PGDCA 2nd Semester

1059

OBJECT ORIENTED CONCEPTS USING JAVA

Paper—PGD-2101

Time Allowed : Three Hours]   **[Maximum Marks : 60**

Note :— Attempt **five** questions in all by selecting **one** question from each Section. Entire Question Number **IX** is compulsory.

SECTION—A

I.   (a) Describe JVM and JDK.

   (b) Explain any two decision control constructs available in Java with their syntax and examples.   6,6

II. (a) Explain the Arithmetic, Relational and Logical operators in Java. Also give their order of precedence.

   (b) What is Method Overloading ? How is it achieved in Java ? Give examples.   6,6

SECTION—B

III. (a) What do you mean by Final variables, methods and classes ? Explain with examples.

   (b) What are Abstract Methods and Classes ? Why are they used ?   6,6

IV. (a) What do you mean by Inheritance ? Illustrate its various types.

(b) What is Method Overriding ? Explain with examples.

6,6

SECTION—C

V. (a) What is a Package ? How do you add a class or interface to a Package ? Write steps.

(b) How can an Interface be used to support Multiple Inheritance ? Give examples.   6,6

VI. What is a Thread in Java ? Exemplify various methods of creating threads. How are threads started, run and stopped ? Give examples.   12

SECTION—D

VII. What is an Exception ? Give details of built-in Exceptions. How these Exception are managed ?   12

VIII. What is an Applet ? How does an applet differ from an application program ? Write Java code to display a message "Welcome to Applets" using both Application and Applet concepts.   12

(Entire question is compulsory)

IX. Write short answers :

(i) Is Java a pure Object Oriented Language ? Justify your answer.

(ii) What is Bytecode ?

(iii) Name numeric data types available in Java.

(iv) What is role of keyword 'static' ?

(v) How are Strings created in Java ?

(vi) How are priorities of a thread set ?   6×2=12