

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech. IV Year I Semester Regular & Supplementary Examinations December-2024
BIG DATA

CSE (Artificial Intelligence and Machine Learning)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

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|----------|--|------------|-----------|-----------|
| 1 | a Discuss in detail about Apache Hadoop and History of Hadoop?
b Examine the different types of digital data with examples? | CO1 | L2 | 6M |
| | | CO1 | L4 | 6M |

OR

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|----------|---|------------|-----------|-----------|
| 2 | a List out the challenges faced by big data.
b Examine the Significance of big data analytics. | CO1 | L1 | 6M |
| | | CO1 | L3 | 6M |

UNIT-II

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|----------|--|------------|-----------|-----------|
| 3 | a Describe the dataflow process in Hadoop Distributed file System.
b Analyze the features of Apache Hadoop. | CO2 | L3 | 6M |
| | | CO2 | L4 | 6M |

OR

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|----------|---|------------|-----------|-----------|
| 4 | a Describe the AVRO file format with diagram.
b Discuss about the data ingest operation using Sqoop and Flume. | CO2 | L3 | 6M |
| | | CO2 | L2 | 6M |

UNIT-III

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|----------|--|------------|-----------|-----------|
| 5 | a Explain in detail about Hadoop YARN Architecture.
b Discuss different types of failures in Classic MapReduce. | CO3 | L2 | 6M |
| | | CO3 | L2 | 6M |

OR

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| 6 | a Identify the Significance of YARN over MapReduce.
b Summarize Task Execution Environment Properties. | CO3 | L3 | 6M |
| | | CO3 | L2 | 6M |

UNIT-IV

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|----------|---|------------|-----------|-----------|
| 7 | a Compare the PIG with Databases with an Example.
b Find the Grouping and Joining Data in Pig Latin. | CO4 | L5 | 6M |
| | | CO4 | L3 | 6M |

OR

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|----------|--|------------|-----------|-----------|
| 8 | a Explain about the data types in Pig Latin.
b Evaluate Data Processing Operators in Pig Latin. | CO4 | L2 | 6M |
| | | CO4 | L5 | 6M |

UNIT-V

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|----------|---|------------|-----------|-----------|
| 9 | a Illustrate Hive table with example.
b Draw a neat sketch of Hive architecture. | CO5 | L3 | 6M |
| | | CO5 | L3 | 6M |

OR

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|-----------|--|------------|-----------|-----------|
| 10 | a Examine the Characteristics of HBase.
b Appraise about Hive query language. | CO5 | L4 | 6M |
| | | CO5 | L3 | 6M |

*** END ***

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