CBCS SCHEME

USN

BAD601/BDS601

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025

Big Data Analytics

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: Bloom's level, C: Course outcomes.

		Module – 1	**M**	**L**	**C**
Q.1	**a.**	Explain classification of Big Data with a diagram.	**10**	**L2**	**CO1**
	b.	Define Big Data explain its characteristics and challenges.	**10**	**L1**	**CO1**
		OR			
Q.2	**a.**	What is NoSQL? Explain different types of NoSQL database with an example.	**10**	**L1**	**CO1**
	b.	Explain shared nothing architecture, CAP theorem and list its advantages.	**10**	**L2**	**CO1**
		Module – 2			
Q.3	**a.**	Differentiate between. i. RDBMS and Hadoop ii. Mapper and Reducer	**10**	**L2**	**CO2**
	b.	Identify and explain key aspects and components of Hadoop.	**10**	**L3**	**CO2**
		OR			
Q.4	**a.**	Explain Hadoop distributed File System (HDFS) with a diagram.	**10**	**L2**	**CO2**
	b.	Identify and explain different phase of map task and reduce task for the word count problem.	**10**	**L3**	**CO2**
		Module – 3			
Q.5	**a.**	What is CRUD operation in Mongo DB? Explain the following commands. i. Insert method ii. Update on array iii. Save method	**10**	**L1**	**CO3**
	b.	Determine and explain the characteristics of Mongo DB.	**10**	**L3**	**CO3**
		OR			
Q.6	**a.**	Write short notes on. i. Aggregate function ii. Map reduce function in Mongo DB	**10**	**L2**	**CO2**
	b.	Determine and explain creation of database, dropping of database and datatypes of Mongo DB.	**10**	**L3**	**CO2**
		Module – 4			
Q.7	**a.**	Define Hive. Explain its main task and features.	**10**	**L1**	**CO4**
	b.	Analyze Hive architecture with its diagram.	**10**	**L4**	**CO4**
		OR			
Q.8	**a.**	Define Pig. Explain its feature, anatomy and philosophy.	**10**	**L1**	**CO4**
	b.	Examine identifiers, keywords, data types and operators of Pig with an example.	**10**	**L4**	**CO4**
		Module – 5			
Q.9	**a.**	Analyze spark SQL and Pandas for data analysis.	**10**	**L4**	**CO4**
	b.	Determine and explain component, features of spark architecture.	**10**	**L3**	**CO5**
		OR			
Q.10	**a.**	Analyze different phase of text mining process with a diagram.	**10**	**L4**	**CO5**
	b.	Identify and explain preprocessing steps, mining task for web content.	**10**	**L3**	**CO5**

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