Question 1:

Bucket algorithm, used to check if the graph is connected or not, is converted into Dijekstra with some logical additions. It gives the minimum distance of each vertex from root. In this way, we traverse through all the vertices of the graph but intelligently selecting the vertex with minimum distance. It gives us the route to traverse the whole graph with minimum cost.

Question 2:

Following are the questions, Dijekstra can answer.

1. Going from one city to other, with minimum distance, how many cities you cross?
2. In what minimum time, one can travel across these cities?
3. For a travel company, it is helpful to know, what route to be followed, for minimum travel expenses?
4. Those who love travelling, can check, on what route to their destination, they can cross more cities with minimum distance, minimum expense?