BT-5/D-18 **35160**

JAVA PROGRAMMING
IT-305N

Time : Three 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. (a) Explain briefly the following object oriented concepts :
   (i) Abstraction
   (ii) Polymorphism.
   (b) Define class and method. How objects are assigned as reference variable ?
   (c) Write a Java program to interchange the row and columns of a given matrix. 5+5+5=15

2. Explain the following with example :
   (a) String handling using string buffer class
   (b) The universal super class-objected class. 8+7=15

Unit II

3. (a) What do you mean by checked and unchecked exceptions ? Discuss with example.
   (b) Wite a Java program to find the area and perimeter of square and circle using interface. 8+7=15

4. (a) Explain the following with necessary code snippets :
   (i) Creating thread
   (ii) Stopping and Blocking a Thread.
   (b) How do you store and retrieve objectives from file ? Discuss. http://www.kuonline.in 8+7=15

Unit III

5. (a) Write Applets programs to accomplish the following tasks :
   (i) Drawing polygons
   (ii) Drawing a line graph.
   (b) Can applet class have a constructor ? Justify your answer with proper explanation and example. 8+7=15

6. (a) Explain any *two* AWT controls in Java with suitable examples.
   (b) What is JDBC API ? How connection is established with database. Briefly explain transactions. 8+7=15

Unit IV

7. Write notes on the following :

    (a)   Event classes and event listeners

    (b)   Servlet chaining.   8+7=15

8.   (a)   What do you mean by synchronization ? Discuss.

    (b)   Explain init and destory with suitable examples.

        8+7=15