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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**  
(An Autonomous Institute Affiliated to AKTU, Lucknow)

**MBA (Integrated)**

**SEM: VII - THEORY EXAMINATION (2025 - 2026)**

**Subject: Business Intelligence and Data Warehousing**

**Time: 2.5 Hours**

**Max. Marks: 60**

General Instructions:

IMP: Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of three Sections -A, B, & C. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

**SECTION-A**

15

1. Attempt all parts:-

1-a. Select the main aim of BI in organizations ( CO1, K2). 1

- (a) Larger servers only
- (b) More paper reports
- (c) Better decisions
- (d) Fewer employees

1-b. Determine the best store choice for high-volume photos ( CO2, K4). 1

- (a) Tape-only index
- (b) Relational tables
- (c) CSV rows
- (d) Object storage

1-c. Select the measure in a data cube: ( CO3, K3). 1

- (a) Quarter
- (b) Country
- (c) Product category
- (d) Revenue

1-d. Select the step that converts formats and cleans data ( CO4, K3). 1

- (a) Vacuum
- (b) Load
- (c) Transform
- (d) Extract

1-e. Select the best description of an attribute ( CO5, K1). 1

- (a) Physical room
- (b) Separate database
- (c) Property of an entity
- (d) Whole enterprise

2. Attempt all parts:-

- 2.a. List the components included in a BI framework (CO1, K2) 2
- 2.b. Show the process of managing unstructured data effectively (CO2, K4) 2
- 2.c. State the challenges faced by OLTP systems (CO3, K3) 2
- 2.d. Summarize the concept of operational data store (CO4, K3) 2
- 2.e. Describe normalization steps for a student database (CO5, K2) 2

**SECTION-B**

15

3. Answer any three of the following:-

- 3-a. Discuss the role of Data Warehousing in supporting BI processes (CO1, K2) 5
- 3-b. Illustrate the storage challenges associated with unstructured data (CO2, K4) 5
- 3.c. Explain the challenges faced by OLTP systems in large-scale environments (CO3, K3) 5
- 3.d. Analyze the link between data profiling and integration strategies (CO4, K3) 5
- 3.e. Formulate a performance management framework for enterprises (CO5, K6) 5

**SECTION-C**

30

4. Answer any one of the following:-

- 4-a. Develop a simple BI framework for a retail store scenario (CO1, K2) 6
- 4-b. Analyze a hypothetical business dashboard scenario and suggest how its metrics could be interpreted for strategic planning. (CO1, K3) 6

5. Answer any one of the following:-

- 5-a. Analyze the sources and management of semi-structured data (CO2, K4) 6
- 5-b. Create a diagram of UIM architecture for unstructured data handling (CO2, K4) 6

6. Answer any one of the following:-

- 6-a. Illustrate slicing and dicing operations using sample data (CO3, K3) 6
- 6-b. Analyze a business scenario and suggest OLAP operations for insights (CO3, K3) 6

7. Answer any one of the following:-

- 7-a. Discuss the role of data profiling in ensuring accurate analytics (CO4, K3) 6
- 7-b. Analyze a case study on data quality issues and propose solutions (CO4, K3) 6

8. Answer any one of the following:-

- 8-a. Create a logical data model for an e-commerce application (CO5, K6) 6
- 8-b. Create a schema for enterprise reporting using dimensional modeling (CO5, K6) 6