

No Preview
Available

Total No. of Question : [4]

Registration No. :

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Programme Name : Computer Science & Engineering(DS)

Regular S.Y.B.Tech. ESE (A.Y. 2023-24) Sem. III Nov.2023

III SEMESTER (2022 BATCH)

201DSL204-Data Structures-TH

Duration : [11:00 AM - 01:00 PM]

Date : 30 Nov, 2023

Day : Thursday

Marks : 50

Instructions :

(Q1) All Questions are compulsory. [20.0]

(1.1) Explain different operations on data structures in detail. [6.0]

CO :- 204.1

Blooms Taxonomy :- Understand

(1.2) Explain the concept of Stack and its operations [7.0]

CO :- 204.2

Blooms Taxonomy :- Understand

(1.3) Explain concept of Queue and operations in detail. [7.0]

CO :- 204.2

Blooms Taxonomy :- Understand

(Q2) All Questions are compulsory. [10.0]

(2.1) Explain the concept of traversing in Doubly Linked list. [4.0]

CO :- 204.2

Blooms Taxonomy :- Understand

(2.2) Explain the Singly Linked List and write the algorithm to delete the node from singly linked list. [6.0]

CO :- 204.2

Blooms Taxonomy :- Understand

OR [2.2 / 2.3]

(2.3) Explain the Singly Linked List and write the algorithm to insert the node in singly linked list. [6.0]

CO :- 204.2

Blooms Taxonomy :- Understand

(Q3) All Questions are compulsory. [10.0]

(3.1) What is a Binary Search Tree? [3.0]

CO :- 204.3

Blooms Taxonomy :- Understand

(3.2) Explain the algorithm for inserting the node in Binary Search Tree. [7.0]

CO :- 204.3

Blooms Taxonomy :- Understand

OR [3.2 / 3.3]

(3.3) Explain the algorithm for deleting the node from Binary Search Tree. [7.0]

CO :- 204.3

Blooms Taxonomy :- Understand

(Q4) Attempt any two out of three questions. [10.0]

(4.1) Explain the graph terminology. Write a short note on Directed Graphs. [5.0]

CO :- 204.4

Blooms Taxonomy :- Understand

(4.2) Write a short note on Breadth-First Search Algorithm. [5.0]

CO :- 204.4

Blooms Taxonomy :- Understand

(4.3) Explain Depth-first Search Algorithm in detail. [5.0]

CO :- 204.4

Blooms Taxonomy :- Understand
