FIRST TERM E-LEARNING NOTE

SUBJECT: DATA PROCESSING CLASS: SS3

SCHEME OF WORK

WEEK	TOPIC
1	REVISION
2	INDEXES:- Definition, Clustered versus Unclustered indexes
3	INDEXES:- Dense versus Sparse, Primary and Secondary Indexes, Indexes using Composite Search Keys
4	MAINTENANCE OF COMPUTER:- Computer Hardware, Process Of Maintaining Hardware
5	MAINTENANCE OF COMPUTER:- Procedure for Software Maintenance, Software for Hardware and Software Maintenance
6	DATABASE SECURITY:- Definition and Explanation, Access Control and Encryption
7	DATABASE SECURITY:- Importance, Integrity and Availability, the Role of a Database Administrator
8	CRASH RECOVERY:- Introduction to ARIES, other Recovery Related Data Structure.
9	CRASH RECOVERY:- Definition and Explanation of Check Pointing, Explain Media Recovery
10	REVISION
11	EXAMINATION

REFERENCE TEXTBOOK: UNDERSTANDING DATA PROCESSING for SENIOR SECONDARY SCHOOLS BY: DINEHIN VICTORIA

WEEK ONE REVISION

DEFINITION OF DATA MODEL

Is the process of structuring and organizing data.

TYPES OF DATA MODELS

(1) Flat (2) Hierarchical (3) Network (4) Relational (5) Object-Relational and (6) Star Schema

SIGNIFICANCE OF DATA MODEL

- (1) A well-developed data model can foster improved understanding of the organization
- (2) Data model helps in structuring and organizing of data
- (3) It imposes constraints or limitations on the data placed within the structure

STANDARD DATA MODEL

A standard data model or industry standard data model is a data model that is widely applied in some industry and shared amongst competitors to some degree. Examples are: ISO 10303, ISO 15926, IDEAS GROUP

NORMALIZATION

Is the process of efficiently organizing data in a database by reducing duplication or redundancy and design flaws.

NORMAL FORM

Provide criteria for determining a table's degree of vulnerability to...