subjects				
Paper-I		4	4	8
Paper-II		4	4	8
Paper-III		4	4	8
Total		20	12	32

5 C. LISTS OF SUBJECTS IN COMPUTER SCIENCE & ENGINEERING**FIRST YEAR****THEORY**

1. COMPUTER FUNDAMENTALS & MS OFFICE
2. PROGRAMMING in C
3. ACCOUNTANCY and TALLY

PRACTICAL

1. WINDOWS & MS OFFICE
2. PROGRAMMING in C
3. ENGINEERING DRAWING

SECOND YEAR**THEORY**

1. OOPS AND JAVA
2. RELATIONAL DATABASE MANAGEMENT SYSTEM
3. DATA COMMUNICATION & COMPUTER NETWORKS

PRACTICAL

1. OOPS & JAVA
2. SQL, PHOTOSHOP & FLASH

**06. SYLLABUS
COMPUTER SCIENCE & ENGINEERING
I YEAR**

PART-B - VOCATIONAL SUBJECTS

PAPER-I COMPUTER FUNDAMENTALS & MS-OFFICE [THEORY]

PERIODS PER WEEK : 4

PERIODS PER YEAR : 135

S.NO.	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Introduction to Computer systems and Hardware	20	10	2	1
II	Overview of Operating Systems:-	20	10	2	1
III	MS Word	35	24	3	3
IV	MS Excel	35	16	2	2
V	MS Power Point	25	8	1	1
	Total	135	68	10	8

Note: After completion of every unit one assignment will be given to the students

Note:- The question paper contains TWO Sections.

SECTION – A contains 10 short questions carries 2marks each,

SECTION – B contains 8 Long questions carries 6 marks each.

The student has to answer ALL questions in SECTION – A and B any FIVE Questions in SECTION-B.

Additions/ Deletions/changes

1. Computer Fundamentals and MS Office has been changed from Paper 2 to Paper1.
2. The unit “Introduction to Computer systems and Hardware” has been added as the first unit in this subject Computer Fundamentals and MS Office. It has been deleted from the previous syllabus paper 1 ie. Computer fundamentals and programming in C.

COMPUTER SCIENCE & ENGINEERING**I Year (THEORY SYLLABUS)****PAPER 1 : COMPUTER FUNDAMENTALS & MS OFFICE.****1. Introduction to Computer systems and Hardware**

- Introduction to Computers, generations of computer
- Classification of Computers based on Purpose, Operation & Size
- Anatomy of Computers
- Number Systems
- Basic I/O Devices
- Block Diagram of CPU
- Memory units- Primary and Auxiliary memory
- Programming Languages, general software features trends and utilities.

2. Overview of Operating Systems

- Introduction to Operating system , function and its types
- Features of DOS
- Working with DOS Commands
- Features of Windows
- Meaning of Multitasking, File system, desktop components, control panel, Windows Explorer , Device manager, File Manager and Program Manager , Display properties, taskbar properties etc.

3. MS-Word

- Introduction to Word Processing
- Editing a Document
- Move and Copy Text and Help System
- Formatting Text and Paragraph
- Finding and Replacing Text and Spell Checking
- Using Tabs
- Enhancing Document
- Columns, Tables and Other Features
- Using Graphics, Templates and Wizards
- Using Mail Merge
- Miscellaneous features of Word

4. MS-Excel

- Introduction to Spreadsheet
- Creating Worksheets & feeding data
- Using functions
- Editing Cells and Using commands and functions
- Moving and Copying, Inserting and Deleting Rows and Columns
- Formatting a Worksheet
- Opening, Saving and Printing a Worksheet
- Working with Charts
- Working with Macros
- Pivot tables

5. MS-PowerPoint

- Creating Presentations using AutoContent Wizard, Template & Blank Presentation
- Working with Master's Slide, Title handout and Notes
- Viewing a Presentation
- Drawing Objects & Inserting OLE
- Drawing freeform shapes
- Rotating Objects
- Animation in slides/objects

Reference Books:

1. PC Software for Windows made simple by R K Taxali — Tata McGraw Hill
2. Fundamentals of MS-Office — BPB Publication

COMPUTER SCIENCE & ENGINEERING**I YEAR****PAPER-I: WINDOWS & MS-OFFICE [PRACTICAL]****PERIODS PER WEEK: 4****PERIODS PER YEAR: 135**

S.NO.	UNITS	NO.OF PERIODS
1	MSDOS	15
2	Working With Windows	20
3	MS Word	40
4	MS Excel	30
5	MS Power Point	20
6	Software installation and hardware maintenance	10
	Total	135

**COMPUTER SCIENCE & ENGINEERING
(PRACTICAL SYLLABUS) - I YEAR
WINDOWS & MS OFFICE****UNIT – I: FAMILIARIZATION WITH WINDOWS - Working with the following:**

- Features of windows
- Graphical user interface (GUI)
- File System
- Multitasking
- Plug and Play Support
- Multimedia Support
- Comparison with CUI (Dos or Unix)

1. WORKING WITH WINDOWS - Working with the following:

- Elements of Windows Interface
- My Computer
- My Documents
- Internet Explorer
- Network Neighborhood
- Recycle Bin
- Taskbar
- My Briefcase
- Shortcut Menus
- Property window
- Mouse Operations
- Shortcuts

2. STARTING A PROGRAM (APPLICATION) - Working with the following:

- Start Menu
- Programs Menu
- Documents Menu
- Settings Menu
- Find and Help Menu
- Run Menu
- Customizing Windows- resizing, moving and closing.

5. SHUTTING DOWN THE PC – Different options like standby, restart etc.**UNIT - II: MANAGING FILES AND FOLDERS WORKING IN WINDOWS - Working with the****following:**

- Folders
- Desktop
- My Computer Folder
- My Document Folder
- Notepad
- Creating Text Files
- Editing Text Files
- All the Menu Features of Notepad
- Renaming the Folders
- Selecting the Objects in Folders
- Selecting One Folder
- Boundary Box Method to Select Multiple Files
- Selecting Single Group of Consecutive Folders
- Selecting Non-Consecutive Folders
- Selecting Group Of Consecutive Folders
- Deleting Files and Folders
- Using Recycle – Bin
- Restoring Deleted File or Folder
- Emptying the Recycle Bin

1. OPENING MULTIPLE OBJECTS:

- Open Multiple Objects
- Open Multiple Applications Using the Mouse
- Creating our Own Folder
- Copying Objects
- Drag and Drop Feature
- Using Keyboard
- Using Standard Toolbar
- Right Dragging Method
- Moving Objects
- Drag and Drop Feature

- Using Keyboard
 - Using Standard Toolbar
 - Right Dragging Method

2. CONFIGURING WINDOWS FOR UNIQUE USER AND DESKTOP:

- Managing Passwords
- Setting Programs
- Starting Programs on Start-Up Menu
- Changing the Icon for a File Tag or Other Object
- Control Panel
- Setting Mouse Properties
- Setting Display Properties
- Setting Printer Properties
- Setting Date and Time Options
- Controlling the Folders Appearance
- Setting the Font Appearance
- Using the Task Bar
- Features of Taskbar
- Setting the Properties of Taskbar
- Desk Top
- Features Of Desk Top
- Customizing the Desktop
- Windows Explorer
- Viewing Files and Folders
- Creating Files and Folders
- Dragging and Dropping Files
- Cut – Copy – Paste
 - Searching Files
 - Deleting Files and Folders
 - Previewing a Document with Quick View.

