

GIET UNIVERSITY, GUNUPUR. DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SUBJECT: OOP USING JAVA

QUESTION BANK

DOWNLOAD PDF 👉 CODING BUGS NOTES GALLERY

Subject Code: BCSPC3030

OBJECTIVE QUESTION

PART-A

UNIT-01

1.	is one of the java features that enables java program to	run anywhere
	anytime.	
	a)Object-Oriented	
	b) Multithreaded	
	c)Platform-Independent	
	d) Dynamic & Extensible	CO1/PO1
2.	is one of the java features that can handle multiple tas	ks simultaneously
	a)Object-Oriented	
	b) Dynamic & Extensible	
	c)Platform-Independent	
	d) Multithreaded	CO1/PO1
3.	Java compiler translates source code into	
	a) Bytecode (Virtual Machine Code)	
	b) Bitcode	
	c) Machine Code	
	d) User code	CO1/PO1
4.	Java interpreter translates into machine code.	
	a)Bit code	
	b) Bytecode(Virtual Machine Code)	
	c)Machine Code	
	d) User code	CO1/PO1
5.	Java compiler produces an intermediate code known as	
	a)Bitcode	
	b) Machine Code	
	c)Bytecodes	
	d) User code	CO1/PO1
6.	tool helps us to find errors in our programs.	
	a)jhelp	
	b) javah	
	c)javap	
	d) jdb	CO1/PO1

7	The process of converting one data type to enother is called	
/	The process of converting one date type to another is called	
	a)Translating	
	b) Casting	
	c)Compiling	CO1/DO1
	d) Declaring	CO1/PO1
8	Java does not support	
	a)Operator overloading	
	b) Global variable	
	c)Multiple inheritance	
	d) All of above	CO1/PO1
9	Casting from byte to data type, the result is no loss informati	on.
	a)short	
	b) int	
	c)long	
	d) all of above	CO1/PO1
1		
1	0. refer to fix value that does not change during the execution	or a program
	a)variables	
	b) constants	
	c)identifiers	GO1/BO1
_	d)integer	CO1/PO1
1	1 operators are used to construct mathematical expression as	s in algebra.
	a)Relational	
	b) Mathematical	
	c)Arithmetic	
	d) Logical	
1	2. The comparisons can be done with help of operator.	
	a)Relational	
	b) Mathematical	
	c)Arithmetic	
	d) Assignment	CO1/PO1
1	3. Which of the following is not assignment operator?	
	a)+=	
	b) = =	
	c)%=	
	d) =	CO1/PO1
1	4. operator is used to construct conditional expression.	001/101
-	a)Dot(.)	
	b) instanceof	
	c)Ternary(?:)	
	d) None	CO1/PO1
1	,	
1	5. Which statement is use to skip the loop and continue with the next iteration)11 :
	a)continue	
	b) terminate	
	c)skip	CO1/PO1
	d) break	CO1/PO1

```
is a group of contiguous or related data items that share a common name.
   a)Variable
   b) Array
   c)Constant
                                                                            CO1/PO2
   d) none
17. Identify the following and find the correct declaration statement in java program?
       a) int num=new int[5]
       b) int num=new num[5]
       c) int[] num=new int[5]
       d) None
                                                                            CO1/PO2
18. class ope
{
     public static void main (String [] args)
       int x=0;
       int y=0;
        if ((++x \ge 1) & (++y \le 1))
             x++;
             System.out.println(x + "" + y);
        i. 2 1
                         ii. 1 2
                                       iii. Compilation time error
                                                                           IV. No output
19. class ope
                                                                            CO1/PO2
          public static void main(String [] args)
                  int x = 11 & 9;
                  int y = x ^ 3;
                  System.out.println( y | 12 );
i.
                         ii. 11
                                            iii. 9
                                                                    IV.
         14
                                                                           3
20. public class VST
                                                                            CO1/PO2
          public static void main(String args[])
           int x = -4;
          System.out.println(x>>1);
```

```
int y = 4;
            System.out.println(y>>1);
}
                                   III. 02
    I. -2 2
                    II. 22
                                                   IV. None of the these
21. public class VST
                                                                                  CO1/PO2
            public static void main(String args[])
        System.out.print(10 + 20 + "GIET");
            System.out.println("GIET" + 10 + 20);
    }
I.
        30GIET
                                   II. 1020GIET GIET1020
                                                                  III. 30GIET IV. None of the
                    GIET 30
        above
22. public class VST
                                                                                  CO1/PO2
            public static void main(String args[])
                    int x=9;
                    int y=0;
                    if((++x) == 10 \&\& (++y) == 1)
                              System.out.println(x);
                              System.out.println(y);
23. public class Test
                                                                   CO1/PO2
                    public static void main(String[] args)
                    for (int i = 0; i < 10; i++)
                    int x = 10;
    i. No Output ii. 2. 10
                                           iii. Compile time error
                                                                          iv. 4. 10 (10 times)
                                                                          CO1/PO2
24. public class Test
    public static void main(String[] args)
 for (int i = 0, String = "GFG"; i < 2; i++)
   System.out.println("HELLO GEEKS");
```

```
}
                     HELLO GEEKS
             Ι.
                    Compile time error
             II.
             III. HELLO GEEKS
                 HELLO GEEKS
                 HELLO GEEKS
             IV. No Output
25.
       class WeekDays
                                                                             CO1/PO2
         public static void main(String s[])
           int day = 7;
           switch(day)
              case 1:
                System.out.println("Monday");
              case 2:
                System.out.println("Tuesday");
              case 3:
                System.out.println("Wednesday");
              case 4:
                System.out.println("Thursday");
              case 5:
                System.out.println("Friday");
           }
         }
      I. no output ii. Compilation time error
                                                iii. Sunday
                                                                     iv. Runtime error
                                            UNIT-02
       1. The java interpreter uses method before any objects are created.
       a)Class
       b) Main
       c)Constructor
       d) All of above
                                                                            CO2/PO1
                            includes hundred of classes and methods grouped into several
          function packages.
       a)API
       b) JVM
       c)JAVAC
       d) JRE
                                                                             CO2/PO1
```

