Paper / Subject Code: 49306 / OBJECT ORIENTAED PROGRAMMING METHODOLOGY
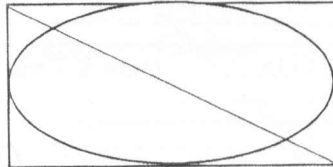SE SEM III / COMP/IT/CREDIT BASE/NOV 2018/21.12.2018

Q. P. Code : 26233

(3 Hours)   Total Marks : 80

N.B   1) Question **no. 1 is compulsory.**

      2) Attempt **any three from remaining** questions.

Q. 1   a   Explain any five features of JAVA language   [5]

     b   Differentiate between abstract class and interface   [5]

     c   Write a program to find the largest of three integers accepted from command   [5]
        line

     d   Explain various access specifiers in JAVA.   [5]

Q. 2   a   Explain different types of relationships among entities.   [10]

        Define the relationships among the objects of given sentences:

           1)   Employee works on project.

           2)   Customer places order.

           3)   WebOrder, TelephoneOrder is a kind of order.

     b   What is the advantage of clause "finally"   [10]

        List any 2 exceptions defined in Java. Explain use of try, catch and use of
        multiple catch block .

Q. 3   A   Create class Student (roll number, name).   [10]

        Class Test (mark1, mark2) inherit student class.

        Create interface Sport with data member as sports_mark and method
        set_sportMark().

        Create class Result which extends Test and implements Sport and has a
        method named calculate which finds total as
        (total=marks1+marks2+sports_mark) and method which display all the
        details.

        Create an object of Result class and show result.

     b   What role does "interface" play in multiple inheritance. Explain with   [10]
        example.

        Demonstrate use of interface to achieve polymorphism with example.

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Q. 4   a   Write a JAVA program to count the number of upper case, lower case, blank   [10]
            spaces and digits in a string.

       b   Which are the two different ways to create a thread? Write a multithreaded   [5]
            program to show inter-leaving of actions from 2 threads and display
            ABABABABABABAB

       c   Write an applet program to display   [5]

Q. 5   a   What is applet? Draw and explain lifecycle of an applet.   [10]

       b   Write a program to check if the year entered is leap or not.   [5]

       c   Compare Method Overloading and Method Overriding   [5]

Q. 6   a   Explain Vectors and its operations (any four) with suitable example /   [10]
            program.

       b   Explain System.arraycopy() method with example.   [5]

       c   Write a program to implement bubble sorting algorithm for sorting numbers   [5]
            in descending order.

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