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CLASS XII HOLIDAY HOME WORK

SUBJECT : MATHS

XII A & C

1. Agebra of Matrices: Solve Miscellaneous exercise problems and all solved examples of the chapter.
2. Determinants : Solve Miscellaneous exercise problems and all solved examples of the chapter.

XII B

1. Agebra of Matrices: Solve Miscellaneous exercise problems and all solved examples of the chapter.
2. Liner Programming :
   (a) Solve 5 sums related to Optimal Line problems.
   (b) Solve 5 sums related to Diet problems.
   (c) Solve 5 sums related to Transportation problems.

SUBJECT : ENGLISH

Read the long reading text "The Invisible Man" By H G Wells and answer the following questions in 100-150 words.
1. Write a note on the Theme and Sub Themes of the novel.
2. Attempt a character sketch for:
a. Mrs. Hall
b. Mr. Hall
c. Teddy Henfry
d. Bunting
e. Griffin
f. Dr. Kemp
g. Marvel
3. Write a note on the plot of the story.
  Write the answers in your Home Work Book and submit on the reopening day.

SUMMER HOLIDAYS HOME WORK FOR CLASS XII A , B & C
SUBJECT : CHEMISTRY
CHAPTER : HALO ALKANES AND HALO ARENES:
1. INTEX QUESTIONS : 10.1 ,10.2 ,10.5,10.6,10.7,10.8&10.9. (7 NO)
2. EXAMPLE QUESTIONS: 10.2, 10.4, 10.5, 10.6, 10.7 , 10.8 (6 NO)

3. EXERCISE QUESTIONS : 10.4, 10.7,10.8, 10.11, 10.12, 10.13, 10.14 ,10.18,10.19, 10.21 & 10.22 (11NO)
4. Prepare a) EthylChloride from Ethanol b) iodobenzene from Diazonium chloride c) Chlorobenzene from Diazonium Chloride
5. Distinguish between primary, secondary and tertiary alchohol by Lucas test?
6. Write short note on the following 1.Sandmayers reaction 2) Markhownikoffs rule 3) Wurtz reaction 4) Friedalcrafts Alkylation and acylation 5) Finkelstain reaction 6) Swarts reaction & Saytzeff rule
7. Write the record for th experiments completed.

SUBJECT : PHYSICS

1 Chapter I Exercise Questions 1.1 TO 1.24   (24 Questions)
Additional Questions (a) 1.25   (b)   1.26   (c) 1.28   (d) 1.29   (e) 1.30   (5 Questions)

SUBJECT :Biology

1 Complete the investigatory project work
2 Read the four chapters of unit Ecology and pick up important points and write in class work as   discussed
3 Practise the diagrams from unit 1

SUBJECT : COMPUTER SCIENCE

Note: Attach the printout of this Home Work in
Your Note book

1   Write a program to calculate the sum of rows, columns of a 2D array.

2   Write a program to perform matrix multiplication.

3   Write a program to enter 3X3 matrix and find maximum value in row wise and column wise respectively.

4 Write a program to enter a string and count the number of Upper case, Lower case and special characters.

5   Write a program to enter a string and print every word in a new line.

6   Write a program to enter integers into 2D array (3X3) and display the array's mirror image.

7 Write a program to enter n integers into an array of integers and multiply all even position's number by 2 and all odd position's integers by 3 and display the result(Note :-array starting from index number 0).

8 Write a function in C++ which accepts an integer array and its size as arguments and swaps the elements of every even location with its following odd location.
Example:

If an array of nine elements initially contains the elements as 2, 4, 1,6,5,7,9,23,10 then the function should rearrange the array as
4,2,6,1,7,5,23,9,10.

9   Differentiate between Object based programming and Object Oriented programming.

10   Differentiate between a Logical Error and Syntax Error. Also give suitable examples of each in C++.

11   Name the header file(s) that shall be needed for
   successful compilation of the following C++ code :
void main( )

   {

   char Text[40];
   strcpy(Text,"AIS
   SCE");
   puts(Text);
   }

12 Write a function in C++ which accepts an integer array and its size as arguments and interchange the value of each elements as follow :-
before :- 1 2 3 4 5 6   after :-   2 1 4 3 6 5

13. Write a function in C++ which accepts a 2D array of integers and its size as arguments and displays elements which are exactly two digit number.
14 Write a program to count the occurrence of any two vowels in succession in a line of text.

   e.g.: Input⇐ pl<u>ea</u>se   ; Output ⇐ ea

15 Write a function to print all the prime numbers stored in a 2-D Array.

16 Explain the following terms with example: (i) typecasting (ii) typedef (iii) call by value and call by reference (iv) #define(v) Actual Parameters and Formal Parameters

17 Rewrite the following C++ program after removing the syntax error(s) if any. Underline each correction.

```
include<iostream.h>

        class FLIGHT
        {       Long
                FlightCode;
                Char
                Description[25]
                ;
        public

                void addInfo()

                {       cin>>FlightCode; gets(Description);}

                void showInfo()

        };      {
                cout<<FlightCode<<":"<<Description<<endl;}

        void main( )
        {       FLIGHT
                F;
                addInfo.
                F();
                showInf
                o.F;
        }
```

18 In the following program, find the correct possible output(s)from the options:

```
        #include<stdlib.h>

        #include<iostream.h>

        void main( )

        { randomize( );
```

```
char City[ ][10]={"DEL", "CHN", "KOL", "BOM", "BNG"};

int Fly;

for(int I=0; I<3;I++)

{Fly=random(2) + 1;

cout<<City[Fly]<< ":";

}}
```