UNIT –III: USING ACCESSORIES, DISK TOOLS AND PRINTERS ACCESSORIES AVAILABLE IN WINDOWS:

- Using Standard Calculator
- Using Scientific Calculator

- **Statistics Box**

- Word Pad**

- Starting Word-Pad
- Creating New WordPad Document
- Opening WordPad Document
- Saving a Document
- Selecting Text
- Moving and Copying Text

- WINDOWS PAINT**

- Starting Windows Paint
- Drawing Pictures with Paint
- Drawing with Pencil Tool
- Drawing the Picture with Tools
- Embedding a Paint Object
- Previewing Painting

LOCATING YOUR FILES AND ORGANISING DISK.

- Finding Files using File Tool
- Using Wild-Cards
- Finding a Program-File
- Searching by Modification Date
- Making a Search Case – Sensitive
- Formatting and Labeling Disks
- Back-Up Files
 - Creating Back-Up File
 - Saving File Set
 - Opening File-Set for using in Back-Up
 - Restoring Files
 - Verifying Back-Up Files

USING PRINTERS

- Windows -Printing Features
- The Print window – various options.

MS -OFFICE**MS-WORD:**

Familiarization with MS Word

1. Features of Word Processor
2. Opening MS Word
3. Contents of MS Word Window
4. Saving with password.
5. Opening an existing Document

Text Formatting

1. Selecting Continuous and Discontinuous text
2. Using Cut, Copy and Paste
3. Using Paste Special
4. Changing the Font type, style, size and color.
5. Changing the text case
6. Highlighting the text
7. Using superscripted and subscripted text
8. Clearing the formatting

Paragraph Formatting

1. Text alignment
2. Line spacing adjustment
3. Indenting the text
4. Bullets and Numbering
5. Inserting and changing tabs
6. Applying Borders and shading

Searching for text

1. Finding and Replacing Text
2. Jumping to the required section using “Go To”

Inserting Objects

1. Inserting and formatting pictures.
2. Inserting Symbols and equations.
3. Inserting and editing shapes and charts
4. Inserting page and section breaks
5. Inserting Text Box
6. Inserting Word Art
7. Inserting Auto text
8. Working with Headers and Footers

9. Inserting and formatting Page Numbers
10. Inserting comments, footnotes and endnotes
11. Inserting Hyperlinks

Working with tables

1. Using different techniques to insert tables.
2. Inserting and deleting cells, columns and rows.
3. Merging and splitting cells
4. Aligning text in tables
5. Changing text direction in tables
6. Working with borders and shading
7. Wrapping text around a table
8. Inserting and modifying formulae in tables
9. Repeating header rows in different pages

Working with Page Layout

1. Setting the page size and margins
2. Setting the page orientation
3. Changing page colour and borders
4. Inserting watermarks
5. Insert line numbers

Additional Tools

1. Using the spell and grammar check tool
2. Using Thesaurus
3. Counting words in documents
4. Using Autocorrect options
5. Showing/hiding the formatting marks
6. Creating and using Macros
7. Arranging and Viewing multiple windows

Mail Merge

1. Creating and storing data for mail merge.
2. Creating the mail merge documents.
3. Merging the documents, editing mail merged documents.
4. Creating labels and envelopes.

Printing the Documents

1. Previewing the documents to be printed

2. Setting the Printer
3. Setting the print range and number of copies
4. Setting the print properties

Emphasis to be laid on using Shortcut Keys for each task.

MS-EXCEL

- Features of MS-Excel
- Contents of the MS-Excel Window
 - Title Bar
 - Menu Bar
 - Toolbars
 - Row and Column Headings
 - Cell
 - Formula Bar
 - Reference Area
 - Status Bar
 - Scroll Bar
 - Worksheet Tabs
 - Office Assistant

Managing Worksheets

- Selecting Worksheets
- Renaming Worksheet
- Inserting and Deleting Worksheets
- Changing the order of Worksheets
- Copying Worksheets
- Selecting cells, columns, rows and sheets
- Inserting Rows and Columns
- Hiding rows and Columns
- Freezing rows and Columns
- Merging Cells
- Formatting Cells
- Cell Referencing

- Saving a Workbook
- Protecting Worksheets, locking and hiding cells.

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

Performing Calculations in Excel

- Entering simple formulae for addition subtraction etc.
- Familiarization with the categories of functions
- Working with the functions in Math and statistical category like sum, product, sqrt average, max, min, round etc.
- Working with the functions in Logical category
- Working with the functions in Date and Time category
- Working with the functions in Text category
- Applying functions to create students marks sheets and reports, Employee pay details and Income Tax computations etc.
- Linking Sheets and Pasting functions

Charts in Excel

- Familiarization with the types of charts
- Creating and formatting charts

Working with Data

- Applying Conditional Formatting to cells
- Sorting and Filtering Data
- Creating Subtotals
- Applying Validation
- Creating and using Lists
- Creating Data Forms

Additional Tools in Excel

- Formula Auditing
- Using Goal seek and creating scenarios.
- Creating one and two variable data tables
- Creating and modifying a pivot table

Printing Excel Sheets

- Setting the Page Size, orientation and margins.
- Previewing Excel sheets
- Inserting header and footer
- Repeating rows / columns to repeat in all pages.
-

MS – POWER PONT

Starting power point - Power Point Window Description

- Title Bar
- Menu Bar
- Toolbars
- Ruler bar
- Slide
- Scroll Bar
- Movement Buttons
- View Buttons
- Status Bar

The MS-PowerPoint Views

- Slide Sorter View
- Outline View
- Notes Pages View
- Slide Show View

Creating a new presentation

- Using templates
- Using Slide Layouts
- Inserting, deleting and rearranging slides
- Creating Speaker's notes

Working with Slides

- Inserting and formatting text.

