



INDIAN SCHOOL DARSAIT DEPARTMENT OF ICT



Subject: Computer Science

Topic: Review of C++

Worksheet No.: 2

(Error correction, Header files, random())

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Date: _____

Name of the Student : _____

Class & Div: XII __

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1. Look at the following C++ code and find the possible output(s) from the options (i) to (iv) following it. Also, write the maximum values that can be assigned to each of the variables Low and High.

```
void main(){
randomize();
int Low=2+random(3),High=5+random(3);
int C[] = "ABCDEFGHJIJ";
for(int I=Low;I<=High;I++)
cout<<C[I];
cout<<endl;}
```

(i)	(ii)
BCDE	CDEF
(iii)	(iv)
CDE	DCEFG

2. The following code is from a game, which generates a set of 4 random numbers. Yallav is playing this game, help him to identify the correct option(s) out of the four choices given below as the possible set of such numbers generated from the program code so that he wins the game. Justify your answer.

```
const int LOW=15;
void main ( ){
randomize( ) ;
int POINT=5, Number;
for (int l=1;I<=4;I++){
Number=LOW+random(POINT);
cout<<Number<<" ";
POINT--;}}
```

i) 19:16:15:18: (ii) 14:18:15:16: (iii) 19:16:14:18 (iv) 19:16:15:16:

3. Find the following program, find the correct possible output(s) from the options.

```
void main( ){
randomize( );
char Area[ ][10]={“NORTH”,“SOUTH”,“EAST”,“WEST”};
int ToGo;
for(int I=0; I<3;I++) {
ToGo=random(2) + 1;
cout<<Area[ToGo]<<" ";}}
```

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

4. Read the following C++ code carefully and find out, which out of the given options (i) to (iv) are the expected correct output(s) of it. Also, write the maximum and minimum value that can be assigned to the variable Taker used in the code :

```
void main(){
    int GuessMe[4]={ 100,50,200,20};
    int Taker=random(2)+2;
    for (int Chance=0;Chance<Taker;Chance++)
    cout<<GuessMe[Chance]<<"#";}
(i) 100#   (ii) 50#200#   (iii) 100#50#200#   (iv) 100#50
```

5. Look at the following C++ code and find the possible output(s) from the options (i) to (iv) following it. Also, write the maximum and the minimum values that can be assigned to the variable PICKER.

```
void main(){
    randomize();
    int PICKER;
    PICKER=1+random(3);
    char COLOR[][5]={"BLUE","PINK","GREEN","RED"};
    for(int I=0;I<=PICKER; I++){
    for(int J=0; J<=I;J++)
    cout<<COLOR[J];
    cout<<endl;
    }
}
```

(i)	(ii)	(iii)	(iv)
PINK PINKGREEN PINKGREENRED	BLUE BLUEPINK BLUEPINKGREEN BLUEPINKGREENRED	GREEN GREENRED	BLUE BLUEPINK BLUEPINKGREEN

6. Read the following C++ code carefully and find out, which out of the given output options (i) to (iv) are the expected correct output(s) of it.

```
#include<stdlib.h>
#include<iostream.h>
void main()
{
    randomize();
    char city[ ][5]={"MCT", "EKM", "TVM", "KOL", "CAL"};
    int ZEN;
    for(int i=0;i<3;i++)
    {
        ZEN=random(2)+1;
        cout<<city[ZEN]<<"@";
    }
}
```

- (i) MCT@ EKM @TVM@
- (ii) EKM @TVM@ EKM @
- (iii) TVM@KOL@CAL@
- (iv) TVM@ EKM @TVM@

7. Ronica Jose has started learning C++ and has typed the following program. When she compiled the following code written by her, she discovered that she needs to include some header files to successfully compile and execute it. Write the names of those header files, which are required to be included in the code.

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

8. Name the header files that shall be needed for successful compilation of the following C++ code:

```
void main(){char str[20],str1[20];
gets(str);
strcpy(str1,str);
strrev(str);
puts(str); puts(str1); }
```

9. Rewrite the following C++ code after removing any/all syntactical errors with each correction underlined. Note: Assume all required header files are already being included in the program.

```
#define Formula(a,b) = 2*a+b
void main(){
float X=3.2;Y=4.1;
Z=Formula(X,Y);
cout<<'Result='<<Z<<endl;}
```

10. Rewrite the following C++ code after removing all the syntax error(s), if present in the code. Make sure that you underline each correction done by you in the code. 2

Important Note :

- Assume that all the required header files are already included, which are essential to run this code.
- The corrections made by you do not change the logic of the program.

```
typedef char[80] STR;
void main(){
Txt STR;
gets(Txt);
cout<<Txt[0]<<'\t'<<Txt[2];
cout<<Txt<<endl;
}
```

11. Rewrite the following program after removing any syntactical errors. Underline each correction made.

```
#include<iostream.h>
void main( )
intA[10];
A=[3,2,5,4,7,9,10];
for( p = 0; p<=6; p++)
{ if(A[p]%2=0)
int S = S+A[p]; }
cout<<S;
}
```

12. Rewrite the following code after removing syntactical error(s), if any. Underline each correction made.

```
#include [iostream.h]
struct PAYITNOW
{
int Charge;
void Raise(){cin>>Charge;}
void Show{cout<<Charge;}
};
void main()
{
PAYITNOW P;
Raise.P();
Show();
}
```

13. Rewrite the following C++ code after removing any/all syntactical errors with each correction underlined. Note : Assume all header files required in the code are already being included.

```
#define 10*Number MAX(Number)
void main()
{
int Num,NewNum;
cout<<"Number:";
cin<<Num;
if Num<10
NewNum=MAX(Num);
else
NewNum=Num-2;
cout<<"New Number:"<<NewNum<<end;
}
```