3. Java provides extensive set of classes, arranged ina) Package	
b) Library file	
c) Template class d) None	CO2/PO1
4. A default constructor takesno of parameter ?	CO2/PO1
i. 0 ii. 1 iii. No argument iv. Non of them	l
5. Super keyword in java is used to	CO2/PO1
a. Refer immediate parent class instance variables.	
b. Invoke immediate parent class methods.c. Invoke immediate parent class constructor.	
d. All	
6. Using which keyword we can access value of the instance variables an	d class
variables of that class inside the method of that class itself.	CO2/PO1
A)	
A) super B) final	
C) this	
D) either super or this	
7. Find the out put of the program	CO2/PO2
public class t	
<pre>public static void main(String [] args)</pre>	
{	
String s=null;	
System.out.println(s.concat("abc"));	
System.out.println(s); }	
}	
a. nullabe b.abe c.no output d.NullPointerException	
8is a feature in C++ where two or more functions can	have the same
name but different parameters.	CO2/PO1
a. Function overloadingb. function overriding c.non of them9. When no access modifier is specified for a class, method or data mem	CO2/PO1
to be having the default access modifier by default.	oci – it is said
a. Private b. public c. protected d. default	CO2/PO1
10. The Java programming language supports multiple inheritance of type	, which is the
ability of a class to implement more than one	
a. Interface b.class c. non of them d. super class 11. Find the output of the program.	
public class str	CO2/PO2
{	
public static void main(String [] args)	

```
{
               String foo="base";
               System.out.println(foo.substring(0,3));
                System.out.println(foo.concat("sub"));
                System.out.println(foo);
       }
}
a. bas
   basesub
    base
b. base
    basesub
    bas
c. no output
12. find the output of the program
                                                                               CO2/PO2
try
  int x = 0;
  int y = 5 / x;
catch (Exception e)
  System.out.println("Exception");
catch (ArithmeticException ae)
  System.out.println(" Arithmetic Exception");
System.out.println("finished");
   a. Finished
                        b. exception
                                                               d. exception arithmetic
                                       c. compilation fails
       exception finished
            Find the output of the program
public class Foo
  public static void main(String[] args)
                                                               CO2/PO2
    try
      return;
    finally
      System.out.println( "Finally" );
  }
}
```

```
b. compilation fails
                                                          d. an exception thrown at run
a. Finally
                                    c. no output
   time
14. Final and finally are both same in java?
                                                                         CO2/PO1
a. Yes
              b. no
15. Java supports multiple inheritance?
                                                                         CO2/PO1
a. True
              b.false
16. Checked exception are compilation time error in java programming.
                                                                         CO2/PO1
a. True
              b.false
17. class Test
                                                                         CO2/PO1
       {
       int i;
   }
   class Main
     public static void main(String args[])
       {
     Test t;
     System.out.println(t.i);
   }
          0 II. Garbage valueIII. Compilation time Error
                                                          IV. No output
   I.
18. In Java, when we implement an interface method, it must be declared as:CO1/PO1
   i. private
              ii. Protected
                             iii. Public
                                           iv. default
19.
       class Helper
                                                                 CO2/PO1
        private int data;
        private Helper()
             data = 5;
        }
   }
   public class Test
        public static void main(String[] args)
             Helper help = new Helper();
             System.out.println(help.data);
        }
   }
                                    ii. 5
           compilation error
                                                   iii. Run time error
                                                                                iv.
           None of these
20. Identify the output of the following program after execution?
                                                                         CO2/PO2
     class array_output {
             public static void main(String args[])
                  int array variable [] = new int[10];
                      for (int i = 0; i < 10; ++i) {
                             array variable[i] = i;
                             System.out.print(array variable[i] + " ");
                  }
             }
        }
```

```
I.
          0 2 4 6 8 II. 1 3 5 7 9
      III. 0123456789 IV. 12345678910
21.
                                                                        CO2/PO2
          class output
          int x, y;
          output()
                   x=y=0;
          void put()
          {
                   System.out.println(x+" "+y+""+x/y);
          Public static void main(String args[])
                   output ob=new output();
                   o.put();
          }
}
          0 0 0
                   22. Static variable are the property of instance
                                                                     CO2/PO1
      i. True
                    ii. . false
23. A java program can run without main()
                                                                     CO2/PO1
      i. True
                    ii. false
24. Super and this usage are same in java
                                                                     CO2/PO1
             True
                    ii. False
      ١.
25. Constructor execution in top to bottom approach in inheritance
                                                                     CO2/PO1
      ١.
             True
                    ii. False
                                  UNIT-03

    Thread are called as _____

                                                                     CO3/PO1
a. Light weight process b. heavy weight process c. process
                                                       d. demon thread
2. sleep() and stop() are same in concept in threading?
                                                                     CO3/PO1
What is true about threads?
a. Threads consumes CPU in best possible manner
b. Threads enables multi processing.
c.Multi threading reduces idle time of CPU
d.All
3. How many threads can a process contain?
                                                                     CO3/PO1
a.1
b.2
c.multiple
d.none
```

