

CBCS SCHEME

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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)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on 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.