# Fundamentals of I.T & Programming (for CCA)

**Objective:** This subject aims to introduce skills relating to basic concepts and terminology of information technology & programming.

**Outcome:** At the end of this course, student should be able to

- (a) Understand basic concepts of I.T.
- (b) Have a basic understanding of personal computers and their operations.
- (c) Able to use MS office tools.
- (d) Understand basics of Programming.

### **Unit I: Introduction**

Introduction to computers: definitions, evolution, characteristics, Organization of a Computer, Classifications, Distributed Computers, Parallel Computers, Computer Memory: Random Access Memory (RAM), Read Only Memory (ROM), External Memory (Secondary Memory), Compact Disk Read Only Memory, Magnetic Storage Drives, USB, Software: Types of S/W - System Software: Operating System, Utility Programs Application Software, Overview of proprietary software, Overview of open source technology

#### **UNIT III Introduction to MS Word**

MS Word Processing basics, Menu Bar, Using The Icons Below Menu Bar; Opening and closing Documents: Save and Save as, Page Setup, Print Preview; Text Creation and manipulation: Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check; Formatting the Text: Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case; Formatting a document: Set page margin, paragraphs and sections within a document, Adjust indents and hanging indents; Table Manipulation: Draw Table, Changing cell width and height, Alignment of Text in cell, Delete / Insertion of row and column Border and shading, Table Formula;

## **UNIT III Spreadsheets and Presentations**

Spread Sheet: Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks; Manipulation of Cells: Entering Text, Numbers and Dates, Creating Text, Number and Date Series, Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width; Formulas and Function: Using Formulas, Function, basic mathematical operators, using AutoSum etc., using formulas with multiple cell references; Presentation - Basic Concepts of presentation: Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation; Creation of Presentation using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation; Preparation of Slides: Inserting Word Table or An Excel Worksheet, Inserting Other Objects,

### **UNIT IV Introduction to Programming**

Programming Language: Machine Language, Assembly Language, High Level Language their advantages & disadvantages. Basic concepts – data types and its representation in programming, basic arithmetic operations – addition, multiplication, division, modulus; conditional checks, relational and comparisons and loops

## Reference books

- 1. Introduction to Information Systems, <u>James O'Brien</u>, <u>George Marakas</u>, TMH
- 2. "Information Technology for Management", (2010) Behl, Ramesh, 1st Ed Tata McGraw Hill, New Delhi
- 3. Alexis & Mathews: "Fundamentals of Information Technology", Vikas Publication.
- 4. Turban Information technology for Management : Transforming Organization in Digital Economy 7/e- Wiley
- 5. Henry Lucas, Information Technology For Management, TMH