

BCA-16
June - Examination 2017
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 given instructions.

Section - A

10 × 2 = 20

(Very Short Answer Questions)

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

- 1) (i) What is the difference between a JDK and a JVM?
- (ii) Define class and object.
- (iii) What is the return type of the main() method?
- (iv) What do you mean by platform independence?
- (v) Explain difference between constructor and method.
- (vi) Why is the main() method declared static?
- (vii) What is the difference between & and && operator?

- (viii) What do you mean by abstract class?
- (ix) What are the methods of applet life cycle?
- (x) The catch clause of the user-defined exception class should _____ its Base class catch clause.

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 is method overloading? What are the important points about overloading methods?
- 3) Explain about explicitly invoking garbage collector and finalize() method with an example.
- 4) Write all similarities and differences between interfaces and classes with example.
- 5) Define packages in java. What are the benefits of using package? Explain with suitable example.
- 6) What is exception handling? What are the various types of exception?
- 7) Explain the process of creating multiple threads. What is inter-thread Communication?
- 8) What is an interface? Describe the purpose and application of interface.
- 9) What is the difference between throw and throws? Explain with an example.

Section - C**2 × 20 = 40**

(Long Answer Questions)

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

- 10) What do you mean by object oriented programming? Explain the basic features of java with example.
 - 11) What is a constructor? How does the Java default constructor be provided? Explain parameterized constructor with example. Explain the role of a constructor in base class and derived class.
 - 12) Write a program in which polymorphism concept is used.
 - 13) How can you implement an array in java, whose size may change during execution of program?
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