004 - Paper-IV - Object Oriented Programming C++

P. Pages : 2   **GUG/W/23/11972**

Time : Three Hours   ‖‖‖‖‖‖‖‖‖   Max. Marks : 40
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Notes : 1. All questions are compulsory and carry equal marks.
        2. Draw a neat and labelled diagram wherever necessary.
        3. Avoid vague answers.

Either:

1. a) Define looping explain any one of the looping statement using suitable example.   **4**

   b) Explain function prototyping in detail.   **4**

OR

   c) Explain the following   **4**
      i)   Inline function   ii)   Manipulators

   d) Design Inline functions for add and multiply of two integer numbers.   **4**

Either:

2. a) Define class, explain how to declare class and subclass using suitable example.   **4**

   b) Explain the Inline member function using suitable example.   **4**

OR

   c) Define Overloading and write a ruler for operator overloading in detail.   **4**

   d) Design a class "complex" with real and imaginary member also design appropriate member function to get and print complex numbers.   **4**

Either:

3. a) Explain the following   **4**
      i)   Constructors with Default Arguments
      ii) Copy constructor

   b) Explain the unary and Binary overloading in detail.   **4**

OR

   c) Define Inheritance explain different types of inheritance in brief.   **4**

   d) Write a program for single inheritance for following structures   **4**
      Student class (rollno, sub 1, sub 2) | Student |
      Result class (total, avg)   ↓
                                            | Result |

Either:

4. a) Explain the following   **4**

    i)   'new' operators

    ii)   'delete' operators

  b) Explain the friend function in detail.   **4**

<p align="center">OR</p>

  c) Explain the opening and closing of a file using suitable example.   **4**

  d) Write a program which demonstrate the pure virtual function.   **4**

5.   Solve all the questions.

  a) Explain the enumeration in brief.   **2**

  b) Explain public and private Data member in brief.   **2**

  c) Write a rules for operator overloading in detail.   **2**

  d) Explain the command line argument in short.   **2**

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