

D02/P30/P32/T60/CMP202/EE/20170529

Time : 3 Hours

Marks : 80

Instructions :

1. All Questions are Compulsory.
 2. Each Sub-question carry 5 marks.
 3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
 4. Question paper of 80 Marks, it will be converted in to your programme structure marks.
-

1. Solve any **four** sub-questions.
 - a) Define Data structure? 5
 - b) What is time complexity? 5
 - c) Explain the Merge Sort with example. 5
 - d) What is sparse matrix? Give example of it. 5
 - e) What is Linked List? 5

2. Solve any **four** sub-questions.
 - a) Difference between Circular and Double Linked List. 5
 - b) What is Stack? List the operation of Stack. 5
 - c) What is Queue? List the operation of Queue. 5
 - d) Write a short note on Binary Search Tree. 5
 - e) Explain the term Garbage Collection. 5

3. Solve any **four** sub-questions.
- a) What is searching? Explain Linear Search with example. 5
 - b) Define Structures. 5
 - c) What is Dynamic Memory Allocation? 5
 - d) Explain the Tree structure. 5
 - e) Write a short note on Heap. 5
4. Solve any **four** sub-questions.
- a) Explain the bitwise operators. 5
 - b) What is Algorithm? List the features of Algorithm. 5
 - c) What is Hashing? What are the hashing operations? 5
 - d) Explain Spanning Tree. 5
 - e) List various Data types in C. 5

