

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
Computer Science & Engineering-AI&ML
B. Tech. Sem - III :SUMMER : 2023
SUBJECT : DATA STRUCTURES

Day : Friday

Time : 02:30 PM-05:30 PM

Date : 12-05-2023

S-23937-2023

Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
 - 4) Assume suitable data if necessary.
-

Q. 1 Explain two dimensional array in function. [10]

OR

Q.1 Why we need of data structure? Explain abstract data types in detail. [10]

Q.2 What is Circular linked list? Explain using suitable example. [10]

OR

Q.2 What are limitation of Singly link list? Explain how to add node in singly linked list using suitable example. [10]

Q.3 How to implement stack using array? Explain using suitable example. [10]

OR

Q.3 How stack is useful for the reverse the converting binary to decimal? [10]

Q.4 What is queue? Explain Priority queue in detail. [10]

OR

Q.4 How to implement queue using linked list? [10]

Q.5 What is Hashing? Explain Hash Function using suitable example. [10]

OR

Q.5 What is merge sort? Explain using suitable example. [10]

Q.6 How to create file to store the Employee information like, Employee name, id, Dept., Salary, no. of experience etc., and display it? [10]

OR

Q.6 Explain File Organization in detail. [10]

* * * *
