



## End Term (Odd) Semester Examination November 2025

Roll no.....

Name of the Course and semester: MBAD III Semester

Name of the Paper: Business Intelligence

Paper Code: MBA 303(BA3)

Time: 3 hours

Maximum Marks: 100

### Note:

- (i) This question paper contains two sections-Section A and Section B
- (ii) Both Sections are compulsory
- (iii) Answer any two sub-questions from a, b & c in each main question of Section A. Each sub-question carries 10 marks.
- (iv) Section B, consisting of a case study, is compulsory. It is of 20 Marks.

### Section A

- Q1. (2X10=20 Marks)
- a. Define Business Intelligence (BI). Explain the role of Business Analysts and Data Scientists in BI with suitable examples.
- b. Differentiate between Decision Support Systems (DSS) and Expert Systems. Discuss the contribution of Group Decision Support Systems in business environments.
- c. Explain the architecture of a Data Warehouse. Discuss the differences between OLTP and OLAP with examples. (CO1)
- Q2. (2X10=20 Marks)
- a. What is Tableau? Describe its interface and main components used for BI reporting.
- b. Explain the steps for connecting Tableau to a database and organizing/simplifying data before visualization.
- c. Demonstrate how to create an interactive Dashboard in Tableau using charts, filters, and analytics features. (CO2)
- Q3. (2X10=20 Marks)
- a. Define data, information, and knowledge. Explain how these elements contribute to effective and timely business decisions.
- b. Discuss the architecture and life cycle of a Business Intelligence analysis. How do enabling factors influence BI projects?
- c. Explain the role of mathematical models in BI decision-making. Discuss any two ethical issues in Business Intelligence. (CO1, CO 5)
- Q4. (2X10=20 Marks)
- a. Describe different BI user types and their reporting needs. Differentiate between Standard and Ad Hoc Reports.
- b. What are Dashboards and Scorecards? Explain the importance of visualization (charts, graphs, geographic visualization) in BI reporting.
- c. What is efficiency analysis in BI? Explain the CCR model and discuss the concept of peer groups and cross-efficiency analysis. (CO3, CO4)



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**Section B**

**Q5. Case Study (CO1, CO2, CO4, CO5)**

**(20 Marks)**

A retail company, ShopSmart, collects data from multiple sources – online sales, in-store transactions, customer feedback, and social media. The management wants to understand sales performance across regions, identify top-selling products, and improve decision-making using Business Intelligence tools like Tableau.

Questions:

- Identify the types of data ShopSmart deals with and suggest how they can ensure data quality before analysis. (5 Marks)
- Explain how a Data Warehouse and Data Mart can be designed to support ShopSmart's BI requirements. (7 Marks)
- Describe how Tableau dashboards and efficiency models (like the CCR model) can help management evaluate performance and optimize operations. (8 Marks)