

Note: Paper setter will set nine questions in all. Question No. 1 comprising of five short types questions carrying four (4) marks each is compulsory. It covers the entire syllabus. Answer to each question should not be more than one page. Candidate is required to attempt four questions from the remaining eight questions carrying 10 marks each.

Overview of Data Management System: element of data-base system, DBMS and its architecture, advantages of DBMS, types of database users, role of database administrator.

Brief overview of hierarchical and network model, detailed study of relational model (relations, properties of relational model, keys and integrity rules), and E-R diagrams.

Normalization: concepts and update anomalies, functional and transitive dependencies normal forms (1NF, 2NF, 3NF and BCNF).

Database objects: terminologies- tables, views, materialized views, indexes; triggers; synonyms; functions, procedures and packages; create operator, create directory, create library, database links.

SQL: methods to access SQL plan; DDL, describe command; DML, joining tables; break clause.

Oracle service: terminology; architecture and background support processes, role of database administrator, applications of ORACLE in business.

Practical: The candidates should be able to work on Oracle

REFERENCES

- C.J. Date, An Introduction to Database Systems Narosa Publisher.
- D. Kroenke: Database Processing: Fundamental Design and Implementation, Pearson.
- Abraham Silberschatz, Henry F Korth and S. Sudarshan, Database System Concepts, McGraw Hill Education.