

2022

BCA

[Honours]

(B.Sc. Second Semester End Examination-2022)

PAPER-C3T

Full Marks: 40

Time: 02 Hrs

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable*

Illustrate the answers wherever necessary

Group A

1) Answer any Five questions: 2x5 = 10

- a. What are the typical responsibilities of JVM?
- b. Why Java is called platform independent?
- c. Differentiate between '==' operator and equals () method in the context of string object.
- d. What is method overriding?
- e. What is the use of the keyword 'super'?
- f. How to define an abstract class? When should we define a class as abstract?
- g. What is a package?
- h. What do you mean by an exception handler?

(2)

Group B

Answer any Four Questions:

4x5 = 20

2. What is the significance of static variable? Write a program to find the area of a rectangle using static method. 2+3
3. Write a Java program to check whether a string is palindrome or not. 5
4. What is exception? Explain any two exceptions on Java with example. 1+4
5. What is the difference between method overloading and method overriding? What do you mean by 'Encapsulation'? 2+2+1
6. What is interface? Write a Java program to implement multiple inheritance. 1+4
7. What is inheritance? What are the major advantages of package in Java? 2+3

Group C

Answer any One Question:

1x10 = 10

8. Create a class called Box which contains three variables – width, height and length. Set the values of the variables using constructor overloading and also one method volume () which returns the volume of the box. From main method, call the volume method of the class and print the volume.
What is the difference between interface and class? 8+2
9. What is multithreading? What are the advantages of multithreading? Explain the lifecycle of a thread. 2+4+4