4. What are valid points about thread CO3/PO1 a. Thread are subdivision of Process. b.One or more Threads runs in the context of process. c.Threads can execute any part of process. And same part of process can be executed by multiple Threads. d.All 5. What are valid point about processes CO3/PO1 a. Processes have their own copy of the data segment of the parent process b.Threads have direct access to the data segment of its process c.Processes have their own address d.All of these CO3/PO1 6. How can we create Thread a.By Extending Thread class b.Implementing Runnable interface c.By using Executor framework - which can internally form threads CO3/PO1 d.All 7. Which of these is not a Thread state? CO3/PO1 a.New b.Runnable c.sleep d.terminated CO3/PO1 8. synchronized instance methods acquire lock on? a.object b.class c.All d.None 9. What state does Thread enter in when it has been created and started? CO3/PO1 a.New b.Runnable c.Running d.Waiting 10. Which method can be used to find whether Thread hasn't entered dead state? CO3/PO1 a.isAlive() b.isRunning() c.isNotDead d.All 11. How can you ensure all threads that started from main must end in order in which they started and also main should end in last CO3/PO1 a.join() method b.sleep() method c.wait() method d.run() method 12. What is difference between starting thread with run() and start() method? CO3/PO1 a.There is no difference b.When you call start() method, main thread internally calls run() method to start newly created Thread c.run() calls start() method internally d.None 13. What are valid statements for suspend() and resume() method? CO3/PO1 a.Suspend() method is deadlock prone.

