

Reg No.



MANIPAL INSTITUTE OF TECHNOLOGY  
(Constituent Institute of Manipal University)  
MANIPAL-576104



SEVENTH SEMESTER B.E. (CSE) DEGREE MAKE-UP EXAMINATION  
JAN 2013

BUSINESS INTELLIGENCE AND APPLICATIONS -ELECTIVE (CSE-405.4)

DATE: 03-01-2013

TIME: 3 HOURS

MAX.MARKS: 50

**Instructions to Candidates**

- Answer **any five** full questions.

- With example explain the types and characteristics of digital data [4]
  - Define BI. Explain BI framework [5]
  - Mention different types of BI users. [1]
- Explain business applications of BI with examples. [2]
  - Why data integration is required? Illustrate. [4]
  - Describe the types of dataware house designing. [4]
- Describe E-T-L process used in data integration. [4]
  - Explain metadata with reference to BI. [4]
  - Mention the tools available for data modelling. [2]
- Design a retail chain application of BI using MBQ model. [5]
  - Differentiate star and snowflake schema with example. [3]
  - What is factless fact table? Give an example. [2]
- What is data integration? Explain 2 main approaches to data integration. [4]
  - Explain the sources of business metrics and KPI. [3]
  - With an example explain the components of good metric system. [3]
- Mention the characteristics of enterprise reporting. [3]
  - Illustrate how Balanced Score card as a management system. [4]
  - Differentiate dash boards with score cards. [3]

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