

### Quiz 3

### Algorithm Section B - FALL 2016

Q 1: Assume that you want to go to from FAST to railway station and it will take following amount of time on a particular route. FAST to kalma chowk takes 10 minutes, FAST to canal road takes 4 minutes, Kalma chowk to Mall road takes 6 minutes, Canal to Mall rd takes 7, Mall to station in 5 minutes, Canal to station via scheme more takes 14 minutes.

- a. How can you represent this as a graph?  
(3)
- b. What is the shortest path from FAST to railway station? Show the path clearly and total minutes taken by you path. (3)
- c. Which algorithm will you use for this calculation? (1) Bonus

Q 2: What is the space requirements of adjacency list? Write in terms of V and E.

Q 3: What is the space requirements of adjacency matrix? Write in terms of V and E.

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