K25U 2521

Reg. No. : .....

Name : .....

V Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular) Examination, November 2025

(2023 Admission)

CORE COURSE IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

5B12AIML – Object Oriented Programming Using Java

Time : 3 Hours Max. Marks : 40

SECTION – A

Answer **all** questions. **(6×1=6)**

1. What will be generated after the successful compilation of source code ?
2. What is the main advantage of inheritance ?
3. Which built-in exception will be thrown when a number is divided by zero ?
4. Consider the following declaration int m = 18, n = 4. The value of the expression m/n + m%n is _____.
5. Expand JDK.
6. What happens when thread's yield() method is called ?

SECTION – B

Answer **any 6** questions. **(6×2=12)**

7. Explain the following line used in Java Program-public static void main (String args[ ]).
8. What are abstract classes ?
9. What is polymorphism ?
10. What is dot operator ?
11. What makes Java platform independent ?
12. Give the names of any four built-in packages.
13. What is the purpose of keyword *super* in inheritance ?
14. What is Array Index out of bounds exception ?

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SECTION – C

Answer **any 4** questions. **(4×3=12)**

15. Explain the relational operators in Java with examples.
16. Explain the difference of *break* and *continue* with examples.
17. Explain the method overloading with an example.
18. Explain the nested classes with example.
19. How will you create user-defined packages ?
20. Explain the *runnable* interface to create threads.

SECTION – D

Answer **any 2** questions. **(2×5=10)**

21. Write a Java program to generate prime numbers between 100 and 200.
22. With an example, explain the use of try...catch statements in Java.
23. Explain with examples to create and initialize one dimensional and two-dimensional arrays in Java.
24. Explain the concept of thread priorities with an example.