BRAINWARE UNIVERSITY

Course – BAMW

JAVA (BMW302A)

(Semester – 3)

Time allotted: 3 Hours   **Full Marks : 70**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Questions)   10 x 1 = 10

1. *Choose the correct alternative from the following*

(i)   The variables declared in class are called _____.

    a. reference variable   b.object

    c. instance variable   d. none of theese.

(ii)   The implicit return type of a constructor is _____.

    a.void   b. a class object in which it is defined.

    c.double   d. none of these

(iii)   The main method should be static for the reason _____.

    a.it can be accessed easily by the class loader   b.it can be accessed by every method or variable without any hindrance.

    c.it can be executed without creating any instance of the class   d. none of these.

(iv)   What is the default constructor of the class public class Test { }?

    a. public Test(void)   b. public void Test()

    c.Test()   d. public Test()

(v)   Which is not a valid statement based on given code?

    a.A a = new A();   b.B a = new B();

    c.A a = new B();   d.B b = new B();

(vi)   A class can extend _____.

     a. a single class   b. multiple classes

     c. exactly two classes   d. none of these.

(vii)   We can not instantiate _____.

     a. a class   b. an Interface

     c. an abstract class and an   d. a class and an abstract class
interface

(viii)   Which of the following tool used to execute java code?

     a.Javac   b.Applet

     c.Java   d.Rmic

(ix)   Single line comment starts with _____ in Java.

     a.//   b./**

     c./*   d. none of these

(x)   ActionPerformed method has single parameter of _____.

     a. actionPerformed class   b. actionEvent class

     c. actionHappend class   d. none of these

Group – B

(Short Answer Type Questions)   3 x 5 = 15

Answer any *three* from the following

2. What is package? What is the relationship between classpath and package?   [3+2]
3. What is access modifier? Discuss about the access modifier of Java with respect to a class.   [2+3]
4. Write a Java program to print factorial of a given number.   [5]
5. Write Java code to print the summation of two numbers using awt TextFields and Buttons.   [5]
6. Discuss about the difference between static and non-static class methods.   [5]

Group – C

(Long Answer Type Questions)   3 x 15 = 45

Answer any *three* from the following

7. (a) Give examples of interface methods for adding two integers and
        concatenating two strings.   [5]
    (b) Hence, write a program for getting an object of interface through
        implementation of a class.   [10]
8. (a) How can we declare an Event handler for a button?   [5]
    (b) Write proper Java code to exemplify your answer.   [10]
9. (a) At any time, a thread is said to be in one of several thread states.
        Discuss the different states of Thread life cycle with proper
        pictorial presentation.   [8]
    (b) What is constructor? Explain its utility. Can there be a constructor
        in abstract class. Justify.   [7]
10.   What is multilevel inheritance? Write java code to exemplify
        multilevel inheritance with class.   [3+12]
11. (a) Write suitable java code to exemplify "polymorphism" in java.   [7]
    (b) Write a Java function to convert a decimal number to its equivalent
        binary number.   [5]
    (c) Discuss split() function in Java   [3]