

CONFIDENTIAL



**INTERNAL EXAMINATION
JUNE SEMESTER 2021**

**BACHELOR OF COMPUTER SCIENCE (HONS.)
(IN COLLABORATION WITH IUKL)**

**DATA STRUCTURE AND ALGORITHMS
(CSC2516)**

(TIME: 1 HOUR)

MATRIC NO. :

IC. / PASSPORT NO. :

LECTURER : PRAKASH CHANDRA

GENERAL INSTRUCTIONS

1. This question booklet consists of 2 printed pages including this page.
2. Answer **ALL** questions in the **ANSWER BOOKLET**.
3. **PLEASE DO NOT TURN THIS PAGE AND START THE EXAM UNTIL YOU ARE TOLD TO DO SO.**

CONFIDENTIAL

(30 MARKS)

There are FOUR (4) questions in this section. Answer ALL Questions in the ANSWER BOOKLET.

1. Explain data structures and its importance. Also list at least 5 data structures.
(5 marks)
(CLO1:PLO1:C2)
2. Explain the working of linear search algorithm and analyze its efficiency.
(7 marks)
(CLO1:PLO1:C2)
3. For doubly linked list:
 - a. Write C program for Insertion, Deletion and Search operation uses in real world applications.
(10 marks)
(CLO1:PLO1:C2)
4. For the given list of numbers:
[15, 8, 25, 40, 7, 9, 10]
 - a. Create binary search tree.
(2 marks)
 - b. Find Inorder, Preorder and Postorder traversal of created binary search tree.
(6 marks)
(CLO1:PLO1:C2)

***** END OF QUESTIONS *****