

BCA-16
June - Examination 2018
BCA Pt. III Examination
Programming in JAVA
Paper - BCA-16

Time : 3 Hours]

[Max. Marks :- 100

Note: The question paper is divided into three sections A, B and C. Write answers as per the given instructions.

Section - A

10 × 2 = 20

(Very Short Answer Type Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks.

- 1) (i) Explain type conversion and type casting in reference to Java.
- (ii) Write a short note on this keyword.
- (iii) What is JUM, how java is a platform independent language?
- (iv) Explain the difference between public and protected access specifier.

- (v) Explain the use of super keyword.
- (vi) What is the use of finally in java.
- (vii) What is an abstract class in java.
- (viii) What are packages in java. Write any two API packages in java.
- (ix) What is default constructor? Explain its use in java.
- (x) Explain garbage collection in java?

Section - B**4 × 10 = 40****(Short Answer Questions)**

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) What do you mean by multithreading? Explain the life cycle of a thread?
- 3) Explain the difference between final, finalize and finally.
- 4) Explain wrapper classes using the suitable example.
- 5) What is a vector? How it is different from an array?
- 6) Explain Exception Hierarchy. How to create custom Exception?
- 7) What do you mean by looping? Explain various categories of looping controls in java.
- 8) What is swing? What are the advantages of using swing over awt?

- 9) Write a program to create a class. Employee that will be having following members → data members → string name, int age, int code, float salary.

Methods are → 1) constructor to initialize values.

2) Set Data () - set all values of class.

3) Show Data () - display all the values on screen

Section - C

2 × 20 = 40

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries 20 marks.

- 10) What do you mean by overloading of methods? Explain the difference between overloading and overriding using suitable example.
- 11) What is a constructor? What are the special properties of constructor? How do we involve constructor? Explain difference between constructor and normal method.
- 12) What is an applet? Differentiate between application and applet and describe the complete life cycle of an applet. Create an applet that will display a text message on the screen?
- 13) What is file handling. How streams are managed in java. Write a program in java that can store the following information into the file - name, roll no, branch, course, age. The program will also show records