Code No: R22A0517

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular Examinations, April 2025 Big Data Analytics

(CSE, CSE-AIML & B.Tech-AIML)

Roll No						
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Time: 3 hours Max. Marks: 60

Note: This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

		PART-A (10 Marks)	BCLL	CO(s)	Marks		
(Write all answers of this part at one place)							
1	A	Define business intelligence.	L1	CO-I	[1M]		
	В	Why do we need big data?	L1	CO-I	[1M]		
	\mathbf{C}	Define RDBMS.	L1	CO-II	[1M]		
	D	What is Hadoop 2?	L1	CO-II	[1M]		
	E	Define MapReduce.	L1	CO-III	[1M]		
	F	List the applications of NoSQL.	L3	CO-III	[1M]		
	G	Define Key space.	L1	CO-IV	[1M]		
	Η	What is Mongo Export?	L1	CO-IV	[1M]		
	I	Outline Apache spark?	L2	CO-V	[1M]		
	J	Define Map side join.	L1	CO-V	[1M]		
PART-B (50 Marks)							
		<u>SECTION-I</u>					
2	A	List and explain Characteristics of Big data.	L2	CO-I	[5M]		
	В	Discuss about Business Intelligence in Big Data.	L6	CO-I	[5M]		
		OR					
3	A	Discuss about Big Data Evolution in detail.	L6	CO-I	[5M]		
	В	Explain the following in detail.	L2	CO-I	[5M]		
		a) Unstructured data					
		b) Semi-structured data					
		c) Structured data					
SECTION-II							
4	A	Compare and contrast Hadoop 1 and Hadoop 2.	L4	CO-II	[5M]		
	В	Illustrate Design principles of Hadoop in detail.	L2	CO-II	[5M]		
		OR					
5	Α	Explain Hadoop 1 in detail.	L2	CO-II	[5M]		
	В	Compare Hadoop with SQL.	L4	CO-II	[5M]		
		SECTION-III					
6	A	Illustrate Processing data with Hadoop using	L2	CO-III	[5M]		
		MapReduce.					

	В	Explain YARN Architecture with a neat sketch.	L5	CO-III	[5M]
		OR			
7	A	What are the Features of NoSQL? Explain.	L2	CO-III	[5M]
	В	How to Manage the Resources with Hadoop YARN?	L2	CO-III	[5M]
		Explain.			
		SECTION-IV			
8	A	Compare and Contrast SQL, NoSQL and NewSQL.	L4	CO-IV	[5M]
	В	Write short notes on Mongo DB Query language.	L1	CO-IV	[5M]
		OR			
9	A	Explain CRUD operations in MongoDB with an	L5	CO-IV	[5M]
		examples.			
	В	Explain CRUD operations in Cassandra with an	L5	CO-IV	[5M]
		examples.			
		SECTION-V			
10	A	Illustrate MapReduce Programming.	L2	CO-V	[5M]
	В	Discuss about Apache spark in detail.	L6	CO-V	[5M]
		OR			
11	A	Explain Create RDD spark Operations.	L5	CO-V	[5M]
	В	Illustrate Apache Spark Framework Architecture with a	L2	CO-V	[5M]
		neat sketch.			