

(SYLLABUS)
INTERMEDIATE



Databases
(Microsoft Access)

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1. Introduction.

a. Terms and Definitions of databases.

- a1. Understanding the concept of databases.
- a2. Understanding of individual elements/components and the structure of a relational database: tables, records, fields, relationships.
- a3. Understanding field types and their basic attributes, size, format.

2. Basic operations & Interface of Database.

a. Basic Operations.

- a1. Start, terminate database application.
- a2. Open, close an existing database.
- a3. Create, save a new database.
- a4. Show, hide, the available toolbars.
- a5. Switch between different viewable tables, forms, reports.
- a6. Use available help functions.

3. Tables.

a. Table Operations.

- a1. Create table, name and define field type.
- a2. Create a validation rule for entering data in a field.
- a3. Change the format of numeric fields, date fields.
- a4. Add, delete field to an existing table.
- a5. Meaning and primary key definition.
- a6. Save, close, delete table.
- a7. Insert, edit data in the table.
- a8. Navigating records, table fields.
- a9. Modify column width of a table.

a10. Move table field.

b. **Relationships.**

b1. Create, delete relations 1-to-1, 1-to-many between tables.

b2. Specify referential integrity in related fields.

4. Forms.

a. **Creating, modifying forms.**

a1. Create and save a form.

a2. Add, modify text in the Header/Footer of a form.

a3. Opening, closing a form.

a4. Use a form to register, modify, delete records.

a5. Move to next/previous record, first/last record, to a specific record using the form.

a6. Delete a form

5. Data Tasks.

a. **Basic Tasks.**

a1. Apply filter to Table/Form.

a2. Use Search in Table Fields

a3. Sort Data in Table/Form

b. **Queries.**

b1. Create and save a select query of one or two tables

b2. Specify query fields, show, hide query fields.

b3. Specify search criteria using comparison operators: logical (or) logical and (and).

b4. Specify sorting in a query.

b5. Show query results.

b6. Close, delete query.

c. **Reports**

- c1 Create and save a report based on a table or query.
- c2 Grouping data based on a field in ascending, descending series.
- c3 Use summary values sum, minimum, maximum, average and counting on an aggregate report.
- c4 Arrangement of fields and headings in a report layout.
- c5 Adding, modifying text in the header or footer of a Report.
- c6 Save, delete a report.
- c7 Opening, closing a report.

6. Print.

a. **Preparing and printing.**

- a1 Print preview, tables, forms, reports.
- a2 Select an orientation and paper size.
- a3 Print all or part of a table, reference.