Council for Technical Education and Vocational Training
Office of the Controller of Examinations
Sanothimi, Bhaktapur
Regular/Back Exam-2078, Bhadra

Program:	**Diploma in Computer Engineering**	**Full Marks: 80**
Year/Part:	**I/I (2018 New Course)**	**Pass Marks: 32**
Subject:	**Computer Programming in C**	**Time: 3 hrs**

Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks.

Attempt Any Five questions.

1 a What is programming language? Explain assembler, compiler and interpreter in brief. [2+6]

   b Define the terms Variable, Constant, keyword and pre-processor directive. [8]

2. a What is data type? Explain any four basic data types along with its memory size and range. [2+6]

   b What do you mean by operator? Explain various types of operators used in C on the basic of operation. [2+6]

3 a Write a program to find roots of quadratic equation. $(ax^2 + bx + c = 0)$ $r1 r2 = (-b \pm \sqrt{b^2 - 4ac})/2a$ [8]

   b Differentiate between while and do-while loop. Write a program to find sum of digits of given number. [3+5]

4. a What is array? Explain any four string handling functions in brief. [2+6]

   b Write a program in C to arrange any ten numbers in ascending order. [8]
   (website :- https://www.arjun00.com.np)

5. a Explain call by value and call by reference with suitable examples. [8]

   b Define the terms function and recursion. Write a program in C to find the factorial of an entered number Using recursion [2+6]

6 a Differentiate between structure and Union with example. [8]

   b Write short notes on : **(Any Two)** [2x4=8]

   i) File opening modes

   ii) Formatted Input / Output function

   iii) Pointer

Good Luck !