

Final Exam, Summer 2021
CSE 225: Data Structure and Algorithms
Total Marks: 30
(Objective 20 + Subjective 10)
Faculty: SAK1
Section: 14

Due Date and Time: September 18, 2021 (Saturday 02:35 PM)

Submission Guideline:

- Write your answer (handwritten) on the paper, **scan the answer script as a single pdf** and submit the pdf file.
- You may consult textbooks and online sources. But, don't copy the code or text from other sources. If you take support from online resources, please mention the sources.
- It is not allowed to consult with any person who has knowledge of this subject, including other students of this course. All solutions have to be your own work.
- You must show all work for each problem to receive full credit.

In the front page, write your identity information like Full Name, ID, Section, etc.

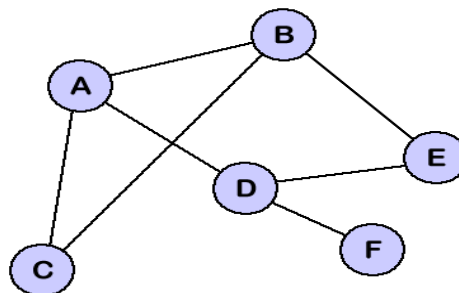
Please answer the below question.

Marks

10

This question is based on the graph given on the right side.

Simulate traversal of all vertices starting at node 'A' using **Breadth First Search (BFS)**. Use alphabetical order to break ties.



Show the state of your auxiliary data structures (e.g., stack/queue) at each step.

Best of Luck!