Section D

- 1. List down advantages of RDBMS over traditional file system.
- 2. Explain the role of Database administrator.
- 3. What is Normalization?
- 4. Explain the various types of normalization with its advantages and disadvantages?
- 5. What are Indexes? Explain the use of Indexes.
- 6. Explain how you can optimize your Query.

Section E

- 1. What is the need of Backup in a database system?
- 2. Describe the methods used for Backup and recovery?
- 3. What is the purpose of Rollback?
- 4. What do you understand from functional dependencies?
- 5. What is data redundancy? How does it affect consistency?
- 6. Explain Data Independence and its types in brief.
- 7. Explain various Recovery techniques.



Section B

- 1. Describe main purposes and activities associated with each stage of database.
- 2. Compare and contrast the three phases of database design.
- 3. Describe the main advantages of using prototyping approach.
- 4. Explain the types of transparencies in a DDBMS.
- 5. Explain single site processing, single site data.
- 6. What is TP monitor? What advantages does TP monitor bring to an OLTP environment?
- 7. Give diagrammatic representation of architecture and components of data warehouse.
- 8. Explain in detail decision support system.
- 9. Discuss what online analytical processing is and how it differs from data warehousing.
- 10. Explain data mining in detail.



Section C

- 1. Explain three level database architecture. What are its objectives?
- 2. What do data independence and its types? How data independence is achieved?
- 3. What are advantages of DBMS?
- 4. Discuss the main disadvantages of a Traditional file approach?
- 5. What is a JOIN operation? How is it represented? Explain with example.
- 6. How does a tuple relational calculus differ from domain relational calculus?



Section A

- 1. Differentiate centralized and decentralized design.
- 2. What is data abstraction?
- 3. What are the differences between serial and non serial schedules?
- 4. What are the advantages and disadvantages of DDBMS?
- 5. What layers of transparency should be provided with a DDBMS?
- 6. What is data replication?
- 7. What is local mapping transparency?
- 8. Describe two phase locking protocol.
- 9. What is load balancing?
- 10. What are the disadvantages of file server architecture?
- 11. Discuss main tasks associated with the administration of a data warehouse.
- 12. What is warehouse manager?
- 13. Describe Codd rules for OLAP tools.
- 14. What is predictive modeling?
- 15. Define primary key and super key.