- Inserting and formatting shapes and pictures
- Inserting tables and charts
- Inserting and editing organization charts
- Inserting hyperlinks
- Inserting music and video
- Inserting various animation effects to the inserted objects

Running the Slide Show

- Modifying the slide transition
- Setting and Controlling the slide show - timer or mouse controlled

Software Installation and Hardware Maintenance

1. Assembling and Disassembling the computer system
2. Every student should individually install MS windows XP /7/10 on the personal computer.

COMPUTER SCIENCE & ENGINEERING
I YEAR
PAPER-II: PROGRAMMING in C
(THEORY)

PERIODS PER WEEK : 4**PERIODS PER YEAR : 135**

S.NO.	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Introduction to Problem Solving Techniques (Algorithms and flowcharts)	15	10	2	1
II	Features of 'C'	40	24	3	3
III	Arrays in 'C'	30	16	2	2
IV	Functions	40	10	2	1
V	Structures in C	10	8	1	1
	Total	135	68	10	8

Note: After completion of every unit one/two assignments will be given to the students

Additions / Deletions/ Changes:

- 1. In unit –III File operations are deleted.**
- 2. Arrays precedes the Functions.**

**COMPUTER SCIENCE & ENGINEERING
I YEAR
PAPER 2 : PROGRAMMING in C [THEORY]**

1. Introduction to Problem Solving Techniques

- Procedure and Algorithms
- Flowcharts

2. Features of 'C'

- Introduction to 'C'
- Structure of a 'C' Program
- Constant and types of constants & Variable and types of variables
- Data types in C
- Operators in C
- I/O Statements associated with scanf,printf,getc,putc,getchar,putchar.
- Control statements (if, if-else, nested if , else if ladder)
- Loops(while, do-while, for, nested loops)
- Branching (switch, break, continue)
- Unconditional branching (go to statement) simple programs covering above units

3. Arrays in 'C'

- Define an array and types of Arrays(single, two dimensional and multidimensional arrays),
- Programs on arrays.

4. Functions

- What is a function?
- Difference between a function and a procedure
- Advantages of functions
User defined and library functions, main function,return()
- Concepts associated with functions – Recursion, scope of a function,
- extent of a variable(global &local)
- Explain with factorial and GCD using recursion.
- Call by value and call by reference with example.
- Use of various categories of built in functions like mathematical functions and string functions.

5. Structures in C

- Structures:- definition - declaration – creation of a structure,
- operation on structures:
a) array of structures, b)array with structures.

- Unions – definition – difference between union and structure.

Reference Books:

1. Let us C by Yashwant Kanetkar

2. Computers and Common sense by Roger Hunt & P.B. Shelley
3. Introduction to Computers by Rajaraman
4. C- programming by Balagurusamy.

COMPUTER SCIENCE & ENGINEERING

I YEAR

PRACTICAL-II: 'C' - PROGRAMMING (PRACTICAL)

PERIODS PER WEEK : 4

PERIODS PER YEAR : 135

S.NO.	UNITS	NO.OF PERIODS
I	Programming involving basic input output operations and operators.	25
II	Programs involving control structures	40
III	Programs involving Arrays	40
IV	Programs to create and use Functions	15
V	Structures in C	15
	Total	135

Note: After completion of every unit one/two assignments will be given to the students

COMPUTER SCIENCE ENGINEERING

First Year (P.C. 311/22)

Subject: Programming in C

Paper - II

Time: 3 Hours

Max. Marks: 50
(1 x 40 = 40 Marks)

Section - I

Write an algorithm and draw a flow chart for the following:

1. a) Addition, Subtraction, Multiplication, Division and Modulus operation on two integers.
b) Write a simple program to multiply given two integer values.

2. Write a c program
 - a) to read the ASCII code of a character and vice versa.
 - b) Perform Lowercase to Uppercase Character Conversion and vice versa.
 - c) Find the Area and Circumference of a Circle.
 - d) Find the Average of the marks of a student.

3. Write a c program
 - a) to calculate simple interest.
 - b) to find Largest of three given numbers
 - c) to Generate a multiplication Table of given number n.
 - d) to Find the given number is even or odd using if .. else statement.

4. Write a c program
 - a) Convert temperature in Celsius to Fahrenheit, Miles to Kms and Kgs to Pounds by using switch case
 - b) find Factorial of a given number

5. write a c program
 - a) to add two arrays with same length.
 - b) to Check whether a given number is a palindrome or not.

6. Write a C program
 - (a) to arrange a single dimensional array of numbers into ascending order.
 - (b) to print prime numbers between 1 to given number.

7. write a c program
 - a) to find biggest value in an array with its location.
 - b) to reverse a four digit number.

- 8 (a) write a c program to print reverse order of a given array.
(b). Write a C program to print Fibonacci Series up to given number.

9. write a c program

a) for addition of two matrices.

b) to find whether given number is prime or not.

10. Write a C program

(a) for matrix multiplication.

(b) to find whether given number is perfect or not.

11. Write a C program

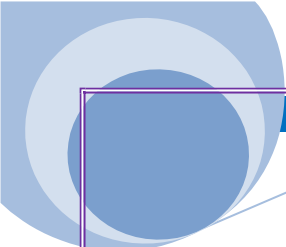
(a). Using string functions like strcat(), strlen(), strcpy() etc.

(b) Write and call a function to print 25 '*' in a line.

12. Write a C program

(a) for matrix subtraction.

(b) to call a functions by value.



COMPUTER SCIENCE & ENGINEERING**I YEAR****PAPER-III: ACCOUNTANCY AND TALLY (THEORY)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 135**

S.NO.	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Introduction to Accountancy	5	8	1	1
II	Double Entry System:-	5	8	1	1
III	Journal	10	2	1	-
IV	Ledger	10	2	1	-
V	Subsidiary Books	15	8	1	1
VI	Cash Book	15	8	1	1
VII	Bank reconciliation statement	15	8	1	1
VIII	Trail Balance and rectification	10	8	1	1
IX	Final Accounts	20	8	1	1
X	Tally Package	30	8	1	1
	Total	135	68	10	8

Note: After completion of every unit one/two assignments will be given to the students

Additions / Deletions/ Changes:

Unit VII “journal proper” has been deleted and introduced “Bank reconciliation statement” .

**COMPUTER SCIENCE & ENGINEERING
I YEAR****PAPER 3 : ACCOUNTANCY AND TALLY (THEORY)**

Unit I: Introduction: Book keeping , Accountancy- uses of Accountancy- Accounting concepts- Accounting Conventions- Accounting terminology.

