

Time: 3 hours

Marks: 80

- N.B.:**
1. Question No.1 is compulsory.
 2. Answer any three out of remaining questions.
 3. Assume suitable data if necessary.
 4. Figures to the right indicate full marks.

- Q1. Attempt All questions 20M
- (a) Explain generalization and Specialization with example.
 - (b) Discuss primary key and foreign key with example.
 - (c) Write a short note on conflict serializability
 - (d) Explain DCL commands in detail.
- Q2. 10M
- (a) Draw and explain Database System architecture 10M
 - (b) Explain different type of attributes with example in Entity Relational Model 10M
- Q3. 10M
- (a) Draw EER diagram for railway reservation management System 10M
 - (b) Draw and explain notations of ER/EER diagram 10M
- Q4. 10M
- (a) Explain the DDL and DML Commands with suitable example. 10M
 - (b) Discuss procedure, functions and cursors with example.
- Q5. 10M
- (a) Define normalization. Explain 1NF in detail with example 10M
 - (b) Explain ACID properties in details with example.
- Q6. write short note on 20M
- (a) Constraints in SQL
 - (b) Need of normalization in Database Design
 - (c) Group by clause
 - (d) JDBC Connection
