

International Islamic University Chittagong

Department of EEE
Final Examination
Course Code: CSE- 1105
Full Marks:50

Program: B.Sc. Engg. (EEE)
Semester: Autumn-2018
Course Title: Computer Programming I
Time: 02 hours 30 minutes

Figures in the right margin indicate full marks. Use separate script for each part.

PART-A

[Answer any two questions from the followings]

- 1(a). Why switch statement is used? Compare switch statement with the nested if..else statement 3
1(b). Draw a nested for loop. Write a program to print the following structure 4

1
01
101
0101
10101

- 1(c). Convert the following program from for loop to while loop. 3

```
int i, n = 10;
for (i=0; i<n; i++)
{
    printf("I like for loop.\n");
    printf("%d\n",i);
    printf("I also like while loop.\n"); }
}
```

- 2(a). What is the important of an array? Explain the initialization of an array. 4
2(b). Write a program to sort data of a two dimensional array.. 4
2(c). What will be output if you will execute following program. 2

```
#include<stdio.h>
#define N 3
short num[3][2]={3,6,9,12,15,18};
printf("%d %d",*(num+1)[1]**(num+2));
}
```

- 3(a). Write a program that explore the sum of following sequence using for loop. 3
1.2.3+2.3.4+3.4.5+.....up to n term.up to n term. 3
3(b). Explain the initialization of two dimensional arrays. 3
3(c). Find errors, if any, in each of the following segment. 3

```
a) if (x + y = z && y > 0);
printf(" ");

b) if (code > 1);
a=b+c
else;
a=0

c) if (p<0) || (q<0);
printf(string is negative).
```

PART-B

[Answer any three questions from the followings]

- 4(a). Pointer can create a perfect copy of a variable-explain with example 3
- 4(b). Write a program using pointers to compute the sum of all element in an array 4
- 4(c). What will be the output of the program ? 3

```

int main()
{
    int x=10, *y, *z;
    y=&x; // some address of x (1 byte size)
    z=y;
    *y++=*z++;
    x++;
    printf("x=%d, y=%d, z=%d\n", x, y, z);
    return 0;
}
    
```

- 5(a). Write a C program to add two distances entered by user. Measurement of distance should be in inch and feet.(Note: 12 inches = 1 foot).using Structure.. 5
 - 5(b). Compare between Array and Structure. Give the prototype of "Union". 5
 - 6(a). Write down the basic file operation supported by C. Write short note on these function fopen(), fclose(), getc(), putc(). 5
 - 6(b). Write the types categories of a function with an example 2
 - 6(c). What do you know about call by reference? 2
 - 7(a). Explain the initialization of pointer variables. 4
 - 7(b). Which of the statements is correct about the program? 2
- ```

int main()
{
 int i=10;
 int *j=&i;
 return 0;
}

```
- 7(c). What is recursion? give an example. 4