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

**Teaching Plan Even Semester**

**Session (2018-19)**

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

**Subject: Database Management System Period : 2nd (1-4)**

**Paper : BCA-16-405 Room No : 101**

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| **S. No** | **Dates** | **Topics to be covered** |
| **Week 1** | **14 /01/2019 – 19/01/2019** | **Introduction to File Systems. File Systems vs. DBMS, Characteristics of the Data Base Approach,** |
| **Week 2** | **21/01/2019 –**  **25/01/2019** | **Abstraction and Data Integration, Database users, Advantages and Disadvantages of DBMS. Implication of Database approach. Data Base Systems Concepts and Architecture: Introduction to Data Models, Schemas and Instances,**  **.** |
| **Week 3** | **28/01/2019 –**  **2/02/2019** | **DBMS architecture and Data Independence, Data base languages & Interfaces, DBMS functions and component modules Entity Relationship Model: Entity Types, Entity Sets, Attributes & Keys, Relationships.** |
| **Week 4** | **4/02/2019 –**  **9/02/2019** | **Relationship Types, Roles and Structural Constraints, Design issues, weak entity types, ER Diagrams. Design of an E-R Database Schema, Reduction of an E-R Schema to Tables** |
| **Week 5** | **11/02/2019 –**  **16/02/2019** | **Relational model concepts, Integrity constraints over Relations,**  **Relational Algebra - Basic Operations.**  **Introduction to Network and Hierarchical Data Models.**  **Relational Data Base Design :** |
| **Week 6** | **18/02/2019 –**  **23/02/2019** | **Functional Dependencies, Decomposition, Desirable**  **properties of decomposition, Normal forms based on primary keys .The 12 Rules (Codd’s Rule) for an RDBMS.** |
| **Week 7** | **25/02/2019 –**  **02/03/2019** | **Data Types, Creating Tables, Creating a Table with data from**  **Another table, Inserting Values into a Table, Updating Column(s) of a Table** |
| **Mid Semester Exam** | | |
| **Week 8** | **11/03/2019 –**  **16/03/2019** | **Deleting Row(s) from a Table, Dropping a Column, Querying database tables, Conditional retrieval of rows.** |
| **Week 9** | **18 /03/2019 –**  **22/03/2019** | **Working with Null Values, Matching a pattern from a table, ordering the result of a**  **Query Aggregate Functions, Grouping the Result of a Query, creation and deletion of Views,COMMIT and ROLLBACK,** |
| **Week 10** | **25/03/2019 –**  **30/03/2019** | **Managing privileges with Grant and Revoke Command Functions: Character Functions, Date Functions, Group Functions** |
| **Week 11** | **1/04/2019 –**  **6/04/2019** | **Querying Multiple Tables using Equi-Joins, Cartesian Joins,**  **Outer Joins, Self-Joins, SET Operators: Union, Intersect, Minus; Introduction to Nested**  **Queries** |
| **Week 12** | **8/04/2019 –**  **12/04/2019** | **Introduction to PL/SQL, The Advantage of PL/SQL, PL/SQL Block Structure,**  **PL/SQL Architecture, Fundamentals of PL/SQL, PL/SQL Data Types, Variables and**  **Constants** |
| **Week 13** | **15/04/2019 –**  **20/04/2019** | **Scope and Visibility of a Variable, Assignments and Expressions, Operator**  **Precedence, Conditional and Iterative Control, Cursor Management in PL/SQL,**  **Implicit/explicit Cursor Attributes** |
| **Week 14** | **22/04/2019 –**  **27/04/2019** | **Exception Handling in PL/SQL; Predefined Exceptions,**  **User Defined Exceptions, Database Trigger, types of triggers,** |
| **Week 15** | **29 /04/2019 –**  **3/05/2019** | **dropping triggers, storage for triggers.** |