

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

B.Tech. IV Year I Semester Regular & Supplementary Examinations October/November-2025
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 | Define big data analytics. Explain about the Classification of Analytics. | CO1 | L2 | 6M |
| | b | Illustrate how does big data analytics work. | CO1 | L3 | 6M |

OR

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|---|---|---|-----|----|----|
| 2 | a | Explain in detail about Infosphere Big Insights with its key features | CO1 | L3 | 6M |
| | b | Discuss in detail about Big sheets with its key features. | CO1 | L2 | 6M |

UNIT-II

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|---|---|--|-----|----|----|
| 3 | a | Discuss in detail about HDFS concepts. | CO2 | L2 | 6M |
| | b | Describe the dataflow process in Hadoop Distributed file System. | CO2 | L3 | 6M |

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| 4 | a | What is Hadoop Archives and explain how to create and lookup files in archives. | CO2 | L2 | 6M |
| | b | Differentiate the compression and serialization operation in Hadoop I/O. | CO2 | L4 | 6M |

UNIT-III

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| 5 | | Describe the types of schedulers in Hadoop with their merits and demerits. | CO3 | L2 | 12M |
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| 6 | a | Analyze the different types of InputFormat in MapReduce. | CO3 | L2 | 6M |
| | b | List the features and use cases for mapreduce. | CO3 | L3 | 6M |

UNIT-IV

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| 7 | | Explain the different execution modes available in Pig along with its execution mechanisms. | CO4 | L2 | 12M |
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| 8 | a | What are the differences types of construction operators available in Pig Latin. | CO4 | L2 | 4M |
| | b | Discuss the Pig Latin relational operations with example. | CO4 | L3 | 8M |

UNIT-V

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|---|--|---|-----|----|-----|
| 9 | | What is Hive? Illustrate step-by-step job execution flow in Hive with Hadoop with neat diagram. | CO5 | L4 | 12M |
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| 10 | | Explain IBM Big SQL with its features along with its working in the Hadoop Ecosystem. | CO5 | L3 | 12M |
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