**20DS703/JO**

**Hall Ticket Number:**

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| **IV/IV B.TECH (Regular) DEGREE EXAMINATION** | | | |
| **January, 2024** | **Data Science** | | |
| **Seventh Semester** | **Big Data Analytics** | | |
| **Time:** Three Hours | | **Maximum: 7**0 Marks | |
| ***Answer Question No. 1 Compulsorily.*** | | | **(14X1 = 14 Marks)** |
| ***Answer one question from each Unit.*** | | | **(4X14=56 Marks)** |

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| 1. | a) | What is Big Data**?** | CO1 | L2 | 1M | | | |
|  | b) | List any four applications of Big Data? | CO1 | L1 | 1M | | | |
|  | c) | Define a Data node? | CO2 | L1 | 1M | | | |
|  | d) | What are the list of Data Types in Pig? | CO3 | L2 | 1M | | | |
|  | e) | Define an Spark job. | CO4 | L1 | 1M | | | |
|  | f) | Define an Stages in Spark. | CO4 | L2 | 1M | | | |
|  | g) | Identify any three advantages of Sqoop? | CO4 | L2 | 1M | | | |
|  | h) | What are the various data sources of Big Data**?** | CO1 | L2 | 1M | | | |
|  | i) | List any three advantages of Pig? | CO2 | L1 | 1M | | | |
|  | j) | What are the Different Phases of Map Reduce. | CO2 | L2 | 1M | | | |
|  | k) | Define a Embedded Metastore? | CO3 | L1 | 1M | | | |
|  | l) | Name any four Pig Latin Functions? | CO3 | L1 | 1M | | | |
|  | m) | List out the Failures of Map Reduce. | CO2 | L1 | 1M | | | |
|  | n) | Define an Resilient Distributed Datasets(RDD)? | CO4 | L1 | 1M | | | |
| **Unit -I** | | | | | |
| 2. | a) | Describe the steps used to configure to the Hadoop installation. | CO1 | L1 | 7M | | |
|  | b) | Explain any three significant characteristics of big data. | CO1 | L2 | 7M | | |
|  |  | **(OR)** |  |  |  |
| 3. | a) | Explain the Architecture of Hadoop. | CO1 | L2 | 7M | | |
|  | b) | Demonstrate the sequence of events when reading a file from hdfs and File a Write to hdfs. | CO1 | L2 | 7M | | |
|  |  | **Unit -II** |  |  |  |
| 4. | a) | Describe the How to Map Reduce Works in Hadoop**.** | CO2 | L1 | 7M | |
|  | b) | Illustrate the Features of Map Reduce. | CO2 | L3 | 7M | |
|  |  | **(OR)** |  |  |  |
| 5. | a) | Explain the Different Kind of scheduling algorithms in YARN with an Advantage and Disadvantage of each scheduler. | CO2 | L2 | 7M | | |
|  | b) | Summarize the Yet Another Resource Negotiator (YARN). | CO2 | L3 | 7M | | |
|  |  | **Unit -III** | |  |  |
| 6. | a) | Describ the Data Peocessing Operators framework for Pig. | CO3 | L1 | 7M | |
|  | b) | Explain the Pig Latin Statements. | CO3 | L2 | 7M | |
|  |  | **(OR)** |  |  |  |
| 7. | a) | Compare between the Hive and traditional DataBases. | CO3 | L2 | 7M | |
|  | b) | Demonstrate the List of Hive Services | CO3 | L2 | 7M | |
|  |  | **Unit -IV** |  |  |  |
| 8. | a) | Demonstrate the process of Installing Spark. | CO4 | L2 | 7M | | |
|  | b) | Write the word Count Program in Spark. | CO4 | L3 | 7M | | |
|  |  | **(OR)** |  |  |  |
| 9. | a) | Describe the Getting Sqoop with an sqoop tools. | CO4 | L2 | 7M | | |
|  | b) | Explain the Sqoop Connectors with an suitable example. | CO4 | L2 | 7M | | |

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