

**BACHELOR OF TECHNOLOGY (CBCS - 2023)**  
**B. Tech. Sem-III Computer Science & Engineering : SUMMER : 2025**  
**SUBJECT: DATABASE SYSTEMS**

Day : Wednesday  
Date : 14/05/2025

**S-29201-2025**

Time : 02:30 PM-05:30 PM  
Max. Marks : 60

**N. B.**

- 1) All Questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data if **NECESSARY**.

Q. 1      What are the different types of Data Model in database systems? Explain in detail. (10)

**OR**

Q. 1      Explain various database languages. (10)

Q. 2      Draw an extended ER Diagram for Restaurant Management system. (10)

**OR**

Q. 2      Draw a Relational schema Diagram for Hospital Management system. (10)

Q. 3      Explain Query Processing with Suitable Diagram (10)

**OR**

Q. 3      Explain Measures of calculating the Query cost. (10)

Q. 4      What is DDL, DML, DCL and TCL commands in SQL? Explain each with example. (10)

**OR**

Q. 4      What are SQL Aggregate Functions? Explain with examples. (10)

Q. 5      Explain different Time Stamping Methods for Concurrency control with the help of an example. (10)

**OR**

Q. 5      What is Serializability ? Explain conflict and view serializability with the help of example. (10)

Q. 6      Write a note on Distributed database Architecture in DBMS. (10)

**OR**

Q. 6      What are different architecture Design for parallel databases? Explain with suitable diagrams. (10)

\* \* \* \*