

ELECTIVE – IV – DATA BASE MANAGEMENT SYSTEMS

UNIT I:

File organization: Implementation of sequential, index sequential and random file organizations
Data overview: Introduction and history – Role of data base in information systems – Data base system architecture – Data structures for data base processing – Types of data bases.

UNIT II:

Relational Model: concepts – relation – domain – attributive keys – design principles – normalization 1NF, 2NF, 3NF – relevant algebra – relational data definition (using SOL) – relational data manipulation (using SOL).

UNIT III:

Network Model – Fundamental concepts – entitle attributes – Set – relationship – area – file – scheme – entity, set characteristics – storage scheme – records mapping placement modes – pointers – record key – sub scheme – privacy mechanism – design considerations – DML programming.

UNIT IV:

Hietarchical model: Brief introduction. Data base administration – share access control – security – privacy recovery mechanisms.

UNIT V:

Further topics in data base – comparison of 3 types of Data bases – data dictionary system – distributed data base – data base machines.

TEXT BOOK:

Data base processing – Fundamentals, design implementation.
David M. Kroenke – Galgotia Publications.

BOOKS FOR REFERENCE:

Date. C.J. An introduction to data base systems
James Martin – Computer Data Base Organization.