

MCA/ M-12
PROGRAMMING IN JAVA
Paper-MCA-403

Time allowed: 3 hours

M.M.: 80

Note: Attempt any five Questions, selecting at least one question from each Unit.

Question No. 1 is Compulsory.

1.
 - (a) Java is both compiled and interpreted. Comment.
 - (b) Differentiate between interface and class.
 - (c) Differentiate between method overriding and method overloading and method overloading
 - (d) Name and explain any three built in exceptions.
 - (e) Explain various parameters in an applet tag.
 - (f) Explain List interface in brief
 - (g) Explain the AWT class hierarchy in brief.
 - (h) What is a Java Bean? What are its major advantages?

UNIT-I

2.
 - (a) Describe various operators along with their hierarchy in Java.
 - (b) Explain the concept of packages with various types of packages in detail.
3.
 - (a) Write a program in Java to find a pattern from a given text and display the locations of pattern, if found, else display 'not found'.
 - (b) Explain how constructors and destructor are handled in Java. Provide suitable examples.

Unit-II

4.
 - (a) How multiple inheritance is executed in Java ? Explain with appropriate example.
 - (b) What is synchronization? How it is handled in Java ? Explain.
5.
 - (a) Define an exception called "NoMatchException" that is thrown when a string is not equal to "India". Write a program that uses this exception.
 - (b) What do you understand by thread priorities ? How can you change the priorities of a thread ?

Unit-III

6.
 - (a) Write a program to create a sequential file that could store details about five products. Details include product code, cost, and number of items available and are provided through the keyboard. After creating a file read the data from that file and compute total value of all the five products.
 - (b) Describe the different stages in the life cycle of an applet.
7.
 - (a) What do you understand by delegation Event Model ? write a program which handles various keyboard events using this model.
 - (b) How can you create and perform various operations on Stack using Collections? Explain with help of a program.

Unit-IV

8. Write a program in Java to display the sum of the digits and reverse of the input number. The user must input the number through a text box and for sum and reverse there should be two buttons.
9.
 - (a) What do you mean by servlet? Explain its life cycle in detail
 - (b) Write down a program in Java to utilize the J Table class and create a table of your own choice

