



**MCA DEGREE EXAMINATIONS: NOV/DEC 2023**

(Regulation 2020)

First Semester

**MASTER OF COMPUTER APPLICATIONS**

P20CAT1004 : Programming with JAVA

**COURSE OUTCOMES**

- CO1:** Apply the fundamental core java, packages, data base connectivity for computing.
- CO2:** Implement Java programs.
- CO3:** Make use of hierarchy of Java classes to provide a solution to a given set of requirements.
- CO4:** Use the frameworks JSP, Hibernate, Spring.
- CO5:** Design and implement server-side programs using Servlets and JSP.

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Consider the following steps of Java Programming. CO1 [K<sub>4</sub>]
  1. Create a Java Program
  2. Install Eclipse
  3. Run the Java program.
  4. Compile the Java program.Arrange them in correct sequence.
  - a) 3-2-1-4
  - b) 2-1-4-3
  - c) 1-2-4-3
  - d) 4-1-3-2
2. The int data type in java occupies \_\_\_\_\_ bytes. CO2 [K<sub>2</sub>]
  - a) 1
  - b) 2
  - c) 4
  - d) 8
3. Which of the following is not a Java features? CO2 [K<sub>2</sub>]
  - a) Dynamic
  - b) Architecture Neutral
  - c) Use of pointers
  - d) Method





26. Write a Java Program to check the given number is prime or not? CO1 [K<sub>3</sub>]

**Answer any FOUR Questions**  
**PART D (4 x 10 = 40 Marks)**

27. Explain the exception Handling with neat Sketch. CO1 [K<sub>2</sub>]

28. Write a Java Program to create a Linked List using the following elements: CO2 [K<sub>3</sub>]  
"Volvo", "BMW", "Ford", "Mazda". Insert "Benz" as the first element and  
"Ferrari" as the last element. Perform remove first and remove last operations.  
Access and display the elements using Iterator.

29. Write a Java Program to Store and Retrieve information using FileInputStream CO3 [K<sub>3</sub>]  
and FileOutputStream.

30. Explain the multitiered application with neat sketch. CO4 [K<sub>2</sub>]

31. Write a Java Program for Sending and Receiving Datagram packet by Datagram CO5 [K<sub>2</sub>]  
socket.

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