CODE NO:- Z-8215 [Total No. of Printed Pages:1] **FACULTY OF ENGINEERING & TECHNOLOGY** M.E(CSE)Year Examination June-2015 **Data Mining and Big Data**

[Time: Three Hours]

[Max. Marks: 80]

"Please check whether you have got the right question paper."

- *i)* Solve <u>any 2</u> questions from each section.
- *ii)* Figure to the right indicate full marks.

iii) Assume suitable date wherever necessary.

SECTION A

Q.1	a)	What is constraint based association mining? What are the different types of constraints?	10
	b)	With an example, show how to generate association rules from the frequent item sets	10
Q.2	a)	Cluster following points in three clusters. Take initially A1, B1, C1 as a center points. Use K –means algorithms to show only the three cluster centers after the final round of execution. A1(2,10) A2(2,5) A3(8,4) B1(5,8) B2(7,5) B3(6,4) C1(1,2) C2(4,9) (use Euclidean distance)	12
	b)	With an example explain how hierarchical clustering works 1)Single linkage 2) Complete Linkage	08
Q.3	a)	What is temporal mining? Describe any one application which is based on it	10
	b)	What is social networking analysis (SNA). How graph techniques is used for SNA	10
		SECTION B	
Q.4	a)	How to improve Data Access in Hadoop using HBase, Sqoop, and Flume	10
	b)	A cloud uses 2000 nodes for data processing and has a processing capacity of 50 GB per hour .	10
		Considering the charges as 0.4USD per node per hour calculate the total cost and time required for processing one zettabyte of data on this cloud.	
Q.5	a)	What is objective based data products?	10

- How will you apply drive train approach for marketing purpose? b) Explain in brief how the application of spreadsheet got enriched to dashboard 10
- Q.6 a) Due to a huge collection of data in advance, is there any' dark side of data'? Explain with an example 10 b) Describe in brief 1) What to watch in Big Data 10

2) Map reduce and parallel DBMS technology