

**International Islamic University Chittagong (IIUC)**

Department of Computer and Communication Engineering (CCE)

**Mid Term Examination**

Program: B.Sc. (Engg)

Semester: Spring 2023

Course Code: CCE-1105

Course Title: Computer Fundamentals and Programming

Time: 1 hour 30 minutes

Full Marks: 30

(i) Answer all the questions. The figures in the right hand margin indicate full marks.

(ii) Course Outcomes (COs) and Bloom's Level are mentioned in additional Column.

Course Outcomes (COs) of this course	
CO1	Define the components of a computer system including the basic terminology used in computer programming.
CO2	Demonstrate C language by writing, compiling and debugging programs with the use of different data types, variables, constants and numerous input/output functions.
CO3	Apply control statements, functions, structures, unions, arrays and pointers of C language to solve real world problems.
CO4	Adapt the concept of file handling to manipulate file data.

Bloom's Level of the Questions						
Letter Symbols	R	U	Ap	An	E	C
Meaning	Remember	Understand	Apply	Analysis	Evaluate	Create

- [1] (a) Define Cache memory and Register memory. U CO1 3  
(b) What are the differences between RAM and ROM? U CO1 3  
(c) Illustrate the structure of a basic C program. An CO2 4
- [2] (a) Design an algorithm as well as draw a flow chart of the following problem:  
◦ Calculating area of triangle C CO2 5  
(c) Illustrate following library functions with relevant example: U CO2 5  
◦ printf()  
◦ scanf()
- [3] (a) Explain the differences between local and global variable. An CO2 4  
(b) Write a C program that take your final mark of CCE-1105 from the keyboard and calculate the grade against the specified mark using if-else-if ladder. Ap CO2 6

OR

- [3] (a) Explain the Differences between #define preprocessor and const keyword used in C? An CO2 4  
(b) Write a C program to find whether a year is leap year or not using if-else statement. Ap CO2 6