Note: Important points while writing answers for coding subjects:-

1. Code must be there.

2.Examples must be there.

3. Problem solving questions, steps must be there.

4. Pseudocode/algorithm must be there with steps.

5.Wherever flowchart and block diagrams, graphs needed, must include.

Practise Questions for Endterm:

1) Explain the classification of data structures.
2) Define the following: Data, Data Objects, Data Structures with examples.
3) Explain the different datatypes used in C.
4) Explain C Decision Making statements with examples.
5) Question on: Explain space and time complexity. Discuss the method used to find the frequency count and time complexity. Find the frequency count and time complexity for code snippets.
6) Explain Asymptotic notations: Big-O, theta and omega.
7) Explain arrays and its types by providing examples.
8) What is LL? Explain its types.
9) Write a program to add two matrices using 2D arrays.
10) What is SLL? List all the operations performed on SLL. Explain those operations.
11) What is DLL? How is it different from SLL.
12) Differentiate among SLL, DLL and CLL.
13) Give the advantages of DLL over SLL and CLL over DLL.
14) What is ADT explain with example.
15) Explain about dynamic memory allocation and list functions used in memory management.
16) Write a note on malloc().
17) Write a note on Stack and its operations, psuedocode/algorithm.
18) List and explain the applications of stack.
19) Brief about the representation of stack using arrays and LL with example.
20) Program to perform BT traversals.
21) Program to perform stack operations
22) Program to perfrom queue operations.
23) Explain Queue and its operations, algorithm, pseudocode, example.
24) Problem on converting infix to postfix expression.
25) List and Explain the applications of queue.
26) Write a note on Double ended queue, circular queue.(note: must include operations, pseudocode and example)
27) Write a C program on BFS, DFS.

28) Explain the steps involved in BFS, DFS(Pseudocode, alogrithm,example).
29) Question Prims algorithm, Kruskals algorithm for MST.
30) Question on problem solving to find MST using Prim's Algorithm.
31) Question on problem solving to find MST using Kruskal's Algorithm
32) Problem on finding shortest distance from source to all other vertices using Dijkstra's Algorithm.
33) Problem on finding tree traversals inorder, preorder,postorder.
34) Applications of tree.
35) Applications of graph ST,MST,Shortest path
36) What is BST property?
37) Explain recursion using stack.
38) Tree terminologies with example.
39) Graph terminologies with example.
40) Explain algorithms prim's/kruskal's/dijkstra's with example.