

MCA/M-16
PROGRAMMING IN JAVA
PAPER- MCA-14-41

Time : Three Hours)

(Maximum Marks : 80

Note : Attempt any five questions selecting atleast one question from each unit.
Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Differentiate the following :
 - (a) Abstract class and Wrapper classes
 - (b) JAVA Keywords and JAVA Identifiers
 - (c) Final, Finally and Finalize
 - (d) Constructor and destructor
 - (e) Class and Interface
 - (f) Multi-programming and Multi-Thread Communication.

UNIT-I

2.
 - (a) Discuss the need of Java as Internet Language. What is JVM?
 - (b) Why pointers are missing in Java? Differentiate fully OOP and Partially OOP with examples.
3.
 - (a) Write Java code to find the sum of greatest among 20 integers, entered through command line argument.
 - (b) Write Java code to find the greatest among 3 integers, entered through command line argument.

UNIT-II

4.
 - (a) Discuss the meaning of Public static void main(), Why there is need of static class and static members? Discuss with examples.
 - (b) What are different types of exceptions and their relative effects?
5. Write Java code to find the area of rectangle using the concept of (a) Package (b) Inheritance (c) Overriding (d) Overloading.

UNIT-III

6. Differentiate Local Applet and Remote Applet. Discuss Applet life cycle in detail with the proper execution of all methods.
7. Write JAVA program to read the text file “Java.txt” from Computer Hard Disk and count the words, integers, special characters and blank spaces.

UNIT-IV

8. (a) Write Applet Program to swap the value of two integers in Text Fields T1 and T2.

(b) Write Java graphics program to display the following Applet graphics.
8. What are Different types of Layouts? Write Applet Program to generate. Applet code to design calculator using Layout manager and proper working of “+”, “-”, “*” and “/” Buttons.