No	Information of Database Management System(IT -31016)	
1	Unit name:	Database Management System
2	Code:	IT 31016
3	Classification:	Engineering subject
4	Credit value:	3
5	Semester/ Year Offered:	1/III
6	Pre-requisite:	Basic Computer Skill and ICS
7	Mode of delivery:	Lecture, Practical, Tutorial
8	Assessment system and breakdown of marks: Test (Tutorial, Assignment, Practical)	Tutorial, Practical Exam, Assignment 30%
	Mid-term/ final Examination	70%
9	Academic staff teaching unit:	Department of Information Technology Engineering
10	Course outcome of unit: In this course, students will be able (a) To recognize about the basic of database system, Functional dependencies, Normalization and Entity Relationship C1,GA1 (b) To comprehend how the relations relates each other by using SQL language, depend from one relation to others, normalize relations C2, GA2 (c) To operate SQL quaries, compute functional dependencies, construct Entity relation model C3, GA3 (d) To create the database by using MySQL software P, GA5	
11	Synopsis of unit: The course covers the fundamental of database management systems with computer simulation Microsoft Access 2013. The course introduces students to the type of database management concepts, database system, data independence, relational system, architecture for a database system, relational data objects, domain and relations, relational data integrity, candidate keys and related matters, relational operation I,II, the SQL language, functional dependencies and further normalization I,II.	

12	Topic:
	8. The SQL Language
	-Introduction
	-Data Definition
	-Data Manipulation: Retrieval Operations
	-Data Manipulation: Update Operations
	-Table Expressions
	-Conditional Expressions
	-Scalar Expressions
	-Embedded SQL
	-Summary
	9. Functional Dependencies
	-Introduction
	-Basic Definitions
	-Trivial and Nontrivial Dependencies
	-Closure of a set of Dependencies
	-Closure of a set of Attributes
	-Irreducible sets of Dependencies
	-Summary
	10. Further Normalization I: 1NF, 2NF, 3NF,BCNF
	-Introduction
	-Non loss Decomposition and Functional Dependencies
	-First, Second, and Third Normal Forms
	-Dependency Preservation
	-Boyce/Codd Normal Form
	-Summary
	11. Further Normalization II: Higher Normal Forms
	-Introduction
	-Multivalued Dependencies and Fourth Normal Form
	-Join Dependencies and Fifth Normal Form

	-The Normalization Procedure Summarized
	-Other Normal Forms
	-Summary
	12. The Entity/Relationship Model
	-Introduction
	-The Overall Approach
	-An Overview of the E/R Model
	-E/R Diagrams
	-Database Design with the E/R Model
	-A Brief Analysis
	-Summary
14	Main references: An Introduction to Database Systems Six Edition C.J. Date
15	Additional references: You Tube Tutorial