



R20 Regulation

Subject code:3E7EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Regular Examinations, November 2023

BIG DATA ANALYTICS (Computer Science and Engineering)

Maximum Marks: 70

Date:08.12.2023 Duration: 3 hours

- Note:
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10x2M=20 Marks)

1	List out the best practices of Big Data Analytics.	L1
2	What is the use of Amazon Elastic Map Reduce?	L1
3	What patterns are found in big data?	L1
4	What is MapReduce pattern in big data analytics?	L1
5	Define Data Acquisition.	L1
6	What is the greatest challenge for implementing a big data solution?	L1
7	What is Writable Interface in Hadoop?	L1
8	Define Map reduce.	L1
9	What are Django's most prominent features?	L1
10	What are the features of NoSQL?	L1

Part-B

Answer All the following questions. (5X10M=50Marks)

11	A. Write in detail about Storage Considerations in Big Data. 5M B. What is CDH in Cloudera and can you list some of Cloudera's competitors? 5M	L2 L2
OR		
12	A. What are the characteristics of Big Data? 5M B. What is Big Data, and where does it come from? How does it work? 5M	L2 L3
13	A. Explain the data architecture pattern in big data? 6M B. What is the mechanism of MapReduce for big data? 4M	L2 L3
OR		
14	A. Write about Working of Columnar Data Model with suitable example. 5M B. What are the different NoSQL document databases supported in cloud? 5M	L2 L3
15	A. Explain the Anatomy of write operation in HDFS. 5M B. What are the various forms of Big Data and explain the suitable Data Exploration techniques. 5M	L2 L2

	OR	
16	A. What is the purpose of publish-subscribe message model? 5M B. What are the different types of message queues? 5M	L4 L2
17	A. With a neat sketch explain the typical architecture of Hadoop cluster. 5M B. Describe the anatomy of Map Reduce program and discuss various types of failures in running a Map Reduce job. 5M	L2 L3
	OR	
18	A. Explain the creating, dropping and altering databases using Apache Hive. 5M B. Explain pig batch analysis with the help of examples. 5M	L2 L3
19	A. How does NoSQL DB budget memory? 5M B. What are the various Relational data bases and how they are used in BDA applications? 5M	L2 L2
	OR	
20	A. When should I use a NoSQL database instead of a relational database? 5M B. How does Django handle security for web applications? 5M	L2 L2