Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)

B. Tech (Sixth Semester – Regular/Supplementary) Examinations, April 2025

21BEEOE36011/22BEEOE36011/21BELOE36011/22BELOE36011
– Big Data Analytics
(EE/EEE)

Time: 3 hrs   Maximum: 70 Marks

Answer ALL questions
(The figures in the right hand margin indicate marks)

PART – A	(2 x 5 = 10 Marks)

Q.1. Answer *ALL* questions

		CO #	Blooms Level
a.	What is the primary focus of Big Data Analytics?	CO1	K1
b.	What is the importance of Data Governance?	CO1	K2
c.	What are the core components of the Hadoop ecosystem?	CO2	K2
d.	How does Tableau help in visualizing data?	CO3	K2
e.	Differentiate between Classification and Regression.	CO4	K4

PART – B	(15 x 4 = 60 Marks)

Answer *all* the questions

		Marks	CO #	Blooms Level
2. a.	Analyze the role of Exploratory Data Analysis (EDA) in data analytics.	8	CO1	K4
b.	How does data visualization improve data-driven decision-making?	7	CO1	K3
	(OR)			
c.	What are the key skills required for a successful data analyst?	8	CO1	K2
d.	Compare the differences between descriptive, predictive, and prescriptive analytics.	7	CO1	K4
3.a.	Define Big Data and explain its significance in modern computing.	8	CO2	K1
b.	Explain the concept of data serialization and its role in Big Data.	7	CO2	K2
	(OR)			
c.	Analyze the significance of distributed computing in handling Big Data.	8	CO2	K4
d.	Explain how cloud computing supports Big Data storage and processing.	7	CO2	K3
4.a.	How do dashboards support business intelligence?	8	CO3	K2
b.	Analyze the importance of interactive visualizations in decision-making.	7	CO3	K4
	(OR)			
c.	Discuss how heatmaps and infographics improve data presentation.	8	CO3	K3
d.	Explain the challenges of handling real-time data visualization.	7	CO3	K5
5.a.	Explain the difference between Supervised and Unsupervised Learning.	8	CO4	K2
b.	Evaluate the significance of hyperparameter tuning in ML models.	7	CO4	K4
	(OR)			
c.	How does feature engineering enhance model performance?	8	CO4	K3
d.	Analyze the concept of overfitting and underfitting in ML.	7	CO4	K4

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