**Course: DBMS Class: II B.Tech. CSE DS Semester A.Y:2022-23**

**ASSIGNMENT-I**

**1. a)** State the purpose of database management systems?

**b)** Describe the structure of DBMS?

**2. a)** Explain the three level of architecture of database system? How is data independence achieved in this system?

**b)** Explain about different types of data models with Examples?

**3. a)** List various categories of database users and discuss their interfaces to DBMS?

**b)** Explain the responsibilities of a database administrator?

**4. a)** Draw and Explain all elements of E-R diagrams ?

**b)** A company database needs to store information about employees(SSN, salary, phone\_ no), departments(dno, dname ,budget) and childrenofemployees(name, age). Employees work in departments. Each department is managed by an Employee. Design E-R diagram and construct database that captures this information.

**5. a)** Design how translating E-R diagrams with relationship with key constraints, with participation constraints and Aggregation possible using the entities emloyee(SSN,name,lot),Projects(pid,started\_on,pbudget),Departments(did,dname,budget) for relationship sets Monitors and sponsors?

**6. a)** Define following :

i). Instance

ii).Schema

iii). referential integrity Constraint

iv). Super key, Candidate Key, Primary key and Foreign Key

**b).** Demonstrate usage of DML, DDL, DCL with suitable examples?