

B.COM SEMESTER – III (APPLIED COMPONENT) Computer Application in Business-I

Course Prerequisites: Basic working knowledge of computers and Internet.

Course Objectives:

- Basic understanding of IT enabled business
- Data designing
- Model Building and implementation using tools
- Interpretation of analyzed data and Data Mobility

Course Structure: Theory (50 marks) + Practical (50 marks) = Total (100 Marks)
Lectures: 3 per week & Practicals: 3 per week (Batch of 10 students)

Course Content:

THEORY

- 1. Data analysis and design** **15 Marks**
 - a. Data Processing – Steps involved in data processing, advantages of computers in data processing, file management concepts, importance of data analysis in business, use of data analysis with tabular format.
 - b. Data forecasting – its need, benefits of data forecasting, use of forecast formula, statistical and financial functions.
 - c. Integration and mobility of data, exchanging data between excel and access

- 2. Databases using database software** **15 Marks**
 - a. Files and Databases – Conventional data processing using files and databases, concepts of table, records, fields, entity, attribute, relation, data model.
 - b. File Backups and restoring
 - c. Entity relations- ER diagrams up to binary relation.
 - d. Data_analysis - Forms, reports, queries using two tables.
 - e. Data models. (Introduction to hierarchical and network model, relational model in detail) data integrity (validation, security, referential integrity), exchanging data with other software, data base administration.

- 3. XML** **10 Marks**
 - a. What is XML,
 - b. Elements, attributes, entity reference, comments
 - c. Advantages of using XML data format

4. ERP

10 Marks

- a. Traditional information model, Introduction to an enterprise, What is an ERP?, Reasons for growth of ERP market, Advantages of ERP, Benefits of ERP
- b. Introduction to business modules, finance, manufacturing, Human resource, materials management, sales and distribution.
- c. Limitations of ERP, enterprise integration applications (EIA), ERP and e-Commerce, ERP and the internet.

BOOKS RECOMMENDED FOR READING AND REFERENCE

1. S Sadagopan, "ERP a Management Prospective" Tata McGraw Hill Publishing Company Limited, New Delhi 1999
2. Alexis Leon , "ERP Demystified", Tata McGraw Hill Publishing Company Limited, New Delhi 2000
3. MS-Excel '07 manual
4. MS-Access '07 manual
5. Database systems – Bipin Desai
6. www.w3schools.com/xml/default.asp
7. Information Technology – Breaking Waves By D. Curtin TMH
8. Computer Fundamentals by P. K. Sinha

PRACTICALS

1. Advanced Spreadsheet (Excel)

35 Marks

- a. Result representation of data using spreadsheet
- b. What-if analysis, Goal seek,
- c. Pivot table, Using solver,
- d. Representing results graphically
- e. Filtering, advanced filters, sorting and conditional formatting data
- f. Data validation techniques, Hyperlinks,
- g. Logical tests(nested if functions), Summing through the sheets,
- h. Importing text files into Excel, Exchanging data between excel and access
- i. Recording a Macro

2. XML

5 Marks

- a. Creation of XML data file (for books, sales, employees or any other data)

3. ACCESS

10 Marks

- a. Creation of tables, forms, reports, queries using two tables

Theory: 3 Lectures per week with class size: 60 students per class

Practical: 3 Lectures per week with batch size: 10 students per batch

Total Theory + Practical: 6 Lectures per week, each lecture of 45 minutes duration.