# C1030

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## **MSC-508**

## **Programming in Java**

(MSCIT-21/MCA-20)

4th Sem./2nd Semester Examination, 2022 (June)

Time : 2 Hours]

#### Max. 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 Twenty (20) marks each. Learners are required to answer any Two (02) questions only. (2×20=40)
- **1.** What is object oriented programming and explain key attributes of oops ?
- **2.** What is thread and explain life cycle of thread with an example?

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- **3.** Explain the concept of URL and URL connection class with example.
- **4.** What is GUI in Java and discuss the various methods available in Graphics class?
- 5. Explain following :
  - (a) Swing.
  - (b) Abstract Data Type (ADT).
  - (c) Streams and Files.
  - (d) String and StringBuffer.
  - (e) Control Structures.

#### SECTION-B

## (Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. (4×10=40)
- **1.** Write a Java program to implement the Fibonacci series using for loop control structure.
- **2.** Explain the following terms with respect to exception handling.
  - (a) try.
  - (b) catch.

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- (c) throw.
- (d) finally.
- 3. Explain the following methods related to thread :
  - (a) wait().
  - (b) sleep().
- 4. Explain packages and write steps to create and access user defined packages.
- 5. Explain Logical (Boolean) operators in JAVA with example.
- 6. Write a program to find average of all the numbers stored in an array.
- 7. Explain types of inheritance with example.
- 8. What is Swing in JAVA? Explain hierarchy of swing classes.