



**Term Evaluation (Even) Semester Examination March 2025**

Roll no.....

Name of the Course: Diploma Engineering

Semester: II

Name of the Paper: Fundamental of Information Technology -II

Paper Code: DTIT (204)

Time: 1.5 hour

**Maximum Marks: 50**

**Note:**

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

**Q1**

a. What are the key stages in the software development life cycle?

OR

b. What is an algorithm? Write an algorithm to check the weather a number is prime or not.

CO1 (10 Marks)

**Q2.**

a. What are the common symbols used in flowcharts? Describe their function with an example to illustrate your explanation.

OR

b. Differentiate between assembly language and machine language and also convert decimal 123 to binary.

CO1 (10 Marks)

**Q3.**

a. Draw a simple flowchart for a program to find area and perimeter of square.

OR

b. What are data types? What is the difference between the integer and float data types in C explain with an example.

CO1 (10 Marks)

**Q4.**

a. How do the scanf() and printf() functions work in C. illustrate with an example.

CO2 (10 Marks)

OR

b. Write a program in C to print your own age and name by taking input from user.

**Q5.**

CO2 (10 Marks)

a. What do you understand by loops? Differentiate between for loop and while loop with an example.

OR

b. What are operators in C?

Consider the following C expression:

```
int a = 10;  
int b = 4;  
int result = a + b * 2;
```

What will the value of result be?