KUMARAGURU
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**B.TECH DEGREE EXAMINATIONS: NOVEMBER 2024**

(Regulation 2018)

Sixth Semester

**INFORMATION TECHNOLOGY**

U18ITE0014**:** Business Intelligence

**COURSE OUTCOMES**

**CO1:**   Explain the Business Intelligent Environment

**CO2:**   Describe the Business Intelligence Architecture

**CO3:**   Outline the usage of ETL in Business Intelligence

**CO4:**   Explore the Emerging trends in Business Intelligence

**Time: Three Hours**                                                                                 **Maximum Marks: 100**

**Answer all the Questions:-**
**PART A (10 x 2 = 20 Marks)**
**(Answer not more than 40 words)**

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|---|---|---|---|
| 1. | Define Business Intelligence (BI) and explain its significance in organizational decision-making. | CO1 | [K₁] |
| 2. | What are the key components of a BI framework, and why are they important? | CO1 | [K₂] |
| 3. | Discuss the role of organizational preparedness in the successful implementation of BI initiatives. | CO2 | [K₂] |
| 4. | Identify and explain two types of BI users within an organization. | CO2 | [K₂] |
| 5. | What is the purpose of data profiling in the context of Business Intelligence? | CO3 | [K₁] |
| 6. | Describe the concept of ETL in data integration and its significance. | CO3 | [K₂] |
| 7. | What are the primary dimensions of data quality, and why are they important? | CO4 | [K₂] |
| 8. | Explain the relationship between knowledge discovery, data mining, and predictive analytics in BI. | CO4 | [K₂] |
| 9. | Discuss the impact of emerging BI trends on organizational strategies. | CO3 | [K₂] |
| 10. | What types of data flaws can affect data quality, and how can they be addressed? | CO4 | [K₂] |

**Answer any FIVE Questions:-**
**PART B (5 x 16 = 80 Marks)**
**(Answer not more than 400 words)**

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| 11. | a) | List and describe about the application of business intelligence to improve organizational operations. | 8 | CO1 | [K₁] |

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| | b) | Explain about information exploitation to improve the business process. | 8 | CO1 | [K$_2$] |
| 12. | a) | Describe in detail about types of business intelligence tools and software. | 8 | CO2 | [K$_2$] |
| | b) | Briefly explain about business intelligence architecture components with neat diagram. | 8 | CO2 | [K$_2$] |
| 13. | a) | Differentiate between OLTP and OLAP with example. | 4 | CO3 | [K$_1$] |
| | b) | Describe about transaction-based information flow and how ETL process for business intelligence provide the various staging architecture components. | 10 | CO3 | [K$_3$] |
| 14. | a) | List and explain the various types of data quality dimensions. | 8 | CO3 | [K$_2$] |
| | b) | Explain about data quality assessment and rules. | 8 | CO3 | [K$_2$] |
| 15. | a) | Explain how the various data cleaning process steps are involved for business intelligence data? Give example. | 8 | CO4 | [K$_2$] |
| | b) | Enumerate briefly about the steps involved in knowledge discovery in predictive analytics. | 8 | CO4 | [K$_3$] |
| 16. | a) | What is knowledge discovery in business intelligence? Explain its benefits. | 8 | CO4 | [K$_2$] |
| | b) | Explain the future of business intelligence trends and how leading organizations use business intelligence to propel their success. | 8 | CO4 | [K$_3$] |

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