

**KENDRIYA VIDYALAYA SANGATHAN CHENNAI REGION**  
**COMMON PREBOARD EXAMINATION 2008-09**  
**COMPUTER SCIENCE- CLASS-XII**  
**MARKING SCHEME**

1.

- (a) An actual parameter is the value or variable sent to a method when it is Invoked. A formal parameter is the corresponding variable in the definition of the method; it takes on the value of the actual parameter so that it can be used inside the method.

*(1 Mark for each correct explanation of actual parameter and formal parameter)*

OR

*(Full 2 Marks for demonstrating the difference between actual parameter and formal parameter)*

- (b) math.h  
string.h

*(½ Mark for identifying each correct header file)*

**Note: Ignore any other header files, if mentioned.**

(c)

```
#include <iostream.h>
class BILL
{
    int Charge;
    public:

        void Increment() { cin>> Charge;}
        void Show { cout<< Charge;}
void main()
{
    BILL B;
    B.Increment();
    B.Show ();
}
}
```

*(½ Mark for each correct answer)*

**OR**

*(1 Mark for identifying at least three errors, without suggesting correction)*

(c) The output is:

- (i) Percentile A  
Percentile B  
Percentile C
- (ii) Percentile C
- (iii) Percentile D  
Percentile F
- (iv) Percentile F

**( 3 Mark for each correct output)**

(e) The output is :

Dog Constructor Called  
Dog Constructor Called  
Dog Constructor Called  
Objects are created Dog Constructor Called  
Objects are created Dog Constructor Called  
Dog Constructor Called

**(1/2 Mark for the correct output)**

(f) The output is option **(ii)** :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

**(2 Marks for the correct output)**

**2.**

(a) The static data members of a class are just like a global variable for its class, i.e., This data member is globally available for all the objects of that class type. The Static data members are usually maintained to store values common to entire class. For instance, a class may have a static data member keeping track of the number of existing objects.

**(1 mark each for correct explanation)**

(b)

- (i) Copy constructor.
- (ii) Function1 --- Animal obj;  
Function 3 --- Animal obj(4);

**( 1 Mark for correct answer)**

(c)

void Flat\_allot( )

```

{
if(income>= 500000)
    strcpy(flat_type, "HIG");
else if((income>= 250000)&& (income< 500000))
    strcpy(flat_type, "MIG");
else if(income< 250000)
    strcpy(flat_type, "LIG");
cout<<" The allocated flat is " << flat_type;
}

```

***For defining class 1 marks.***

***For defining correct Read function 1 marks.***

***For defining correct Flat\_Allocate function 2 marks.***

(d)

- (i) Sales\_Entry( ), Sales\_Detail( ),Enter( ),show( )
- (ii) CUSTOMER, SALESMAN
- (iii) Voucher\_No, Sales\_Date, Salary
- (iv) 66

***( 1 Mark for correct answer)***

***( No marks for partial correct answers)***

**3.**

```

(a) void Show(int T[4][4])
{
    int i,j;
    cout<<"The Original array is "<< endl;
    for(i=0;i<4;i++)
    {
        for(j=0;j<4;j++)
        {
            cout<< T[i][j]<<"\t";
        }
    }
    cout <<"The even numbers are : " << endl;
    for(i=0;i<4;i++)

```

```

    {
        for(j=0;j<4;j++)
        {
            if(T[i][j] % 2 !=0)
                T[i][j]= 0;
            else
                cout <<T[i][j]<<"\t";
        }
    }
    cout <<"The array after replacing 0 : " << endl;
    for(i=0;i<4;i++)
    {
        for(j=0;j<4;j++)
        {
            cout <<(T[i][j] << "/t");
        }
        cout<< endl;
    }
}

```

***For correct heading and argument list give ½ marks.***

***For correct logic list give 1 marks.***

***For each correct loop give 1 marks.***

***For correct if statement 1 marks.***

***For correct printing give ½ marks.***

(b)

