

2023

COMPUTER SCIENCE — HONOURS — PRACTICAL

Paper : CC-9P

Full Marks : 30

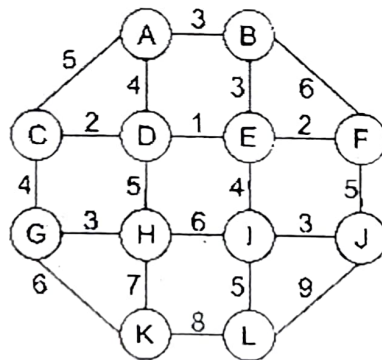
SET - 1

Marks Distribution :

Source Code :	10
Algorithm :	05
Output :	05
Sessional :	04
Viva voce :	06

Answer *any one* question.

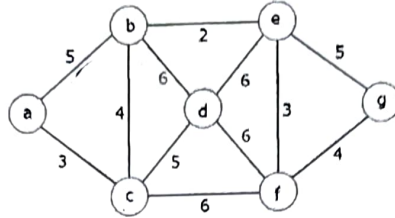
1. Write a C program to implement Prim's Algorithm on the following graph to generate Minimum cost spanning tree.



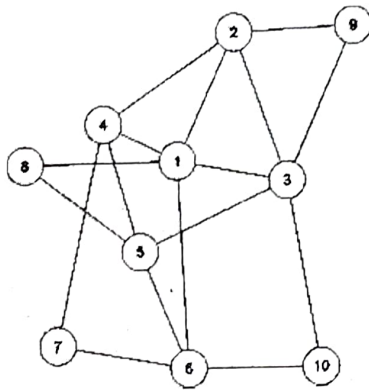
(2)

Z(4th Sm.)-Computer Sc.-II/Pr./CC-9P/CBCS/Set-I

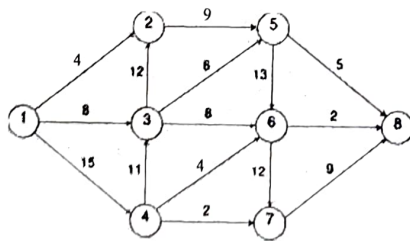
2. Write a C program to implement a minimum cost path using Dijkstra's algorithm on the following graph from 'a' to 'g'. Output corresponding minimum cost and vertices minimum cost path.



3. Write a C program to apply DFS algorithm on the following graph.



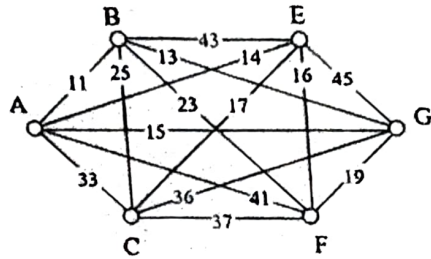
4. Write a C program and apply Floyd Warshall's Algorithm to generate all possible shortest paths among all pairs of two vertices on the graph given below. Output the shortest paths between each pair of vertices.



(3)

Z(4th Sm.)-Computer Sc.-H/Pr./CC-9P/CBCS/Set-1

5. Write a C program to find minimum cost spanning tree from the given graph using Kruskal's algorithm.



6. Write a C program to apply BFS on the following graph and generate a tree.

