

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED– SEMESTER I- EXAMINATION –WINTER-2023

Subject Code:2618603**Date: 06/01/2024****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)** Do as Directed. **07**
1. Size of float is _____ bytes.
 2. Writing for (;;); in a statement of 'C' program would generate an infinite loop.[T/F]
 3. Define ternary operator.
 4. _____ is used for writing multiline comment.
 5. What do you mean by lifetime of a variable?
 6. The associativity of && is _____ to _____.
 7. Differentiate between “=” and “==”.
- (b)** What is an operator? What are the types of operators? Explain any 2 types of operators in Detail. **07**
- Q.2 (a)** Define data types? Explain basic data types in detail. **07**
- (b)** What are tokens? Explain different classes of tokens. **07**
- OR**
- (b)** Explain formatted input and output function with proper example. **07**
- Q.3 (a)** Explain structure of “C” program. **07**
- (b)** Write a program to display the following output using C Language. **07**
- ```
*
* *
* * *
* * * *
```
- OR**
- (a)** What is a typecasting? Write its significance and purpose with suitable example. **07**
- (b)** What is the use of switch case, explain with proper example. Also explain the use of Default. **07**
- Q.4 (a)** What is a flowchart? State the standard guidelines and standard symbols for drawing a Flowchart. **07**
- (b)** What is an Array? How it differs from ordinary variables? How to initialize 1D array and 2-D array? Write a program which find odd maximum number from 1-D Integer array. **07**
- OR**
- (a)** Explain different decision-making statements of C with examples. **07**
- (b)** Write a recursive function to print conversion of decimal number into binary number. **07**
- Q.5 (a)** Explain following string functions with suitable example. **07**
- (i) strrev() (ii) strcpy() (iii) strstr () **07**
- (b)** Explain various escape sequence and format Specifiers with their usage. **07**
- OR**
- (a)** Explain following terms with example. **07**
- (i) Constant (ii) keyword (iii) variable (iv) object file
- (b)** What do you mean by scope and lifetime of a variable? Explain the types of scope. **07**