

Programme: B.Sc.
Subject: Computer Science
Semester: III
Paper Code: CSC103
Paper Title: Database Management System

Unit II: Conceptual design and Entity Relationship model
Module Name: Any two Examples of Entity Relationship Diagram (ERD)
Module No: 07
Name of the Presenter: Mrs. Ana B. Gracy Fernandes

Short Answer type:

- 1) Explain ER model in detail
- 2) Define degree of relation
- 3) What is the difference between a relation and a relationship?
- 4) Give the limitations of E-R model? How do you overcome this?

Long Answer Type:

- 1) Construct an E-R diagram for a car-insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents.
- 2) What are the steps involved in designing a database application? Explain with an application.
- 3) Answer the following:
 1. Manufacturers have a name, which we may assume is unique, an address, and a phone number.
 2. Products have a model number and a type (e.g., television set). Each product is made by one manufacturer, and different manufacturers may have different products with the same model number. However, you may assume that no manufacturer would have two products with the same model number.
 3. Customers are identified by their unique social security number. They have email addresses, and physical addresses. Several customers may live at the same (physical) address, but we assume that no two customers have the same email address.
 4. An order has a unique order number, and a date. An order is placed by one customer. For each order, there are one or more products ordered, and there is a quantity for each product on the order.

Draw an E/R diagram that represents the above information. Do not forget to underline the keys as usual.