1. 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.

**2.** 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 to accept value from bcode, name, innings, notout and invoke

the function calcavg()

displaydata() Function to display the data members on the screen.

**3.** 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

## **4.** 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

# **5.** 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.

## **6.** 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.