Outputs:

(i) DEL : CHN : KOL: (ii)
CHN: KOL : CHN: (iii) KOL : BOM :
BNG: (iv) KOL : CHN : KOL:

19 n the following C++ program what is the expected value of Myscore from options (i)

to (iv) given below. Justify your answer.

```
#include<stdlib.h>

#include<iostream.h>

void main( )

{       randomize( );

int Score[ ] = {25,20,34,56,72,63},Myscore;

cout<<Myscore<<endl;

}
```

Ii) 25 (ii) 34 (iii) 20 (iv) Garbage Value.

```
#include<iostreamm.h>

struct  Game

{ int Score, Bonus;};

void Calculate(Game &P, int N = 10)

{        P.Score++;      P.Bonus+=N;   }

void main()

{        Game PL={7, 12};

Calculate(PL, 5);         cout << PL.Score << ":"
<<      PL.Bonus     <<     endl;    Calculate(PL);
cout << PL.Score << ":" << PL.Bonus << endl;
Calculate(PL, 15);        cout << PL.Score << ":"
<< PL.Bonus << endl;
        }
```

```
#include<iostream.h>

int i = 20;

void abc ( )

{        static int i = 4;          i = i + 4;

        cout << "first = " << i;

}

void main( )

{        int i = 2;abc( );

        cout << " second = " << i << endl;

        abc();                                        }
```

```
                              cout << " Third = " << ::i << endl;


#include<stdl
ib.h>
                    #include<iostream.h>

                    void main()

                    {       randomize();

                            int Num, Rndnum;

                            cin >> Num;              Rndnum =
                            random(Num) + 5;

                            for (int N = 1; N<=Rndnum-1; N++)      cout
                            << N << " ";}
```

```cpp
#include <iostream.h>

// Function prototype for
general function void try();
class abc

{

        int x;    public:

                // Class member
                function void try()
                {       cout << "Hello"; }
};

// Function body of
general function void try()
{       cout << "How are you?";  }

void main()

{       abc A;  A.try();  try();

}
```
_____

```cpp
#include <iostream.h>

#include <conio.h>

int Function(int p)

{

        if(p == 1 || p == 0)                    return 1;

        if(p%2 == 0)                return Function(p / 2) + 4;

        else            return Function(p - 1) + 5;
```

```
}

void main()

{        clrscr(); int A = Function(6);        cout << A;}
```

```
#include<iostream.h>

void Execute(int &B, int C = 100)

{

        int TEMP =
        B+C; B +=
        TEMP;
        if(C != 200)

                cout << TEMP << B << C << endl;

}

void main()

{

        int M = 90, N = 10;

        Execute(M);        cout << M <<
        N << endl; Execute(M, N);
        cout << M << N << endl;
}
```

```
#include<stdio.h>

#include<iostream.h>

void main()

{        int s1,s2, num;

        s1 = s2 = 0;
```

```cpp
        for(int x=0; x<11; x++)

        {                    cin >> num;

            if (num > 0) s1 += num; else s2 /= num;  }

        cout<<s1<<s2;}

}

#include<iostream.h>

int func(int &x, int y = 10)

{       if ( x % y == 0) return ++x; else return y--; }

void main()

{

        int p = 20, q
        = 23;

        q = func(p,q);     cout << p
        << q << endl; p = func(q);
        cout << p << q << endl; q =
        func(p);       cout << p << q
        << endl;
}
```

_____

```cpp
# include<iostream.h>

main()

{

        int x, sum = 0;

        int n;    cin >> n;

        for (x = 1; x < 100; x+=2)
```

```
        if( x%2 == 0)    sum += x;

      cout << "SUM = " << sum;

 }
_____

 #include <iostream.h>

 int max(int &x, int &y, int &z)

 {

      if (x > y && y > z)

      {              y++;            z++;           return x;
      }

      else




 }

 void main()

 {

if (y > x)
return y;

else
return z;
```

```cpp
        int a = 10, b = 13, c = 8; a = max(a, b, c);

        cout << a << b << c << endl;      b = max(a, b, c);

        cout << ++a << ++b << ++c << endl;      c = max(a, b, c);

        cout << a++ << ++b << +++c << endl;

}
```

C++ PROGRAMMING

I Write the C++ programs for the following

1. Maximum of three numbers
2. Multiplication table of any given no.
3. To check if any given no. is

   I)   Armstrong no. 2) Number Palindrome

4. LCM and GCD of 2 numbers
5. Print the following series 1+ 1/1! + 2/2!   + 3/3! +………………+ n/n!
6. Swap 2 numbers i) call by value and ii)call by reference
7. To print the output as follows
   i)   *
          * *
          * * *
          * * * *
          * * * * *
   ii)   &
            & &
           & & &
          & & & &
8. To accept student details and print them using structures.

9. Fibonacci series

10. Matrix Addition, Subtraction, and Transpose.

Holiday H.W

Class XII Biotechnology

Read the complete chapter "Recombinant DNA Technology ". Prepare the notes on :-

1) Basic steps of RDT with diagram.
2) Various tools used in RDT.
3) Vector as a "vehicle" to carry the foreign gene.
4) Methods used for insertion of gene into the host.
5) Methods used for identification of recombinant host
6) Polymerase chain reaction (PCR) with its applications.
7) DNA library and its types
8) DNA sequencing- Chain termination method.
9) Southern Hybridization with diagram.