Code: 20IT4702E

IV B.Tech - I Semester - Regular Examinations - DECEMBER 2023

BIG DATA ANALYTICS (INFORMATION TECHNOLOGY)

Duration: 3 hours Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level CO – Course Outcome

| | | | BL | СО | Max. Marks | | | |
|---------|----|---|----|-----|---------------|--|--|--|
| | | | | | Warks | | | |
| UNIT-I | | | | | | | | |
| 1 | a) | What are the Characteristics of Big Data? | L1 | CO1 | 7 M | | | |
| | b) | Explain shared-nothing architecture. | L2 | CO1 | 7 M | | | |
| | OR | | | | | | | |
| 2 | a) | List the Advantages of NoSQL. | L1 | CO1 | 7 M | | | |
| | b) | Discuss Classification of digital data. | L2 | CO1 | 7 M | | | |
| | | | | | | | | |
| UNIT-II | | | | | | | | |
| 3 | a) | Explain the process of Import from CSV, | L2 | CO1 | 7 M | | | |
| | | STDIN. | | | | | | |
| | b) | How do you use keyspaces in Cqlsh? | L1 | CO1 | 7 M | | | |
| | | | | | | | | |
| OR | | | | | | | | |
| 4 | a) | Explain CRUD: Create, Read, Update and | L2 | CO2 | 7 M | | | |
| | | Delete operations. | | | | | | |
| | | | | | | | | |

| | b) | Demonstrate the following Alter commands: | L2 | CO2 | 7 M | | | | |
|--|------------|--|----|-----------------|-------|--|--|--|--|
| | | • Alter table to change the data type of a | | | | | | | |
| | | column | | | | | | | |
| | | Alter table to delete a column | | | | | | | |
| | | • Drop a table | | | | | | | |
| | | Drop a database | | | | | | | |
| | TINITO TIT | | | | | | | | |
| UNIT-III 5 a) Discuss Processing Data with Hadoop. L2 CO2 7 M | | | | | | | | | |
| | b) | Demonstrate Combiner, Partitioner using | | 002 | / 1/1 | | | | |
| | | MAPREDUCE. | L3 | CO2 | 7 M | | | | |
| OR | | | | | | | | | |
| 6 | a) | Illustrate Process of searching in Map | L3 | CO2 | 7 M | | | | |
| | | Reduce program with an example. | | | | | | | |
| | b) | Demonstrate the Process of sorting data in | L3 | CO2 | 7 M | | | | |
| | | Map Reduce program with an example. | | | | | | | |
| | | | | | | | | | |
| | | UNIT-IV | 1 | T | | | | | |
| 7 | a) | What is Hive? Discuss History of Hive and | L1 | CO ₁ | 7 M | | | | |
| | | Recent releases of Hive. | | | | | | | |
| | b) | Illustrate Collection data Types. | L3 | CO3 | 7 M | | | | |
| OR | | | | | | | | | |
| 8 | a) | Discuss Hive Features, Hive Integration and | L2 | CO3 | 7 M | | | | |
| | | work flow, Hive data Units. | | | | | | | |
| | b) | Write a short note on Static Partition, | L1 | CO3 | 7 M | | | | |
| | | Dynamic partition, Bucketing. | | | | | | | |

| UNIT-V | | | | | | | | |
|--------|----|--|----|-----|-----|--|--|--|
| 9 | a) | Write a short note on Pig. | L1 | CO1 | 7 M | | | |
| | b) | Explain Execution Modes of Pig. | L2 | CO1 | 7 M | | | |
| | OR | | | | | | | |
| 10 | a) | Illustrate Relational Operators - Filter, | L3 | CO3 | 7 M | | | |
| | | ForEach, Group, Distinct, Limit, order By, | | | | | | |
| | | Join, Union, Split, Sample. | | | | | | |
| | b) | Demonstrate Word Count Example using | L3 | CO3 | 7 M | | | |
| | | Pig. | | | | | | |