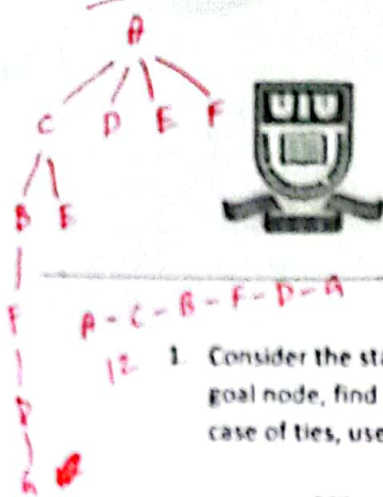
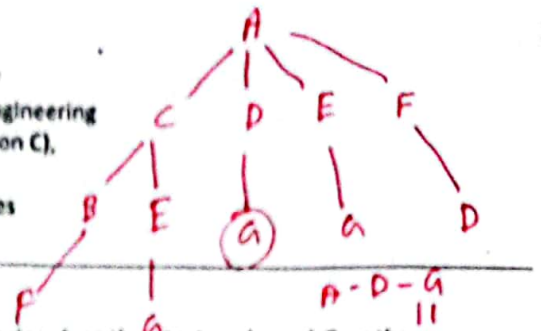


DFS

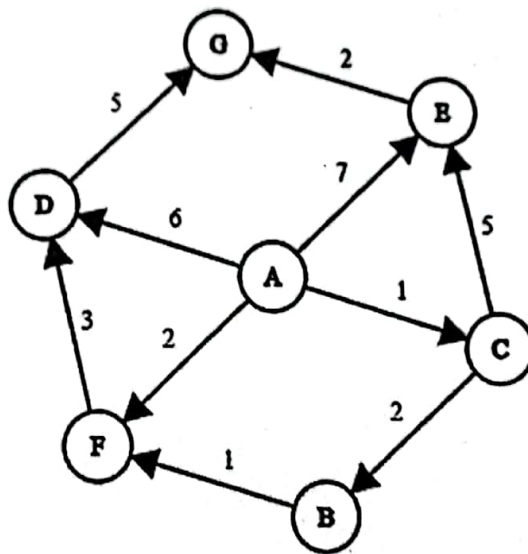


BFS

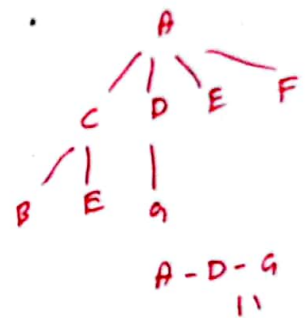


1. Consider the state-space graph in the following figure. Considering A as the start node and G as the goal node, find out the solution paths and costs returned by the following tree-search algorithms. In case of ties, use alphabetical order to choose nodes. [2+2+2+4+6]

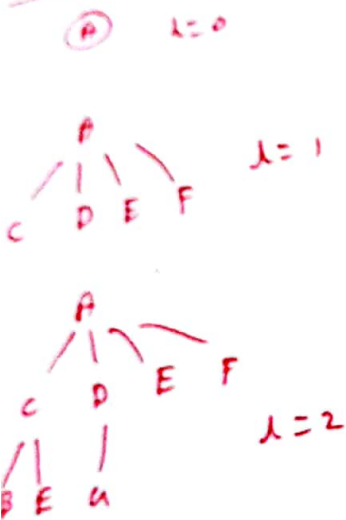
a. BFS   b. DFS   c. DLS(depth limit = 2)   d. IDS   e. UCS



DLS



IDS



2. Is Iterative Deepening Search complete? Is it optimal? What is the time and space complexity? Explain your answer. [4]

UCS

