Lesson Plan

**BCA III semester**

**BCA – 235 FUNDAMENTALS OF DATABASE SYSTEM**

Teacher name:

October 2020

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| Basic Concepts – Data, Information, Records and files. Traditional file –  based Systems-File Based Approach-Limitations of File Based  Approach, Database Approach-Characteristics of Database Approach,  Database Management System (DBMS), Components of DBMS  Environment, DBMS Functions and Components, Advantages and  Disadvantages of DBMS, Roles in the Database Environment - Data and  Database Administrator, Database Designers, Applications Developers  and Users. |

November 2020

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| Database System Architecture – Three Levels of Architecture, External,  Conceptual and Internal Levels, Schemas, Mappings and Instances,  Data Independence – Logical and Physical Data Independence,  Classification of Database Management System, Centralized and Client  Server architecture to DBMS. |

December 2020

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| Data Models: Records- based Data Models, Object-based Data Models,  Physical Data Models and Conceptual Modeling, Entity-Relationship  Model – Entity Types, Entity Sets, Attributes Relationship Types,  Relationship Instances and ER Diagrams. |

January2021

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| Relational Data Model:-Brief History, Terminology in Relational Data  Structure, Relations, Properties of Relations, Keys, Domains, Integrity |

February 2021

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| Constraints over Relations, Base Tables and Views, Basic Concepts of  Hierarchical and Network Data Model. |