Unit II: Double Entry System: Meaning theory of double entry system- Classification of Accounts- Advantages of double entry system

Unit III: Journal: Introduction- journalizing of different transactions-

Unit IV: Ledger: Meaning- Ledger posting- ledger of balancing, advantages of ledger

Unit V: Subsidiary Books: Meaning and significance- different type of books – purchase books – sales book – purchase return book- sales returns – bills receive books, bills payable book ,Treatment of trade discount.

Unit VI: Cash book: Meaning and significance- features – kinds of cash books single cash book cash book with cash and discount- cash book with cash – discount and bank- cash book with cash and bank and discount columns- analytical petty cash books.

Unit VII: Bank Reconciliation Statement(BRS): pass book, over draft problems on BRS. ,problems on as per cash book balance and as per passbook balance, overdraft balance.

Unit VIII: Trial Balance and Rectification:- Meaning and significance- features and Objectives- preparation of trial balance- errors disclosed by trial balance,errors not disclosed by the trial balance.

Unit IX: Final Accounts:

- (a) Trading Account: Meaning and significance: performance of trading account- adjustments-outstanding expenses ,prepaid expenses,depreciation.
- (b) Profit and Loss account: Meaning and significance – steps in preparation of profit and loss accounts- performance of profit and loss account- adjustments
- (c) Balance Sheet: Meaning and significance- objectives – preparation of balance sheet- arrange of assets and liabilities – adjustments.

Unit X: Tally Package:- Introduction to Tally package

- a) Introduction to Accounting packages – Features, accounting, data migration capability, duties and taxes, advantages and disadvantages.
- b) Financial functions of Tally – Inventory and application – Creation of company, alteration of company, master configuration, creation of groups, grouping of ledger accounts, voucher configuration, recording transactions of sample data.
- c) Display and reports – Accounting reports, Balance sheet, profit and loss account, printing reports.
- d) Ratio Analysis – Classification- Financial ratios, Profitability ratio, Activity ratio analysis.
- e) 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.

COMPUTER SCIENCE & ENGINEERING**I YEAR****PAPER-III: ENGINEERING DRAWING (PRACTICAL)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 135**

S.NO.	UNITS	NO.OF PERIODS
1	Introduction	6
2	Lettering and Dimensioning	20
3	Geometrical Construction	24
4	Orthographic Projection.	35
5	Isometric Projection	25
6	Using AUTOCAD	25
	Total	135

Note: After completion of every unit one/two assignments will be given to the students

**COMPUTER SCIENCE & ENGINEERING
I YEAR****PAPER-III: ENGINEERING DRAWING (PRACTICAL SYLLABUS)****Introduction**

- Scope and objective of the subject
- 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.

Lettering and Dimensioning

- Types of Lettering
- Guide Lines for lettering
- Recommended sizes of letters and numbers
- Single stroke letters.
- Dimensioning - rules and systems of dimensioning – dimensioning a given drawing

Geometric Construction

- Bisecting a line - perpendiculars - parallel lines - division of a line
- Angles - bisection, trisection
- Tangent lines touching circles internally and externally
- Polygons - Regular polygons - circumscribed and inscribed in circles.
- Conic sections - Definitions of focus, directrix, eccentricity
 - Construction of Ellipse by Concentric circles method.
 - Construction of parabola by rectangular method.
 - Construction of Hyperbola when given the position of point from X-axis and Y-axis.

Orthographic Projection

- Definition - Planes of Projection - Four quadrants – Reference line.
- First angle projection - Third angle projection
- Projections of points
- Projections of straight lines
- Projections of planes
- Projections of solids
- Conversion of pictorial views into orthographic views

Isometric Projection

- Definition - Isometric axes, lines and planes
- Isometric Scale - Isometric view
- Drawing of isometric views of plane figures
- Drawing of isometric views of prisms and pyramids
- Drawing of isometric view of cylinders and cones

Using AutoCAD

- Introduction to AutoCAD: the Interface
- The Basics of Using AutoCAD Drawing Tools
- Using AutoCAD Navigation Tools
- Using AutoCAD Drafting Tools
- Modifying AutoCAD Drawing Objects using Copy / Move, Scale, Rotate etc.
- Working with text in AutoCAD

**COMPUTER SCIENCE & ENGINEERING
II YEAR****PAPER-I: OOPS and JAVA (THEORY)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 110.**

S.NO.	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Object-Oriented Programming and Java	10	8	1	1
II	The Java programming language	25	8	1	1
III	Control Statements and Arrays	25	18	3	2
IV	Implementing OOPS in Java	25	8	1	1
V	Packages and Interfaces	10	8	1	1
VI	Exception Handling	5	2	1	1
VII	Threads	5	8	1	1
VIII	Java Applets	5	8	1	-
	Total	110	68	10	8

Note: After completion of every unit one/two assignments will be given to the students

Additions / Deletion / Changes

1. units IX and X were deleted.

COMPUTER SCIENCE & ENGINEERING II YEAR

PAPER-I: OOPS and JAVA (THEORY SYLLABUS)

1. Object-Oriented Programming and Java

1. Introduction
2. History of Java
3. Need of Object Oriented Programming
4. Principles of Object Oriented Programming Language
 - Class
 - Object
 - Data Encapsulation
 - Inheritance
 - Polymorphism
5. Application of Object Oriented Programming Language
6. Features of Java
7. JVM,JRE,JIT,Bytecode
8. Java Program Structures
9. Installation of JDK

2. The Java programming language

1. Variables , literals, identifiers
2. Data Types, mixed mode and casting values
3. Operators
4. Class, Objects and Creating Objects
5. Access Specifier
6. Constructors
7. Methods

3. Control Statements and Arrays

1. The If, Nested If, If – Else, if- else-if ladder and the switch statement.
2. Java Iteration statements – while, do- while and for statements.
3. Break and Continue statements.
4. One and two dimensional arrays, reading and writing to arrays, arithmetical operations on arrays.

4. Implementing OOPS in Java

1. Creating and using various types of Methods to accept / return basic data types and objects.
2. Implementing the concept of Polymorphism, Inheritance and Operator Overloading.

5. Packages and Interfaces

1. Concepts and uses of packages.
2. Creating and importing packages.
3. Concepts of interface and its uses.
4. Writing and implementing simple interfaces.

6. Exception Handling

1. Exception Handling fundamentals and Debugging
2. Exception types, the try, catch, throw, throws and finally keywords.
3. Java's built in exceptions.
4. Writing simple programs for exception handling.

7. Threads

1. Concepts of Threads,
2. The Thread class and its methods
3. Multithreading and Multitasking.
4. Writing simple programs involving threads.

