

# ASSIGNMENT -I

## UNIT 1

1. What do you mean by programming language? Explain machine language, assembly language and high level language.
2. Why high level programming is preferred over low level programming language? Explain advantages and disadvantages of high level programming language and low level programming language.
3. What do you mean by language translation? Differentiate compiler and interpreter.
4. Explain different types of software with suitable examples.
5. Explain different generation of computer.
6. Explain the concept of structured programming.
7. Discuss the Significance of Algorithm and Flowchart in Programming.
8. What are the different steps in problem solving using computer? Briefly explain each step.
9. Write an Algorithm and flowchart to find the number given by user is divisible by 2,3, and 6 or not.  
(Perform similar operation to check the number is exactly divisible by 5 but not 7)
10. Write an algorithm and draw a flowchart to find and output all the roots of a quadratic equation, for non-zero coefficients .In case of errors program should report suitable error message
11. Draw a flowchart to read the three sides of triangle and print area of the valid data and to print “invalid data” if either side of one triangle is greater or equals to sum of other two sides.  
(Area=  $\sqrt{s(s-a)(s-b)(s-c)}$  where a, b and c are three sides and  $s = (a+b+c)/2$ .)
12. Write short notes on:
  - Debugging and testing
  - Errors in programming

## UNIT 2

1. Explain the following terms:
  - i. C as a middle level language
  - ii. C as a system programming language
2. Define the following terms with suitable examples.
  - Character set
  - Token
3. Why it is necessary to have knowledge of data type in C programming. Explain all types of data types of data type available in C.

OR

(What are different data types available in C? Explain their type's qualifier, conversion character, range of value and storage size in memory occupied by each type)

4. How can you declare following variables using suitable data types? Mobile phone numbers, address, body, temperature, salary. Also explain each memory occupancy size and range  
(Perform similar operations for Registration number, Account number, age, weight, distance jumped by frog, Examination symbol number of student, Prime number between 5 and 555)
5. Define operator and operand. List the types of operators and explain any five of them.
6. Describe about the unary operator, binary operator and ternary operator with example.

OR

Describe different types of operators on the basis of number of operand.

7. Differentiate between keywords and identifier. Write the rules of naming identifiers in C?

8. Differentiate between variables and constants. Which of the following are invalid variable name and why?

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9. What do you mean by formatted and unformatted i/o functions in C programming. Explain different formatted i/o functions with suitable examples.
10. Write short notes on:
- History of C language
  - Features of C
  - ASCII
  - Format specifier