ASSIGNMENT-1

Program: B.TECH (AI &ML)
Semester:III
Subject code: CSAIML302T
Subject name: Database Systems

1. Define DBMS and list its main functions.

2. Explain the three levels of data abstraction in DBMS.

3. Differentiate between logical and physical data independence.

4. What are the advantages of DBMS over file systems?

5. Describe the components of a database system architecture.

6. Explain the concept of data models with examples.

7. What is the difference between a schema and an instance?

8. Describe the entity-relationship model and its components.

9. Explain the architecture of a DBMS with a neat diagram and describe each component.

10. Discuss the advantages and disadvantages of DBMS compared to traditional file systems.

Instructions:

- **All questions are compulsory.**
- **Answers should be clear, well-structured, and supported with examples and diagrams where applicable.**
- **Last submission date-2Aug -2025.**