MANIPAL INSTITUTE OF TECHNOLOGY

(A constituent college of ManipalUniversity, Manipal)
Manipal Karnataka 576 104

Department Of Information and Communication Technology

COURSE PLAN

Department : **Information and Communication Technology**

Subject : **DATABASE SYSTEMS LAB**

Semester & branch : **IV B.Tech Information Technology (ICT-214)**

Name of the faculty :**Mrs. Diana Olivia, Mr. Akshay K.C**

No of contact hours/week :**03**

TEST/EXAM	Topics
REGULAR EVALUATION	BI WEEKLY
FINAL EXAM	SQL Queries and Mini Project

Submitted by:

Mrs. Diana Olivia

Signature of the faculty

Mr. Akshay K.C.

Date: 30/01/2015

Approved by: Dr. Preetham Kumar

(Signature of HOD)
Date: 31.1.15

Lab No.	Laboratory Assignment to be discussed
1.	Designing a simple calculator using C#
2.	Designing an interface in C# including the following: Changing size, color of the font. Working with RichText Box, ListBox, Combo Box, Radio Button and Check Box.
3.	1. Working with Tab Control, DateTime Picker, Tree View, Menu Strip, Status bar, and Tool Strip. 2. Consider the Insurance database given below. PERSON(driver_id#: String, name: String, address: String) CAR(regno: String, model: String, Year: int) ACCIDENT(report-number: int, accd_date: date, location: string) OWNS(driver_id#: String, regno: String) PARTICIPATED(driver_id#: String, regno: String, report-number: int, damage_amount:int) i.) Create the above tables by properly specifyting the primary keys and the foreign keys. ii.) Enter atleast five tuples for each relation
4.	For the insurance database demonstrate how you 1. Update the damage amount to 25000 for the car with a specific regno. In the ACCIDENT table with report number 12. 2. Add a new accident to the database. 3. Find the total number of people who owned cars that were involved in accidents in 2008. 4. Find the number of accidents in which cars belonging to a specific model were involved. 5. Create a suitable front for querying and displaying the results.
5.	Consider the following relations for an order processing database application in a company. CUSTOMER(cust#: int, cname:string, city:string) ORDERS(order#:int, odate:date, cust#:int, ordamt: int) ORDER_ITEM(order#:int, item#: int, qty: int) ITEM(item#: int, us=nitprice: int) SHIPMENT(order#: int, warehouse#: int, shipdate: date) WAREHOUSE(warehouse#: int, shipdate: date) i. Create the above tables by properly specifying the primary keys and the foreign keys. ii. Enter atleast 5 tuples for each relation. iii. Produce a listing: CUSTNAME, No. of Orders, AVG_ORDER_AMT, where the middle column is the total

	number of orders by the customer and the last column is the average order amount for that customer. iv. List the order no for the orders that were shipped from all the warehouses that the company has in a specific city. v. Demonstrate the deletion of any item from the ITEM and demonstrate a method of handling the rows in ORDER_ITEM table that contain this particular item. vi. Generate suitable reports. vii. Create suitable front end for querying and displaying the results.
6.	1. Submission of the abstract for the dbms mini project. 2. Consider the following database of student enrollment in courses and books adopted for each course. STUDENT(regno: string, name:string, major:string, bdate:date) COURSE(course#:int, cname:string, dept:string) ENROLL(regno: string, course#:int, sem:int, book_isbn:int) BOOK_ADOPTION(course#:int, sem:int, book_isbn:int) TEXT(book_isbn:int, booktitle:string, publisher:string, author:string) i. Create the above tables properly by specifying the primary keys and foreign keys. ii. Enter atleast 5 tuples for each relation. iii. Demonstrate how you add a new text book to the database and make this book be adopted by some department. iv. Produce a list of text books(include course#, book_isbn, booktitle) in the alphabetical order for courses offered by the "IT " department that use more than two books. v. List any department that has all its adopted books published by a specific publisher. vi. Generate suitable reports vii. Create suitable front end for querying and displaying th results.
7.	1. Submission of ER diagram of the mini project 2. Submit the design of the front end of the mini project 3. Specifications for the information to be retrieved from the database. Ex: When the Author's name is specified, all the text books written by him should be retrieved.
8.	1. Submission of tables designed for the miniproject in minimum BCNF along with the normalization process. 2. Complete the schema diagram of the data base of the mini project.
9.	1. Designing a data base for the project and populating it with sample data. 2. Executing the queries required and saving them.
10.	1. Connecting the C# front end with the data base and executing the queries through front end.

11.	Complete the working of the project and testing
12.	Testing and validation of the project.
13.	End sem lab exam.

REGULAR EVALUATION GUIDELINES:

Split up of 60 marks for Regular Lab Evaluation
Total of 6 regular evaluations which will be carried out in alternate weeks. Each evaluation is for 10 marks of which will have the following split up: **Record : 4 Marks** **Viva: 4 Marks** **Execution 2 Marks** **Total = 10.** **Total Internal Marks: 6 * 10 =60**
End Semester Lab evaluation: 40 marks (Duration 2 hrs)
1. Data base design and querying 2. Submission of project report 3. Demonstration of the project