Bachelor of Computer Applications (BCA) BCA I (Sem II)

| Course Code: 201 | DBMS Credits: 02 | Marks: 50 (Internal -10 External -40) |
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| Course Outcomes | After completion of this course students will be able to — 1) Describe the basic concepts of DBMS and systematic database design approaches. 2) Learn MS-Access for database creation and handling transactions. | |
| Unit No. | Descriptions | No. of Periods. |
| I | Introduction of DBMS: Basic Concept (Data Vs. Information, Database), Definition of DBMS, Needs and Features of DBMS, Comparison of file processing system with DBMS, functions of DBMS advantages and disadvantages of DBMS, Structure of DBMS, | 5, 15 |
| II | Data Models: Introduction, definition, features of data models, DFD, Object based data models- Entity Relationship Model, Cardinality; Record based models- Hierarchical Model, Network Model, Relational Model and Physical Data Models. Keys: Primary key, foreign key, candidate key, super key, unique key. Normalization: Concept of normalization, advantages, First NF, Second NF, Third NF, examples of normalizations. Database Management through Ms-Access: Introduction of MsAccess, features, database creation, table creation, insert records, queries, forms and report creation. | of on |
| | Books Recommended: 1) Database System Concept – Henry korth and A. Silberschatz 2) Fundamentals of Database System- RamezElmasri, Shamkant B. Navathe (Pearson) 3) Database Management System- Raghu Ramkrishnan, Gehrke (McGraw Hill 4) Database Management System- R. Panneerselvam 5) Ms-Office Complete reference Web References: 1) https://www.oreilly.com/library/view/relational-theory 2) https://en.wikipedia.org/wiki/Database 3) https://hackr.io/blog/dbms-normalization 4) https://en.wikipedia.org/wiki/Database normalization | |