



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Seventh Semester, B.E. - Information Science and Engineering

Semester End Examination; Dec - 2017 / Jan - 2018

Big Data

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

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| 1 a. | Define Big data and explain Big data in terms of three dimensions: volume, variety and velocity. | 10 |
| | b. Explain the role of Big data in Industry. | 10 |
| 2 a. | Discuss why Big data and its importance. | 10 |
| | b. Explain inter and trans firewall analytics. | 10 |

UNIT - II

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|------|--|----|
| 3 a. | Explain the aggregate data model in detail. | 10 |
| | b. Explain NoSql. Why are NoSql Databases interesting? | 10 |
| 4 a. | Explain Document database and Graph database with example. | 10 |
| | b. Explain MapReduce in detail. | 10 |

UNIT - III

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| 5 a. | Explain HDFS architecture in detail. | 10 |
| | b. Explain Hadoop pipes with an example. | 10 |
| 6 a. | Explain MapReduce java program for word count. | 10 |
| | b. Explain Hadoop architecture in detail. | 10 |

UNIT - IV

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| 7 a. | Explain the anatomy of classic MapReduce. | 10 |
| | b. Discuss the limitations of current classic MapReduce and YARN. | 10 |
| 8 a. | Explain YARN architecture in detail. | 10 |
| | b. Discuss issues in MapReduce scheduling. | 10 |

UNIT - V

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| 9 a. | Explain Hbase in detail with a neat diagram. | 10 |
| | b. Compare and contrast Relational Database and Hbase. | 10 |
| 10 a. | Explain Cassandra in detail with its data model. | 10 |
| | b. Explain Pig Latin with an example. | 10 |

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