

## Quiz 1

### Question 1.

- (a) Big data has the 4V properties. Use the operation of **Amazon** to explain the terms:  
Volume and Velocity in Big Data.

(6 marks)

- (b) Use WhatsApp to explain the concept of unstructured data.

(3 marks)

### Question 2.

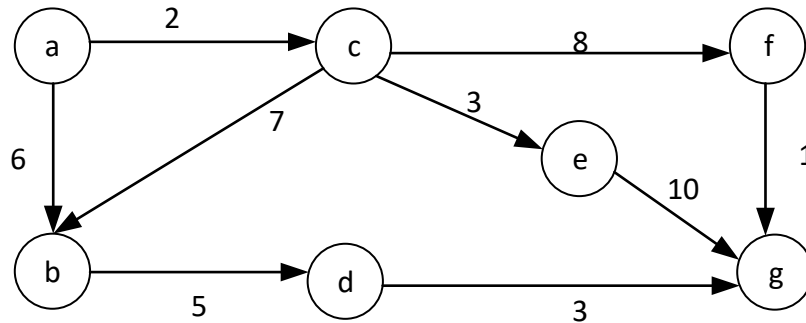


Figure Q2

Figure Q3 show a weighted digraph.

- (a) What is the adjacency matrix of the weighted digraph?

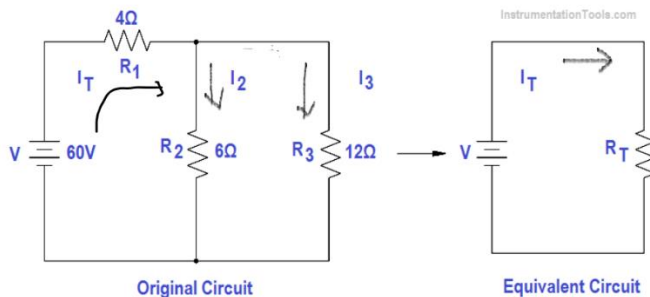
(3 marks)

- (b) Use the Dijkstra's Algorithm to find the shortest path from node-a to node-g. **Show your steps.**

(8 marks)

### Question 3

Determine  $I_2$ ,  $I_3$ ,  $I_T$ ,  $R_T$ . Clearly state the physics laws used in your formulation.



(10 marks)