



R20 Regulation

Subject code: 3E7EA

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

## B.Tech VII Semester Supplementary Examinations, December 2024

### BIG DATA ANALYTICS

(Computer Science and Engineering)

Maximum Marks: 70

Date: 7.1.25

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.
  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)			CO
1	What is Analytics?	L1	CO1
2	Explain about HDP?	L1	CO1
3	What is CAP?	L1	CO2
4	List the components of Document Databases?	L1	CO2
5	What is the functionality of big data collection System?	L1	CO3
6	What is HDFS?	L1	CO3
7	Write the Tools and Frame Works of Batch Processing?	L2	CO4
8	What is Apache Spark?	L1	CO4
9	What is Relational Database?	L1	CO5
10	Explain Cassandra Data Model?	L2	CO5

#### Part-B

Answer All the following questions. (10M X 5=50Marks)			
11	Explain the big data stack with the help of neat diagram? [10M]	L2	CO1
OR			
12	A) Explain the analytical patterns by using ALPHA pattern? [5M] B) What are the key frameworks in HDP stack? [5M]	L2	CO1
13	List the classification of NoSQL Databases and explain about key-valued database? [10M]	L1	CO2
OR			
14	A) List the components of data model which used in HBase ? [5M] B) Briefly explain about the Column family database? [5M]	L2	CO2
15	Explain about the publish-subscribe messaging frameworks? [10M]	L2	CO3
OR			
16	A) Draw the Apache Flume architecture. [5M] B) Explain the HDFS architecture. [5M]	L2	CO3

17	Define Hadoop and Map reduce and explain about Hadoop and Map reduce examples? [10M].	L2	CO4
	OR		CO5
18	What are the major components of pig? Illustrate? [10M]	L2	
19	Draw an Django architecture adopts a Model-Template-View (MTV)? [10M]	L2	CO5
	OR		
20	A) Write the Pros and Cons of relational database?[5M] B) Explain about Entity-relationship(ER) diagram for the reference application? [5M]	L2	CO5