**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Even Semester**

**(2017-18)**

**Class: BCA 4th Sem. Name of the Teacher: Sheenam**

**Subject: Database Management System Period : 2nd(Mon-tue)6th (fri-sat)**

**Paper : BCA-16-405 Room No : 202(I.T.Block)**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan 08, 2018 | Jan 13, 2018 | | Basic Concepts: A Historical perspective, File Systems vs. DBMS, Characteristics of the  Data Base Approach, Abstraction and Data Integration, Database users, Advantages and  Disadvantages of DBMS, |
| Week 2 | Jan 15, 2018 | Jan 20, 2018 | | Implication of Database approach.  Data Base Systems Concepts and Architecture: Data Models, Schemas and Instances, Entity Relationship Model: Entity Types, Entity Sets, Attributes & Keys, Relationships,  Relationship Types, Roles and Structural Constraints, Design issues, weak entity types,  E-R Diagrams. |
| Week 3 | Jan 22, 2018 | Jan 27, 2018 | | Design of an E-R Database Schema, Reduction of an E-R Schema to  Tables.  DBMS architecture and Data Independence,Data base languages & Interfaces, DBMS  functions and component modules. |
| Week 4 | Jan 29, 2018 | Feb 3, 2018 | | Relational Data Model : Relational model concepts, Integrity constraints over  Relations, Relational Algebra - Basic Operations.  . |
| Week 5 | Feb 5, 2018 | Feb 10, 2018 | | Conventional Data Models : An overview of Network and Hierarchical Data Models.Terminology, The 12 Rules (Codd’s Rule) for an RDBMS |
| Week 6 | Feb 12, 2018 | Feb 17, 2018 | | Data Types, Creating Tables, Creating a Table with data from  Another table, Inserting Values into a Table, Updating Column(s) of a Table, Deleting  Row(s) from a Table, Dropping a Column, Querying database tables, Conditional retrieval of rows, Working with Null Values, Matching a pattern from a table, ordering the result of a  Query Aggregate Functions, Grouping the Result of a Query |
| Week 7 | Feb 19, 2018 | Feb 24, 2018 | | creation and deletion of  Views, Managing privileges with Grant and Revoke Command, COMMIT and  ROLLBACK, Functions: Character Functions, Date Functions, Group Functions |
| Week 8 | Feb 26, 2018 | Mar 03 , 2018 | | Relational Data Base Design : Functional Dependencies, Decomposition, Desirable  properties of decomposition, Normal forms based on primary keys (1 NF, 2 NF, 3 NF and  BC NF). |
| **2nd week March (Mid Semester Exam)** | | | | |
| Week 9 | March 12, 2018 | | March 17, 2018 | Querying Multiple Tables using Equi-Joins, Cartesian Joins,  Outer Joins, Self-Joins, |
| Week 10 | March 19 , 2018 | | March 24, 2018 | SET Operators: Union, Intersect, Minus; Introduction to Nested  Queries |
| Week 11 | March 26, 2018 | | March 31, 2018 | Introduction to PL/SQL, The Advantage of PL/SQL, PL/SQL Block Structure, |
| Week 12 | April 02, 2018 | | April 07, 2018 | PL/SQL Architecture, Fundamentals of PL/SQL, PL/SQL Data Types, Variables and  Constants, Scope and Visibility of a Variable, |
| Week 13 | April 09, 2018 | | April 14 , 2018 | Assignments and Expressions, Operator  Precedence, Conditional and Iterative Control, Cursor Management in PL/SQL, |
| Week 14 | April 16, 2018 | | April 21, 2018 | Implicit/explicit Cursor Attributes, Exception Handling in PL/SQL; |
| Week 15 | April 23, 2018 | | April 28, 2018 | Predefined  Exceptions, User Defined Exceptions,  . |
| Week 16 | April 30, 2018 | | May 05, 2018 | Database Trigger, types of triggers, dropping triggers, storage for triggers |