

**QUESTION BANK**

**SUB: COMPUTER SCIENCE(083)**

**Chapter1: Revision tour of C++ 1**

**Mark Question:**

1. Write header files required to execute the following code:

```
void main()
{ double X,Times,Result; cin>>X>>Times;
  Result=pow(X,Times);
  cout<<Result<<endl;
}
```

2. typedef char TEXT[80]; void main()

```
{ TEXT q[] = "Time Flies";
  int l=0; while (q[l]!='\0')
if (isupper(q[l])) q[l++]='@';
  else
q[l++]='%';
puts(q);}
```

**2 Marks Questions**

1. What is typedef? Explain with example.
2. What are pre-processor directives?
3. What is type casting? Explain with example.
4. Rewrite the following codes after removing errors, if any, in the following snippet.

Explain each error. #include<iostream.h> void main( )

```
{ int x[5], *y, z[5] for
(i = 0; i < 5; i ++ )
{x[i] = i; z[i]
= i + 3; y =
z;
x = y;}
```

5. Rewrite the following program after removing the error(s), if any. Underline each correction.

```
#include <iostream.h>
void main( ) {int x,
sum =0; cin>>n; for
(x=1;x<100, x+=2) if
x%2=0 sum+=x;
cout<< "sum=" >>sum;}
```

6. Rewrite the following program after removing the syntactical error(s), if any Underline each correction: #include <iostream.h>

```
void main( ) {struct
Book
```

```
{char Book_name[20]; char
Publisher_name[20]; int
Price = 170;} New Book;
gets(Book_name);
gets(Publisher_name);}
```

7. Rewrite the following program after removing the syntactical errors (if any). Underline each correction. #include [iostream.h] class MEMBER {int Mno;float Fees; PUBLIC: void Register(){cin>>Mno>>Fees;} void Display{cout<<Mno<<" : "<<Fees<<endl;}}; void main() {MEMBER M; Register(); M.Display();}

8. Rewrite the following program after removing the syntactical errors (if any). Underline each correction. #include <iostream.h> struct Pixels { int Color,Style;} void ShowPoint(Pixels P) { cout<<P.Color,P.Style<<endl;} void main() { Pixels Point1=(5,3); ShowPoint(Point1); Pixels Point2=Point1; Color.Point1+=2; ShowPoint(Point2);}

9. Rewrite the following program after removing the error(s), if any. Underline each correction. #include <iostream.h> void main( ) {int x, sum =0; cin>>n; for (x=1;x<100, x+=2) if x%2=0 sum+=x; cout<< "sum=" >>sum;}

10. Will the following program execute successfully? If no, state the reason(s) : #include<iostream.h> #include<stdio.h> #define int M=3; void main( ) {const int s1=10; int s2=100; char ch; getchar(ch); s1=s2\*M; s1+M = s2; cout<<s1<<s2 ;}

11. Rewrite the following program after removing the syntactical error (s), if any. Underline each correction. #include<iostream.h> const int divisor 5; void main( ) { Number = 15; for(int Count=1;Count<=5;Count++,Number -= 3) if(Number % divisor = 0) {cout<<Number / Dividor; cout<<endl;} else cout<<Number + Dividor <<endl;}

12 Rewrite the following program after removing the syntactical error(s) if any. Underline each correction. #include<iostream.h> void main( ) {First = 10, Second = 30; Jumpto(First;Second); Jumpto(Second);} void Jumpto(int N1, int N2 = 20) {N1=N1+N2; cout<<N1>>N2;}

13. Rewrite the following program after removing the syntactical error(s) if any. Underline each correction. #include<iostream.h> const int Max 10; void main() {int Numbers[Max]; Numbers = {20,50,10,30,40}; for(Loc=Max-1;Loc>=10;Loc--) cout>>Numbers[Loc];}

14. Rewrite the following program after removing the syntactical error(s), if any. Underline each correction. #include<iostream.h> const int Multiple 3; void main( ) {value = 15; for(int Counter = 1;Counter = <5;Counter ++, Value -= 2) if(Value%Multiple = = 0) {cout<<Value \* Multiple; cout<<endl;} else cout<<Value + Multiple <<endl; }

15. Will the following program execute successfully? If not, state the reason(s). 2 #include<stdio.h> void main( ) { int s1,s2,num;

```
s1=s2=0; for(x=0;x<11;x++)
{
cin<<num;
If(num>0)s1+=num;else s2=/num;
}
cout<<s1<<s2; }
```

16. Write the output of the following program. void main( ) {int x=5,y=5; cout<<x- -; cout<<" "; cout<- - x; cout<<" "; cout<<y- -<<" "<<- -y; }

17. Find the output of the following program:

```
#include<iostream.h> void main( ) {int U=10,V=20;
for(int l=1;l<=2;l++)
{cout<<"[1]"<<U++<<"&"<<V - 5 <<endl;
cout<<"[2]"<<V++<<"&"<<U + 2 <<endl;}
}
```

