

Krantiguru Shyamji Krishna Verma Kachchh University, Bhuj
Master of Science (Computer Applications & Information Technology)
Semester: III

Paper Code: CCCS310		Total Credit : 4
Title of Paper: Database Management System – I		Total Marks : 70
		Time : 3 Hrs
Unit	Description	Weighting
I	Database Management System Introduction Definition of DBMS File processing system Vs DBMS <ul style="list-style-type: none"> - Limitation of file processing system - Comparison of File processing system and DBMS Advantages and Disadvantages of DBMS Users of DBMS <ul style="list-style-type: none"> - Database Designers - Application programmer - Sophisticated Users - End Users Capabilities of good DBMS Overall System structure	20%
II	Data Models Introduction Object Based Logical Model Record Base Logical Model <ul style="list-style-type: none"> - Relational Model, Network Model, Hierarchical Model Entity Relationship Model <ul style="list-style-type: none"> - Entity Set, Attribute, Relationship Set Entity Relationship Diagram (ERD) Extended features of ERD	20%
III	Relational Databases Introduction Terms <ul style="list-style-type: none"> - Relation, Tuple, Attribute, Cardinality, Degree, Domain Keys <ul style="list-style-type: none"> - Super Key, Candidate Key, Primary Key, Foreign Key Relational Algebra Operations <ul style="list-style-type: none"> - Select, Project, Union, Difference, Intersection, Cartesian, Product, Natural Join 	20%
IV	Relational Database Design Introduction, Anomalies of un normalized database Normalization, Normal Forms: 1 NF, 2 NF, 3 NF, 4 NF, BCNF, DKNF	20%
V	SQL (Structured Query Language) Introduction, History Of SQL, Basic Structure DDL Commands: CREATE, ALTER, DROP, TRUNCATE DML Commands: SELECT, INSERT, UPDATE, DELETE Clauses : FROM, GROUP BY, HAVING, ORDER BY, IN Aggregate Functions: AVG, COUNT, FIRST, LAST, MIN, MAX, SUM Simple Queries and Nested Queries MS Access Forms and Reports	20%
Basic Text & Reference Books :-		
1.	Database System Concepts By Henry Korth and A. Silberschatz	
2.	An Introduction to Database System by Bipin Desai	

Krantiguru Shyamji Krishna Verma Kachchh University, Bhuj
Master of Science (Computer Applications & Information Technology)
Semester: III

Paper Code: CCCS310		Total Credit : 4	
Title of Paper: Database Management System – I		Total Marks : 70	
		Time : 3 Hrs	
Unit	Description	Total Marks	
I	Q.1 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.1 (B) Medium / Long Questions. (With Internal Option)	08	
II	Q.2 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.2 (B) Medium / Long Questions. (With Internal Option)	08	
III	Q.3 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.3 (B) Medium / Long Questions. (With Internal Option)	08	
IV	Q.4 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.4 (B) Medium / Long Questions. (With Internal Option)	08	
V	Q.5 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.5 (B) Medium / Long Questions. (With Internal Option)	08	