



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

(An Autonomous Institution affiliated to VTU, Belagavi)

Second Semester, M.Tech. - Computer Science and Engineering (MCSE)

Semester End Examination; May / June - 2019

Business Intelligence and its Applications

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. | Compare and contrast structured, semi-structured and unstructured digital data. Give an example for each. | 12 |
| | b. Explain MOLAP and ROLAP with neat figures. | 8 |
| 2 a. | What are the major components of Business Intelligence? Explain with a diagram. | 12 |
| | b. Examine BI technology and explain how BI systems help business to identify market trends and spot business problems to be addressed. | 8 |

UNIT - II

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| 3 a. | Explain ETL process with a neat diagram. | 8 |
| | b. What is Data Integration? Explain the problems faced in Data Integration. | 12 |
| 4 a. | Summarize five advantages and limitations of Data warehouse. | 10 |
| | b. Distinguish between Data quality and Data profiling concepts. | 10 |

UNIT - III

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| 5 a. | Discuss dimensional modeling life cycle developed by Ralph Kimball. Illustrate it with a neat diagram. | 10 |
| | b. Define the following and discuss briefly ; | 10 |
| | i) Facts ii) Cubes iii) Attribute iv) Hierarchies | |
| 6 a. | Distinguish between Star and Snow-flake schema. | 10 |
| | b. Compare and contrast Relational model and Dimensional model. | 10 |

UNIT - IV

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| 7 a. | List the attributes of an effective KPI. | 5 |
| | b. Define metrics. Discuss salient attributes of metrics. | 10 |
| | c. How do you measure business intelligence performance? Explain. | 5 |
| 8 a. | Discuss Fact based decision making. | 10 |
| | b. Differentiate KPI and Metrics. | 10 |

UNIT - V

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| 9 a. | What is enterprise reporting? Discuss. | 10 |
| | b. Explain Malcom Baldrige - Quality performance framework. | 10 |
| 10 a. | Clearly bring out the differences between balanced score board versus enterprise dash board. | 10 |
| | b. Summarize the best practices in the design of enterprise dash board. | 10 |