

B.SC. FINAL COMPUTER SCIENCE
SEMESTER-V
5S-COMPUTER SCIENCE
RDBMS AND VISUAL BASIC

UNIT-I : Fundamental of DBMS : Architecture of a database system,, data independence, database models; Relational Hierarchical, network; data dictionary.

UNIT-II: Relational Model : Relations, Domains and Attributes keys, E-R diagrams, Reducing E-R diagrams to tables, function dependency, Normalization Process, Normal forms : 1NF, 2NF, 3NF, 4NF, BCNF.

UNIT-III : Introduction to SQL : Components of SQL, data types, operators, DDL Commands : CREATE, ALTER, DROP, for tables & views. DML Commands : SELECT, INSERT, DELETE & UPDATE; Clauses : ORDER BY, GROUP BY and HAVING;

UNIT-IV : Introduction to Visual Basic : Visual programming, event driven programming, VB Environment : New Project window, property window, Form layout window, toolbar, menu bar, tool box, form window;

Managing Control : Form properties, pointer tool, label control, text box, command button, picture box, image control, event procedure.

UNIT-V : Creating Menus : Application wizard for menu, menu editor, creating menu, adding code to menus, data types & variables.

Operators : Conditional operators, logical operators, control structures : If-else, Nested If—else, select case, goto, do loop, for loop, nested for loop.

UNIT-VI : Introduction to Internal Functions : MsgBox(), named constant, default buttons, specifying icons. Input box(), title, caption; using check box and option button in form.

VB Programm es : Private and public procedure, passing data by reference and value, passing control as arguments. **Internal Functions :** Numeric functions, data type functions, string functions, special functions.

Books Recommended : 1. An introduction to database system, C.J.Date - Narosa Publication.

2. Database Management System : Mujumdar and Bhattacharya- TMH.

3. Essential of Oracle - Tom Lewis.

4. Oracle the Complete Reference - Koch & Loney.

5. Visual Basic 6.0 in 21 days - Greg Perry, Techmedia.

6. VB Guide 6.0, Black Book, Peter Norton, Techmedia.

7. Mastering VB 6.0 , Evangelous Petroustos, BPB.

Practicals :

Group A - Minimum 8 Practical based on RDBMS. AND

Group B - Minimum 8 Practical based on VB.

Study Tour : Study tour may be arranged to Computer Industry or Software development, Organisation or Software Technology Park or IT Park.

Software : Software's legal version based on syllabus.

Hardware :

- (1) A minimum 10 (Ten) Computer system per batch and with latest specification.
- (2) Minimum 2 laser printer.
- (3) Internet facility with Broad Band connections