8. The Java Applet

1. Introduction to Java Applets.
2. Basic methods of the Applet class,
3. Applet initialization and Termination
4. The HTML applet tag and writing code to create simple applets.

COMPUTER SCIENCE & ENGINEERING**II YEAR****PAPER-I: OOPS & JAVA (PRACTICAL)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 115**

S.NO.	UNITS	NO.OF PERIODS
1	Programs using basic data types and operators	10
2	Programming with Control Statements	25
3	Programming with Arrays	25
4	Creating and using Classes and Objects.	20
5	Implementing polymorphism and operator overloading	10
6	Programs involving Inheritance	10
7	Creating Packages and interfaces	10
8	Java Applets	5
	Total	115

Note: After completion of every unit one/two assignments will be given to the students

COMPUTER SCIENCE & ENGINEERING**Second Year (P.C. 311/71)****Subject : OOPS & JAVA****Paper - I****Time : 3 Hours****Max. Marks : 50****(1 x 40 = 40 Marks)****Section - I**

1. (a) Write a simple Java program to print a line of text.
(b) Write a simple Java Program to Multiplication of two integers.
2. (a) Write a Java program to convert the temperature from Celsius to Fahrenheit.
(b) Write a simple Java program to find whether given number is even or not.
3. (a) Write a Java program to print numbers from 1 to n using the do ... while structure.
(b) Write a Java program to find sum of n natural numbers.
4. (a) Write a Java program to print the multiplication table of a given Number n using the while structure.
(b) Write a java program to find whether a given number is prime or not using the ' for' statement.
5. (a) Write a program that prints the first 20 Fibonacci numbers.
(b) Create an array of integers and print its values, sum of values and average of the values
6. (a) write a program to find minimum value in an array.
(b) Arrange the given array into ascending order.
7. (a) write a program to find maximum value in an array.
(b) Write a program for addition of two matrices.
8. (a) Write a program for multiplication of two matrices.
(b) Write a program to find whether given number is perfect or not.
9. (a) Write a program to find the maximum value among three values.
(b) Write a program to find roots of a quadratic equation in all cases.
10. (a) Write a program to find whether the given number is palindrome or not.
(b) Write a program to find factorial of a given number.
11. a) Display the Reverse of a given array.
(b) Write all necessary constructors and methods to accept data from user, display user data and return the sum and product of these variable to the user.
12. Write a program for the following
a).call by value b).call by reference
13. Write a program on inheritance for an employee basic pay ,bonus using "extends" keyword.
14. Write a program simple polymorphism to create a box with a simple box, wooden box, steel box and large wooden box.
15. Write a program to overloading ,return type, constructor parameter and access modifier use.
16. Write a program that describes exception handling mechanism showing the JVM " throws" Exception at run time.
17. write a program to involving threads to print 1 to 5 numbers.

18. a) Develop an applet to display a simple message “hello”.
- b) Display any image on the applet.

COMPUTER SCIENCE & ENGINEERING**II YEAR****PAPER-II: RELATIONAL DATABASE MANAGEMENT SYSTEM(RDBMS) (THEORY)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 110**

S.NO	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Concepts of DBMS	20	16	2	2
II	Entity and Relationship	20	16	2	2
III	Relational Model	20	16	2	2
IV	SQL	30	10	2	1
V	Software Development Life Cycle	20	10	2	1
	Total	110	68	10	8

Note: After completion of every unit one/two assignments will be given to the students

Additions / deletions/ changes:-

- 1. Reducing E-R diagrams into tables from unit –II has been deleted.**
- 2.. Unit - V “PL / SQL “ has been deleted.**

COMPUTER SCIENCE & ENGINEERING
II YEAR
PAPER-II: RELATIONAL DATABASE MANAGEMENT SYSTEM(RDBMS) (THEORY)

Unit I: Concept of DBMS:

1. Purpose of Data Base Systems
2. Data abstraction
3. Data models
4. Instances, Schemes
5. Data Independence
6. Data Integrity
7. DDL , DML. DCL
8. Responsibility of a Database Manager
9. Data Base Administrator.

Unit II: Entity and relationship:

1. Entity and Entity sets
2. Attributes
3. Relationship and Relationship sets
4. Mapping constraints
5. E-R representation symbols
6. Drawing E-R diagrams
7. Reducing E-R diagrams into tables.

Unit III: Relational Data Model:

1. Structure
2. table Structure
3. Domain, Range, degree of a table tuple, types and attributes
4. types of keys.
5. Formal query languages
6. commercial query languages
7. CODD rules.

Unit IV: SQL:

1. Introduction to SQL
2. data types
3. DDL,DML and DCL Commands
4. Set operators and joins
5. Sub queries and database objects.
6. More practical exercises on DML quires.

Unit V: Software Development and Life cycle:

1. Definition of system, analysis and design
2. Study of software life cycle
3. Requirement analysis, design, development, testing, implementation and maintenance.

Books:

1. Data Base Management Systems — Korth and Sudershan
2. Data Base Management — C.J. Date
3. Software Engineering — Roger Pressman

COMPUTER SCIENCE & ENGINEERING**II YEAR****PAPER-II: SQL, PHOTOSHOP & FLASH PLAYER (PRACTICAL)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 115**

S.NO.	UNITS	NO.OF PERIODS
I	SQL	35
II	Image Editing with Photoshop	35
III	Flash player	45
	Total	115

Additions / Deletions /Changes:

- 1. A new unit “Adobe flash player ” has been included. This will expose the students to various multimedia techniques thus increasing the employment opportunities in this field.**
- 2. In Unit- II PL/ SQL has been deleted.**

COMPUTER SCIENCE & ENGINEERING**II YEAR****PRACTICAL – II : SQL , PHOTOSHOP & FLASH PLAYER(PRACTICAL)****SQL and PL/ SQL:-**

Practice minimum of 20 simple Queries using SQL covering all units related to DDL,DML and DCL.

PHOTOSHOP

- Introduction to the Photoshop interface Familiarization with the toolbars
- Creating a new Photoshop file , adjusting colour, size and resolution settings Importing and copying images into Photoshop
- Working with layers-the layers palette, adding, deleting, adjusting the layer effects, layer features like locking, styles, opacity and blending options.
- Familiarizing with the types of tools in the toolbox.
- Working with the selection tools –The marquee tools, lasso tools, move tools, and the magic wand, crop and slice tools.
- Working with the retouch paint tools –The healing tools, brush, clone, history, eraser, fill tools, sharpen/blur, dodge/burn and sponge tools.
- 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.
- Working with the annotation and measurements tools.
- Working with the Image Menu - Image Size, Canvas Size, Image Adjustments, Color Modes etc.
- Working with the filter menu - Blur, Sharpen, Extract, Liquify, Vanishing Point, Distort, Pixelate, Render etc.
- Working with the View Menu - Zoom In, Zoom Out, Proof Colors, Screen Modes, Rulers, Guides, Snap etc. Exercises involving image modifications using various photo editing and photo effects together.

