



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Eighth Semester, B.E. - Computer Science and Engineering

Semester End Examination; July / Aug. - 2022

Business Intelligence and Applications

Time: 3 hrs

Max. Marks: 100

Course Outcomes

The Students will be able to:

CO1: Illustrate role of business intelligence in the IT applications.

CO2: Construct OLAP operations to analyze business intelligence

CO3: Apply various ETL techniques of data integration

CO4: Identify data modeling technique to analyze data for a successful business enterprise.

CO5: Construct enterprise reports for various situations of a business enterprise

Note: I) PART - A is compulsory. **Two** marks for each question.

II) PART - B: Answer any **Two** sub questions (from a, b, c) for a Maximum of **18** marks from each unit.

Q. No.	Questions	Marks	BLs	COs	POs
I : PART - A		10			
I a.	Mention the characteristics of internet ready IT applications.	2	L1	CO1	PO1
b.	List roles of DSS and MIS in business intelligence.	2	L2	CO2	PO1
c.	List various needs for data warehouse.	2	L3	CO3	PO1
d.	Define the following: i) Metric ii) Indicator	2	L3	CO4	PO1
e.	List various business metrics.	2	L3	CO5	PO2
II : PART - B		90			
UNIT - I		18			
1 a.	Differentiate OLTP and OLAP.	9	L1	CO1	PO1
b.	Explain digital data and its types in detail.	9	L2	CO1	PO2
c.	Explain different OLAP architectures with its advantages and disadvantages.	9	L3	CO1	PO2
UNIT - II		18			
2 a.	Define EIS. Explain how is information is analyzed for making decision in BI?	9	L1,2	CO2	PO1
b.	Describe business intelligence roles and responsibilities.	9	L3	CO2	PO2
c.	List and explain business intelligence applications.	9	L2	CO2	PO2
UNIT - III		18			
3 a.	Explain Ralph Kimball's approach and W.H Immon's approach.	9	L2	CO3	PO1
b.	Explain various constituents of data warehouse with diagram.	9	L2	CO3	PO2
c.	Differentiate between quality and data profiling.	9	L1,2	CO3	PO2

UNIT - IV**18**

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|---|---|----|-----|-----|
| 4 a. Explain any two types of data models with an example each with a neat diagram. | 9 | L2 | CO4 | PO1 |
| b. Explain data modeling life cycle. | 9 | L2 | CO4 | PO2 |
| c. Discuss fact table and data table with examples. | 9 | L2 | CO4 | PO2 |

UNIT - V**18**

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|--|---|------|-----|-----|
| 5 a. Explain report standardization and presentation practices. | 9 | L2 | CO5 | PO1 |
| b. Differentiate score card and dashboard used in enterprise reporting | 9 | L2 | CO5 | PO2 |
| c. Explain step by step guidelines to create enterprise report by using MS-Access. | 9 | L1,3 | CO5 | PO2 |

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