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; 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

1 a. Discuss the following categories of IT Applications giving suitable examples for each :

   i) On-line Transaction processing system

   ii) Business Process / Model Innovation Application   10

   iii) Departmental IT Application.

   b. Discuss the characteristics of un-structured, semi-structured and structured data.   10

2 a. Discuss the advantages and disadvantages of different types of OLAP architecture.   6

   b. Compare the features of OLTP and OLAP.   10

   c. Briefly explain the data models for OLAP.   4

UNIT - II

3 a. Explain the common OLAP operations available on multidimensional data with suitable   10
   example.

   b. List the difference between ERP and BI.   5

   c. Differentiate Business Intelligence and Business Analysis.   5

4 a. Discuss the important features of BI and the types of decisions supported by BI with a neat   12
   diagram.

   b. Explain the role of OLAP tools in the BI architecture with a neat diagram.   8

UNIT - III

5 a. What is data profiling? Discuss when to conduct and how to conduct data profiling?   12

   b. Discuss the four components of administration and operation layers of BI component   8
   framework with a neat diagram.

6 a. List and explain the BI application for business solution.   10

   b. Differentiate data integrity and data quality.   10

UNIT - IV

7 a. Discuss the SMART test for metric relevance to business.   5

   b. Explain the four components of metric data giving suitable example.   5

   c. Explain the dimensional modeling schemas.   10

8 a. Describe the salient attributes of a good Metric. 10

  b. What is fact table? Giving suitable example describe various types of facts. 10

UNIT - V

9 a. Discuss how KPIs are used by companies? 6

  b. Explain the four perspective of balanced score cards with a neat diagram. 8

  c. Discuss the various standardization perspectives used by the enterprises to standardize the reporting process. 6

10 a. Discuss the potential sources of inputs for metrics that companies use to evolve KPIs? 8

  b. What is Dashboard? List the types of Dashboard. Discuss the steps used in creating the dashboard. 12

✳ ✳ ✳