

K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

8/12/2022

Nov – Dec 2022 (B. Tech) Program: Electronics and Telecommunication Examination: LY Semester: VII Course Code: EXDLC7034 Course Name: Big Data Analytics Max. Marks: 60				
Duration: 2.5 Hours				
Instructions: (1) All questions are compulsory. (2) Draw neat diagrams wherever applicable. (3) Assume suitable data, if necessary.				
		Max. Marks	CO	BT level
Q 1	Solve any six questions out of eight:	12		
i)	What are big data sources ?	02	CO1	U
ii)	Explain functions performed by NameNode.	02	CO3	U
iii)	What is the difference in structured, unstructured and semi-structure databases in big data analytics?	02	CO1	U
iv)	Explain any four characteristics of big data analytics.	02	CO1	U
v)	Explain Bloom filtering with suitable example.	02	CO3	AP
vi)	What do you mean by Data Stream?	02	CO5	U
vii)	Discuss any four HDFS commands in brief.	02	CO2	U
viii)	Explain role of splitter with suitable example in MapReduce Framework	02	CO4	U
Q.2	Solve any four questions out of six.	16		
i)	Difference between NOSQL and RDBMS.	04	CO5	U
ii)	Explain FM algorithm with suitable example.	04	CO4	AP
iii)	Compare Apriori and PCY algorithm for frequent itemset mining	04	CO5	AP
iv)	Compare Traditional and Big Data business approach.	04	CO1	U
v)	Explain collaborative and content based filtering with suitable example	04	CO6	U
vi)	Explain different types of architectural methods used in NOSQL.	04	CO3	U
Q.3	Solve any two questions out of three.	16		

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i)	Explain working of Girvan-Newman algorithm for clustering in social networking graphs with example.	08	CO6	AP
ii)	List Big Data Challenges and solution for each of the challenge.	08	CO1	U
iii)	Explain in detail DGIM Algorithm.	08	CO5	U
Q.4	Solve any two questions out of three.	16		
i)	Explain Page Rank with suitable example and discuss the problem associated with PageRank	08	CO5	AP
ii)	Give functions of all components of Hadoop Ecosystem and explain core components in detail.	08	CO2	U
iii)	Explain NoSQL databases in detail with examples?	08	CO3	U
