Course Code: 23AD4T01

BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)
II-B. Tech II-Semester Supplementary Examinations (BR23), Aug - 2025
INTRODUCTION TO DATA SCIENCE (CSE- AI&DS)

Time: 3 hours   Max. Marks: 70

Question Paper consists of Part-A and Part-B
Answer ALL the question in Part-AandPart-B

PART–A (10X2 = 20M)

			Marks	CO	BL
1. a)	Describe about data science process?		(2M)	CO1	BL1
b)	Explain transforming data?		(2M)	CO1	BL2
c)	Summarize different types of Machine Learning?		(2M)	CO2	BL2
d)	Explain sklearn python tool?		(2M)	CO2	BL2
e)	Explain the features of Hadoop?		(2M)	CO3	BL2
f)	Describe isolation in relational database?		(2M)	CO3	BL1
g)	Explain about Neo4j?		(2M)	CO4	BL2
h)	Discuss about nltk python library?		(2M)	CO4	BL2
i)	What is data visualization?		(2M)	CO5	BL1
j)	Explain about crossfilter?		(2M)	CO5	BL2

PART–B (5X10 = 50M)

		Marks	CO	BL
2a.	Explain in detail about bigdata ecosystem and data science?	(5M)	CO1	BL2
b.	What is exploratory data analysis and discuss in detail about exploratory data analysis techniques?	(5M)	CO1	BL2
	(OR)			
3a.	What is retrieving data and determine the common methods for retrieving data in data science?	(5M)	CO1	BL3
b.	Define model building and explain the different steps that are necessary for model building?	(5M)	CO1	BL2
4a.	Illustrate the programming tips for dealing with large datasets?	(5M)	CO2	BL3
b.	What is machine learning and explain about applications of machine learning in data science?	(5M)	CO2	BL2
	(OR)			
5.	Analyse the data science project case study for predicting malicious URLs?	(10M)	CO2	BL4
6a.	Analyse data storage and processing with Hadoop framework?	(6M)	CO3	BL4
b.	Analyse the types of NoSQL databases?	(4M)	CO3	BL4
	(OR)			
7a.	Determine the CAP theorem?	(4M)	CO3	BL3
b.	Examine the case study on disease diagnosis and profiling?	(6M)	CO3	BL3

8.	What is SQLite? Determine the SQLite for handling Text mining and analytics.	(10M)	CO4	BL3
	(OR)			
9.	Examine the case study for classifying reddit posts?	(10M)	CO4	BL3
10.	Create an interactive dashboard with dc.js?	(10M)	CO5	BL6
	(OR)			
11a.	Classify the dashboard development tools?	(5M)	CO5	BL4
b.	What is MapReduce? Illustrate the JavaScript MapReduce library.	(5M)	CO5	BL3

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