Name: Enrolment No:	

UPES

End Semester Examination, Dec 2024

Course: Data Management **Semester: III**

Program: BBA ABD **Time: 03 hrs.**

Course Code: DSBA2010 **Max. Marks: 100**

Instructions:

SECTION A **10Qx2M=20Marks**			
S. No.		**Marks**	**CO**
Q 1	Statement of question	**2**	**CO1**
a.	Define data management.	**2**	**CO1**
b.	What is the role of a data management system?	**2**	**CO1**
c.	What is an ER diagram?	**2**	**CO1**
d.	Name two operations that can be performed using SQL.	**2**	**CO1**
e.	Name two examples of cloud database services.	**2**	**CO1**
f.	Name the three stages of the ETL process.	**2**	**CO1**
g.	Mention one challenge of managing unstructured data.	**2**	**CO1**
h.	What are data cubes used for?	**2**	**CO1**
i.	Write the SQL syntax to create a table with three fields.	**2**	**CO1**
j.	Name two examples of data management systems.	**2**	**CO1**
SECTION B **4Qx5M= 20 Marks**			
Q 2	Statement of question		**CO**
a.	What are the main components of an ER diagram?	**5**	**CO2**
b.	Describe how data cleaning improves data quality.	**5**	**CO2**
c.	Explain the concept and advantages of cloud-based databases.	**5**	**CO2**
d.	Differentiate between conceptual and logical database modeling.	**5**	**CO2**
SECTION-C **3Qx10M=30 Marks**			
Q 3	Statement of question		**CO**
a.	Discuss the types of data management systems and their applications.	**10**	**CO3**

b.	Develop an ETL pipeline for integrating data from multiple sources into a data warehouse. Discuss the steps involved in data extraction, cleaning, transformation, and loading.	**10**	**CO3**
c.	Compare OLAP and OLTP systems, emphasizing their roles, features, and differences. OR Draw ER diagram for Hospital Management System **(Use DOCTOR, PATIENT, HOSPITAL and MEDICAL_RECORD Entity).** Identify Primary Key and Foreign Key.	**10**	**CO3**
SECTION-D 2Qx15M= 30 Marks			
Q 4	Statement of question		**CO**
a.	Discuss the significance of data cleaning in the context of data warehousing and mining. Also explain the following: • Common data cleaning techniques such as handling missing values, outlier detection, and data standardization. • Provide examples of preprocessing a raw dataset for use in analytical tools or a data warehouse. • Highlight the impact of data quality on decision-making and analysis.	**15**	**CO4**
b.	Describe the key aspects of data management and their relevance in enterprise systems. Provide real-world examples. OR Design and implement a data management system for a library. The system should: • Include an ER diagram and relational schema for entities like Books, Members, Staff, and Transactions. • Use SQL to create and populate the database with sample data. • Implement CRUD operations (Create, Read, Update, Delete) and write SQL queries for specific use cases, such as overdue books or member transaction history.	**15**	**CO4**