

**FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2024
COMPUTER SCIENCE & MATHEMATICS (DOUBLE MAIN)
GDCS4A02T: JAVA PROGRAMMING**

Time: 2 ½ Hours

Maximum Marks: 80

**SECTION A: Answer the following questions. Each carries *two* marks.
(Ceiling 25 Marks)**

1. Why is Java a platform-independent language?
2. Define abstraction.
3. What do you mean by versioning?
4. If Obj X1 is an object of class A created using a new keyword, what does the statement ObjX2=ObjX1 mean?
5. Define Copy constructor in java.
6. Detail Method Overloading.
7. Differentiate 'this' Reference and finalize.
8. Describe dynamic method dispatch with an example.
9. Define Threads.
10. Why does thread synchronisation happen in Java?
11. What is the difference between a constructor and a method?
12. Based on the importance of different threads, is it possible to assign priority to threads?
Comment.
13. Define Applets.
14. What is JDBC?
15. Create a file to store the message "This time will pass" and display the total count.

**SECTION B: Answer the following questions. Each carries *five* marks.
(Ceiling 35 Marks)**

16. Explain any six features of Java.
17. Write a java program to find if the string is Palindrome or not.
18. What do you mean by stream? Explain about character stream in Java.
19. Write a java program using threads to print "Good morning" and "Welcome" continuously to display.

20. With proper code fragment, explain the significance of 'final' and 'static' Keywords.
21. Elaborate Events and GUI applications in java.
22. Write an Applet program for drawing an arc.
23. Explain Java Servlet and its features.

SECTION C: Answer any *two* questions. Each carries *ten* marks.

24. List and explain the basic principles of object orientation.
25. Explain exception handling. What is the difference between checked exception, unchecked exception and error?
26. Elaborate the structure of the AWT and its components.
27. Write a java applet program to create different shapes and fill color using applet.

(2 x 10 = 20 Marks)