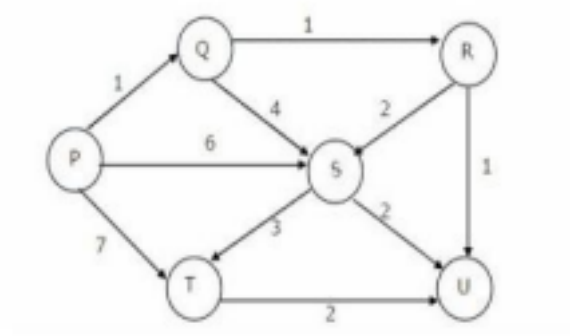
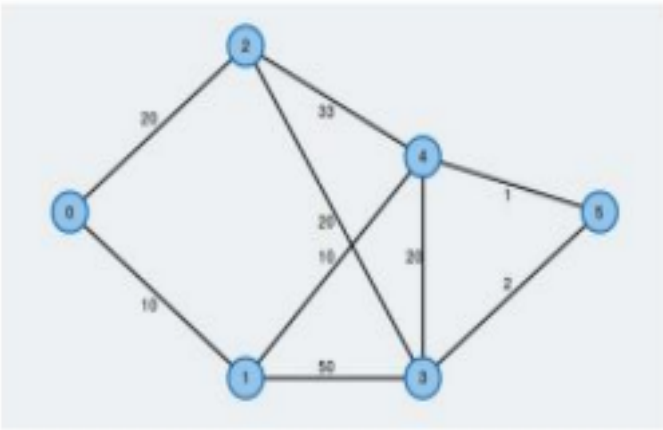
# Practice Sheet 2

**Q1)**



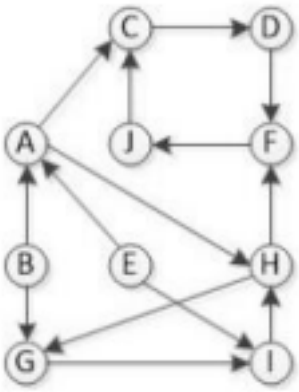

**Run Dijkstra's algorithm on the above graph to find the shortest weighted path from 'P' to 'U'.**

**Q2)**



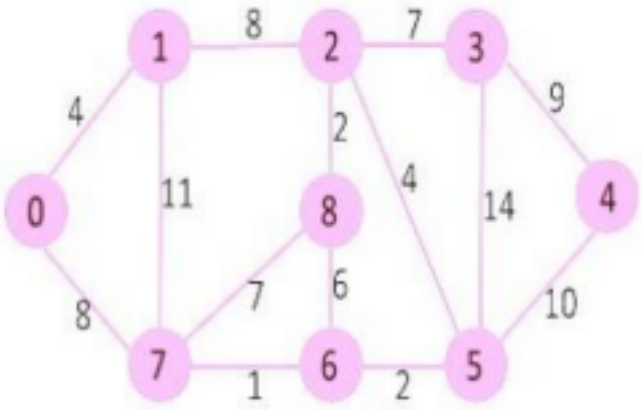

**Apply Prim's algorithm to find the Minimum Spanning Tree of the following graph.**

**Q3)**



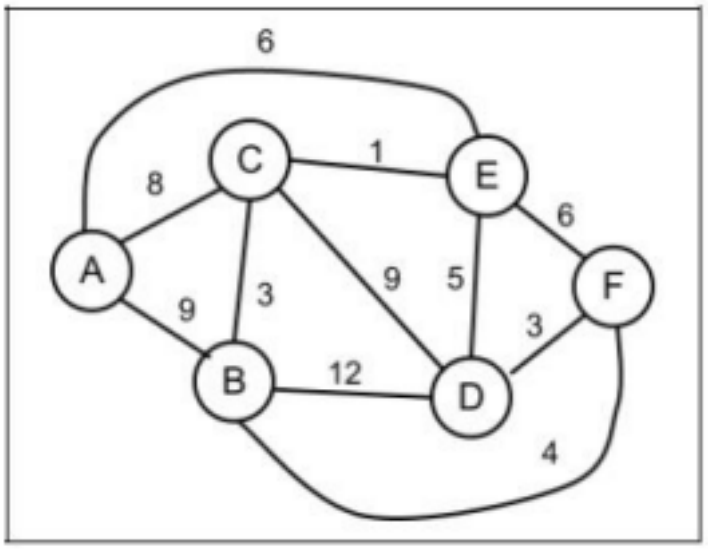

**Find the strongly connected components in the following graph.**

**Q4)**




**Find the minimum spanning tree of the following graph using kruskal's algorithm.**

**Q5)**




**Consider the following graph of a road network. You are planning to connect all of your friends staying at those locations virtually by setting up a broadband network. Determine the total distance you need to cover for broadband set-up such that the total distance will be minimum among all possible ways of connecting your friends virtually.**