AW—1698

B.Sc. Part-II (Semester-III) Examination
COMPUTER APPLICATION (VOC.) (NEW)
(OOPS with Java Programming)

Time : Three Hours]   [Maximum Marks : 80

Note :— (1) **ALL** questions are compulsory.

(2) Question Nos. **2** to **13** carry equal marks.

(3) Assume suitable data wherever necessary.

1. (A) Fill in the blanks :   2

(i) The smallest individual units in the program is known as _____.

(ii) _____ means data hiding.

(iii) A _____ is a collection of classes and interface.

(iv) Java supports a special type of method called _____.

(B) Choose the correct alternatives :   2

(i) Which is not a valid type of variable ?

(a) Global variable   (b) Local variable

(c) Class variable   (d) Instance variable

(ii) JRE stands for :

(a) Java Running Environment   (b) Java Runtime Environment

(c) Java Runnable Environment   (d) None of these

(iii) Which of these cannot be declared static ?

(a) Class   (b) Object

(c) Variable   (d) Method

(iv) Applet are _____ program.

(a) Client side   (b) Server side

(c) Both (a) and (b)   (d) None of these

(C) Answer in **ONE** sentence :   4

(i) What is Java Virtual Machine ?

(ii) What is Applet ?

(iii) What is Array ?

(iv) What is Exception ?

2. (A) Explain the benefits and application of OOPS.   6

(B) Explain the following :   6

(i) Java byte code

(ii) Portability

(iii) Security.

OR

3. (A) Explain the following :

   (i) Objects

   (ii) Classes.

   (B) Explain the Java development tools with suitable example.   6

4. (A) Write a program in Java to find factorial of given integer by using do-while loop.   6

   (B) Explain the concept of type casting with suitable example.   6

<div align="center">OR</div>

5. (A) Write a Java program to find out the area of rectangle using single inheritance.   6

   (B) Explain difference between do-while and while loop.   6

6. (A) Explain the following :   6

   (i) Finalize method

   (ii) Abstract method.

   (B) What is overloading ? Explain with example.   6

<div align="center">OR</div>

7. (A) Explain static members with examples.   6

   (B) How data members of an object can be initialized ? Explain with example.   6

8. (A) What is Array ? Explain one dimensional array with suitable example.   6

   (B) Write a program in Java for sorting of array elements in ascending order.   6

<div align="center">OR</div>

9. (A) Explain the concept of Package. What are its applications ? How do we use them ?   6

   (B) Explain the procedure for creating an Array.   6

10. (A) Explain any three methods of thread class.   6

    (B) Explain the different types of errors.   6

<div align="center">OR</div>

11. (A) Explain the Java's way of exception handling.   6

    (B) Explain how to create and destroy the thread with suitable example.   6

12. (A) Differentiate between Java application program and Applet program.   6

    (B) Explain the procedure of Building Applet Code.   6

<div align="center">OR</div>

13. (A) State the life cycle of an Applet.   6

    (B) Explain the procedure for Writing Applets.   6