Eighth Semester B.E. Degree Examination, July/August 2022 **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. With a diagram, explain the HDFS components.

(08 Marks)

b. Briefly explain HDFS block replication, Name node high availability, Snap shots and Safe mode. (08 Marks)

OR

2 a. Discuss the general HDFS commands.

(08 Marks)

b. Write a HDFS Java application example for reading, writing and deleting files from HDFS.

(08 Marks)

Module-2

3 a. With block diagram, discuss the various frameworks that run under YARN. (08 Marks)

b. With diagram, explain the concept of Apache squoop

(08 Marks)

OF

4 a. List the importance of Apache Flume, explain with weblog example. (08 Marks)

b. With respect to Oozie, describe the following i) DAG ii) Workflow definition. (08 Marks)

Module-3

5 a. List three business intelligence applications in the hospitality industry. (08 Marks)

b. What are the two Data warehousing development approaches? Compare and contrast DW and Data mining. (08 Marks)

OR

6 a. List and explain BI Applications.

(06 Marks)

b. Explain BIDM cycle with respect to BI.

(06 Marks)

c. What is a confusion matrix?

(04 Marks)

Module-4

7 a. With example illustrate decision tree algorithm? Describe three criteria for choosing splitting variable. (08 Marks)

b. What is a regression model? What are the advantages and disadvantages?

(08 Marks)

OR

8 a. Explain the design principles of an Artificial Neural Network.

(08 Marks)

D. Using the data below, determine the number of clusters and the center points of those clusters.

Data Set x 2 2 5 4 8 6 5 5 6 4 y 4 6 6 7 3 6 2 7 3 4

(08 Marks)

Module-5

- 9 a. Define Text mining. Discuss the issues of private security by considering case study of whatsapp. (08 Marks)
 - b. Compare and contrast Text mining and Data mining.

(08 Marks)

OR

- 10 a. What are the three types of web mining? Explain privacy issues in web mining. (08 Marks)
 - b. Discuss Page Rank application with reference to social network analysis. (08 Marks)