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| Question Paper Code | 12311 |
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M.E. / M.Tech - DEGREE EXAMINATIONS, NOV / DEC 2023

First Semester

M.E. - Big Data Analytics

20PBDPC102 - BIG DATA MINING AND ANALYTICS

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|--|-------------------------------|
| 1. What is the need of Machine Learning techniques? | <i>2,K2,CO1</i> |
| 2. Define Feature Extraction. | <i>2,K1,CO1</i> |
| 3. What is Jaccard Distance? | <i>2,K2,CO2</i> |
| 4. What is Generalized Locality-Sensitive Hashing? | <i>2,K2,CO2</i> |
| 5. What is Bloom Filter? | <i>2,K1,CO3</i> |
| 6. List the main characteristics of stream sources. | <i>2,K2,CO3</i> |
| 7. What is the Google Solution to Term Spam? | <i>2,K2,CO4</i> |
| 8. Define Random Surfer Model. | <i>2,K2,CO4</i> |
| 9. Which algorithm is suitable to handle data that is too large to fit in main memory? | <i>2,K2,CO5</i> |
| 10. List the different Clustering Strategies. | <i>2,K2,CO5</i> |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

- | | |
|---|------------------|
| 11. a) Explain Distributed File Systems in detail. | <i>13,K2,CO1</i> |
| OR | |
| b) Explain about the Statistical Limits on Data Mining. | <i>13,K2,CO1</i> |
| 12. a) Explain Locality-Sensitive Hashing for Documents. | <i>13,K2,CO2</i> |
| OR | |
| b) Explain about Shingling of Documents. | <i>13,K2,CO2</i> |
| 13. a) Explain Data Stream Model with a neat architecture diagram. | <i>13,K2,CO3</i> |
| OR | |
| b) Explain the idea behind the Flajolet-Martin Algorithm with suitable example. | <i>13,K2,CO3</i> |

14. a) Explain A-Priori Algorithm with suitable example. *13,K2,CO4*

OR

b) Explain PageRank in detail. *13,K2,CO4*

15. a) Explain K-means Algorithms and also explain how will initialize Clusters for K-Means. *13,K2,CO5*

OR

b) Explain the CURE Algorithm in detail. *13,K2,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Why did Netflix want/need to do a big data project? *15,K3,CO5*

OR

b) How Facebook recommend the person which has the highest possibility to become friend? Explain. *15,K3,CO5*