## Assignment-IV <br> MODULE-4 <br> (TREE AND SHORTEST PATH)

1. Apply the Dijkstra's method to find the Shortest distance and Shortest path between the two vertices a and $f$ in the graph

2. Apply the Dijkstra's method to find the Shortest path between the two vertices a and $f$ in the graph

3. A Graph is given below
(a) Find the distance between $v_{1}$ and $v_{4}$.
(b) Find the diam(G).
(c) Find one circuit Which includes $v_{1}$.

4. Apply the Dijkstra's method to find the Shortest distance and Shortest path between the two vertices $v_{1}$ and $v_{4}$ in the graph

5. Apply the Dijkstra's method to find the Shortest distance and Shortest path between the specified vertices of the following graph
(i) Between a and f

(ii) Between $v_{1}$ and $v_{4}$

(iii) Between A and G

