

International Islamic University Chittagong
Department of Electrical and Electronic Engineering

Final Examination Spring-2019

Course Code: CSE 1105

Time: 2 hours 30 minutes

Program: B.Sc. Engg. (EEE)

Course Title: Computer Programming-I

Full Marks: 50

Part A

[Answer any two questions from the followings; figures in the right margin indicate full marks.]

- 1(a). Write a C program to check whether a number is positive, negative or zero using if-else. 03
- 1(b). Define continue statement. Determine the output of the following program: 03
- ```
int main(){
 int a=11;
 do {
 if(a==15){ a=a+1; continue; } printf("%d \n", a);
 a++; }while(a<20) return 0; }
```
- 1(c). Draw the flowchart of nested do-while loop. Write a program to print the following pattern using loop. 04
- ```
5 4 3 2 1
4 3 2 1
3 2 1
2 1
```
- 2(a). What is the importance of an array? Describe the initialization of an array. 03
- 2(b). Write a program to sort data of a two dimensional array. 03
- 2(c). Write a program to print the following structure 04

```
1      1
2      2
3      3
4 4
5
4 4
3      3
2      2
1      1
```

- 3(a). Discuss recursion. Write a program to display Fibonacci series using recursion. 03
- 3(b). Define goto statement. Draw the flowchart of goto and continue statement. 02
- 3(c). Define loop. Write a program in C to find the square of any number using the function. 02
- 3(d). Explain break and continue statements with example. 03

Part B

[Answer any three questions from the followings; figures in the right margin indicate full marks.]

- 4(a). How can we access a variable by using a pointer, explains with proper example. 03
- 4(b). What is Pointer? Address the significance of using pointers in C programming. 04
- 4(c). Write code segment that print int string[9]={2,3,5,0,7,7,8,5,9} using pointer . 03
- 5(a). Differentiate between array and structure. 02
- 5(b). Design a structure struct student which contains information about the ID, name, age, department, semester, mobile_no, and address. Write a code segment to take the input for a student object And display the information. 04
- 5(c). What is string? Write a program to convert string to lowercase. 04
- 6(a). Define pointer? Why pointer is used? How to create a pointer? 03
- 6(b). Determine the output of the following program: 03
- ```
int main(){
 int *y;
 int x;
 y = &x;
 *y = 1;
 printf(" x = %dn", x);
 printf(" *y = %dn", *y);
 *y += 2;
 printf(" x = %dn", x);
 printf(" *y = %dn", *y);
 return 0;
}.
```
- 6(c). How we can access a variable by using pointer, explain with example. 04
- 7(a). Write a program to the existence of a number in an array 02
- 7(b). Write the types categories of a function with an example. 02
- 7(c). Write down the basic file operation supported by C. Write short note on these function fopen(), fclose(), getc(), putc(). 04
- 7(d). Write a program in C to read n number of values in an array and display it in reverse order. 02