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 BasedApproach, Database Approach-Characteristics of Database Approach,Database Management System (DBMS), Components of DBMSEnvironment, DBMS Functions and Components, Advantages andDisadvantages of DBMS, Roles in the Database Environment - Data andDatabase Administrator, Database Designers, Applications Developersand 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 ClientServer 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-RelationshipModel – 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 DataStructure, Relations, Properties of Relations, Keys, Domains, Integrity |

February 2021

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