**Class & Objects**

1. **Define a class TwoNum with following specification**

**Private members of class TwoNum**

**X,Y Both Define as Integer**

**Public Members**

**GetValues(),PutValues(),Add(),Multiply(),Swap(),Max(),**

**Min()**

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| **2** | Define a class student with the following specification **Private members** of class student admno                        integer sname                        20 character eng. math, science       float total                            float ctotal()                        a function to calculate eng + math + science with float return type. **Public member** function of class student Takedata()                   Function to accept values for admno, sname, eng, science and invoke ctotal() to                                    calculate total. Showdata()                   Function to display all the data members on the screen. |
| **3** | Define a class batsman with the following specifications: **Private members:** bcode                            4 digits code number bname                           20 characters innings, notout, runs        integer type batavg                           it is calculated according to the formula –                                       batavg =runs/(innings-notout) calcavg()                        Function to compute batavg **Public members:** readdata()                      Function toaccept value from bcode, name, innings, notout and invoke the function                                       calcavg() displaydata()                   Function to display the data members on the screen. |
| **4** | Define a class TEST in C++ with following description: **Private Members** TestCode of type integer Description of type string NoCandidate of type integer CenterReqd (number of centers required) of type integer A member function CALCNTR() to calculate and return the number of centers as (NoCandidates/100+1) **Public Members**  -  A function SCHEDULE() to allow user to enter values for TestCode, Description, NoCandidate & call function CALCNTR() to calculate the number of Centres - A function DISPTEST() to allow user to view the content of all the data members |
| **5** | Define a class in C++ with following description: **Private Members** A data member Flight number of type integer A data member Destination of type string A data member Distance of type float A data member Fuel of type float A member function CALFUEL() to calculate the value of Fuel as per the following criteria             Distance                                                          Fuel             <=1000                                                           500             more than 1000  and <=2000                          1100             more than 2000                                              2200 **Public Members** A function FEEDINFO() to allow user to enter values for Flight Number, Destination, Distance & call function CALFUEL() to calculate the quantity of Fuel A function SHOWINFO() to allow user to view the content of all the data members |
| **6** | Define a class BOOK with the following specifications : **Private members** of the class BOOK are BOOK NO                integer type BOOKTITLE             20 characters PRICE                     float (price per copy) TOTAL\_COST()        A function to calculate the total cost for N number of copies where N is passed to the                               function as argument.  **Public members** of the class BOOK are INPUT()                   function to read BOOK\_NO. BOOKTITLE, PRICE PURCHASE()            function to ask the user to input the number of copies to be purchased. It invokes                               TOTAL\_COST() and prints the total cost to be paid by the user.  Note : You are also required to give detailed function definitions. |
| **7** | Define a class REPORT with the following specification: **Private members :** adno                         4 digit admission number name                        20 characters marks                       an array of 5 floating point values average                    average marks obtained GETAVG()                 a function to compute the average obtained in five subject **Public members:** READINFO()              function to accept values for adno, name, marks. Invoke the function GETAVG()              DISPLAYINFO()          function to display all data members of report on the screen. You should give function definitions. |