

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

Subject : FDS

ASSIGNMENT NO – 01

Unit - I

1. Define and explain the following terms : (i) **Data** (ii) **Data structure**
(iii) **Flowchart.**
2. Define **algorithms** and explain its characteristics.
3. Explain the **divide and conquer strategy** with suitable example. Comment on its time complexity.
4. Explain the **Asymptotic notation** Big O, Omega and Theta with suitable example.
5. Explain **static and dynamic data structures** with examples.
6. Differentiate between **linear and non-linear data structure** with example.
7. Explain the **Greedy strategy** with suitable example. Comment on its time complexity.
8. Define and explain **ADT(Abstract Data Type).**
9. State Analysis of programming constructs - Linear, Quadratic, Cubic, Logarithmic
10. Define and explain the following terms :
 - (a) Linear data structure
 - (b) Non-linear data structure
 - (c) Time complexity
 - (d) Space complexity

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