



Sardar Patel Institute of Technology

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

Mid Semester Examination

March 2019

Max. Marks: 20

Class: BEIT

Course Code: IT802

Name of the Course: Big Data Analytics

Duration: 60 Minutes

Semester: VIII

Branch: IT

Instructions:

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

Question No.		Max. Marks	CO
Q 1	Discuss Hadoop Ecosystem in brief with diagram Diagram 2M Explanation of components(3M)	05	CO1
Q 2	Explain BASE Transactions along with its characteristics Explanation of BASE - 3M Characteristics – 2M OR Identify any 2 different NOSQL architectural patterns along with it's usage and examples. Type I—Explanation (1M) Typical usage (1M) Examples (0.5M) Type II— Explanation (1M) Typical usage (1M) Examples (0.5M)	05	CO2
Q3	Draw a web graph of your choice of 6 nodes. Write page rank flow equations for each node of this graph. Write Matrix formulation and solve for 3 iterations using basic page rank algorithm. Pagerank flow equations of all 6 nodes – 3M Matrix formulation – 0.5M 3 iterations using basic page rank algorithm – 1.5M	05	CO2



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Q4	<p>With example show that Multi stage Algorithm is suitable for big data as compare to traditional Apriori algorithm. (only 1 iteration)</p> <p>Memory picture of Multi stage Algorithm with explanation – 1.5M Compare memory requirement of Apriori and Multi stage Algorithm -1.5M Working of Multi stage Algorithm (only 1 iteration) - 2M</p> <p style="text-align: center;">OR</p> <p>With example show that Multi hash Algorithm is suitable for big data as compared to traditional Apriori algorithm. (only 1 iteration)</p> <p>Memory picture of Multi hash Algorithm with explanation – 1.5M Compare memory requirement of Apriori and Multi hash Algorithm -1.5M Working of Multi hash Algorithm (only 1 iteration) - 2M</p>	05	CO3
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