

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA Integrated – SEMESTER – I - EXAMINATION – SUMMER 2022**

**Subject Code: 2618603****Date: 30/07/2022****Subject Name: Fundamental of Programming–I****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.

- Q.1 (a)** True or False with proper Reasons. **07**
1. In 'C' program, Modulus operator (%) works with float variable.
  2. It necessary to write default clause after the last case clause in Switch statement.
  3. The values that are passed while calling a function are called formal parameters
  4. Writing for(;;); in a statement of 'C' program would generate an infinite loop.
  5. No += 2; is a valid statement in 'C' program.
  6. The precedence of logical operators are higher that relational operators.
  7. Array index can have negative value.
- (b)** Do as Directed in reference to C language. **07**
1. Size of float is \_\_\_\_\_ bytes.
  2. "\t" is used for \_\_\_\_\_ and "\b" is used for \_\_\_\_\_.
  3. What do yoSu mean by lifetime of a variable?
  4. \_\_\_\_\_ is used for writing multiline comment.
  5. Find minimum of 2 numbers using ternary operator.
  6. What does the header file consists of?
  7. The associativity of && is \_\_\_\_\_ to \_\_\_\_\_.
- Q.2 (a)** What is an operator? What are the types of operators? Explain any 2 types of operators in detail. **07**
- (b)** Explain formatted input and output function with proper example. **07**
- OR**
- (b)** What are tokens? Explain different classes of tokens. **07**
- Q.3 (a)** What is a flowchart? State the standard guidelines and standard symbols for drawing a flowchart. **07**
- (b)** Explain Entry Control & Exit Control loop in details with syntax, use and example **07**
- OR**
- Q.3 (a)** Explain structure of "C" program. **07**
- (b)** Explain different decision making statements of C with examples. **07**
- Q.4 (a)** What is function prototype, function definition and function call? – explain with an example. **07**
- (b)** Write a program in C Language to read two, 3x3 matrices and find sum of the matrices. **07**
- OR**
- Q.4 (a)** Explain four storage classes of C language. **07**
- (b)** Write a program in C Language to find sum of digits of any given number. **07**

- Q.5 (a)** What is an Array? How it differs from ordinary variables? How to initialize 1-D array and 2-D array? Write a program which find odd maximum number from 1-D Integer array. **07**
- (b)** Write a program in C Language to check whether a string is palindrome or not. **07**  
(A palindrome is a word which reads the same backward and forward. E.g. madam, dad.)

**OR**

- Q.5 (a)** Explain following functions. **07**  
(1) strcmp( ) (2) strlen( ) (3) strrev( ) (4) strcat( ) (5) strcpy( )
- (b)** Write a program to display the following output using C Language. **07**  
A  
B C  
D E F  
G H I J

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