Pune Vidyarthi Griha's COLLEGE OF ENGINEERING, NASHIK – 4

COMPUTER ENGINEERING DEPARTMENT

Subject : FDS <u>ASSIGNMENT NO – 02</u> Unit : II

- 1. Define & explain the term i) Sequential Organization.
 - ii) Ordered List
- 2. Explain **polynomial representation using arrays** with suitable example
- 3. Derive address calculation formula for one-dimensional array with one example.
- 4. Explain **two-dimensional arrays** with row and column major implementation. Explain address calculation in both cases with example.
- 5. What is **sparse matrix**? Explain with suitable example.
- 6. Explain **fast Transpose of sparse matrix** with suitable example, Discuss time complexity of fast transpose.
- 7. Write pseudo Python code to perform simple transpose of sparse matrix. Discuss its time complexity.
- 8. Write pseudo Python code to perform polynomial multiplication using array.
- 9. Write pseudo Python code **for reversing a string** and state its time complexity.
- 10. Write pseudo Python code that count number of times a given int/data occurs in array.