

Assignment-1 (C++ BASICS)

1. What is the difference between Actual Parameter and Formal Parameter? Give an example in C++ to illustrate both types of parameters.

2. Write the names of the header files to which the following belong:(i) setw() (ii) sqrt()

3. Rewrite the following program after removing the syntactical errors (if any). Underline each correction.

```
#include <iostream.h>ax
#include <stdio.h>
class MyStudent
{ int StudentId=1001;
char Name[20];
public:
MyStudent( ) { }
void Register( )
{ cin>>StudentId;
gets(Name);
}
void Display( )
{ cout<<StudentId<<":"<<Name<<endl;
}
};
void main( )
{ MyStudent MS;
Register.MS( );
MS.Display( );
```

4. Find the output of the following program :

```
#include<iostream.h>
#include<ctype.h>
void Secret(char Msg[ ], int N);
void main( )
{ char SMS[ ]="rEPorTmE";
Secret(SMS,2);
cout<<SMS<<endl;}
void Secret(char Msg[ ], int N)
{ for(int C=0;Msg[C]!='\0';C++)
if(C%2==0)
Msg[C]=Msg[C]+N;
else if(isupper(Msg[C]))
Msg[C]=tolower(Msg[C]);
else
Msg[C]=Msg[C]-N;
}
```

5. 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#

6. Name the header files that shall be needed for the following code:

```
void main( )
{ char String[ ] = "Peace";
cout << setw(2)<<String;
}
```

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

```
#include<iostream.h>
void main( )
{ First = 10, Second = 20;
Jumpto(First;Second);
Jumpto(Second);
}
void Jumpto(int N1, int N2 = 20)
{ N1=N1+N2;
count<<N1>>N2;
}
```

8. Find the output of the following program;

```
#include<iostream.h>
#include<ctype.h>
void main( )
{ char Text[ ] = "Mind@work!";
for(int I=0; Text[I]!='\0';I++)
{ if(!isalpha(Text[I]))
Text[I]='*';
else if(isupper(Text[I]))
```

```
Text[I]=Text[I]+1;
else
Text[I] = Text[I+1];
}
```

```
cout<<Text;
}
```

9. Find the output of the following program:

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

10. 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

11. Name the header files that shall be needed for the following code:

```
void main( )
{ char word[]="Exam";
cout<<setw(20)<<word;
}
```

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

```
#include<iostream.h>
void main( )
{ One=10,Two=20;
Callme(One;Two);
Callme(Two);
}
void Callme(int Arg1,int Arg2)
{ Arg1=Arg1+Arg2;
Count<<Arg1>>Arg2; }
```

13. Find the output of the following program:

```
#include<iostream.h>
#include<ctype.h>
void main( )
{ char Mystring[ ] = "what@OUTPUT!";
for(int l=0; Mystring[l]!='\0';l++)
```

```
{ if(!isalpha(Mystring[l]))
Mystring[l]='*';
else if(isupper(Mystring[l]))
Mystring[l]=Mystring[l]+1;
else
Mystring[l] =Mystring[l+1];
}
cout<<Mystring;}
```

14. Find the output of the following program:

```
#include<iostream.h>
void main( )
{ int A=5,B=10;
for(int l=1;l<=2;l++)
{ cout<<"Line1"<<A++<<"&"<<B-2
<<endl;
cout<<"Line2"<<++B<<"&"<<A +3
<<endl;
}}
```

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

```
#include<stdlib.h>
#include<iostream.h>
void main( )
{ randomize( );
char Area[ ][10]=
{"NORTH","SOUTH","EAST","WEST"};
int ToGo;
for(int l=0; l<3;l++)
{ ToGo=random(2) + 1;
```

```
cout<<Area[ToGo]<<" ";
}}
```

Outputs:

- (i) SOUTH : EAST : SOUTH :
- (ii) NORTH : SOUTH : EAST :
- (iii) SOUTH : EAST : WEST :
- (iv) SOUTH : EAST : EAST :

16. Differentiate between a Run Time Error and Syntax Error. Also give suitable examples of each in c++.

17. Name the header file(s) that shall be needed for successful compilation of the following C++ code.

```
void main( )
{ char String[20];
gets(String);
strcat(String,"CBSE");
puts(String);}
```

18. 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];}
```

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. In the following C++ program what is the expected value of MyMarks from options (i) to (iv) given below. Justify answer.

```
#include<stdlib.h>
#include<iostream.h>
void main( )
{ randomize( );
int
Marks[]={99,92,94,96,93,95},MyMarks;
MyMarks = Marks [1+random(2)];
cout<<MyMarks<<endl;
}
```

- (i)99 (ii)94 (iii)96 (iv) None of the above.