B.Sc. II Semester Computer Science

Open Elective: Fundamentals of Computer Application

Number of hours per Week: 4 hrs   Max. Marks: 100 marks

Number of Credits: 4 credit   Internal Assessments: 30 Marks

     Theory Marks: 70 marks

Unit I: **13 hours**

Introduction to Computer, Generations of Computer (I-V) , Block Diagram of a Computer, Functions of the Different Units Input unit, Output unit, Memory unit, CPU (ALU+CU). Input & Output Devices Input Devices: Keyboard, Point and draw devices mouse, joystick, track ball, light pen Data Scanning devices image scanner, OCR, OMR, MICR, Bar code reader, card reader d) Voice Recognition Device, Digitizers Output Devices: Monitor, Printer laser printer, dot matrix printer, ink jet printer, Projector Memories [Memory hierarchy], Registers [Types of Registers] ,Cache Memory ,Primary Memory ,RAM, ROM, Types of ROM , Secondary Memories ,Hard disk ,Structure of a hard disk, how data is stored in a hard disk, concept of tracks, sectors, clusters, cylinders ,formatting of hard disk, Floppy ,CD.

Unit II: **13 hours**

MS Word: Create a new document, open, save and print a document, Edit and format text, Change the page layout, background and borders. Insert headers and footers. Insert and edit tables. Insert clip art and pictures to documents. Perform a mail merge. Share and review shared document files.

Unit III: **13 hours**

MS Excel: Examine spreadsheet concepts and explore the Microsoft Office Excel environment. Create, open and view a workbook. Save and print workbooks. Enter and edit data. Modify a worksheet and workbook. Work with cell references. Learn to use functions and formulas. Create and edit charts and graphics. Filter and sort table data. Work with pivot tables and charts. Import and export data.

Unit IV: **13 hours**

Examine slide show presentation concepts and explore the Microsoft Office PowerPoint environment. Create a new presentation. Modify presentation themes. Add and edit text to

slides. Add new slides to a presentation. Insert clipart images and shapes to slides. Insert and modify tables and charts. Add sound and video to a slide presentation. Insert and edit animations and slide transitions. Display a speaker-lead and self-running presentation.

References:

1. *Fundamentals of Computers by Rajaraman V*
2. *Computer Fundamentals Paperback, by P. K. Sinha*
3. *Microsoft Office Access 2007: The Complete Reference.*
4. *MS-Office 2007 Training Guide by S. Jain*
5. *MS-Office 2007 by Mr. Kalpesh Patel*
6. *Computer Fundamentals by D.P. Nagpal*