## Pune Vidyarthi Griha's

## COLLEGE OF ENGINEERING, NASHIK – 4

## **COMPUTER ENGINEERING DEPARTMENT**

Subject : FDS  $\underline{ASSIGNMENT NO - 04}$  Unit : IVs

- 1. Compare Singly, Doubly and Circular Linked List.
- 2. Explain **Generalized Linked List** with suitable example.
- 3. Explain **polynomial representation** using linked list with an example.
- 4. Represent the following using **GLL**:

$$(\mathbf{p},\mathbf{q}(\mathbf{r},\mathbf{s}(\mathbf{u},\mathbf{v}),\mathbf{w})\,(\mathbf{x},\mathbf{y}))$$

5. Represent the following polynomial by **using-generalized linked list**:

- 6. Write a pseudo C++ code to reverse singly linked list
- 7. Write pseudo C++ code to represent singly linked list as an ADT.
- 8. Write pseudo C++ code to represent doubly linked list as an ADT.
- 9. Write pseudo C++ code to represent **circular linked list as an ADT**.
- 10. Write pseudo C++ code for **polynomial addition** using singly linked list.
- 11. Write a pseudo C++ code to **delete intermediate node** from singly linked list.
- 12. Write an algorithm to perform the following operations on singly linked list:
  - 1. Reverse
  - 2. Sort
- 13. Write pseudo C++ code to delete a node from a doubly linked list.

\*\*\*\*\*\* Best of Luck \*\*\*\*\*\*\*\*\*\*\*