

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA INTEGRATED – SEMESTER I- EXAMINATION –WINTER-2024

Subject Code: 2618603

Date: 02/01/2025

Subject Name: Fundamental of Programming–I

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. What is Compiler?
 - ii. Double data type occupy _____ bytes of memory.
 - iii. C Language consist _____ number of keywords.
 - iv. What is Comment Line?
 - v. List out the single character Input and Output function.
 - vi. What is Lvalue & Rvalue?
 - vii. What is an Argument?
- (b)** What is Flow chart? Discuss the standards and guidelines for drawing a flowchart. **07**
- Q.2 (a)** Explain general structure of a C Program in detail. **07**
- (b)** What is Low-level Languages? Explain various Low-level languages with its advantages and disadvantages. **07**
- OR**
- (b)** List out various types of Loop available in C Language. Describe For Loop in detail with example. **07**
- Q.3 (a)** What do you mean by Data type? Describe various Data type used in C Language in detail. **07**
- (b)** What do you mean by Multi-way Decision? Explain Switch statement used in C Language with example. **07**
- OR**
- Q.3 (a)** What is an operator? Describe any two operators used in C in detail with example. **07**
- (b)** What is an Array? Discuss internal representation of Array in detail. **07**
- Q.4 (a)** What is Multi-Dimensional Array? How can we initialize and access Two Dimensional Array. Explain it with proper example. **07**
- (b)** Describe Function Prototype, Function Calling and Function Definition with suitable example. **07**
- OR**
- Q.4 (a)** Explain various Special Control Statement used in C with suitable example. **07**
- (b)** Write a C program to find out factorial using User Defined Function. **07**
- Q.5 (a)** Write a C program to arrange given elements in to Ascending order. **07**
- (b)** Explain storage classes in detail. **07**
- OR**
- Q.5 (a)** Discuss various string manipulation function used in C language with suitable example. **07**
- (b)** Write a C program that uses a function to perform addition of two matrices having integer numbers. **07**