

2022

Time : 3 hours

Full Marks : 60

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Groups as directed.

Group – A

(Compulsory)

✓ 1. Choose the correct answer of the following :

1×10 = 10

(a) Which component is used to compile, debug and execute the Java Programs ?

(i) JRE

(ii) JIT

(iii) JDK

(iv) JVM

(b) Which environment variable is used to set the Java path ?

(i) MAVEN_Path

(ii) JavaPATH

(iii) JAVA ✓

(iv) JAVA_HOME

(c) What is not the use of "this" keyword in Java ?

(i) Referring to the instance variable when a local variable has the same name

(ii) Passing itself to the method of the same class

(iii) Passing itself to another method

(iv) Calling another constructor in constructor chaining

(d) Which of the following is a type of Polymorphism in Java Programming ?

(i) Mutiple polymorphism ✓

(ii) Compile polymorphism

(iii) Multilevel time polymorphism

(iv) Execution time polymorphism

(e) Which exception is thrown when Java is out of memory ?

- (i) MemoryError ✓
- (ii) Out OfMemoryError
- (iii) Memory out of Bounds Exception
- (iv) MemoryFullException

(f) Which of these keywords is used to define interfaces in Java ?

- (i) intf
- (ii) Intf
- (iii) interface
- (iv) Interface ✓

(g) Which of the following is a superclass of every class in Java ?

- (i) Array List
- (ii) Abstract class ✓
- (iii) Object class
- (iv) String

- (h) Which of these packages contains the exception Stack Overflow in Java ?
- (i) java.io
 - (ii) java.sytsem
 - (iii) java.lang ✓
 - (iv) java.util
- (i) Which one of the following is not an access modifier ?
- (i) Protected
 - (ii) Void ✓
 - (iii) Public
 - (iv) Private
- (j) What is the numerical range of a char data type in Java ?
- (i) 0 to 256 ✓
 - (ii) - 128 to 127
 - (iii) 0 to 65535
 - (iv) 0 to 32767

2. Why Java is called platform independent programming language ? Explain. 5

Group – B

Answer any **three** questions of the following :

15×3 = 45

3. ✓ What is Conditional Programming ? Define its types. Write the all syntax of types of conditional programming. WAP using Scanner class to find greater between three numbers.
4. ✓ What is loop ? Define types of loop. Differentiate between entry control and exit control loop. WAP using Scanner class to check input number is prime or not ?
5. ✓ What is constructor ? Define its types. Differentiate between function overloading and constructor overloading with suitable programming examples.
6. What is exception handling ? Define (a) try-catch (b) multi try-single catch (c) try-multi catch (d) multi try-multi catch with suitable programming examples.

7. Write short notes on any **two** of the following :

(a) Differentiate between throw and throws

(b) Differentiate between final and finally

(c) Abstract class

(d) Method overriding

