

DECEMBER 2015

P/ID 17515/PCASR

Time : Three hours

Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. Give the three levels of data abstraction and explain.
2. Discuss on Null values and state the uses.
3. What are weak entity sets? Explain with examples.
4. Write short note on persistent programming languages.
5. Discuss on fixed-length records with diagrams.
6. Give the steps in query processing and explain.
7. Write about recoverability with examples.
8. Describe parallel database architectures with diagrams.

PART B — (7 × 10 = 70 marks)

Answer any SEVEN questions.

9. Discuss on Tuple Relational calculus operators and give examples.
10. Illustrate views in relational model.
11. Explain reduction of an ER-Schema to tables.
12. Illustrate normalization using Join dependency.
13. Discuss on RAID system with diagrams.
14. Explain dynamic hashing with examples.
15. Give the implementation of atomicity and durability and explain with diagrams.
16. Explain timestamp-based protocols.
17. Explain distributed systems with neat illustrations.
18. Discuss on various network types with diagrams.