M. Sc. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2024

SEMESTER 1 : COMPUTER SCIENCE (Artificial Intelligence)

COURSE: **24P1CAIT02: OBJECT ORIENTED PROGRAMMING WITH JAVA**

(*For Regular 2024 Admission*)

Time: Three Hours   Max. Weightage : 30

PART-A

Answer any 8 Questions   Weight : 1

1. Discuss the various tokens in Java.

2. Write a Java program to read and display employee details.

3. Discuss the use of the 'static' keyword in Java.

4. Write a Java program to create a class called **Rectangle** with **width** and **height** as private attributes. Calculate the area and perimeter of the rectangle.

5. Explain any five methods of the **ArrayList** class in Java.

6. Discuss the use of 'super' keyword in Java.

7. Enumerate any five methods used in networking along with their descriptions.

8. Describe inter-thread communication in Java.

9. Recall the applet lifecycle in Java.

10. Write short notes on event sources and event listeners.

(1 x 8 = 8)

PART- B

Answer any 6 Questions   Weights : 2

11. Discuss the basic concepts of Object-Oriented Programming.

12. Write a Java program to implement method overloading.

13. Discuss the various loops in Java with examples.

14. Write a Java program to demonstrate the use of default and parameterized constructors.

15. Explain the Java **String** class and its methods.

16. Elaborate on interfaces in Java.

17. Write a Java program that creates two threads by extending the Thread class. First thread displays "Good Morning" every one second and the second thread displays "World" every two seconds.

18. Discuss the AWT class hierarchy.   **(2 x 6 = 12)**

PART- C

Answer any 2 Questions   **Weights : 5**

19. Explain the features/buzzwords of Java programming.

20. Discuss Inheritance in Java with examples.

21. Explain packages in Java in detail.

22. Write a Java program to create two threads, one thread will print the even numbers between 1 and 10 and the other will print the odd numbers between 11 and 20.

(5 x 2 = 10)