HSSC-II Examination

Computer Science Paper

Time allowed: 2.40 hours

Total Marks:60

SECTION – B (Marks 21)

Q.2 Attempt any **SEVEN** parts from the following. All parts carry equal marks. (7x3=21)

i. Write difference between Prefix and Postfix Increment with example.

ii. Write a program that inputs marks of a student and displays "Pass" if marks are more than 40 and "Fail" otherwise by using Ternary or Conditional Operator.

iii. Evaluate the following expression using Operator Precedence

i.10*(24/(5-2))+13 ii. 4*5/10+8 iii. 3*(2+7*4)

iv. What will be the output of the following program?

```
#include <iostream.h>
#include <conio.h>
void main ()
{
    int n;
    n=10;
    cout<<"The initial value of n is "<< n<<endl;
    n++;
    cout<<"The value of n is now "<< n<<endl;
    n++; n++;
    cout<<"The value of n is now "<< n<<endl;
    n--;
    cout<<"The value of n is now "<< n<<endl;
```

```
    getch();
}
```

v. How is implicit type casting performed?

vi. Write a program that inputs a character and displays whether it is vowel or not.

vii. Write a program that repeatedly inputs a number from the user and prints its square. The loop terminates if the user enters 0 and the program prints "Good Bye".

viii. What will be the output of the following program?

```
#include <iostream.h>
#include <conio.h>
void main ()
{
    int x=5+7/2;
    switch (x)
    {
        case 5:
            cout<<'p'; break;
        case 7:
            cout<<'q'; break;
        case 8:
            cout<<'r'; break;
        default:
            cout<<"No output;
    }
    getch();
}
```

ix. Write a program that inputs five integers values in an array and finds their total and average.

x. Write difference between "**gets**" and "**puts**" function.

SECTION – C (Marks 21)

Q.3 Attempt any **SEVEN** parts from the following. All parts carry equal marks. (7x3 =21)

i. Write a program that gets starting and ending point from the user and displays all odd numbers in the given range using **do-while** loop.

ii. Write a program that inputs five integers from the user and stores them in a array. It the displays all values in the array without using loops.

iii. What is the purpose of sizeof( ) function? Give an Example.

iv. What is function call? Give an Example.

v. How are parameters passed to a function by reference?

vi. Write a program that inputs two integers. Its passes first integer to a function that calculates and returns its square. It passes second integer to another function that calculates and returns its cube. The main() function adds both returned values and displays the result.

vii. For what purpose inline functions are used?

viii. How should the function differ in overloading?

ix. What is the output of the following C++ program?

```
#include<iostream.h>

void showDub(int);

void main()

{

    int x=2;
```

```
    showDub(x);
    cout<<x;
}
void showDub( int num)
{
    cout<<(num*2)<<endl;
}
```

x. What type of pointer can store the address of any type of variable?

SECTION – D (Marks 18)

Note: Attempt any **THREE** questions. All questions carry equal marks. (3x6 = 18)

Q.4 Explain the purpose of following string functions.

i. Strcat() ii. Strlen() iii. Strcpy() iv. Strcmp() (1.5+1.5+1.5+1.5)

Q.5 What is function signature? Explain its different parts with Example.

Q.6 Write three versions of function line. The first version takes no parameter and displays a line of 10 asterisks (*). The second version of function takes an integer parameter and displays a line of **n** asterisks. The third version takes an integer and a character as parameters and displays a line of given character of **n** length.

Q.7 Write a program that adds the corresponding elements of two 2- dimensional arrays with 2 rows and 4 columns. It displays the result in the form of a matrix.