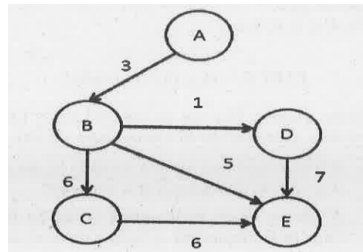


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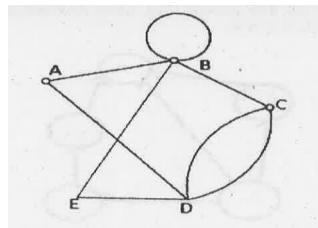
Slot 1 -15.11.2022

SET A

1. Apply an appropriate algorithm to find the shortest path from A to every other node of A. For the given graph



- 2.i) Find an Euler path or an Euler circuit for the following graph



- ii) Write a program to find an Euler circuit in a graph

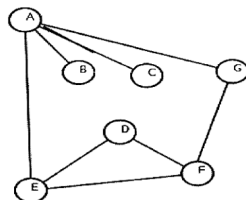
3. i) Compare B tree with B+ tree

- ii) Create a B+ tree of order 5 for the following data arriving in sequence

90,27,7,9,18,21,3,4,16,11,21,72

4. i) Give the graph traversal procedures for DFS and BFS

- ii) Give the order of traversing the nodes of the graph given when DFS and BFS are applied on the same



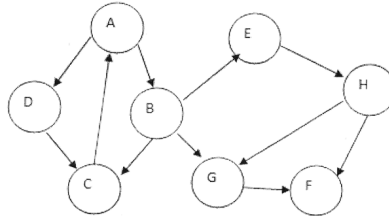
5. State and explain topological sort with examples

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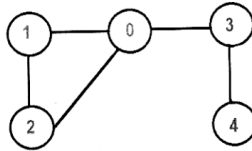
Slot 1 -15.11.2022

SET B

1. State and Explain topological sort with examples.
2. Consider the following graph, in what order will the nodes be visited using Breadth First Search and Depth First Search and give the routine for the same



3. i) What are Eulerian circuit and Eulerian paths ?
ii) Give the procedure to determine Euler circuit
iii) Does the figure has Euler circuits ?
iv) Does it have Euler path. If so list.



4. i) Compare B tree with B+ tree
ii) Create a B tree of order 5 for the following data arriving in sequence
3,14,7,1,8,5,11,17,13,6,23,12,20,26,4,16,18,24,25 and 19.
5. Apply an appropriate algorithm to find the shortest path from A to every other node of A. For the given graph

