

Roll No.

Total Pages : 03

CMCS/M-24

24537

PROGRAMMING IN JAVA

Paper : MS-20-22

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

1. Explain the following :

- (a) JVM
- (b) Interface
- (c) Wrapper classes
- (d) Access Specifiers
- (e) JAVA Beans
- (f) Static members
- (g) Adapter class.

Unit I

2. Differentiate C++ and Java. How JAVA is pure object oriented ? Write its various features. Does JAVA support Event Handling ? Justify your answer.

3. Write Java code to find the area of circle using the concept of :
- (a) Object
 - (b) Constructor
 - (c) Function Overriding

Unit II

4. Explain multithreading in Java. Explain all properties of thread with the help of thread life-cycle.
5. What are uncaught exceptions in JAVA ? Discuss the use of Nested try statements and finally keywords.

Unit III

6. Explain Applet Life-Cycle with suitable Java Program ? Write applet code to draw Smiling Face using graphics.
7. Explains with an example character stream and byte stream classes. What are their importances over normal classes ? Write program to copy the contents of one file to another with the help of byte stream class.

Unit IV

8. What are AWT Classes ? Explain various features of AWT classes in detail. Write Java Program to add the values in Two TextFields and answer appears in Third TextField, when pressing Button CLICK.
9. Define various Layout Managers in Java. Write program to design calculator using GridLayout.