b.If the target thread holds a lock on object when it is suspended, no thread can lock this object until the target thread is resumed. c.If the thread that would resume the target thread attempts to lock this monitor prior to calling resume, it results in deadlock formation. d.All 14. How can Thread go from waiting to runnable state? CO3/PO1 a.notify/notifAll b. When sleep time is up c.Using resume() method when thread was suspended d.All Thread is a ___ ____ process. CO3/PO1 a. Light weight b.heavy weight c. medium weight d. non of them 16. A Thread class can be extended. CO3/PO1 a. True b. false 17. Which of these class is not a member class of java.io package? CO3/PO1 A. String B. StringReader C. Writer D. File 18. Which of these interface is not a member of java.io package? CO3/PO1 A. DataInput B. ObjectInput C. ObjectFilter D. FileFilter 19. Which of these classes is used for input and output operation when working with bytes? A. InputStream B. Reader C. Writer D. All of the mentioned CO3/PO1 20. Which of these class is used to read and write bytes in a file? CO3/PO1 A. FileReader B. FileWriter C. FileInputStream D. InputStreamReader 21. Which of these class can be used to implement input stream that uses a character array as the source? CO3/PO1 A. BufferedReader B. FileReader C. CharArrayReader D. FileArrayReader 22. Which of these classes are used by Byte streams for input and output operation?CO3/PO1 A. InputStream B. InputOutputStream C. Reader D. All of the mentioned 23. Which of these classes are used by character streams for input and output operations? CO3/PO1 A. InputStream B. Writer C. ReadStream D. InputOutputStream 24. Which exception is thrown by read() method? CO3/PO1 A. IOException B. InterruptedException C. SystemException D. SystemInputException 25. Which of these class is used to read characters and strings in Java from console? CO3/PO1 A. BufferedReader B. StringReader C. BufferedStreamReader D. InputStreamReader UNIT-04 1. Which of these functions is called to display the output of an applet? CO4/PO1 a) display() b) paint() c) displayApplet() d) PrintApplet() CO4/PO2 2. The following example shows the creation of a import java.applet.*; import java.awt.*;

public class Main extends Applet{
public void paint(Graphics g){

} }

g.drawString("Welcome in Java Applet.",40,20);

