School of Computing Science and Engineering B.Tech CSE

ETE - Jun 2023

Time: 3 Hours Marks: 100

Sem IV - E2UC405B / BTCS9212 / BTCS9202 **Data Sciences**

Your answer should be specific to the question asked Draw neat labeled diagrams wherever necessary

1. 2. 3.	Discuss the challenges of big data technology. Compare between DataFrame and series and Implement them. Discuss Data Cleaning process.	K1 CO1 (5 K3 CO1 (5 K2 CO2 (5	5)
4.5.6.7.	Elucidate in detail about the life cycle of data science with neat diagram. Describe the following excel analysis: CountA, Averageifs and Find/Search with example. Demonstrate Reindexing in pandas with suitable program and trace the output. Characterize various types of machine learning algorithms with an example.	K1 CO1 (1 K4 CO3 (1 K2 CO2 (1 K4 CO4 (1	10) 10) 10)
OR			
	Compare and contrast between Classification and Regression in Machine Learning.	K4 CO4 (10)
8.	Perform power, mod, min, max, variance operation on Numpy array	K3 CO2 (15)
9.	Illustrate Histogram, Barchart and pie chart by using your own examples with code.	K3 CO3 (15)
10.	Analyze various criterions in selecting the appropriate ML algorithm for your learning model with proper justifications.	K4 CO4 (15)
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OR

Illustrate the working mechanism of K-Means Clustering and various types in selecting centroids. K4 CO4 (15)