Active Learning Method

Program: B. Tech – CSE   Academic Year / Yr-Sem : 2025 - 26 / II - I Sem

CourseTitle & Code:**24AD2103/R – DATABASE MANAGEMENT SYSTEMS**

Date: Time: Venue:

CO#	1
Topics	Enhanced ER Model
Type of ALM	**THINK / PAIR / SHARE**
Learning Approach	**collaborative learning**

THINK / PAIR / SHARE: Enhanced ER Model

Have attendees turn to someone near them to summarize what they're learning, to answer a question posed during the discussion, or to consider how and why and when they might apply a concept to their own situations.

RUBRIC:

Marks to be awarded	5M	3M	1M
Identify the question and are able to find a cogent answer.	The pair accurately identifies the question and summarize well or find the right situation to apply concept.	The pair accurately identifies the question and summarize well or find the right situation to apply concept but to a lesser degree	Does not identify the problem at all.

PROCEDURE:

1. The students learn collaborative learning.

2. The assessment shall be in pairs.

Case Study : Hospital Management System

A hospital maintains information about its **medical staff**, **patients**, and **departments**. All staff members are **Employees**, but some are **Doctors**, **Nurses**, and **Technicians**, each with distinct attributes. Some **Doctors** are **Specialists**, while others are **General Physicians**. Patients are treated by doctors and may undergo various medical **procedures**, which are conducted by **Technicians**. Each department maintains its **equipment**, and some **doctors** are also involved in **administrative roles**.

Key Entities and Relationships:
- **Employee** (Emp_ID, Name, Contact, Join_Date)
- **Doctor** (Emp_ID, Specialization, License_No)
- **Nurse** (Emp_ID, Shift, Ward_Assigned)
- **Technician** (Emp_ID, Skill_Type, Equipment_ID)
- **Patient** (Patient_ID, Name, DOB, Admitted_Date)
- **Procedure** (Proc_ID, Name, Cost)
- **Department** (Dept_ID, Name, Head_EmpID)
- **Treats** (Doctor_ID, Patient_ID, Date)
- **Undergoes** (Patient_ID, Proc_ID, Date, Performed_By_Tech_ID)
- **Assigned_To** (Employee_ID, Department_ID)

EER Concepts Applied:

EER Feature	Application
Generalization	All staff are generalized as **Employees**.
Specialization	Employees can be **Doctors**, **Nurses**, or **Technicians**. Doctors can be further specialized into **Specialists** and **General Physicians**.
Aggregation	The relationship "Undergoes" can be aggregated if we need to connect it with another entity like **Billing** or **Insurance**.

Photographs / Screenshot of ALM:

Signature of the Course Faculty

Course Coordinator   **TLP I/C**

Academic Professor I/C   **Head of the Department**