

GUJARAT TECHNOLOGICAL UNIVERSITY
BCA/ MCA INTEGRATED – SEMESTER I- EXAMINATION –SUMMER-2025

Subject Code: BC01001021**Date: 04/06/2025****Subject Name: Fundamental of Programming****Time:02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

	Marks
Q.1 (a) Basic Data types in C	07
(b) State two differences between 1) structure Vs union 2) compiler Vs interpreter.	07
Q.2 (a) What is loop? Explain while loop with example.	07
(b) What is control structure? Explain switch-case with example.	07
OR	
(b) What is nested if? Explain with suitable example.	07
Q.3 (a) What is function prototype? Write UDF (return by value) that implements given number is prime or not.	07
(b) Define term recursion. Using recursion find factorial's of N number.	07
OR	
Q.3 (a) Define array. Write code that finds average of 10 elements of an array.	07
(b) What is the last character of string? Explain with suitable example: strcat function.	07
Q.4 (a) What is pointer? Write code that swaps two integer values using pointer.	07
(b) Design a structure student_record that contains name, branch and total mark obtained. Develop a program to read data for 10 students in a class and print them.	07
OR	
Q.4 (a) Advantages and Disadvantages of pointer	07
(b) Define structure data type called date_struct containing three member's integer year, integer month and integer day. Develop a program that would assign values to the individual number and display the date in the following format: yyyy-mm-dd	07
Q.5 (a) Write a program to accept the contents from the user and store it in the file one line at a time and print the contents of the file.	07
(b) Write syntax and significance of fseek() and ftell() functions	07
OR	
Q.5 (a) Write syntax and significance of fopen() function..	07
(b) Write a code that read a file 'abc.txt' in reverse order.	07
