

**VPMP Polytechnic  
Computer Department**

**BCP (4310702)**

**Assignment: 1**

- 1) What is Flow chart? Draw and Explain symbols of Flowchart.
- 2) Give advantages and disadvantages of flowchart.
- 3) Explain different structure of Flowchart.
- 4) What is Algorithm? Give advantages and disadvantages of Algorithm.
- 5) Draw Flowchart to Calculate the Area of Circle. Write down algorithm for the same.
- 6) Draw Flowchart to find out Maximum number out of two numbers.
- 7) Write an Algorithm to find out whether the given number is odd or even.

**Assignment: 2**

- 1) List the features of C.(List the advantages of C. )
- 2) Draw a basic structure of C program and explain in short.
- 3) Explain C Tokens (with types), keywords and identifiers.
- 4) Explain Constants with example.
- 5) Define variable. List out rules for variable naming.
- 6) List the basic data types with its size and range.
- 7) List operators available in C. Explain Arithmetic, Relational, Logical operators in C.
- 8) Explain Conditional and bitwise operators in C.
- 9) Explain explicit and implicit type casting.
- 10) Evaluate following arithmetic expression.
  - (1)  $x=9-12/3+3*2-1;$
  - (2)  $y=9-12/(3+3)*(2-1)$
  - (3)  $z=9-(12/(3+3)*2)-1$
- 11) Convert the following expression into its equivalent C expression.
  - (1)  $y = ax^2+bx+c$
  - (2)  $y = \frac{m1+m2}{1-m1m2}$
  - (3)  $y = \sqrt{s(s-a)(s-b)(s-c)}$
  - (4)  $y = \sqrt{a^2 + b^2}$

### Assignment-3

- 1) Explain **Nested If-else** statement with example.
- 2) Explain **If-else-if Ladder** statement with example.
- 3) Explain **Switch** statement with example.
- 4) Explain Unconditional branching statement- **goto**.
- 5) Explain **while loop** and **do-while** loop with example.
- 6) Compare While loop and do-while loop.( Compare Entry-control loop and Exit-control loop)
- 7) Explain **for loop** with example.
- 8) Explain **Break** and **continue** statements with example.

### Assignment-4

- 1) Define array. Give characteristics of an array.
- 2) What is an array? How to declare and initialize 1-D array.
- 3) How to declare and initialize 2-D array.
- 4) Write a program to read 5 elements of array and display it.
- 5) Define String. How to declare and initialize string.
- 6) Explain gets ( ) and puts ( ).
- 7) Define pointer. How to declare and initialize pointer.
- 8) Explain void pointer.
- 9) Explain pointer to pointer.

### Assignment-5

- 1) What is user defined(UDF) and library function? Explain with two example of each.
- 2) Explain call by value with example.
- 3) Explain call by reference with example.
- 4) Explain recursion with example.
- 5) Explain following string function with example.  
(1) strcpy() (2) strcat() (3) strcmp() (4) strlen()
- 6) List out math in-built functions.
- 7) List available storage class in C.

### Assignment-6

- 1) Explain enumerated data type with example.
- 2) How to declare a structure? State the difference between structure and union.
- 3) Differentiate between array and structure.
- 4) Define File. List files operations. Explain fscanf() & fprintf ( ) functions with examples.
- 5) Explain fopen() & fclose() functions with examples.