Roll No. …………………..

MCA–16/M. Sc. (IT)–13

Programming in Java

Master of Computer Application/Master of Science
in Information Technology
(MCA/M.Sc.(IT)-11/12/16/17)

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 JDBC ? Explain the various types of JDBC drivers. Also explain major design constraints with JDBC.

2. Explain the following using suitable example :

    (a) Keyword

    (b) Applets

    (c) Exception Handling

    (d) Java Token

(B-98) P. T. O.

3. What are the benefits of using packages ? Explain the steps in creating a package and using it is a Java program with an example.

4. Explain the multiple inheritance in java with example.

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 characteristics of OOP.

2. Explain the java virtual machine.

3. What is method overloading ? How is it different from method overriding ?

4. Explain the an interface and applying interfaces.

5. Explain the exception handling fundamentals.

6. What is file handling in Java ? Explain reading and writing files.

7. Explain various components of event handling.

8. Explain the AWT components.

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 valid keyword in Java ?

    (a) Interface

    (b) String

    (c) Float

    (d) Unsigned

(B-98)

2. Which of these values can a boolean variable contain ?

    (a)   True and False

    (b)   0 and 1

    (c)   Any integer value

    (d)   True

3. What is the order of variables in Enum ?

    (a)   Ascending order

    (b)   Descending order

    (c)   Random order

    (d)   Depends on the order( ) method

4. Which of the below data type doesn't support overloaded methods for +, –, * and / ?

    (a)   int

    (b)   float

    (c)   double

    (d)   big decimal

5. Which of these can be returned by the operators ?

    (a)   Integer

    (b)   Boolean

    (c)   Character

    (d)   Integer or Boolean

6. Which of these have highest precedence ?

    (a)   + +

    (b)   ( )

    (c)   *

    (d)   > >

7. String in Java is a :
   (a) Object
   (b) Variable
   (c) Class
   (d) Character array

8. Which of these method of object class is used to obtain class of an object at runtime ?
   (a) get( )
   (b) void getclass( )
   (c) class getclass( )
   (d) None of the above

9. Which of the following operators is used to generate instances of an exception which can be thrown using throw ?
   (a) thrown
   (b) alloc
   (c) malloc
   (d) new

10. Which of these can be overloaded ?
    (a) Methods
    (b) Constructors
    (c) All of the above
    (d) None of the above