U.S.N ☐☐☐☐☐☐☐☐☐☐

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; Jan. / Feb. - 2021
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

1 a.	Explain the different types of OLAP architecture along with two advantages and two disadvantages.	10
b.	Compare OLTP and OLAP systems.	10
2 a.	Define BI. Explain business layer of the BI component framework.	10
b.	Compare structured, semi-structured and unstructured data with examples.	10

UNIT - II

3 a.	What are the advantages of data integration? Explain the two main approaches of data integration.	10
b.	Define data quality. Describe the different dimensions of data quality.	10
4 a.	Explain the common approaches of data integration.	10
b.	Describe the procedure of ETL using Pentaho data integration.	10

UNIT - III

5 a.	Discuss different types of data model, with an example.	10
b.	Explain briefly different types of dimension table.	10
6 a.	List and explain the different schemas in dimensional model.	10
b.	Write a note on; i) Cube ii) Attribute iii) Hierarchies	10

UNIT - IV

7 a.	Discuss the "Fact based decision making" and KPIS.	10
b.	Explain any ten salient attributes of a good metric.	10
8 a.	Explain measurement system terminology.	10
b.	Discuss the potential sources for business metric and explain its relationship between business world and the technical world with a neat diagram.	10

UNIT - V

9 a.	Summarize the common best practices the most enterprises employ while considering reporting requirements.	10
b.	Describe the characteristics of enterprise reporting in OLAP world.	10
10 a.	Identify the four perspectives of balanced scorecard and show the mappings to organization's strategic objectives.	10
b.	Explain briefly Malcolm Baldrige quality performance framework.	10

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