S.No. : 478   MCA2303

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Following Paper ID and Roll No. to be filled in your Answer Book.
PAPER ID : 21203 Roll No. [| | | | | | | |]

MCA Examination 2018-19

(Third Semester)

OBJECT ORIENTED PROGRAMMING USING JAVA

Time : Three Hours]   [*Maximum Marks* : 60

Note :   Attempt all questions.

SECTION 'A'

1. Attempt all parts of the following :   1×8=8

    (a)   What is an object model? What are the other omt models?

    (b)   What are the main advantages of DFD?

    (c)   Define the term classes and objects.

    (d)   What are different types of errors?

    (e)   What is exception handling?

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(f)   What are the used of sockets in Java?

(g)   Define the java swing.

(h)   Explain the client-server architecture.

SECTION 'B'

2.   Attempt any two parts of the following :   2×6=12

   (a)   Explain the differences among Bidirectional, Unidirectional and Reflexive association.

   (b)   Define the following with example :

      (i)   Encapsulation

      (ii)   Inheritance

   (c)   What do you understand by multithreaded programming? Explain with a suitable example.

   (d)   Explain the different networking or socket classes defined in java.

SECTION 'C'

Note :   Attempt all questions. Attempt any two parts from each questions.   10×4=40

3.   (a)   What do you mean by object oriented design model. Also discuss the input and output of object oriented design.

(b) What do you mean by class diagram? Where it is used and also discuss the steps to draw the class diagram with any one example.

(c) Differentiate interaction diagrams and state diagram.

4. (a) Discuss various primitive data types supported by java.

(b) What are the various looping statements available in java? Discuss any one with suitable example.

(c) What are constructors? Write down its various features and different types. Also write example for parameterized constructor.

5. (a) Write short notes on the following :

   (i) Toggle buttons

   (ii) Combo box

   (iii) Tabbed pones

   (iv) Scroll pones

(b) Explain with example the various graphics methods supported by AWT. How color of an object can be changed?

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    (c)   Define an Applet. How is an applet different from an application? Describe the life cycle of an applet.

6. (a)   What is Java Beans? Discuss the uses and advantages of java beans.

    (b)   What do you understand by state of bean. In this reference describe indexed properties of a class with the help of suitable example.

    (c)   Write a program in java to demonstrate communication using TCP/IP i.e. using socket.

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