



Bachelor in Information Technology

Mid Term Evaluation

TIME: 1 HOURS 45 MINUTES (1 Hour 15 Minutes writing time 30 minutes Scan and Upload Time)

EXAM DATE: JUNE 27, 2021

SEMESTER: BIT III

SUBJECT: Data Structure &
Algorithm

LECTURER: Saroj Ghimire

INSTRUCTIONS:

1. Section A is compulsory.
2. Please start every question on a new page.
3. Answers will not be marked if it is illegible.

Question Number	A	Total
1,2,3,4,5		/35

Section A

Attempt All the Questions

(Marks 5 x 7 = 35)

1. Define minimum spanning tree. Explain the Kruskal algorithm with suitable example.(2+5)
2. Write recursive algorithm to get Fibonacci term. Why do we need recursion?(4+3)
3. Define stack as an ADT. Explain the condition that is to be checked for Push operation.(Stack)(3+4)
4. How balance factor is calculated in AVL tree. Construct an AVL Tree by inserting numbers from 1 to 8. (2+5)
5. Write algorithm for infix to prefix conversion with suitable example. (7)

Best of Luck