18. #include<stdlib.h> #include<iostream.h> void main( )  
{randomize( );  
char City[ ][10]={"DEL","CHN","KOL","BOM","BNG"};  
int Fly; for(int l=0; l<3;l++) {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. Find the output of the following program.

```
#include<iostream.h> void Withdef(int
HisNum=30)
{
for(int l=20;l<=HisNum;l+=5) cout<<l<<" ";
cout<<endl;
}
void Control(int &MyNum)
{
MyNum+=10;
Withdef(MyNum);
}
void main()
{
int YourNum=20; Control(YourNum);
Withdef();
cout<<"Number="<<YourNum<<endl;
```

20. Find the output of the following program:

```
#include<iostream.h> void main( )
{
long NUM=1234543;
int F=0,S=0;
do
{
int R=NUM % 10;
if (R %2 != 0) F
+= R; else S += R;
NUM /= 10; }
while (NUM>0);
cout<<F-S;
}
```

21. Observe the following program GAME.CPP carefully, if the value of Num entered by the user is 14, choose the correct possible output(s) from the options from (i) to (iv), and justify your option. //Program:GAME.CPP

```
#include<stdlib.h>
#include<iostream.h> void
main( )
{
randomize( ); int
Num,Rndnum;
cin>>Num;
Rndnum=random(Num)+7; for(int
N=1;N<=Rndnum;N++)
cout<<N<<" ";
}
```

Output Options:

(i) 1 2 3 (ii) 1 2 3 4 5 6 7 8 9 10 11

(iii) 1 2 3 4 5 (iv) 1 2 3 4

22. Give the output of the following program:

```
#include<iostream.h>
#include<conio.h> int
g=20; void func(int
&x,int y)
{
x=x-y; y=x*10;
cout<<x<<','<<y<<'\n';
}
void main( ) {int g=7;
func(g,::g);
cout<<g<<','<<::g<<'\n';
func(::g,g);
cout<<g<<','<<::g<<'\n'; }
```

23. Find the output of the following program:

```
#include<iostream.h> struct Box { int Len,
Bre, Hei;
};
void Dimension(Box B)
{
cout << B.Len << " X " << B.Bre << " X ";
cout << B.Hei << endl;
}
void main ( )
{
Box B1 = {10, 20, 8}, B2, B3;
++B1.Hei;
Dimension (B1); //first calling
B3= B1;
```

```

++B3.Len; B3.Bre++;
Dimension (B3); // second function calling
B2= B3;
B2.Hei += 5;
B2.Len -= 2;
Dimension (B2); // third function calling
}

```

24. Find the output of the following program:

```

#include <iostream.h> struct PLAY { int
Score, Bonus;
};
void Calculate(PLAY &P, int N=10)
{
P.Score++;P.Bonus+=N; }

void main()
{
PLAY PL={10,15}; 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;
}

```

25.. In the following C++ program , what will the maximum and minimum value of r generated with the help of random function.

```

#include<iostream.h>
#include<stdlib.h>
void main()
{
int r;
randomize();
r=random(20)+random(2);
cout<<r;
}

```

26. Study the following program and select the possible output from it:

```

#include<iostream.h>
#include<stdlib.h> const
int Max=3;
void main( )
{
randomize(); int
Number;
Number=50+random(Max);
for(int P=Number; P >=50;P- -)
cout<<P<<"#";
cout<<endl;
}

```

- (i) 53#52#51#50#
- (ii) 50#51#52#
- (iii) 50#51#
- (iv) 51#50#

27. Find the output of the following program: #include <iostream.h>

```
void Changethecontent(int Arr[ ], int Count)
{
    for (int C=1;C<Count;C++)
    Arr[C-1]+=Arr[C];
}
void main( )
{
    int A[ ]={3,4,5},B[ ]={10,20,30,40},C[ ]={900,1200};
    Changethecontent(A,3);
    Changethecontent(B,4);
    Changethecontent(C,2); for (int
    L=0;L<3;L++) cout<<A[L]<<'#';
    cout<<endl;
    for (L=0;L<4;L++) cout<<B[L] <<'#'; cout<<endl;
    for (L=0;L<2;L++) cout<<C[L] <<'#'; }
```

28. In the following program, if the value of Guess entered by the user is 65, what will be the expected output(s) from the following options (i), (ii), (iii) and (iv)?

```
#include <iostream.h> #include
<stdlib.h>
void main()
{
    int Guess; randomize();
    cin>>Guess;
    for (int l=1;l<=4;l++)
    {
        New=Guess+random(l);
        cout<<(char)New;
    }
}
(i) ABBC
(ii) ACBA
(iii) BCDA
(iv) CABD
```

29. #include <iostream.h>  
void Secret(char Str[ ])  
{  
for (int L=0;Str[L]!='\0';L++);  
for (int C=0;C<L/2;C++) if  
(Str[C]=='A' || Str[C]=='E')

```

Str[C]='#';
else
{
char Temp=Str[C]; Str[C]=Str[L-C-1];
Str[L-C-1]=Temp;
}
}
void main()
{
char Message[ ]="Indian Ocean"; Secret(Message);
cout<<Message<<endl;
}

```

30. Give the output of the following program.

```

#include<iostream.h>
void main( )
{
char *p="Difficult"; char c;
c=*p++;
cout<<c<<c++<<""<<c<<"\n";
char d =c+1;
cout<<d++<<"\n";
cout<<d<<"\n"; cout<<*p;
}

```