

## HOLIDAY HOMEWORK

Q1)

- a) What is significance of My Computer? 2
- b) Explain different types of operating systems . 1
- c) What is an Operating System? Explain its any two functions 2
- d) How is a compiler different from interpreter? 2
- e) Convert
- (i)  $(10.10)_{10} = ( ? )_2$
- (ii)  $(101011.1110)_2 = ( ? )_{10}$  2

Q2)

- a) What do you mean by run time error? 1
- b) what is the deference between if and if – else statement 2
- c) Mention and explain briefly any three characteristics of a good program 2
- d) How can you give a single line and multiline comments in C++ explain with suitable examples 2
- e) what do you mean by header files? What is the difference between `#include <iostream.h>` and `#include "iostream.h"` 2

Q3)

- a) Classify the following variable names of c++ into valid and invalid category 2
- (i) 1no (ii) num 1 (iii) num (iv) num1num (v) num+1 (vi) num.1

- b) Give output of following code. 3

```
#include<iostream.h>
int m=5; void check();
void main()
{ int m=20;
  {
  int m=10*::m;
  cout<<"m="<<m<<"::m="<<::m<<endl;
  } check();
  cout<<"m="<<m<<"::m="<<::m<<endl;
  check(); cout<<"::m="<<::m<<"m="<<m<<endl;
  }
  void check()
  { ++m;
  }
}
```

- c) What will be result of following statements if a=5 , b=5 initially 2
- (i) `++a<=5` (ii) `b++<=5`

- d) Name the header file(s) that shall be needed for successful compilation of the following C++ code. 2

```
void main()
{
  char name[40];
  strcpy(name,"India");
  puts(name); }
```

- e) Explain conditional operator (?) with example in c++ . 2

- f) What is difference between „#” and „%” operators in c++ ? explain with a example 2

Q4)

- a) What do you mean by function prototype in C++ 2

b) Explain Break and Continue statement in C++ with example. 2

c) Find syntax error(s) if any in following program ( Assume all header files are present) 2

```
main<>
{ int c;
  switch( c );
  case 1.5: { cout<<" India is great\n";
             } break;
  ,case" 2: { cout<<" hello\n";
             } break;
} // end of main
} // end of switch
```

d) How will you declare and define 1

- i) Array named mark with 10 integer values
- ii) array named avg with 8 float values

e) Convert following while loop to for loop 2

```
int x=0;
while(x<=100)
{ cout<<" the value of x is \n"<<x;
  cout<<"done \n";
  x+=2;
}
```

f ) Define token ? 1

g) What is the difference between call by value and call by reference explain with suitable example 2

h) Find the output of the following program; 3

```
#include<iostream.h>
#include<ctype.h>
void main()
{ char Text[ ] = "Comp@uter!";
  for(int l=0; Text[l]!='\0';l++)
  { if(!isalpha(Text[l]))
    Text[l]="*";
    else if(isupper(Text[l]))
    Text[l]=Text[l]+1;
    else
    Text[l] = Text[l+1]; }
  cout<<Text; }
```

i) What are differences between for and do- while loop ? explain with example 2

j) How can you define Global Variable and Local Variable? Also, give a suitable C++ code to illustrate both. 2

**Q5 : a) Write a program to print the left and right diagonal element of an NXN matrix**

- **b) Write a program to find the factorial of a number recursive function.** 4

- **c) Write a program to find the total number of characters, lines and words in a paragraph of text.** 4

- **d) Write a program to sort an array on N numbers in ascending order. Avoid duplication of elements.** 4

- **e) Write a program to find the roots of a quadratic equation.**

