

**COPYRIGHT RESERVED BCA(Sem-II) — Prog.
in Java (201) Core – III**

2018

Time : 3 hours

Full Marks : 70

*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 **all** the Sections as directed.*

Section – A

(Compulsory)

1. Choose the appropriate answer from each of the following multiple choice questions : $2 \times 10 = 20$

(a) Which one of the following will declare an array and initialize with five numbers ?

(i) Array a = new Array (5)

(ii) int [] a = {23, 22, 21, 20, 5}

(iii) int a [] = new int [5]

(iv) int [5] array;

(b) _____ is the ability of an Java application to perform multiple tasks at the same time.

(i) Multiprogramming

(ii) Multithreading

(iii) Multiprocessing

(iv) Multitasking

(c) What is the name of the method used to start a thread execution ?

(i) init ();

(ii) start ();

(iii) run ();

(iv) resume ();

(d) A compiler converts the Java program into an intermediate language representation called :

(i) Byte code

(ii) Byte

(iii) Byteclass

(iv) Bytejava

(e) Which of the following is not a part of exception handling ?

- (i) Try
- (ii) Finally
- (iii) Thrown
- (iv) Catch

(f) AWT stands for :

- (i) All Window Tool
- (ii) All Writing Tool
- (iii) Abstract Window Toolkit
- (iv) Abstract Writing Toolkit

(g) Java platform consist of JVM and a package of readymade software component this package is known as :

- (i) Java API
- (ii) JVM API
- (iii) JM API
- (iv) API

(h) Which of the following package stores all the standard java classes ?

- (i) Lang

- (ii) Java
 - (iii) Util
 - (iv) Java packages
- (i) Java is associated with _____ programming language.
- (i) Oak
 - (ii) Basic
 - (iii) Perl
 - (iv) C
- (j) Which of these access specifiers can be used for an Interface ?
- (i) Public
 - (ii) Protected
 - (iii) Private
 - (iv) All of the above

Section – B

Answer any four questions : $5 \times 4 = 20$

2. Explain the life cycle of Applet in Java.
3. Write a program in Java to sort the array elements in ascending order.
4. What is function Overloading ? Explain it with an example.

5. What is a constructor ? How many types of constructor are used in Java ?
6. Write a program in Java to find the factorial of a given number.
7. What are the advantages of packages in Java ?
8. List the features of Java Programming Language.

Section – C

Answer any **two** questions : 15×2 = 30

9. What is Inheritance ? Explain different types of inheritance with diagram and Java Syntax for each.
10. Explain JDBC architecture in details.
11. Differentiate the following with the help of example :
 - (a) Application and Applet
 - (b) Structure approach and object oriented approach
 - (c) Abstract class and interface
12. What is a thread ? Explain life cycle of thread and how to create thread in java with example.