

BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)

B.C.A. Sem-IV : : SUMMER - 2022

SUBJECT : JAVA PROGRAMMING

Day : Saturday
Date : 28-05-2022

S-18779-2022

Time : 10:00 AM-01:00 PM
Max. Marks : 60

N. B. :

- 1) **Q. NO. 4** from Section – I is **COMPULSORY**.
 - 2) Attempt **ANY TWO** questions from **Q. 1, 2, 3** in Section – I.
 - 3) Attempt **ANY TWO** questions from **Q. 5, 6, 7** in Section – II.
 - 4) Figures to the right indicate **FULL** marks.
 - 5) Answers to both the sections should be written in **SAME** answer book.
 - 6) Draw neat and labelled diagrams **WHEREVER** necessary.
-

SECTION – I

- Q. 1** a) Explain Java features in detail. (06)
b) What is looping? Describe for loop and while loop with example. (06)
- Q. 2** What is Synchronization? Why it is necessary? Explain with example. (12)
- Q. 3** a) What is method overloading? Explain it with suitable example. (06)
b) What is inheritance? Explain single inheritance in detail. (06)
- Q. 4** Write short notes on **ANY THREE** of the following : (12)
a) Garbage Collection
b) AWT Components
c) Packages
d) Types of Streams
e) Exception Handling

SECTION – II

- Q. 5** What is an interface? How to implement the concept of multiple inheritance using interfaces? (12)
- Q. 6** a) Describe different stages in the life cycle of an applet. (06)
b) Write a Java program to print sum of digits of a given number. (06)
- Q. 7** Write a program to define a class employee having members with empno, name, basic salary, DA is 5 % of Basic Salary, HRA is 10 % of Basic Salary, Professional tax is Rs. 200 and calculate Gross Salary for an employee. Write all necessary methods accordingly. (12)

* * * * *