	a. Banner using Applet b. Basic Applet	
	c. Display clock	
	d. None of the above	
3.	From the following statements which is a drawback for Applet? a. It works at client side so less response time	CO4/PO1
	b. Secured	
	c. It can be executed by browsers running under many platforms, including Linux, V	Vindows, and Mac
	Os etc.	
	d. Plugin is required at client browser to execute applet	
4.	Applet works at client side so less response time.	CO4/PO1
	a. True	
_	b. False	
5.	What invokes immediately after the start() method and also any time the applet no	
	itself in the browser?	CO4/PO1
	a. stop()	
	b. init() c. paint()	
	d. destroy()	
6	Which method is called only once during the run time of your applet?	CO4/PO1
0.	a. stop()	001/101
	b. paint()	
	c. init()	
	d. destroy()	
7.	Which of these methods are used to register a keyboard event listener?	CO4/PO1
	a) KeyListener()	•
	b) addKistener()	
	c) addKeyListener()	
	d) eventKeyboardListener()	
8.	Which of these methods are used to register a mouse motion listener?	CO4/PO1
	a) addMouse()	
	b) addMouseListener()	
	c) addMouseMotionListner()	
^	d) eventMouseMotionListener()	OO4 /DO1
9.	Event class is defined in which of these libraries?	CO4/PO1
	a) java.io b) java.lang	
	c) java.net	
	d) java.util	
10	. Which of these methods can be used to determine the type of event?	CO4/PO1
-0	a) getID()	00./101
	b) getSource()	
	c) getEvent()	
	d) getEventObject()	
11	. Which of these class is super class of all the events?	CO4/PO1
	a) EventObject	
	b) EventClass	
	c) ActionEvent	
	d) ItemEvent	

```
12. Which of these methods can be used to output a sting in an applet?
                                                                      CO4/PO1
   a) display()
   b) print()
   c) drawString()
   d) transient()
13. Which of these operators can be used to get run time information about an
   object?
                                                                       CO4/PO1
   a) getInfo
   b) Info
   c) instanceof
   d) getinfoof
14. What is the Message is displayed in the applet made by this program?
                                                                       CO4 /PO2
     import java.awt.*;
     import java.applet.*;
          public class myapplet extends Applet
     {
        public void paint(Graphics g)
          g.drawString("A Simple Applet", 20, 20);
   a) A Simple Applet
      b) A Simple Applet 20 20
      c) Compilation Error
      d) Runtime Error
15. which of these functions is called to display the output of an applet?
                                                                      CO4/PO1
   A. display()
   B. print()
   C. displayApplet()
   D. PrintApplet()
```

PART-B

UNIT-01

1.	Define byte code in java?	CO1/PO1
2.	Why java called platform independent language?	CO1/PO1
3.	Why java called write once, run anywhere language?	CO1/PO1
4.	Why the function main() always declared as static in java?	CO1/PO1
5.	Write the coding part to find the reverse of a number by accepting	number Command
	Argument.	CO1/PO3
6.	Write the codes to check the biggest among three numbers using ternary	operator? CO1/PO3
7.	Exemplify Class and object in Java.	CO1/PO1
8.	Describe the uses of parseInt() in Java programming.	CO1/PO1
9.	T100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Differentiate static and dynamic array in java with an small exam	ple? CO1/PO1
	Differentiate static and dynamic array in java with an small exam Identify type casting in java Programming?	ple? CO1/PO1 CO1/PO1

<u>UNIT-02</u>

CO2/PO1
CO2/PO1
CO2/PO1
CO2/PO1
CO2/PO1
using super keyword
CO2/PO2
and returns the biggest
CO2/PO1
CO2/PO1
CO2/PO1

UNIT-03

/PO1

- 2. Choose the name of the method is used to start a thread execution? CO3/PO1
- 3. Differentiate between string and string buffer class? CO3/PO1
- 4. Define the behavior of == operator in string class with code? CO3/PO1
- 5. Differentiate between implements and extends? CO3/PO1

- 6. What is the difference between checked and unchecked exception in java? CO3/PO1
- 7. Enlist the importance of finally keyword in exception handing?CO3/PO1
- 8. Identify 2 checked exception names CO3/PO1
- 9. Differentiate between isAlive() and Join() in MultiThreading? CO3/PO1
- 10. Judge the output

CO3/PO1

```
public class Foo
{
    public static void main(String[] args)
    {
        try
        {
            return;
        }
        finally
        {
            System.out.println("Finally");
        }
    }
}
```

UNIT-04

1.	Explain about event delegation?	CO4/PO2
2.	Differentiate between Applet and AppletViwer?	CO4/CO1
3.	Define "public void init()" in Applet?	CO4/PO1
4.	Identify the attributes of applet tag?	CO4/PO1
5.	Define Adapter Class	CO4/CO1
6.	Select the methods of Mouse Listener.	CO4/PO3
7.	Define (1) Event (2) Event Source (3) Event Class (4) Event Listener	CO4/PO2
8.	Describe the methods (1) setBackground() (2) setForeground()	CO4/PO3
9.	Compare the difference between java applet program and java application	program.
		CO4/PO1
10.	Differentiate between applet and applet viewer?	CO4/PO1

