



# BRAINWARE UNIVERSITY

Course – MAMW

OOPS Using Java (MMW 103)

(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 Question)

1 x 10 = 10

1. Choose the correct alternatives for the following:
  - i) Byte code of java is
 

a) platform dependent	b) depend upon OS
c) platform independent	d) none of these
  - ii) JVM -
 

a) Java Vertical Machine	b) Java Virtual Machine
c) Java Virtual Mode	d) Java Vertical Mode
  - iii) In System.out.println( ); out is
 

a) method	b) a class
c) output stream object	d) none of these
  - iv) Package may contain
 

a) interface only	b) only subpackage
c) a class only	d) class and interface

v) Which code declares class B belong to the pack.mamw

- a) `import java.mamw;`
- b) `package pack : package mamw;`
- c) `import pack.*;`
- d) `package pack.mamw;`

vi) Which of the following is not a keyword in Java

- a) `int`
- b) `float`
- c) `String`
- d) `char`

vii) Class MAMW

```
{
    public void main ( )
    {
        System.out.print("First");
    }
    public static void main (String arg[ ])
    {
        System.out.print("Second");
    }
}
```

Referring to above program, what is the output ?

- a) `First`
- b) `Second`
- c) `Both a and b`
- d) `None of these`

viii) `int i="hello";` What type of exception java throws

- a) `NumberFormatException`
- b) `IllegalArgumentException`
- c) `CastingException`
- d) `IntegertoStringCastingException`

- ix) Which of the following is not the java wrapper class
- a) Integer
  - b) String
  - c) Float
  - d) Double
- x) `super()` is used to
- a) access superclass constructor within subclass constructor
  - b) access superclass method within subclass constructor
  - c) both (a) and (b)
  - d) none of these

### Group – B

(Short Answer Type Question)

3 x 5 = 15

Answer *any three* of the following

2. “Programmer can call a constructor from another constructor”. Explain with an example.
3. What is the way to define a class that cannot be inherited? Give an example.
4. What is the checked and unchecked exception? Describe with proper example.
5. Explain wrapper class with example.
6. Describe garbage collector in java.

**Group – C**

(Long Answer Type Question)

3 x 15 = 45

Answer *any three* of the following

7. Explain all words in the statement “public static void main(String arg[])”. Briefly explain method overloading and method overriding with proper example.

Write a java program with class ComLine to print the number of arguments passed on the command line as well as the arguments. Write a main method to the MAMW class.

4 + 6 + 5

8. What are the different types of inheritance? Explain with example. What is the way to implement multiple inheritance in Java? What is partial implementation of an interface?

6 + 4 + 5

9. How do we define try catch block? Describe throw, throws, throwable in java. What is user defined exception? Explain with a program.

3 + 6 + 6

10. Describe the complete life cycle of an applet. Briefly explain local applet and remote applet with example. What is appletviewer?

6 + 6 + 3

11. Write short notes on *any three* of the following :

3 x 5

- a) Abstraction
- b) Runtime polymorphism in java
- c) Interface
- d) Thread life cycle
- e) Final, finally and finalize keyword