

Centre for Management Studies

Dibrugarh University

Course Code : 20600 [MBA (PT)]

Course Name : Computer Application and Data Processing

Course Type : Core

Prerequisites : None

Objective : The course has been designed to develop an appreciation for the computer and the way it affects any business environment. It seeks to make the to-be manager confident in handling the computer and use it in his/her day-to-day activities effectively.

Evaluation : *Internal assessment*: 40 marks (2 Sessional Examinations – 10 marks each totaling 20 marks, Attendance – 5 marks, Assignment – 15 marks); *End Semester Examination*: 60 marks

Instructor : Himadri Barman (himadri@cmsdu.org; <http://himadri.cmsdu.org>)

Detailed Course Outline

Unit 1: Computer Systems

- ❑ Number Systems, Evolutionary History of Computers, Classification
- ❑ Hardware Concepts – Definition, Block Diagram and the various components
- ❑ Software Concepts – Definition, System Software, Utility Software and Application Software
- ❑ System Software – Operating System - its need, function and types
- ❑ Utility Software – Compression Tools, Anti-virus Software, File Management Tools, Disk Management Tools
- ❑ Application Software – Word Processors, Presentation Tools, Spreadsheet Packages, DBMS, RDBMS Concepts

Unit 2: Information Technology

- ❑ Concepts of Networks, Elementary Terminologies related to Networks, Internet – related Terminologies, Security and Maintenance

Unit 3: Business Data Processing

- ❑ Data, Information and Knowledge, Data Processing Functions and Modes, Business Data Processing Applications
- ❑ Records, Files, Classification of Business Files, File Organizations, File Operations, File Processing Activities, Reporting

Unit 4: Business Applications

- ❑ Financial Accounting Software – need and use
- ❑ E-Commerce – definition, functions and types
- ❑ Computer Based Information Systems – definition, need and types

Unit 5: Introduction to Programming and Elementary Data Structures

- ② Program and programming concepts including flowcharting and algorithm development, Steps in programming, Characteristics of a good program, Software development process, System design techniques – top down and bottom up, Structured programming concepts, Software aids for programming
- ② Data Structures – definition, linear and non-linear data structures, Elementary ideas about arrays, stacks, queues, linked lists, trees and strings, Searching and sorting techniques – sequential and binary search, selection sort, insertion sort, bubble sort

Practical:

- ② DOS – basic commands, MS Windows 98/Me/XP, MS Office 2000/XP – Word, Excel, PowerPoint, Access
- ② Introductory Programming in any of the following languages to develop logic – C, C++, Java and Visual Basic

Suggested Books:

1. Fundamentals of Computers – V. Rajaraman, PHI
2. Fundamentals of Information Technology – Deepak Bharihoke, Excel Books
3. Foundations of IT and Computers – Himadri Barman, Mahaveer Publications