



16

Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous College Affiliated to University of Mumbai)

End Semester Examination

Nov-Dec 2017

Max. Marks: 100

Class: ME

Course Code: CE912

Name of the Course: **Big Data Analytics and Management(BDAM)**

Duration: 180 Minutes

Semester: I

Branch: Computer

Instructions:

- (1) All Questions are Compulsory
- (2) Draw neat diagrams
- (3) Assume suitable data if necessary

Question No.		Max. Marks	CO
Q 1 (a)	What are the advantages of Big data Analytics as compared to traditional analytical model and advantages of Hadoop in particular over RDBMS	10	1
Q 1 (b)	Illustrate Hadoop Architecture. Give functionality of each component like NN, DN, JT, TT etc	10	1
Q 2 a)	<p>Write a Map Reduce program for word count of large data. Give the output at each stage ie mapper stage and reduce stage</p> <p>OR</p> <p>Write the program for the following scenario -</p> <p>Let there be a file : custs.txt</p> <p>where col1 - cust_id col2 - first_name col3 - last_name col4 - age col5 - designation</p> <p>Write a Map Reduce program to find out Designation wise Customer count like -how many doctors are there in the file or how many lawyers are there in the file.</p>	10	2
Q2(b)	Explain Natural join by map reduce with an example . Write its pseudo code.	10	2



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous College Affiliated to University of Mumbai)

	OR Explain grouping and aggregation by map reduce with an example. Write its pseudo code.		
Q3 (a)	Describe stream clustering algorithm. Explain initialization, merging buckets and answering queries.	10	3
Q3 (b)	what is sentiment analysis? Explain in brief.	10	3
Q4 (a)	Give the analysis of Flajolet-Martin algorithm.	10	4
Q4 (b)	Describe data stream model in details with examples. OR Give different techniques to combat link spam	10	4
5 (a)	what are the different types of load scenarios in Hadoop. Explain with examples.	10	5
Q 5(b)	Describe Sqoop along with its working? Give its import command. OR Explain working of Flume with the help of diagrams.	10	5