

Faculty of Computing and Technology

Department of Computing

Bachelor of Science (Hons) in Computer Science | Software Engineering

End - Semester Examination

Year 2023, Semester 01 -Batch 01

CS|SE 1102 - Fundamentals of Programming

Duration: 3 Hours

Instructions to the candidates:

- 1. There are five (05) questions given.
- 2. Answer all the questions.
- 3. Clearly write all the calculations where they needed.
- 4. The total number of marks allocated will be 100.
- 5. Follow the General Guidelines given by the Department of Examination for exam Start time and closing time.

Question 01

A. Briefly describe the compiler and the interpreter.

Marks - 04

B. Describe the THREE (03) types of errors occur in programming.

Marks - 06

C. Discuss the SIX (06) main stages in the programming process.

Marks-10

[Total Marks - 20]

Question 02

A. List the main FOUR (04) flowchart structures.

Marks - 04

B. Illustrate a flowchart to get the age as the input from the user, check the age and display the following messages accordingly.

If the age is greater than or equal to 20 -> "You are an adult"

If the age is less than 20 -> "You are still a teenager"

Marks - 06

C. Write a pseudocode to get the subject marks from the user as the input and display the grade according to the table given below. (Table 1)

Range	Grade
100- 90	A+
89-80	A
79-60	В
59-45	C
45-30	C-
29-0	F
For any other input	Invalid input

Table 1

Marks - 10

[Total Marks - 20]

Question 03

A. List the TWO (02) types of conversions in C – Type Casting.

Marks - 04

B. Write a C program to input two numbers from the user and display the summation.

Marks - 06

C. Create a user defined structure to save the following details of employees of an organization.

Employee id, Employee name, Employee age, Employee Address, Employee salary

Marks-10

[Total Marks - 20]

Question 04

A. Briefly describe the functionality of "break" and "continue" statements in C programming.

Marks-04

B. Write a C program to print the numbers from 1 to 10, using a loop structure.

Marks - 06

C. Write a c program to get a number between 1 and 7 from the user and display the messages according to the Table 2. (Hint: Use a switch statement)

Marks-10

Number	Output
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday
Any other input	Invalid Range

Table 2

[Total Marks - 20]

Question 05

- A. Briefly describe FOUR (04) file Opening Modes in File Handling using C programming.

 Marks 04
- B. Write a C program to define an integer array, assign the values from 5 to 10 (examples: 5, 6, 7, 8, 9, 10) and print the values in the command prompt. (Hint: Use a loop structure to print the values)

Marks - 06

C. Write a C program to input two numbers and print the largest number in the command prompt. To find the largest number, you should use a function. To the function give an appropriate name as well.

Marks - 10

[Total Marks - 20]

*********** End Paper ************