

MAY 2011

P/ID 77525/PMEJ

Time : Three hours

Maximum : 100 marks

PART A — (5 × 6 = 30 marks)

Answer any FIVE questions.

All questions carry equal marks.

1. What are data models and how are they grouped?
2. Explain Hierarchical model with examples.
3. How to save data from a Form to database
4. What is an active database?
5. What do mean by Data base security?
6. What is the difference between a database schema and a database state?
7. Explain Concurrent transaction with examples.
8. Describe the problems that are associated with redundant data.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

9. What is normalisation and explain normalisation techniques?
10. Explain how concurrency execution of transactions improves overall system performance.
11. How to differentiate a good database design from a bad database design?
12. Give the limitations of E-R model. How to overcome this?
13. List the required properties of a transaction to ensure integrity of the data.
14. What is a relation? Differentiate between relation schema and relation instance.
15. Discuss the steps involved in processing a query with example.
16. What is meant by E-R diagram? Mention the components available in E-R diagram.

PART C — (1 × 20 = 20 marks)

(Compulsory)

17. Construct an ER diagram for a school with a set of students and a set of teachers. Associate with each student a log of the various tests and examinations conducted.
