



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

(An Autonomous Institution affiliated to VTU, Belagavi)

Fifth Semester, Master of Computer Applications (MCA)

Semester End Examination; Dec - 2017/Jan - 2018

Business Intelligence - Data Warehousing and Analytics

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. | Explain core business functions with an example. | 10 |
| | b. What are the characteristics of structured data? Explain Hassle-free retrieval. | 10 |
| 2 a. | Bring out the differences between OLAP and OLTP. | 8 |
| | b. Explain MOLAP, ROLAP and HOLAP architectures. | 12 |

UNIT - II

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| 3 a. | Discuss the role of OLAP tools in BI architecture. | 8 |
| | b. Explain briefly the following :
Slice, Dice, Roll-up and Drill down. | 12 |
| 4 a. | Define Business Intelligence. Explain the features of BI. | 10 |
| | b. List out the differences between :
i) Business Intelligence and Business Analytics ii) ERP and Business Intelligence. | 10 |

UNIT - III

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| 5 a. | What are the best practices adopted in BI/DW? Explain. | 10 |
| | b. Explain the Business layer of BI component framework with a neat figure. | 10 |
| 6 a. | What are the goals of a data warehouse? What constitutes a data warehouse? Explain. | 10 |
| | b. Discuss the two main approaches to data integration. | 10 |

UNIT - IV

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| 7 a. | Discuss different types of data model. | 12 |
| | b. Explain additive facts and non-additive facts with an example for each. | 8 |
| 8 a. | Explain "Fact-Based Decision Making" and KPIS. | 10 |
| | b. Explain Measurement system terminology. | 10 |

UNIT - V

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| 9 a. | List and explain the types of common report layout. | 12 |
| | b. Summarize the common best practices that most enterprises employ while considering reporting requirements. | 8 |
| 10 a. | Explain enterprise reporting characteristics in OLAP world. | 10 |
| | b. Identify the four perspectives of Balanced scorecard and show the mappings to organization's strategic objectives. | 10 |