

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN Course Code **M B A B A 3 1 1**

Third Semester MBA Degree Examinations, February 2026

**DATA ANALYTICS FOR MANAGERS****Duration: 3 hrs****Max. Marks: 100**

- Note:** 1. Answer any **FOUR** full questions from Question No. 1 to 7.  
2. Question No. 8 is compulsory  
3. Missing data, if any, may be suitably assumed

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBTL:CO:PO)</u>
1	a. Define business. Identify how the activities of the business are managed.	03	(3 :1 : 1.7.1)
	b. Compare between database and data warehouse.	07	(3 :1 : 1.7.1)
	c. Illustrate the data processing chain.	10	(3 :1 : 1.7.1)
2.	a. Define BI. Identify the tools used by BI.	03	(3 :1 : 1.7.1)
	b. Discuss the two main kinds of decisions used by BI.	07	(3 :1 : 1.7.1)
	c. Identify the important data mining techniques and explain.	10	(3 :1 : 1.7.1)
3.	a. Identify the activities dealt by the BI framework.	03	(3 :2 : 1.7.1)
	b. Differentiate between OLTP and DW.	07	(3 :2 : 1.7.1)
	c. Identify the important characteristics of BI and explain each one.	10	(3 :2 : 1.7.1)
4.	a. Identify the various factors which determine the data quality.	03	(3 :2 : 1.7.1)
	b. Differentiate between structured data and unstructured data.	07	(3 :2 : 1.7.1)
	c. Identify the best practices followed to maintain the quality of the data and explain each one.	10	(3 :2 : 1.7.1)
5	a. Define the term data lake.	03	(3 :3 : 1.7.1)
	b. Differentiate between data lake versus data warehouse.	07	(3 :3 : 1.7.1)
	c. With a neat diagram, explain main components of data lake.	10	(3 :3 : 1.7.1)
6.	a. Define the term decision tree.	03	(3 :4 : 1.7.1)
	b. Illustrate with example, the use of bubble chart.	07	(3 :4 : 1.7.1)
	c. Define the data visualization best practices.	10	(3 :4 : 1.7.1)
7.	a. List the characteristics of a decision tree.	03	(3 :5 : 1.7.1)
	b. Write a pseudo code for making decision trees.	07	(3 :5 : 1.7.1)
	c. Identify the 3 key elements on which the decision tree algorithm differs? Explain each one.	10	(3 :5 : 1.7.1)
8.	<b><u>Case Study</u></b>		
	a. List and explain in detail any 5 free tools available for data visualization.	10	(3 :5 : 1.7.1)
	b. Illustrate with a figure, advantages and disadvantages: (i) Star Schema (b) Snowflake Schema	10	(3 :3 : 1.7.1)

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**Note: (RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PO – Programme Outcome)**