

# Database Management System

## Class Project

### **CLO3:**

Design ERM for Relational database Model using the concepts of Normalization

### **PLO:**

Design/Development of Solutions

**High**

Theory

30 Marks

Lab

30 Marks

# **Presentations and Schedule:**

- **Presentations will conducted in the remaining classes as follows:**

- **Weeks 1-2: Dated: 10-11 and 17-18/04/2018**

Title of the project, the **INNOVATIVE IDEA**, Entities (strong and weak), Attributes (required and optional, single valued and multivalued, simple, composite and derived attributes), Keys (Super, Primary, Foreign, Candidate, Secondary, Surrogate) and Business rules

- **Week 3: Dated: 17-18/04/2018**

1st Designing (ER Model) without Normalization and with Full Functional dependence, , Connectivity and Cardinality, Relationships (participation, strength and degree), with existence dependence.

- **Week 4: Dated: 24-25/04/2018**

2nd Designing (ER Model) with Normalization with improving the design Concepts, Higher Normal Forms and Denormalization

**Complete Presentation with Implementation Demo (within Lab)**

**Dated: 04-05/05/2018**

# **Presentations Guidelines:**

- **Every group must maintain three components:**
  - Presentation Slides and Charts (Theory)
  - DB Implementation (Lab)
- Every group must present 30 Slides(at least), 10 slides for each student, One Chart and Notebook in each presentation.
- Explaining each topic must be explained within design.
  - Complete Understanding of Entities, Relationships and Attributes.
- **Complete ERM**
  - Complete Understanding of ER Model and Normalization
  - ERD (*with explanation of each symbol, line and terminologies etc*)
  - Explaining Data Dictionary or System catalog
  - Anomalies, Data inconsistencies, Data Redundancies etc
    - Explain with Scenarios
  - Improving the Database Designs all aspects one by one.

# Students Marking and Grading Criteria:

Students will be marked on ACCKO System.

- ☐ Appearance

- ☐ Communication

- ☐ Coordination among group fellows

- ☐ Knowledge

  - ☐ (Max. Marks, **INNOVATIVE IDEA** and its implementation prototype and plan)

- ☐ Overall performance



# Mark Sheet format

**Note:** Students and groups information filled Mark Sheets must provided by CR and GR for their respective sections before the next class

Group Number	Title of project	Registration Number	Name	1 <sup>st</sup> Presentation Marks out of 10	2 <sup>nd</sup> Presentation Marks out of 10	3 <sup>rd</sup> Presentation Marks out of 10	Group Marks	Comments	Final Marks Marks out of 30