Total No. of Pages: 04 Roll No.

MCA-16/M.Sc.(IT)-13 Programming in Java

Master of Computer Applications/Master of Science in Information Technology (MCA/MSc. IT-11/12/16/17)

Fourth Semester Examination, 2019

Time: 3 Hours [Maximum Marks: 80]

Note: This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

Section-A

(Long Answer Type Questions)

Note: Section A contains Five (05) long-answer-type questions of Fifteen (15) marks each.

Learners are required to answer any three (03) questions only.

(3×15=45)

1. What are various techniques to handle Exceptions in Java? Explain with example.

- 2. Explain the different type of loop in Java programming language? Briefly explain with their examples.
- 3. What is Polymorphism? Explain the difference between method overloading and method overriding with the help of example.
- 4. What is an exception? How is it different from an error? Is it possible to include your own exception in a proprain?
- 5. Explain the following: (5 marks each)
 - (a) IDBC
 - (b) AWT
 - (c) Applets

Section-B

(Short-Answer-Type Questions)

Note: Section 'B' contains Eight (08) short-answertype questions of Seven (07) marks each.

Learners are required to answer any Five (05) questions only.

(5×7=35)

1. What is object-oriented programming? Explain the benefits of OOP.

S-357

P.T.O.

S-357

- 2. What are the various data types available in Java? Explain.
- 3. Explain the JVM (Java Virtual Machine)?
- 4. What is a package? Explain its functions?
- 5. Explain the File Handling in Java?
- 6. What is Inheritance? Explain the different forms of inheritance in Java?
- 7. Explain the swings and its components?
- 8. Write short notes on the following:

(3½ marks each)

- (a) Message passing.
- (b) Java keyword.