BRAINWARE UNIVERSITY

Course – MAMW

OOPs Using Java (MMW103)

(Semester – 1)

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) Java compiler creates

    a. class file   b. binary file

    c. executable file   d. All of these

(ii) Which of the following is not a valid string declaration in java

    a. String myString=new String("Hello");   b. String s="Hello";

    c. String s=new String(10);   d. String s=new String();

(iii) class A implements B - is a structure used to create

    a. polymorphism   b. inheritance

    c. copy class   d. invalid statement

(iv) constant variable is declared in java using the following keyword

    a. constant   b. final

    c. static   d. freeze

(v) Which of the following is erroneous?

      a. a try block with only catch   b. a try block with only finally

      c. a try block without catch or finally   d. a try block with multiple catch

(vi)   In java *new* is a/an

      a. function   b. operator

      c. class   d. none of these

(vii)   In System.out.println(), out is a/an

      a. class   b. object

      c. method   d. All of these

(viii)   In java *finalize* is a/an

      a. class   b. object

      c. method   d. none of these

(ix)   Which keyword is used to compile a java program?

      a. javac   b. javap

      c. java   d. exec

(x)   parseInt() method is used to convert

      a. string to integer   b. integer to string

      c. integer to long integer   d. none of these

Group – B

(Short Answer Type Questions)   3 x 5 = 15

Answer any *three* from the following

2.   What is a JVM? Write down the significance of public, static and void
     keywords while declaring main function.   [1 + 4]
3.   Discuss the steps to run a java program through command line.   [5]
4.   Write a short note on constructor.   [5]
5.   What is finalize? What is encapsulation.   [2 + 3]
6.   Write short note on garbage collection in java?   [5]

Group – C

(Long Answer Type Questions)   3 x 15 = 45

Answer any *three* from the following

7.	(a)	Discuss properties of OOP.	[5]
	(b)	Write a java program to illustrate multilevel inheritance. How multiple inheritance is supported by java?	[8 + 2]
8.	(a)	With suitable diagram, discuss the life cycle of thread.	[7]
	(b)	In how many ways multithreaded programming can be implemented in java? Explain with a snippet.	[5]
	(c)	Briefly discuss about necessity of static keyword in java.	[3]
9.	(a)	How 2D arrays are declared and initiated in java? Write appropriate syntax to illustrate.	[3]
	(b)	Write a java program to take a number from user and display the sum of the digits.	[8]
	(c)	Briefly discuss the limitations of Applet?	[4]
10.	(a)	Write down differences between ArrayList and Vector?	[2]
	(b)	How exceptions are handled in java?	[10]
	(c)	Briefly describe checked and unchecked exceptions?	[3]
11.	(a)	Write a program in java to create an applet to display circle and draw lines using different color.	[8]
	(b)	Write a short note on different string manipulation technique in Java.	[4]
	(c)	Discuss about throw and throws keywords.	[3]