## B.E 2/4 (sem-4) 2021-2022

## **DBMS Assignment -1**

## Date of Submission: 9/05/2022

- Define a) Data b) Information c) Database d) DBMS e) Data Independence
  f) Schema g) Query h) Entity i) Relationship Set j) Relation
- 2. Design Architecture of Data Base System. Explain the functionality of each component in the system.
- 3. Differentiate between File Processing Systems and Data Base Systems.
- 4. Explain the terms Primary key, Foreign key, Candidate key and Super key and differentiate among them with an example.
- 5. What is Data abstraction? Explain three levels of data abstraction.
- 6. What is Data Model? Explain different types of data models in DBMS.
- 7. Explain database design for Banking Enterprise using ER Diagram and write relational model for that ER diagram.
- 8. Explain the concept of Generalization, Specialization and Aggregation with an example.(Extended ER features).
- 9. Explain Codd rules in detail.
- 10. What is Functional Dependency? Explain different types of functional dependency.
- 11. Discuss about Inference rules with examples.
- 12. What is Normalization? Explain different types of Normal Forms with example.
- 13. Write short notes on:
  - a) Aggregate functions in SQL.
  - b) Comparison Operators.
  - c) Logical Connectivity's.
  - d) Nested queries.
  - e) Correlated Nested queries.