

**FACULTY OF ENGINEERING**

**B.E. CSE(AI & ML) IV - Semester (AICTE) (Main & Backlog) (New) Examination,  
September /October 2023**

**Subject: Java Programming**

**Time: 3 Hours**

**Max. Marks: 70**

**Note: (i) First question is compulsory and answer any four questions from the remaining six questions. Each questions carries 14 Marks.**

**(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.**

**(iii) Missing data, if any, may be suitably assumed.**

1. a) Why "this" keyword is used?  
b) Write the usages of "super" and "final" keywords.  
c) Define thread. Write various methods of creating threads.  
d) What do you mean by serialization?  
e) What are different sources of events in java?  
f) Write about different JDBC drivers used for database programming.  
g) Discuss about the package used for servlets in java.
2. a) What is constructor? Explain its purpose with java program.  
b) Explain different types of data types used in java.
3. a) What is exception handling? Explain about various keywords used for exception handling in java with examples.  
b) What is an interface? Explain the implementation of multiple inheritance using interfaces with example.
4. a) Write about stack class and stringtokenizer class.  
b) Distinguish between byte stream and character stream classes.
5. a) Discuss various Abstract Window Toolkit (AWT) containers with examples.  
b) List the Java event listeners and explain the role of each event listener in event handling.
6. a) Explain in detail with examples  
(i) JLabel (ii) JTextField (iii) JTabbedPane (iv) JList  
b) Write a java servlet program for handling HTTP request and response.
7. a) What is inheritance? Explain different types of member access rules in java inheritance.  
b) Write a java program to illustrate the usage of thread priorities.