

Cluster Innovation Centre
End Semester Examination – June- 2024

Name of the Course: B. Tech (IT and MI)

Name of the Paper: Object Oriented Programming (java)

Paper Code: 3122611203

Duration: 3 Hrs.

Semester: II

Maximum Marks:90

Instructions to the candidates: Attempt any FIVE questions from the all. Question 1 and 4 are compulsory, rest all questions carry equal marks.

- Q. 1 Answer the following questions. 20
- (a). Differentiate between the roles of JDK, JVM and JRE.
 - (b). What are threads? How they are implemented in Java?
 - (c). Explain the concept of abstract class with example code.
 - (d). Explain use of 'new' and 'this' in java.
 - (e). Demonstrate the use of public, private and protected access modifiers with sample code.
- Q. 2 What is meant by multi-level inheritance? Explain how java implements multi-level inheritance with a sample code. 9+9
- Q. 3 What is run time polymorphism? Explain with code how java implements run time polymorphism. 9+9
- Q. 4 Write short notes on : 16
- i) Platform neutral
 - ii) Constructor and destructor
 - iii) Try and catch
 - iv) File handling
- Q. 5 Differentiate between class and Interfaces. Explain how variable and methods are declared in interfaces. 9+9
- Q. 6 What is meant by object oriented programming? How referring objects helps in better programming approach? Explain. 9+9
- Q. 7 What are strings and how they are implemented in java? List various operations which can be performed on string in Java with example. 9+9
