

Class Test (1) Examination: Spring-2025

Course Code: CIS 222

Course Title: Database Management System

Time: 30 Minutes

Total Marks: 15

1.	Explain the main disadvantages of traditional file processing systems. How does a DBMS address these issues?	[5]
2.	What is a relation in the relational data model? Define and explain the concepts of attribute, tuple, relation schema, degree, and cardinality with an example.	[5]
3.	What is data abstraction in DBMS? Describe the three levels of data abstraction with suitable examples.	[5]

Class Test (2) Examination: Summer-2025

Course Code: CIS 222

Course Title: Database Management System

Time: 30 Minutes

Total Marks: 15

1.	<p>The craft trading website Itsy! Bitsy! is setting up a database to record sellers and their products. This requires recording the following information:</p> <ul style="list-style-type: none">-For each seller, their name, contact email, and postal address.-For each product, its name, price, and number available.-Which product is from which seller.-A unique id number for each product. <p>Draw an entity-relationship (ER) diagram that represents this information. Ensure that you capture the constraints on the relationships involved and designate appropriate primary keys for the entities.</p>	[6]
2.	<p>Imagine you are designing a database for a university. The database has two tables:</p> <ul style="list-style-type: none">- Students (StudentID, FullName, DOB, PhoneNumber, Email)- Courses (CourseID, CourseName, InstructorID) <p>Later, a third table is added:</p> <ul style="list-style-type: none">- Enrollments (StudentID, CourseID, EnrollmentDate) <p>Based on this structure: Justify why a composite key might be suitable in the Enrollments table.</p>	[6]
3.	<p>Explain the three-tier architecture of databases.</p>	[3]

Student ID Course ID