# Tilak Maharashtra Vidyapeeth

Diploma in Engineering

SUB: C Programming

## Assignment No: I

(Write any five)

Q.1 Explain control structures in 'C '

Q.2 Explain string handling in 'C'

Q.3 Write a 'C$^1$ program to define single dimensional array. Explain 2 -

dimensional and multi-dimensional arrays.

Q.4 What is data structure? Which types of control structures are available

in 'C' programming language? Explain one data structure.

Q.5 Write a short note on:

User defined data types.

Q.6 Explain with example accessing structure data member by using and

without using pointers.

Q.7 Write a note on data structures & C. Can you implement data structure

except C language?

## Assignment No: II

(Write any five)

Q.1 Write a short note on:

Application of stack

Q.2 Explain LIFO operation and FIFO operation.

Q.3 Distinguish between static and dynamic memory allocation.

Q.4 Explain Quick sort with an example.

Q.5 Explain Linear and binary search with example.

Q.6 What do you mean by sorting? State the different methods of sorting?

Explain bubble sort with the help of an example.

Q.7 What are queues? Explain in detail and compare it with stack.

## Assignment No: III

(Write any five)

Q.1 Show the binary expression tree that represents the following preorder

expression.

*- + a b c - d  + e If+ g h

Q.2 In what way tree data structure differ from graph data structure? List

methods for representing graph data structures.

Q.3 What is a hash function? Explain overflow and collision.

Q.4 Write a Short note on: binary tree traversal techniques.

Q.5 Write a note on graph Terminologies.