FLASH PLAYER**A. Introduction:**

About Flash , Understanding the Workspace of Flash

B. Getting Started with Flash:

Flash Document Setup, Create Animation , Publishing , Basic drawing

C. Play with Text:

Text Tool, Transforming Text, Skew, Break Apart and Color Text, Vertical Text, Rotate Text and Zoom Text

D. Symbols and Interactivity:

Graphic symbol , Buttons symbol , ActionScript , Movie clip symbol

E. Special Effects:

Shape Tween , Mask , Spotlight , Motion Guides , Motion Tween , Motion Presets

F. Combine Flash Movies:

Add Scenes , Load Movies

G. Play with Graphic

Brightness , Tint , Alpha , Remove background

H. Play with Sound

Add background music , Add sound effect

I. Video:

Steps for importing video

Practice on

1. Draw circle and perform motion tweening operation using flash
2. Create 24 spokes on a wheel using Flash
3. Draw any shape and change the object shape using tweening concept.

COMPUTER SCIENCE & ENGINEERING**II YEAR****PAPER-III: DATA COMMUNICATION & COMPUTER NETWORKS(DCCN)
(THEORY)****PERIODS PER WEEK : 4****PERIODS PER YEAR : 110**

S.NO.	UNITS	NO.OF PERIODS	WEIGHTAGE OF MARKS	NO. OF SHORT QUESTIONS	NO.OF ESSAY QUESTIONS
I	Data communications	10	8	1	1
II	Network Topologies	15	16	2	2
III	LAN components and Communication Hardware	20	8	1	1
IV	Computer Networks	20	10	2	1
V	Internet Connectivity and Services	20	16	2	2
VI	Trouble shooting	25	10	2	1
	Total	110	68	10	8

Note: After completion of every unit one/two assignments will be given to the students

Additions / Deletions / Changes:

- 1. In unit –I methods of data transmission & parallel and serial interfaces are deleted.**
- 2. In unit-III adaptors ,functions and types ,multiplexers are deleted.**
- 3. In unit-IV introduction of firewalls and types of fire walls has been introduced.**
- 4. Unit V now is “HTML and webpage design” has been deleted**
- 5. Unit VI has been introduced “Trouble shooting”.**

COMPUTER SCIENCE & ENGINEERING
II YEAR
PAPER-III: DATA COMMUNICATION & COMPUTER NETWORKS(DCCN)
(THEORY)

UNIT 1 :- Data communications:

1. Definition
2. Modes of data transmission (Analog and Digital)
3. Types of Communications
4. Bandwidth
5. Communication channels (Wire cables, Microwave and Fiber optic)

UNIT 2:- Network Types and Topologies:

1. Definition of Computer network
2. Advantages & disadvantages
3. Types of Networks (LAN, MAN, WAN, Private, public & Value added)
4. Definition of Network topology
5. Types and structure of topologies (Bus, Ring, Star, Mesh and Hybrid)
6. Advantages and Disadvantages of topologies.

UNIT 3:- LAN Components:

- 1.Server, Clients, Fileserver
- 2.Ethernet cards, HUBS, Switches, Routers, Gateways.
- 3.Modem and types - V-SAT,ATMS

UNIT 4: Computer Networks

- 1.OSI Model
- 2.Physical layer, Data link layer, Network layer, Transport layer, Session layer and Presentation layer.
- 3.TCP/IP Reference model

UNIT 5. - Internet Connectivity and Services.

1. Introduction to internet
2. Advantages , browsers Services
3. Messaging E-mail and FTP.
4. Introduction to Internet security – viruses, Trojans, worms, phishing and hacking & antivirus software.
5. Fire walls: introduction of firewalls and types of fire walls.

UNIT-6:- Trouble Shooting

1. Introduction to Trouble Shooting
2. trouble shooting of Mother board
3. FDD,HDD, CDROM,
4. Printers, Modems, Monitors and SMPs.

Reference Books :

1. Fundamentals of Information Technology — Galgotia Publications
2. Computer Networks — A.Tenenbaum
3. NetWork Concepts — BPB Publications

COMPUTER SCIENCE & ENGINEERING**II YEAR****PAPER-III: INTERNET TECHNOLOGIES (PRACTICAL)****PERIODS PER WEEK: 4****PERIODS PER YEAR: 115**

S.NO.	UNITS	NO.OF PERIODS
1	Familiarization with network components	10
2	Basic troubleshooting of a PC, CMOS setup, Formatting, Partitioning a hard disk and loading OS	20
3	Configuring LAN	15
4	Browsing, E mail and File Transfer	25
5	Creating web pages using HTML	25
6	Web designing	20
	Total	115

Note: After completion of every unit one/two assignments will be given to the students

Additions / Deletion / Changes

- 1. Unit no. VI. In VI unit has been introduced “web designing”.**

**COMPUTER SCIENCE & ENGINEERING
II YEAR
PRACTICAL III: INTERNET TECHNOLOGIES (PRACTICALSYLLABUS)**

1. Exposure to Network connectivity Hardware and Devices.
2. Network devices such as
 - Modem
 - Network cards
 - LAN cards.
3. Dial up and ISDN connections
4. Usage of Public Internet Services for the following
 - E-Mail
 - Internet Fax
 - Web Surfing
 - File Transfer
5. Trouble shooting:
 - Diagnose the problem when the 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
 - Trouble shoot when the computer has no sound and also no sound is heard from audio media.

Writing HTML code using the following:

1. 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
3. Tags for creating lists - Ordered Lists, Unordered Lists
4. Tags for creating hyperlinks
5. Tags for creating and modifying images
6. Tags for creating Tables
7. Tables for creating frames Tags for creating forms
8. Create a website to display the information about your college
9. Create a website for a product company to display their product and price.
10. Create your own personal website.

Note: The students should practice to identify the computer related problems and troubleshoot them.

