

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA INTEGRATED– SEMESTER - I EXAMINATION- SUMMER-2023**

**Subject Code: 2618603****Date: 14/07/2023****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.**
1. What is the output: **01**  

```
int main()
{
    printf(“%d”, ‘A’);
    return 0;
}
```
  2. What is the output: **04**  

```
int main ( )
{
    int no = 5;
    printf ( “ %d %d %d”, no++, no, ++no);
    return 0;
}
```
  3. What is the output: **02**  

```
int main()
{
    int a=5;
    i=!a >10;
    printf(“i=%d”,i);
    return 0;
}
```
- (b) Do as Directed.** **07**
1. “\n” is used for \_\_\_\_\_ and “\0” is used for \_\_\_\_\_.
  2. Size of float in \_\_\_\_\_ bytes.
  3. Differentiate between “=” and “==”.
  4. Define ternary operator.
  5. The associativity of && is \_\_\_\_\_ to \_\_\_\_\_.
  6. Array allocates space automatically. (T/F)
  7. \_\_\_\_\_ is used for writing multiline comment.
- Q.2 (a) What are tokens? Explain different classes of tokens.** **07**
- (b) What are data types? Explain basic data types in detail.** **07**
- OR**
- (b) Explain four storage classes of C language.** **07**

- Q.3** (a) Write a program in C Language to find sum of digits of any given number. **07**  
(b) Explain following functions. (1) strcmp( ) (2) strlen( ) (3) strcmp( ) (4) strcat( ) (5) strcpy( ). **07**

**OR**

- Q.3** (a) Write a program to display the following output using C Language. **07**  
A  
B C  
D E F  
G H I J  
(b) What are operators? State different types of operators and explain prefix, postfix operator and relational operator. **07**

- Q.4** (a) What is a typecasting? Write its significance and purpose with suitable example(s). **07**  
(b) Difference between: **07**  
1. Entry control and exit control  
2. Break and continue.

**OR**

- Q.4** (a) Write a program in C Language to accept 10 numbers from the user in an array and display their average. **07**  
(b) What is the use of switch case, explain with proper example. Also explain the use of default. **07**
- Q.5** (a) Explain different format specifier in printf ( ), along with few examples. **07**  
(b) What is function prototype, function definition and function call? – explain with an example. **07**

**OR**

- Q.5** (a) Explain different decision-making statements of C with examples. **07**  
(b) What do you mean by scope and lifetime of a variable? Explain the types of scope. **07**

\*\*\*\*\*