

**HOLIDAY HOME WORK**  
**COMPUTER SCIENCE-class 12**

**1.** Define class CABS with following specifications:

Datamembers

CNo – to store CabNo

Type – to store a character 'A', 'B', or 'C' as City type

Pkm – to store per kilo meter charges

Dist – to store distance travelled (in km)

Member functions

A constructor function to initialize type as 'A' and Cno as '1111'

A function charges() to assign pkm as per the following table:

Type	Pkm
A	25
B	20
C	15

A function Register() to allow administrator to enter the values for Cno and type. Also, this function should call charges() to assign pkm charges.

A function showcab() to allow user to enter the value of distance and display cno, type pkm, pkm \* distance (as amount) on screen.

**2.** Answer the questions (i) and (ii) after going through the following class:

```
class Exam
{
int Marks; char Subject[20];
public:
Exam()
{ ..... } //Function 1
Exam(char S[])
{.....} //Function 2
Exam(int M)
{.....} //Function 3
Exam(char S[], int M) //Function 4
{.....}
```

- i. Which statements in C++ that would execute Function 3 and Function 4 of class Exam.
- ii. Which feature of Object Oriented Programming is demonstrated using Function1, Function 2, Function 3 and Function 4 in the above class Exam?
- iii. Give definition statements for function1, function2, function3 and function 4.
- iv. Define copy constructor also for the above class.

**3.** Answer the questions (i) to (iv) based on the following codes

<pre>Class Drug {     char category[10];     char dt_of     _manufacture[10];     char Company[20];     Public:     Drug();     Void     enterdrugdetails ( );     Void showdrugdetails     ( ); }</pre>	<pre>class Tablet : public drug {     protected:     char     tablet_name[30];     char volume_label[20];     public:     float Price;     Tablet();     Void enter tab_details( );</pre>	<pre>Void showtab_details( ); }; class PainReliever:public tablet {     intdosage_units;     char     side_effects[20];     intuse_within_days;     public:     PainReliever( );     void enterdetails( );     void showdetails( ); };</pre>
--	---	--

- (i) How many bytes will be required by an object of class Drug and an object of class PainReliever respectively?
- (ii) Write names of all the data members which are accessible from the object of class PainReliever.
- (iii) Write names of all the members accessible from member functions of class Tablet.
- (iv) Write names of all member functions which are accessible from objects of class PainReliever.

**4.**

<pre> class CUSTOMER { intCust_no; char Cust_Name[20]; protected: void Register(); public: CUSTOMER(); void Status(); } </pre>	<pre> class SALESMAN { intSalesman_no; char Salesman_Name[20]; protected: float Salary; public: SALESMAN(); void Enter(); void Show(); } </pre>	<pre> class SHOP : private CUSTOMER , public SALESMAN { char Voucher_No[10]; char Sales_Date[8]; public: SHOP(); void Sales_Entry(); void Sales_Detail(); } </pre>
--	---	--

- (i) Write the names of data members which are accessible from objects belonging to class CUSTOMER.
- (ii) Write the member functions that are accessible from objects belonging to class SALESMAN.
- (iii) Write the names of all the members which are accessible from member functions of class SHOP.
- (iv) How many bytes will be required by an object belonging to class SHOP?

**5. Write a function in C++ to count the number of vowels present in a text file.**

**6. Write a function in C++ to count the number of words in a text file**

**NOTES.TXT.**

**7. Write a function in C++ to count the number of lines present in a text file**

**“STORY.TXT”.**

**8. Write a function in C++ to read & display the details of all the members whose membership type is ‘L’ or ‘M’ from a binary file “CLUB.DAT”. Assume the binary file contains object of class CLUB.**

```

class CLUB
{
intmno; char mname[20]; char type;
public:
void register ( ); void dis();
charwhattype( )
{ return type;}
};

```

**9. Write a function in C++ to read and display the detail of all the users whose status is ‘A’ (i.e. Active) from a binary file “USER.DAT”. Assuming the binary file “USER.DAT” is containing objects of class USER, which is defined as follows :**

```

class USER
{
intUid; //User Id
charUname [20]; //User Name
char Status; // User Type : A Active I Inactive
public:
void Register(); //Function to enter the content
void show(); //Function to display all data members
charGetstatus () {return Status;}.
};

```