COMPUTER SCIENCE & ENGINEERING**07. LIST OF EQUIPMENT****HARDWARE, TOOLS AND EQUIPMENT:**

1. Pentium-i5 or latest processor with at least 8 GB RAM, 1 TB Hard disk space, 20'' LED Color Monitor, USB Key board, USB Optical Mouse, CD/DVD R/W Drive, at least 6 USB ports onboard Sound, Graphics, Modem and Network adaptor preloaded with Windows 7 Operating system supplied with media kit and antivirus software .21 Nos (20 for students and one for the teacher)
2. Online UPS 2 KVA One no.
3. LCD Projector and screen One no.
4. 16 Port Switch Two nos.
5. Laser Printers Two nos.
6. Flatbed Scanner One No.
7. Web Cam One No.
8. Crimping tool for network cables One No.

SOFTWARE (LATEST VERSIONS)

1. Latest versions of the following software
2. MS Office 2010
3. Turbo C
4. Tally
5. Adobe flash player
6. Adobe Photoshop
7. AutoCAD

FURNITURE

1. Air conditioners 1.5 Ton 02 Nos
2. Computer Tables 21 Nos
3. Operator's Chairs 21 Nos
4. Printer tables 02 Nos
5. Steel cupboards 01 Nos
6. Library book case with lock facility 01 Nos
7. Tables for Staff members 02Nos
8. Chairs for Staff members 02 Nos
9. Vacuum cleaner 01 Nos
10. Shoe Rack (to accommodate at least 20 pairs) 01 Nos

CONSUMABLES

1. Print cartridges as per requirement
2. Printer Paper as per requirement
3. Pen drives of required storage size 4 Nos..
4. Different types of network cables as per requirement
5. CDs and DVDs as per requirement
6. RJ 45/ or compatible connectors for network cabling as per requirement.

LAB INFRASTRUCTURE

Computer center 20' X 25' or subject to the availability of accommodation but minimum of 20' x 20' with false roofing and flooring.

*. **High Speed Internet connection is required not only for training in internet technologies but also to expose the students to acquire latest knowledge about latest updates available, antivirus and other security tools and for troubleshooting tips on a need basis.**

COMPUTER SCIENCE & ENGINEERING

8 (a) COLLABORATING INSTITUTIONS FOR CURRICULUM TRANSACTIONS

- DTP centers locally available
- Data conversion centers

8(b) ON THE JOB TRAINING CENTERS

- Software development centers
- Universities
- Public sector companies
- Small Scale Industries

9. QUALIFICATION OF LECTURERS:

1. B.E. /B.Tech [CSE] or equivalent viz AMIE in Computer Science.

2. B.E. /B.Tech [IT].

3. MCA/M.Sc [Computers / MS.IT/MSIS with computer subject at graduation level / B.Sc /B.Com computers with PGDCA from Recognized University as per Proc.Rc.No. VOC-I-A1/471/2004, dated 21.07.2006 of Commissioner of Intermediate Education, Andhra Pradesh, Hyderabad]

Equivalency:

In the new curriculum 2012 there is no equivalency paper to any paper. Hence the old syllabi students will be given two chances to clear their backlogs (i.e. March & ASE 2013) for I year and (March & ASE 2014) for II year.

10. VERTICAL MOBILITY

- Eligible to appear EAMCET on par with MPC students by appearing Bridge Course
- Can enter into B.Sc(CS/IT), B.E/B.Tech, Polytechnic 2ND year on completion of Bridge course
- B.Com(Comp) , BCA etc. without bridge course.
- Eligible to attend A Level course recognized by DOEACC.

COMPUTER SCIENCE & ENGINEERING**11. LIST OF REFERENCE BOOKS**

1. Engineering Drawing — N.D.Bhatt
2. AutoCAD -
3. Fundamentals of Information technology — M.L. Sai Kumar
4. Fundamentals of Information technology — Galgotia Publications
5. Computer and commonsense — Hunt & Shelly
6. Understanding Computers — Dinesh Kumar
7. Computers Today — Sandesson
8. Programming in – Kerningham and Ritchie
9. Programming in C — E. Balaguruswamy
10. Let Us “C” — Yashwanth Kanetkar
11. Data Base Management System — C.J. Date
12. Data Base Management System — Korth and Sudershan
13. Fundamentals of MS-Office — BPB Publications
14. Adobe Photoshop - Adobe publications
15. Image editing with Photoshop - BPB Publications
16. Flash player — BPB Publications
17. Computer Networks — Andrew .S. Tanenbaum
18. Software Engineering — Roger Pressman
19. Software Engineering — Shuman
20. Teach yourself Java – Techmedia publications
21. Java – complete reference –
22. HTML Primer –
23. Tally –
24. Textbook Sams “Teach Yourself Macromedia Flash 8.0”
25. Reference Book - “PC HARDWARE, A BIGGINERS GUIDE” written by Ron Gilster

COMPUTER SCIENCE & ENGG- 1ST YEAR**12. MODEL QUESTION PAPERS [THEORY & PRACTICAL]****PAPER-1: COMPUTER FUNDAMENTS & MSOFFICE [THEORY]**

Time:- 3 Hrs

Max. Marks:- 50

SECTION-A

10 x 2=20

Note:- 1. Answer ALL Questions:

2. Each Question carries 2Marks.

01. Define a Computer?
02. Write the names of any two input and two output devices.
03. Write any four DOS internal commands.
04. Define an operating system.
05. What is auto correct?
06. What are different views in ms-word?
07. What is a worksheet?
08. Write the number of Rows and Columns in Spreadsheet.
09. What is presentation?
10. What is slideshow?

SECTION-B

Note:- 1. Answer any FIVE Questions from the following

5 x 6= 30.

2. Each Question carries 6Marks.

11. Draw the block diagram of computer and explain each block in it.
12. Write any 6 DOS Commands with proper syntax and examples.
13. Explain any six File menu options.
14. Explain formatting toolbar in ms-word
15. Explain Mail merge procedure with an example
16. Explain any three types of Charts in Excel
17. Explain any five statistical functions in Excel.
18. What is presentation? Write the procedure for perfect presentation.

COMPUTER SCIENCE & ENGG- 1ST YEAR**PAPER-2: PROGRAMMING C[THEORY]**

Time:- 3 Hrs

Max. Marks:- 50

SECTION-A

Note:- 1. Answer ALL Questions:

10 x 2=20

2. Each Question carries 2Marks.

01. Define an Algorithm?
02. Write the symbols of Flowchart with purpose.
03. Define variable and constant in C.
04. What is goto statement?
05. Write the syntax of SWITCH statement
06. What is an Array?
07. What are applications of two dimensional Arrays?
08. Define a function.
09. What is Recursion?
10. Define Union.

SECTION-B

Note:- 1. Answer any FIVE Questions from the following

5 x 6= 30.