LOGN QUESTION: [EACH CARRIES 7/8/10 MARKS]

<u>UNIT-01</u>

1	A. Define object-orientation and specify the characteristics of object oriented approach?	CO1/PO1(7mark)
	b. Evaluate a program for computing x ^y doing repetitive multiplication. X and y are of type integer and are to be given as command line arguments. Raise and handle exception(s) for invalid values of x and y.	CO3/PO3(8 marks)
2	A. Write a java program to print maximum between 3 positive number using conditional operator?	CO1/PO2(7 marks)
	B. Write a java program to print "Java is Good" 10 times using for loop, while loop and do-while loop?	CO1/PO2(8 marks)
3	A. Write a program to check the give number is prime or not?	CO1/PO1(8 makrs)
	B. Demonstrate a java program to implement Selection sort?	CO1/PO2 (7 marks)
4	A. Write a Java program that prints the following pattern 1 2 3 4 5 1 2 3 4 1 2 3 1 2 1	CO1/PO3(8marks)
	B.Demonstrate Loop in java and write a program to print 1 to 10 using for loop, while loop and dowhile loop?	CO1/PO2(7mark)
5	A. Demonstrate a Java program to search an element using binary search.	CO1/PO1(7mark)
	B. Design a Java program to perform addition of two matrices, where the values are accepted to the both matrix at run time using Buffer Reader Class.	CO1/PO1(8mark)

6	A. Demonstrate a Java program to accept a number at run	CO1/PO1(7mark)
	time using scanner class and check the given number is	
	Armstrong or not?	
	B. Demonstrate a Java program to convert a binary	CO1/PO1(8mark
	number to decimal number	
7	A. Define for each loop in java with a suitable example?	CO1/PO1(7mark)
	B. Define static data member in java and demonstrate a	CO1/PO2 (8mark)
	suitable example to count the number of objects	
	constructed using static data member?	
8	A. Differentiate between Scanner class and Buffered Reader	CO1/PO1(7mark)
	class in java with a suitable	
	example?	
	B. Describe JVM and explain and draw the Architecture of	CO1/PO2(8 mark)
	JVM?	

<u>UNIT-02</u>

1	A. Design a java program to create to display your name, branch with your college name?	CO2/PO1(7 marks)
	B. Define function over loading and write a program to calculate the area of Circle, Sphere and Square using function overloading concept?	CO2/PO2(8 marks)
2	A. Differentiate between function over loading and constructor overloading with a suitable example?	CO2/PO1 (8mark)
	B. Discuss about constructor? Explain constructor overloading with example	CO2/PO1(7marks)
3	Define short notes any 3 of the following Static b.final c.garbage collection d.constructor	CO2/PO1(15mark)
4	A. Differentiate between class and interface with suitable example?	CO2/PO1(7 mark)
	B. Write a Java program to implement Polymorphism.(Note: Consider a scenario, Bank is a class that provides method to get the rate of interest. But, rate of interest may differ according to banks. For example, SBI, ICICI and AXIS banks are providing 8.4%, 7.3% and 9.7% rate of interest	CO2/PO1 (8 mark)
5	Write a program to demonstrate the multipath inheritance for the classes having relations as shown in figure 1 .	CO2/PO3(15 marks)

	B C D	
6	A. State the difference between Method overloading and method overriding with example.	CO2/PO1 (8 mark)
	B. Differentiate between interface and abstract class with suitable example?	CO2/PO1 (7 mark)
7	A. Differentiate between auto boxing and unboxing?	CO2/PO1(7mark)
	B. Explain about collection in Java? Differentiate between Vector and Array List	CO2/PO1 (8 mark)
8	A. List out any five methods of String Buffer class by suitable example.	CO2/PO1(8 marks)
	B. List the 5 methods of String Buffer class with a suitable Example	CO2/PO1(7 marks)
9	A. Wap to accept a string and check whether it is a peliondramic or not?	CO2/PO1 (7 marks)
	B. Classify the uses of super keyword and explain why it is used? Write a java program to find out cost, weight and volume of a box using multilevel inheritance and use super keyword at proper places?	CO2/PO1(8 marks)
10	A. Tell about package? Design a program to find out sum of product of consecutive digits of a number using interface, package and command line arguments? Suppose Number is 12345 then Result will be1+2+3+4+5	CO2/PO2(8marks)
	B.Explain the following terms with respect to exception handling.i) try ii) catch iii) throw iv) finally	CO2/PO1(7 marks)
11	Explain following with example: i) Finalize()	CO2/PO1(15 marks)

