B.Ed(4 Years) Elementary Education

Code	Subject Title	Cr. Hrs	Semester
EDE- 185	Computer Science III (Data Base Management System)	3	
Year	**Discipline**		
	Elementary Education		

Aims

This course acts as a foundation for the following semesters. The course aims to help the students increase their proficiency in Computer by enhancing their knowledge in the subject.

Objectives

Upon the successful completion of this course the students will be able to:
- Understand and explain the foundations of Computer
- Apply their knowledge in different situations
- Develop a sense of understanding the trends and issues of Computer

Syllabus
Theory:

Introduction to database processing: relationship of application programs and the DBMS, file processing system, database processing system, history of database processing database development: database and DBMS, creating the data base, components of database applications, database development processes. Entity relationship modelling semantic objects model, relational model and normalization: relational model, normalization—1 to 5th normal forms, domain/key normal form, synthesis of relation, multivalued dependencies, iteration 2. Database design using entity-relationship models: transformation of database design. Database design with semantic objects model: transformation of semantic objects in to rational database design. Database application design: characteristics of database application, form design, report design, application program design. Foundation of relational implementation: defining rational data, relational data manipulation. Structured query language: querying a single table, querying multiple tables, exists and not exists, changing data. Relational implementation for personal database: creating the database scheme, creating forms, creating reports. Client-server database system: client server architecture, reliability and security, open database connectivity (ODBC) standards, application of (ODBC) in client server.

Text Books

- Kroenke, D. (1983). *Database processing: fundamentals, design, implementation*: Science Research Associates.
- Coronel, C., & Morris, S. (2016). *Database systems: design, implementation, & management*: Cengage Learning.
- Elmasri, R. (2008). *Fundamentals of database systems*: Pearson Education India.
- Date, C. J. (2006). *An introduction to database systems*: Pearson Education India.
- Shelly, G. B., Cashman, T. J., & Pratt, P. J. (2000). *Microsoft Access 2000: Comprehensive Concepts and Techniques*: Course Technology

Reference Material

Some practical examples under reference material as a guideline are given below:

1. Exploring access 2000 work place: opening access application , menus, toll balls other components
2. Designing and creating a database
3. Entering and editing data into tablets
4. Designing and using basic forms
5. Integrating access with other Microsoft office application and internet
6. Establishing relationships between tablets
7. Finding, scoring and filtering information
8. Creating basic queries
9. Designing and using basic reports
10. Creating and using data access pages
11. Creating action querying advanced queries