

[Total No. of Questions - 9] [Total No. of Printed Pages - 3]  
(2064)

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MCA 2nd Semester Examination

Object Oriented & Visual Programming using JAVA (N.S.)

MCA-202

Time : 3 Hours

Max. Marks : 60

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Candidates are required to attempt *five* questions in all selecting one question from each of the Section A, B, C & D and all the subparts of question in Section E.

**SECTION - A**

1. (a) List the basic data types used in JAVA. Explain with the help of suitable example. (6)
- (b) Write a program in JAVA to find the sum of odd numbers in the range 1 to n using for loop. (6)
2. (a) Discuss any three string handling functions in JAVA by giving suitable example. (6)
- (b) What is a constructor? What are the different types of constructor? Explain. (6)

**SECTION - B**

3. (a) Compare the following:
  - (i) Interface and class.
  - (ii) Public and private access specifier. (6)

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- (b) What is inheritance and what are its uses? Describe the syntax of single inheritance in JAVA. (4)
- (c) What is the use of super keyword? Explain. (2)
- 4. (a) Write a program in JAVA to demonstrate the concept of exception handling. (6)
- (b) Differentiate between checked and unchecked exceptions. (6)

#### SECTION - C

- 5. (a) What are the thread priorities available in thread class? Explain. (6)
- (b) What is the importance of thread synchronization in multithreading? (4)
- (c) Explain the concept of deadlock. (2)
- 6. (a) Explain the life cycle of an applet. (6)
- (b) What is the use of applet viewer and show status() method in JAVA? (6)

#### SECTION - D

- 7. (a) Discuss any four methods in detail available in java.awt.graphics. (8)
- (b) Discuss two constructors of checkbox class. (4)
- 8. (a) Discuss any three methods of Text Area class. (6)
- (b) Discuss the various steps for creating pull down menus by giving an example. (6)

**SECTION - E (Compulsory)**

9. Explain the following :

- (i) Encapsulation.
- (ii) jar tool
- (iii) this keyword
- (iv) final modifier
- (v) Polymorphism
- (vi) catch statement
- (vii) sleep() method
- (viii) stream
- (ix) destroy() method
- (x) Frame
- (xi) Scroll Bar
- (xii) Checkbox

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