

## BCA-13

### Programming in JAVA

Bachelor of Computer Applications  
(BCA-11/16/17)

Fourth Semester, Examination, 2018

**Time : 3 Hours**

**Max. Marks : 80**

**Note :** This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

#### Section-A

##### (Long Answer Type Questions)

**Note :** Section 'A' contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. What is constructor ? What are its special properties ?  
Is it possible to overload a constructor ?
2. (a) What do you mean by event handling ? What are the types of events used in Java AWT ?  
(b) Discuss briefly about three layout manager.
3. Explain various types of JDBC drivers. Also explain major design constraints with JDBC ? Explain.
4. (a) What is an interface ? Write the general format of declaring an interface.  
(b) List some of the common types of exceptions that might occur in Java. Give examples.

**Section–B****(Short Answer Type Questions)**

**Note :** Section ‘B’ contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. Explain the relational operators in Java with suitable examples.
2. Explain the different loops available in java with examples.
3. What do you mean by an Array ? Describe declaration, creation, initialization and accessing of an array in Java using suitable examples.
4. What is a package in Java ? Explain the creation and use of user define package with an example.
5. (a) What is a class ? How does it accomplish data hiding ?  
(b) What is recursive method ? Explain with example.
6. Explain AWT and Swing component.
7. Write a program in Java which will display all the odd numbers between 1 to 50.
8. (a) Explain inheritance using suitable example.  
(b) What is a constructor ? How do we involve a constructor ? What are its special properties ?

**Section–C****(Objective Type Questions)**

**Note :** Section ‘C’ contains ten (10) objective type questions of one (1) mark each. All the questions of this Section are compulsory.

1. Which of these operators is used to allocate memory to array variable in Java ?  
(a) malloc

- (b) alloc
  - (c) new
  - (d) new malloc
2. If method have same name as class name and method don't have any return type then it is known as :
- (a) Destructors
  - (b) Object
  - (c) Variable
  - (d) Constructor
3. Which of these can not be used for a variable name in Java ?
- (a) identifier
  - (b) keyword
  - (c) identifier and keyword
  - (d) None of the mentioned
4. Inheritance means :
- (a) Sub-class extends super class
  - (b) Sub-class extends base class
  - (c) Sub-class create object of super class
  - (d) All of the above
5. Which of these have highest precedence ?
- (a) ()
  - (b) ++
  - (c) \*
  - (d) >>

6. String is the predefined :
  - (a) Method
  - (b) Class
  - (c) Variable
  - (d) Object
7. What is jdb ?
  - (a) java compiler
  - (b) java interpreter
  - (c) java disassemble
  - (d) java debugger
8. Which of these class is related to all the exceptions that cannot be caught ?
  - (a) Error
  - (b) Exception
  - (c) Runtime exception
  - (d) All of the mentioned
9. Hot java is :
  - (a) System software
  - (b) Web browser
  - (c) IDE
  - (d) Java environment
10. Which of these can be overloaded ?
  - (a) Methods
  - (b) Constructors
  - (c) All of the mentioned
  - (d) None of the mentioned