

**R18**

Code No: 155ER

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, January/February - 2023

DATA WAREHOUSING AND BUSINESS INTELLIGENCE

(Computer Science and Engineering – Artificial Intelligence and Machine Learning)

Time: 3 Hours

Max. Marks: 75

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART – A**

**(25 Marks)**

- 1.a) Define metadata repository. [2]
- b) Explain about a three-tier data warehouse architecture. [3]
- c) What is business analytics? [2]
- d) Write a brief history of BI. [3]
- e) What are key drivers of BI? [2]
- f) Draw architecture of BI. [3]
- g) What are BI tools? [2]
- h) Explain about Pentaho tool. [3]
- i) Define physical integration. [2]
- j) What are limitations of on-demand BI? [3]

**PART – B**

**(50 Marks)**

- 2.a) Describe OLAP operations in the multidimensional data model.
- b) Explain about multiway array aggregation for full cube computation. [5+5]

**OR**

- 3.a) Discuss about computing iceberg cubes using a dynamic star-tree structure.
- b) Explain in detail about indexing OLAP data. [5+5]

4. What is Business Intelligence? Explain about leveraging knowledge and data for BI. [10]

**OR**

5. What are BI dimensions? Explain about BI life cycle in detail. [10]

- 6.a) What are key performance indicators? Explain.
- b) Explain about the value of business intelligence. [5+5]

**OR**

- 7.a) Describe best practices of Business Intelligence.
- b) Discuss about a cyclic process of intelligence creation. [5+5]

8. Explain about social networks importance in BI. Also explain about emerging trends in BI. [10]

**OR**

9. What is KNIME? What are features of KNIME? Explain in detail. [10]

10. Explain the following:

a) Mobile social networking

b) Implications of business and enterprise social networks. [5+5]

**OR**

11. Explain the following:

a) Social networks

b) Connecting BI systems to databases and other enterprise systems. [5+5]

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Used papers 2023