

**DIRECTORATE OF DISTANCE EDUCATION  
ALAGAPPA UNIVERSITY, KARAİKUDI**

**INTERNAL ASSESSMENT  
(Academic Year 2018-19 On wards)**

Programme Code	130
Programme Name	B. Sc (Computer Science) & Lateral

**III SEMESTER  
ASSIGNMENT/PRACTICAL QUESTIONS**

Paper Code : 13033/13233	Maximum Marks: 25
Paper Title : Data Structures and Algorithms	
<ol style="list-style-type: none"><li>1. Write some points of differences between linear and non-linear data structures.</li><li>2. What do you mean by time and space complexity of algorithms?</li><li>3. Describe the memory representation of a two-dimensional array.</li><li>4. State and explain an algorithm to convert an expression from infix notation to prefix notation.</li><li>5. Explain about Insertion sort with an algorithm and examples.</li></ol>	

Paper Code : 13034/13234	Maximum Marks: 25
Paper Title : LAB – Data Structures and Algorithms	
<ol style="list-style-type: none"><li>1. Write a C++ program for implement singly linked list.</li><li>2. Write a C++ program for Insertion, Deletion and Traversal in Binary Search Tree.</li><li>3. Write a C++ program to merge two sorted linked lists</li><li>4. Program for Kruskal's algorithm to find Minimum Spanning Tree of a given connected, undirected and weighted graph.</li><li>5. Prepare a C++ program for Merge Sort.</li></ol>	