

Roll No.

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. 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 are the benefits of using packages ? Write down the steps involved in creating a package in a Java program with an example.
2. Explain in detail the following words using suitable example :
 - (a) Java Token
 - (b) Applet
 - (c) Abstract class

- (d) Keyword
 - (e) Vectors
 - (f) File Handling
3. What is object-oriented programming in context of JAVA ? Discuss about the features of object oriented programming in detail.
 4. What are the various decision-making and control statements available in JAVA ? Explain switch statement with suitable example.

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (8) marks each. Learners are required to answer *four* (04) questions only.

1. What do you mean by copy constructor in JAVA ?
2. What is Inheritance ? Explain multilevel inheritance with example.
3. Explain the term Array copy() and Multi-dimensional arrays.
4. What is Class in JAVA ? Explain with the help of example.
5. Explain the term AWT components in detail.
6. What is an Interface ? Write steps to implement interface in JAVA.
7. Explain the various type of JDBC drivers.
8. Explain the term I/O basics and the predefined streams.

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

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. Which is a reserved word in the Java programming language ?
(a) method (b) native
(c) subclass (d) array
2. What is the numerical range of a char ?
(a) - 128 to 127
(b) - (2^{15}) to $(2^{15}) - 1$
(c) 0 to 32767
(d) 0 to 65535
3. Public Class Test()
What is the prototype of the default constructor ?
(a) Test() (b) Test (void)
(c) Public Test () (d) Public Test (void)
4. A class to have access to members of another class in the same packages. Which is the most restrictive access that accomplishes this objective ?
(a) public (b) private
(c) protected (d) default access
5. Which of these packages contains all the classes and methods required for even handling in Java ?
(a) java.applet

- (b) java.awt
 - (c) java.event
 - (d) java.awt.event
6. What does AWT stand for ?
- (a) All Window Tools
 - (b) All writing Tools
 - (c) Abstract Window Toolkit
 - (d) Abstract Writing Toolkit
7. Which of these operators can be used to concatenate two or more string objects ?
- (a) +
 - (b) +=
 - (c) &
 - (d) ||
8. What is the process of defining a method in subclass having same name and type signature as a method in its superclass ?
- (a) Method overloading
 - (b) Method overriding
 - (c) Method hiding
 - (d) None of the above
9. Which of these data types is used by operating system to manage the Recursion in Java ?
- (a) Array
 - (b) Stack
 - (c) Queue
 - (d) Tree
10. Which of the following is not OOPs concept in Java ?
- (a) Inheritance
 - (b) Encapsulation
 - (c) Polymorphism
 - (d) Compilation