Address of [I, J]<sup>th</sup> element in row major order in an array  
 $= \mathbf{B} + \mathbf{W} [ \mathbf{c} ( \mathbf{I} - \mathbf{L}_r ) + ( \mathbf{J} - \mathbf{L}_c ) ]$

where B=Base address = 1000  
W= size of the element = 4  
c= number of columns= 20  
L1 = L2 = 1

$$\begin{aligned}
 A[10][12] &= 1000 + 4 [20 (20 - 1) + ( 20 - 1)] \\
 &= 1000 + 4 [20(19) + 19] \\
 &= 1000 + 4 [380+19] \\
 &= 1000 + 1596 \\
 &= 2596
 \end{aligned}$$

***(2 Mark for calculating correct Base Address)***

***( 1 Mark for writing correct formula/correct substituted values)***

*(1 Mark for calculating Address of A[10]123)*

(c) struct node

```
{  
    int data;  
    node * link ;  
};
```

*For correct heading of function give 1mark.*

*For correct logic give 1mark.*

*For correct condition checking of null give 1 mark.*

*For correct deletion give 1 mark.*

(d) 41 28 74 11 65 58  
28 41 74 11 65 58  
28 41 74 11 65 58  
11 28 41 74 65 58  
11 28 41 65 74 58  
11 28 41 58 65 75

*For correct answer give 2 marks.*

*For some correct answer give 1 mark.*

(e) The output is 28.

*For correct logic give ½ marks.*

*For correct stack drawing give ½ marks.*

*For correct answer give 1 marks.*

4.

(a) FILE.seekg(Rno \* sizeof (Item)); // Statement1  
FILE.seekp(Rno \* sizeof (Item)); // Statement2

**(½ Mark for each correct answer)**

(b) *For file object creation and correct mode give ½ marks.*

*For correct condition checking give ½ marks.*

*For correct writing into the file give 1 marks.*

- (c) *For correct function definition give ½ marks.*  
*For opening file in correct mode give 1 marks.*  
*For correct condition checking of file end give ½ marks.*  
*For correct printing statement give 1 marks.*

5.

- (a) *For each correct definition of Foreign Key and Candidate Key give 1 mark.*
- (b) (i) SELECT \* FROM art WHERE category = “ Oil ”;  
(ii) SELECT MAX(price)FROM art group by category ;  
(iii)SELECT name, title, price FROM art ORDER BY Year DESC ;  
(iv) SELECT \* FROM art WHERE price between 8000 AND 12000;
- (v) AVG (Price)  
7500.00
- (vi) COUNT(\*)      STATUS  
4                      Not Sold  
5                      Sold
- (vii) COUNT(DISTINCT Category)  
3
- (viii) MIN(Code)  
2098

*For correct answer of question from (i) to (iv) give ½ marks.*  
*For correct answer of question from (v) to (viii) give 1 marks.*

6.

- (a) *For defining the Distributive Law give 1 mark.*  
*For verifying using truth table give 1 mark.*
- (b) *For correct logic circuit give 1 mark*
- (c) *For correct answer give 2 marks. For some correct answer give 1 mark.*
- (d) The output is:

$$F = (X+Y)(X' + Z')(X +Z + W') (X+ Z'+W)(X'+Y+W)$$

*For creating correct graph of 4 variable K- Map at least give 1 marks.*  
*For correct answer give 2 marks.*  
*Some correct answer give 1 marks.*

7.

- (a) **Cookie:** Cookies are files stored temporarily on a World-Wide-Web browser's computer, which allow the World-Wide-Web Server to store persistent information associated with the browsing user. A World-Wide-Web server is able to store any information in a cookie, but generally can only retrieve information that it stored in first place.

*(1 Mark for any correct definition/explanation)*

- (b) *For each correct merit give ½ mark..*  
*For each correct demerit give ½ mark .*

- (c)

**DHTML** : Dynamic Hyper Text Markup Language

**XML** : eXtensible Markup Language.

*(1 Mark for any correct expansion)*

- (d) (i) Star or Bus or any other valid topology.  
(ii) Wing S, because maximum number of computers are located at Wing S.  
(iii) Hub/ Switch in all the wings.  
(iv) Coaxial cable/Modem/LAN/TCP-IP/Dialup/DSL/Leased Lines or any other valid technology.

*(1 Mark for each correct answer)*