**CLASS AND OBJECT  
[SET – 1]**

**Question 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.

**Question 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 toaccept value from bcode, name, innings,   
 notout and invoke the function calcavg()  
displaydata() Function to display the data members on the screen.

**Question 3**  Define a class TEST in JAVA 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

**Question 4**  Define a class in JAVA 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

**Question 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.

**Question 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.  
You should give function definitions.