

GUJARAT TECHNOLOGICAL UNIVERSITY

MASTER OF BUSINESS ADMINISTRATION (Global Program)

Year – II (Semester – III) (W.E.F. January 2014)

Specialization: Information System Management

Subject Name: Database Management (DM)

Subject Code: 2830401

1. Objective:

This course is design to impart knowledge of database management. This will help the students in understanding the issues which are required to be addressed at the time of database design and also make them understanding the management issues of database

2. Course Duration:

The total hours for teaching this course will be 45 hours which will be divided into 36 sessions of 75 minutes each.

3. Course Content:

The course will contain following modules

Module	Module and Sub-Modules	Sessions	Marks
I	Basic concepts: data, information, metadata, Need of database system, advantages and disadvantages of database system, application area of database system, people who interact with database, Entity-Relationship model : entity and entity sets, relationship, constraints, E-R diagrams, issues with E-R diagrams, design of tables from schemas, Data Models Association of data, Data model classification, Relational Model Data Views: Data abstraction, instances and schemas	8	17
II	Introduction to DBMS: DBMS three level, Client/Server Architecture: two and three tier Architecture definition of DBMS, entities, attributes, relationships, Data dependency Keys : Super key, Candidate key, Primary key, Alternate key, Foreign key Integrity Constraints: Entity Integrity, Referential Integrity	8	18
III	Database Languages: Introduction to SQL, Types of SQL: Data Manipulation Language (DML), Data Definition Language (DDL) : create, alter, drop (sql statements with examples), Data Control Language (DCL), Transaction	8	17

	Control Language (TCL), Data Query Language (DQL), Database system environment and utilities		
IV	DML: insert, update, delete (sql statements with examples) TCL : commit, rollback, grant, revoke (sql statements with examples) DQL :Select from table, multiple tables, sub query, functions ,Virtual tables (SQL View)	8	18
V	Case studies to designing and implementation of database for business case, such as finance system, inventory control system, order system, purchase system etc	4	Internal Evaluation (20 Marks of CEC)

4. Teaching Methods:

The course will use the following pedagogical tools:

- A. Case discussion covering a cross section of decision situations.
- B. Discussions on issues and techniques of Marketing.
- C. Projects/ Assignments/ Quizzes/ Class participation etc

5. Evaluation:

The evaluation of participants will be on continuous basis comprising of the following elements:

6. Text Books:

S. No	Authors	Name of the Books	Publisher	Edition & Year of Publication
T1	Mark L. Gillenson	Fundamentals of Database Management Systems	Wiley	Latest Edition
T2	Jeffrey A. hoffer, Mary Prescott and Heikki Topi,	Modern Database Management systems	Pearson	Latest Edition
T3	Rajesh Narang	Database Management Systems	PHI	Latest Edition

7. Reference Books:

Sr. No.	Author	Name of the Book	Publisher	Edition
R1	Bipin C. Desai,	Introduction to Database Systems	Galgotia	Latest Edition
R2	C.J. Date, A. Kannan, S. Swamynathan,	An Introduction to Database Systems	Pearson	Latest Edition
R3	Ramez Elmasri, S.B. Navathe	Fundamentals of Database Systems	Pearson	Latest Edition
R4	A. Silberschatz, H.F. Korth, S. Sudarshan,	Database System Concepts	Tata Mc Graw-Hill	Latest Edition
R5	Mark L. Gillenson,	Introduction to	Wiley	Latest Edition

	et al with Frank miller	Database Management		
R6	Peter Rob and Carlos Coronel	Database System Concepts	Cengage Learning	Latest Edition

8. List of Journals/ Periodicals/ Magazines/ Newspapers:

Computer Express, Chip, Data Quest,.

NB: The Instructor/s (Faculty Member/s) will be required to guide the students regarding suggested readings from Text(s) and references in items 6 and 7 mentioned above.

9. Session Plan:

Session	Topics to be covered
1 - 4	Basic concepts: data, information, metadata, Need of database system, advantages and disadvantages of database system, application area of database system, people who interact with database
5 - 8	Entity-Relationship model : entity and entity sets, relationship, constraints, E-R diagrams, issues with E-R diagrams, design of tables from schemas, Data Models Association of data, Data model classification, Relational Model Data Views: Data abstraction, instances and schemas
9 - 16	Introduction to DBMS: DBMS three level, Client/Server Architecture: two and three tier Architecture definition of DBMS, entities, attributes, relationships, Data dependency Keys : Super key, Candidate key, Primary key, Alternate key, Foreign key Integrity Constraints: Entity Integrity, Referential Integrity
17 - 24	Database Languages: Introduction to SQL, Types of SQL: Data Manipulation Language (DML), Data Definition Language (DDL) : create, alter, drop (sql statements with examples), Data Control Language (DCL), Transaction Control Language (TCL), Data Query Language (DQL), Database system environment and utilities
25 - 32	DML: insert, update, delete (sql statements with examples) TCL : commit, rollback, grant, revoke (sql statements with examples) DQL :Select from table, multiple tables, sub query, functions ,Virtual tables (SQL View)
32 -36	Case studies to designing and implementation of database for business case, such as finance system, inventory control system, order system, purchase system etc