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| **Program: B. Com** | | | **Semester : I** | | |
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| **Course : Database Management Systems** | | | **Course Code:** | | |
| **Credits** | | **Evaluation Scheme: 50 marks** | | | |
| **2** | | **Continuous Assessment (CA): 40 % (20 marks)**  **Component 1: Machine Test…. 16 marks**  **Component 2: Journal & Viva….04 marks** | | **End Semester Examination: 60 %**  **(30marks)** | |
| **Pre-requisite**   1. **Skill of using a computer** | | | | | |
| **Objectives:**   1. To prepare and equip students in areas of Database Management(Mysql) | | | | | |
| **Outcomes:** After completion of the course, students would be able to:   1. Learners will attain the ability to apply the knowledge of computing to appropriate disciplines 2. Apply logical skills to programming in a variety of languages | | | | | |
| **Detailed Syllabus: (unit wise)** | | | | | |
| **Unit** | **Description** | | | | **Duration** |
| **1** | **Database and Mysql**  Introduction: To Databases, Relational and Non Relational database system ,Mysql as a Non procedural language. View of data.  Mysql Basics: Statements (Schema Statements, Data statements, Transaction statements), names (table and column names),data types( Char, Varchar, Text,  medium text,, long text, Smallint, Bigint,Boolean, Decimal, Float, Double, Date, Date Time, Timestamp, Year,Time), Creating databases, inserting data, Updating data, deleting data expressions, Built-in-functions – lower,upper,reverse,length,day,month, year ,dayname, monthname,abs, pow,mod,round,sqrt missing data (NULL AND NOT NULL default values). Create, use, Alter (Add, remove, Change columns), Rename, show Describe ( Create table, columns, status and databases only) and drop (table, column, databases statements), Primary key, Foreign key, ( one and more columns) simple validity checking using one and more constraints. | | | | **8** |
| **2** | Database and MySql  MySql simple queries: The Select statement ( from, where,group by , having, order by, Distinct, Filtering data by using conditions . Simple and complex conditions using logical, arithmetic and relational operators(=,!, =,<,>,<>,AND,OR,NOT,LIKE) Aggregate Functions – count, sum, avg, max,min  Multi table queries: Simple joins (INNER JOIN),SQL, considerations for multi table queries(table aliases, qualified column names, all column selection self join)  Nested queries( only up to two levels): Using sub queries, sub queries search conditions, sub queries and joins , nested sub queries, correlated sub queries, sub queries in the having clause, simple transaction illustrating START, COMMIT, and Rollback. | | | | **7** |
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|  | **Details of Internal Continuous Assessment (ICA)**  **Machine Test Marks : 16**  **Journal: 04**  Machine Test is 1 Hour test carrying 2 compulsory question from unit 1 and 2.  Journal contains the programs carried out through out the semester.  **Term End Examination Question Paper Pattern**  **Total Marks: 30**  Q1 Answer any **two** out of the following Three questions 5\*2=10  Q2 Answer any **two** out of the following Three questions 5\*2=10  Q3 Answer any **two** out of the following Three questions 5\*2=10 | | | |  |

**Prepared by:**

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