Register No: Date:

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE

II SEMESTER EXAMINATION, MARCH-APRIL 2018

M.SC. BIG DATA ANALYTICS

BDA 2116 : FOUNDATION OF DATA SCIENCE

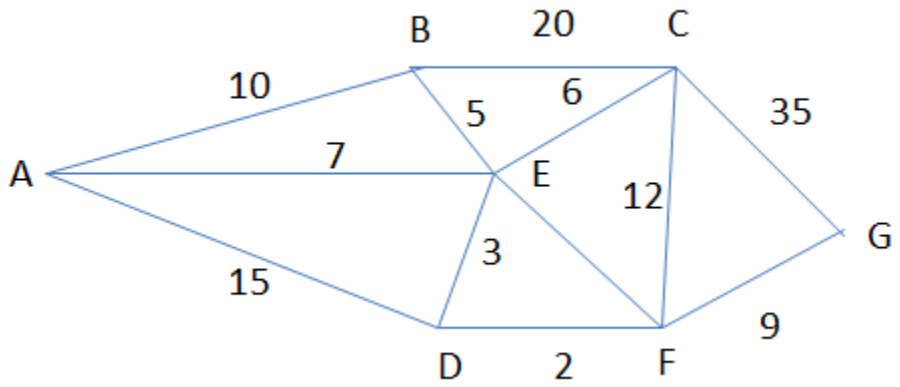
TIME 2.5 HRS **MAX MARKS 70**

This Question Paper Contains one printed paper

PART-A

ANSWER ANY SEVEN QUESTIONS **7 X10 = 70**

1. Using Dijkstra's algorithm find the shortest path of the given directed graph between A to G .



2. Explain Kruskal's algorithm with example. (10)
3. (a) Create a list of the five most important things that you learned about high dimensions. (5)

   (b) Write a short essay whose purpose is to excite a college freshman to learn about high dimensions. (5)
4. Explain properties of High dimensional space.
5. a) Explain Jaccard similarity with a suitable example.
   b) What do you mean by Erdo and Renyi's G(n,p) model on random graph? How is it different from regular graph?

   (5+5)
6. Write and explain the algorithm for finding SVD using Power method. (10)

7. a) What is stream model? How is it different from DBMS?
   b) Give three different applications of stream model. (5+5)

8. Explain the frequency moment of data stream. (10)
9. Explain reflection principle with suitable example. (10)