GIET UNIVERSITY, GUNUPUR – 765022

B. C. A (Third Semester) Examinations, January' 2023

BCA20302 - Object Oriented Programming with Java

Time: 3 hrs   Maximum: 70 Marks

The figures in the right hand margin indicate marks.

PART – A: (Multiple Choice Questions)   **(1 x 10 = 10 Marks)**

Q. 1 Answer *ALL* questions   CO #   PO #

a. Number of primitive data types in Java are?   CO1   PO2

   (i)   6   (ii)   7
   (iii) 8   (iv)   9

b. Automatic type conversion is possible in which of the possible cases?   CO1   PO2

   (i)   Byte to int   (ii)   int to long
   (iii) Long to int   (iv)   short to int

c. Which of the following is not a Java features?   CO1   PO2

   (i)   Dynamic   (ii)   Architecture Neutral
   (iii) Use of pointers   (iv)   Object-oriented

d. What is the return type of the hashCode() method in the Object class?   CO2   PO3

   (i)   Object   (ii)   int
   (iii) long   (iv)   void

e. What does the expression float a = 35 / 0 return?   CO1   PO2

   (i)   0   (ii)   Not a number
   (iii) Infinity   (iv)   run time exception

f. Which of the following tool is used to generate API documentation in HTML format from doc comments in source code?   CO4   PO2

   (i)   javap tool   (ii)   javaw command
   (iii) Javadoc tool   (iv)   javah command

g. In which process, a local variable has the same name as one of the instance variables?   CO2   PO1

   (i)   Serialization   (ii)   Variable Shadowing
   (iii) Abstraction   (iv)   Multi-threading

h. Which of the following is true about the anonymous inner class?   CO3   PO2

   (i)   It has only methods   (ii)   Objects can't be created
   (iii) It has a fixed class name   (iv)   It has no class name

i. Which package contains the Random class?   CO4   PO1

   (i)   java.util package   (ii)   java. Lang package
   (iii) java.awt package   (iv)   java.io package

j. Which of the following is an immediate subclass of the Panel class?   CO4   PO1

   (i)   Applet class   (ii)   Window class
   (iii) Frame class   (iv)   Dialog class

PART – B: (Short Answer Questions)   **(2 x 10 = 20 Marks)**

Q.2. Answer *ALL* questions

		CO #	PO #
a.	How Java is different from C language?	CO1	PO2
b.	What do you mean by type conversion in Java?	CO1	PO1
c.	What do you mean by wrapper class?	CO2	PO1
d.	What is the need of final class?	CO2	PO3
e.	What is abstract method and write down its syntax?	CO2	PO1
f.	Write down the syntax for thread creation.	CO3	PO1
g.	What do you mean by thread priority?	CO3	PO3
h.	What are the phases used in thread life cycle?	CO3	PO1
i.	What is byte stream classes?	CO4	PO3
j.	What is Exception handling?	CO4	PO1

PART – C: (Long Answer Questions)   **(10 x 4 = 40 Marks)**

Answer *ALL* questions

		CO #	PO #
3.*a.*	Write a Java program to find the largest among 3 number.	CO1	PO1
b.	Write a java program to print every week's day name using Switch case.	CO1	PO2

(OR)

c.	Write the difference between function overloading and overriding.	CO2	PO1
d.	Write a Java program using static keyword and static member function.	CO2	PO2
4.*a.*	Write a java program using the concept of function overriding.	CO2	PO1
b.	Write a java program using the concept of multilevel inheritance.	CO2	PO2

(OR)

c.	Write a Java program to enter a number and check whether it is Armstrong or not.	CO1	PO1
d.	Write a Java program to enter a string and check whether it is palindrome or not.	CO1	PO2
5.*a.*	Define a package and explain the Java API package.	CO3	PO1
b.	Write a Java program for how to add a class in the existing package.	CO3	PO2

(OR)

c.	Write a java program to designing a webpage using applet?	CO4	PO3
d.	Write a java program for to add an applet code into HTML file?	CO4	PO1
6.*a*	Define Exception handling? Briefly explain types of error?	CO4	PO2
b.	Define applet? Explain the applet life cycle?	CO4	PO2

(OR)

c.	Write a Java program to extend a thread class.?	CO3	PO3
d.	Write a Java program to stopping and blocking a thread?	CO3	PO1

--- End of Paper ---