BT–5/D–21   **45198**

JAVA PROGRAMMING
Paper–ES–301A

Time Allowed : 3 Hours]   [Maximum Marks : 75

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

UNIT–I

1. Explain the various Applications of Java and how Java programming is important for Java.   15

2. Write short notes on following :   15

   (a) The Byte-Code.   (b) Constructors vs Methods.

   (c) Automatic Garbage Collection.

UNIT–II

3. What is Multithreading in Java? Explain the inter thread communication with the help of suitable example.   15

4. Explain the difference between method overriding and method overloading with the help of suitable example.   15

UNIT–III

5. Explain the Applet life cycle. Write a Java applet for calculator, which looks like as Calculator and perform different mathematical operations.

15

6. Explain the following :   15

   (a) Relation Databases.   (b) JDBC API.

   (c) AWT classes.

UNIT–IV

7. (a) Explain the role and advantages of Java Servlets in Web Applications development.

   (b) Explain HTTP Servlets.   15

8. Explain two events handling mechanisms and also explain Delegation Event Model and event handling process.   15