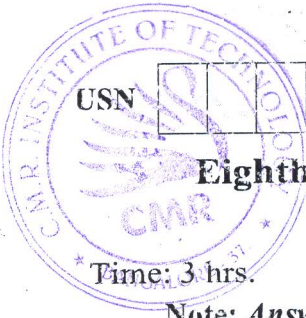


# CBCS SCHEME



15CS82

## Eighth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Big Data Analytics

Time: 3 hrs.

Max. Marks : 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. What are the various systems roles in an HDFS development? Explain with a neat diagram. (08 Marks)
- b. Explain with a neat diagram HDFS Block replication. (08 Marks)

OR

- 2 a. Write the code for simple mapper script and simple reducer script. (08 Marks)
- b. With a neat diagram explain Apache Hadoop parallel mapReduce data flow. (08 Marks)

### Module-2

- 3 a. Explain the structure of Yarn Application. (08 Marks)
- b. With a neat diagram, explain Yarn Application Framework. (08 Marks)

OR

- 4 a. Explain Apache Squoop Import and Export method. (08 Marks)
- b. Explain Apache Ambasi service view of a Hadoop Cluster. (08 Marks)

### Module-3

- 5 a. Write any four Business Intelligence Application for various sectors. (08 Marks)
- b. Explain the star schema design of Data Warehousing with an example. (06 Marks)
- c. What is Confusion Matrix? (02 Marks)

OR

- 6 a. Explain CRISP-DM cycle with a neat diagram. (08 Marks)
- b. What do you understand by the term Data Visualization? How is it important in Big data Analytics? (05 Marks)
- c. Differentiate between Data Mining and Data Warehousing. (03 Marks)

### Module-4

- 7 a. Describe the advantages and disadvantages of using Regression Models. (08 Marks)
- b. Explain Decision tree and write the algorithm to construct decision tree. (08 Marks)

OR

- 8 a. Explain design principles of Artificial Neural Network. (08 Marks)
- b. Explain Regression. List key steps of Regression. (04 Marks)
- c. Explain Apriori Algorithms. (04 Marks)

### Module-5

- 9 a. Explain with a neat diagram text mining process. (08 Marks)
- b. What are the advantages and disadvantages of Naïve-Bayes's algorithm? (04 Marks)
- c. Explain with a neat diagram SVM model. (04 Marks)

OR

- 10 a. Explain with a neat diagram web usage mining architecture. (08 Marks)
- b. List and explain the applications of social network analysis. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines or the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.

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