

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA – SEMESTER I- EXAMINATION –WINTER-2024

Subject Code: MC01094011

Date: 09/01/2025

Subject Name: Programming with C

Time:10:30 AM TO 01:00 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.

- Q.1 (a)** Answer the following question. **07**
- i. _____ Keywords are available with C.
 - ii. _____ Symbol is used for input and output in Flowchart.
 - iii. _____ function is used to compare two string.
 - iv. A function which calls itself is called _____.
 - v. Pointer variable can point to pointer is called _____.
 - vi. _____ is an array of the Command-Line Arguments.
 - vii. _____ mode is used to open an existing file for both reading and writing purpose.
- (b)** What is Programming Language? Describe the classification of Programming Languages. **07**
- Q.2 (a)** Explain different input and output function used in C. **07**
- (b)** Write a C program to find out the maximum and minimum number from given 10 numbers. **07**
- OR**
- (b)** Explain the process of Compilation in detail. **07**
- Q.3 (a)** What is pre-test loop? Describe pre-test loop used in C language in detail with proper example. **07**
- (b)** Explain different function used to read text file from the disk and write a text file in to the disk with suitable example. **07**
- OR**
- Q.3 (a)** Describe Pointer to function in detail with example. **07**
- (b)** Discuss various Special control statement used in C with example. **07**
- Q.4 (a)** What is an Operator? Explain Relational and Logical operator used in c in detail with suitable example. **07**
- (b)** What is User Defined Function? Explain function prototype declaration, Function calling and function definition. **07**
- OR**
- Q.4 (a)** What is C preprocessor? Discuss different Preprocessor Directives used in c. **07**
- (b)** What is Dynamic Memory Allocation? Explain various function used for Dynamic Memory Allocation. **07**
- Q.5 (a)** Discuss different Storage Class Specifiers used in C language with example. **07**
- (b)** Discuss nesting of Structure in detail with example. **07**
- OR**
- Q.5 (a)** Write a C program to compare two files given by the user, and displaying a message indicating whether the files are identical or different. **07**
- (b)** Write a short note on Enumeration type and Bit fields. **07**