

3rd semester (SE)
Data structure Assignment

Full marks = 30

2 x 10 = 20

1 (a) What are the main objectives of data structure?

(b) Define data structure with example.

(c) List out the different ways to implement the list?

(d) Define singly linked list with neat diagram.

(e) List out the advantages and disadvantages of singly linked list.

(f) Define double linked list with neat diagram.

(g) What are the two basic types of data structures?

(h) State the operations on stack. Define them and give the diagrammatic representation.

(i) What is the purpose of top and pop?

(j) State the applications of stack.

Each question carries 5 marks $5 \times 2 = 10$

2 (a) What is a stack? What are the applications of stack?

(b) How is a stack different from a queue?