	ii) static	
	iii) super	
	iv) final	
12	A.Describe Inheritance and its type with suitable diagrams	CO2/PO1(8 marks)
	CO2/PO1(8 marks	
	B. Differentiate String class and StringBuffer class?	CO2/PO1(7 marks)
13	Define short notes on any thred of the following	CO2/PO1(15mark)
14	Recall package? Define the benefits of package? Explain Java	CO2/PO1(15 marks)
	API packages with a suitable example	
15	1. Explain the following method uses in Sring Buffer class with	CO2/PO1(15mark
	examples?	
	append() b.insert() c.replace() d. delete() e.length	

<u>UNIT-03</u>

1	a. Compose a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 20 numbers.	CO3/PO3(8 marks)
	b. Describe the difference between checked and unchecked exception? List at least 5 un-checked exception class names.	CO3/PO1(7 marks)
2	a.Explain about thread? Describe the complete life cycle of thread with example.	CO3/PO1 (10 marks)
	b. Design a JAVA Program to create a Thread and print the first 10 natural numbers along the Thread name by delay.	C03/PO3(5marks)
3	a. Illustrate a program to input two numbers using scanner class and find the division of the entered number. Use an appropriate exception handling mechanism to handle arithmetic exception?	CO3/PO1(7 marks)
	b.Evaluate a program for computing x ^y doing repetitive multiplication. X and y are of type integer and are to be given as command line arguments. Raise and handle exception(s) for invalid values of x and y?	CO3/PO3(8 marks)
4	a.What is user defined Exception in Java? WAP to accept student age and check whether he is eligible for vote or not? Show an appropriate message when the age is not eligible?	CO3/PO1(8mark)
	b. Write a java program to store "Java file is good" in to a file called "myfile.txt".	CO3/PO3 (7 marks)
5	AWhat is exception? And explain try, throw and catch with a	CO3/PO1(8 marks)

	suitable exemple?	
	b. Write a short note on Character Stream classes?	CO3/PO1(7 marks)
6	Write short notes on the following	CO3/PO1(15mark)
	Join b. sleep c. start d. sleep e.yeild	
7	a.Write a java program to shows how to read and write Files Using a RandomAccessFile Object	CO3/PO1(10 marks)
	b. Differentiate the following:1. Text I/O v/s Binary I/O	CO3/PO3 (5 marks)
8	Demonstrate a program to accept the first 10 natural numbers and store the even and odd numbers separately in to a text file called "odd.txt" and "even.txt"?	CO3/PO2(15 marks)

<u>UNIT-04</u>

1	a. What is an Applet? Explain the life cycle of Applet by a neat diagram?	CO4/PO3(8marks)
	b.Explain life cycle of Applet. Create a simple Applet having a message Hello?	CO4/PO3 (7 marks)
2	A.Write a Java program to display digital clock by using Applet.	CO4/PO3 (8mark)
	b. Write a Java program of event handling by implementing Action Listener?	CO4/PO3 (7mark)
3	A.Write a Java program to implement Mouse Motion Adapter?	CO4/PO3 (8mark)
	b. Design an applet having a circle which is moving from left to right and reflected back from right to left continuously?	CO4/PO3(7 marks)
4	A.Design an applet that having three scroll bars for three colors red, green and blue with minimum 0 and maximum 255 values. The background color of applet changes depending on the value of the scroll bar at that time.	CO4/PO3(15 marks)