CCA-101: Fundamentals of IT & Programming

Course Objective

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

Course Outcomes

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

1. Understand basic concepts of I.T.
2. Have a basic understanding of personal computers and their operations.
3. Able to use MS office tools.
4. Understand basics of Programming.

Course Outline

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 II 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

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/ 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,JamesO'Brien,GeorgeMarakas,TMH
2. "Information Technology for Management", (2010) Behl, Ramesh, 1st Ed Tata McGraw Hill, NewDelhi
3. Alexis & Mathews: "Fundamentals of Information Technology", VikasPublication.
4. Turban - Information technology for Management : Transforming Organization in Digital Economy 7/e-Wiley
5. Henry Lucas, Information Technology For Management,TMH