2. Each Question carries 6Marks.

11. Write an algorithm for biggest of given three numbers
12. Explain arithmetic operators with examples.
13. Write about if,if..else statements in c.
14. Explain various looping statements in c.
15. Write a program for sorting n numbers in an array.
16. Write a C program for matrix addition of two matrices.
17. Write a c program to find factorial of given number by using function.
18. What are the differences between structure and union.

COMPUTER SCIENCE & ENGG- 1ST YEAR

PAPER-3: ACCOUNTANCY and TALLY [THEORY]

Time:- 3 Hrs

Max. Marks:- 50

SECTION-A

- Note:- 1. Answer ALL Questions:
2. Each Question carries 2Marks

10 x 2=20

01. Define Account.
02. What is double entry system?
03. Define journal.
04. Define ledger?
05. What is debit note?
06. What is petty cash book?
07. What is BRS?
08. Define trial balance.
09. What is bad debts?
10. What are the function keys in Tally package?

SECTION – B

5 X 6 = 30

- Note:- 1. Answer any FIVE Questions:
2. Each Question carries 6 Marks

11. Describe the major concepts in Accounting.
12. Write about types of accounts.
13. Write about subsidiary books.
14. Enter the following transactions in Simple cash –book Vamshi traders.

2017 Oct1 st – Balance of cash	9000
3 Goods purchased	3000
5 Sales	2500
8 Interest paid	1000
10 cash purchases	1500
15 Cash Sales	2000
19 Received cash from N	1800
22 Paid cash to R	1100
26 Purchases furniture	500
29 Received commission	900
31 Paid rent	1000
15. What are the causes when the passbook balances is not tallied with cash book balances.
16. what are the objectives of trial balance? Explain.
17. Explain the following
 - a) Drawings
 - b) Liabilities
 - c) Outstanding expenses
18. Explain the procedure to create a company account in Tally.

COMPUTER SCIENCE & ENGG- 2ND YEAR**PAPER-1: OOPS and JAVA [THEORY]**

Time:- 3 Hrs

Max. Marks:- 50

SECTION-A

Note:- 1. Answer ALL Questions:
2. Each Question carries 2Marks.

10 x 2=20

1. Define oops.
2. What is mixed mode?
3. What is the syntax of if statement?
4. What is goto statement?
5. Define an Array.
6. Define Polymorphism.
7. Define an interface.
8. What is an exception?
9. What is debugging?
10. Define an Applet.

SECTION - B

5 x 6 = 30

Note:- 1. Answer ANY FIVE Questions:
2. Each Question carries 6 Marks.

11. Describe the main features of OOPS.
12. Describe the main data types in Java.
13. Explain the loop statements in java.
14. Write a program for matrix multiplication.
15. Explain Inheritance with an example.
16. Explain Packages in Java with an example.
17. Write about the types of errors?
18. What are the differences between Multitasking and multithreading.

COMPUTER SCIENCE & ENGG- 2ND YEAR**PAPER-2: RELATIONAL DATA BASE MANAGEMENT SYSTEM. [THEORY]**

Time:- 3 Hrs

Max. Marks:- 50

SECTION-A

10 x 2=20

Note:- 1. Answer ALL Questions:

2. Each Question carries 2Marks.

01. Define DBMS.
02. Expand DDL and DML.
03. What is Entity and Relationship?
04. What are different types symbols used in E-R Diagram?
05. What are the different types of attributes in relational model?
06. What are the unary operations in relational model?
07. Write the structure of SQL
08. What are basic operations in SQL?
09. Define a system.
10. What are the testing methods?

SECTION - B

5 x 6 = 30

Note:- 1. Answer any FIVE Questions:

2. Each Question carries 2Marks.

11. Explain the advantages of DBMS over File processing system.
12. Write the functions of Database Administrator.
13. Draw an ER diagram to show relation between a Student and Bank.
14. Explain basic structure of Relational Model.
15. Explain Binary operations in Relational data base.
16. Write about CODD rules.
17. Explain any five DDL commands with an example
18. Explain various stages of System Development Life Cycle.

COMPUTER SCIENCE & ENGG- 2ND YEAR

**PAPER-3: DATA COMMUNICATION AND COMPUTER NETWORKS(DCCN)
[THEORY]**

Time:- 3 Hrs

Max. Marks:- 50

10 x 2=20

SECTION-A

Note:- 1. Answer ALL Questions:
2. Each Question carries 2Marks.

01. Define Data Communication.
02. What is Computer Network?
03. What is Network Topology
04. What is HUB? Write types in it.
05. What are layers in OSI model?
06. Expand TCP/IP.
07. What is an E-Mail?
08. What is search Engine?
09. What is Trouble shooting?
10. Give the possible reasons for the printer not printing.

SECTION - B

5 x 6 = 30

Note:- 1. Answer ALL Questions:
2. Each Question carries 2Marks.

11. Explain basic of modes of Data Transmissions
12. Explain about LAN, WAN and MAN
13. Explain any three network topologies.
14. Explain about ROUTER and Bridge
15. Explain briefly the OSI model.
16. Explain any three web browsers.
17. Explain different types of firewalls.
18. Explain how will you trouble shoot when system is not functioning.

COMPUTER SCIENCE & ENGINEERING**MODEL PRACTICAL QUESTION PAPER PATTREN [FIRST & SECOND YEARS]**
[EXCEPT ENGINEERING DRAWING]

Instructions:-

- The maximum mark of Question paper 50.
- The Question paper should be prepared by the External Examiner in consultation with internal examiner.
- The Question should contain EIGHT Questions.
- The Examiner should allot any TWO Questions from the paper to each student by drawing lots.
- Evolution of should be done as follows.
 - Each Question carries TEN marks (i.e. 2 x 10) - 20
 - Demonstration on the System - 10
 - Record - 10
 - Viva - 10

Total	----- 50 -----
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COMPUTER SCIENCE & ENGINEERING**13. EQUIVALENCY OF PAPERS****FIRST YEAR****NEW PROPOSED SYLLABUS**

THEORY

1. COMP. FUNDAMENTALS & MS OFFICE
2. PROGRAMMING in C
3. ACCOUNTANCY and TALLY

PRACTICAL

1. WINDOWS & MS OFFICE
2. C –PROGRAMMING
3. ENGINEERING DRAWING

EXISTING SYLLABUS

THEORY

PRACTICAL

SECOND YEAR

THEORY

1. OOPS AND JAVA
2. RELATIONAL DATABASE MANAGEMENT SYSTEM
3. DATA COMMUNICATIONS & COMPUTER NETWORKS

PRACTICAL

1. OOPS & JAVA
2. SQL, PHOTOSHOP & FLASH PLAYER
3. INTERNET TECHNOLOGIES

THEORY

PRACTICAL

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