CSc.154-2074

Tribhuvan University
Institute of Science and Technology
2074

Bachelor Level I First Year/ Second Semester/ Science   FullMarks:60
Computer Science and Information Technology (CSc.154)   Pass Marks:24
 (Data Structure and Algorithm)   Time: 3 hours.

Candidates are required to give their answers in their own words as for as practicable. The figures in the margin indicate full marks.

Section A

Attempt any two questions. (2x10 20)

1. Illustrate the algorithm for Binary search tree with example.
2. What do you mean by circular list? Differentiate between stack as a circular list and Queue as a circular list.
3. Explain the procedure for construction of Huffman algorithm with example.

Section B

Attempt any eight questions.

4. Differentiate between sinteture and union.
 5. Describe the Big '0' notation.
6. Explain the infix to post fix conversion algorithm.
7. Explain the Tower of Hanoi (TOH) with practical example.
8. Vale do you mean by double linked list? Explain with example.
 9. What are the types of binary tree? Compare between them.
10. Differentiate between pre-order traversal and in order traversal.
11. What do you mean by sorting? Explain the Bubble sort with example.
12. Differeutiate betweva sequential searching and binary searching.

13. Discuss the Kruskal's algorithm with example.

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