

BCACACN 203

Second Semester B.C.A. Degree Examination, September 2022 (NEP-2020) (2021 – 22 Batch Onwards) OBJECT ORIENTED CONCEPTS USING JAVA (DSCC)

Time: 2 Hours Max. Marks: 60

Note: Answer **any six** questions from Part – **A** and **one full** question from **each** Unit in Part – **B**.

 $PART - A (6 \times 2 = 12)$

- 1. a) Define the terms:
 - i) Data Encapsulation
 - ii) Data Abstraction.
 - b) What is stream? List different types of streams in Java.
 - c) What is vector? How it is different from array?
 - d) What are constructors? Mention types of constructors in Java.
 - e) What is the purpose of keyword super and super ()?
 - f) List any four API packages of Java.
 - g) Give the syntax of Applet tag.
 - h) List the two key features of a swing GUI.

PART - B

Unit - I

- 2. a) Explain various features of OOP.
 - b) List and explain different primitive data types available in Java.
- 3. a) Explain any 6 features of Java.
 - b) Explain the increment, decrement and conditional operator with syntax and example. (6+6)

P.T.O.

(6+6)



Unit - II

- 4. a) Explain for loop with syntax and example.
 - b) What are arrays? Explain how to declare instantiate initialize and use a one-dimensional array with suitable code example.
 - c) Write the general form of a class. Explain how to define a class in Java with suitable example. (4+5+3)
- 5. a) Explain any two string methods in Java with suitable example.
 - b) Explain method overloading with suitable example.
 - c) Explain do while loop with syntax and example.

(4+5+3)

Unit - III

- 6. a) What is inheritance? Explain multi-level inheritance with suitable example.
 - b) Explain the life cycle of a Thread with diagram.

(6+6)

- 7. a) Explain how to create and implement interface using suitable example.
 - b) Explain exception handling using try/catch with suitable example.

(6+6)

Unit - IV

- 8. a) List and explain any 6 methods defined by Applet.
 - b) Explain how any two Mouse events are handled in java with suitable example.

(6+6)

- 9. a) List and explain the components of Delegation Event Model.
 - b) Explain following swing components with any two methods associated with it.
 - i) JTextField
 - ii) Jlist

iii) JRadioButton.

(6+6)