Syllabus – Post Graduate Programmes

<u>**COMPUTER FUNDAMENTALS**</u>

Level I – First Year

Introduction to Computer: History of computers, Generations of computers, Computer-Definition, Characteristics, capabilities and Limitations, applications classification of computers based on size, shape and operating system.

Basic components of a computer System: Control Unit, ALU, Input / Output. Primary Memory-RAM, ROM, EPROM, PROM, EEPROM.

Input and output Devices: Keyboard, Mouse, Trackball, Joystick, digitizing tablet, touch pad, Scanners, Digital Camera, MICR, OCR, OMR, Bar-Code Reader, microphone, Light Pen, Touch Screen. Output devices-VDU, printers (Impact and Non-impact),plotters, speakers

Memory devices and Number system: Primary memory, Secondary memory**,** Various Storage Devices – Magnetic Tape, Magnetic Disks, hard disk, Floppy disk.

Optical disk – CD-RW, CD-R, CD - ROM, DVD, blue ray disk, Flash memory. **Number System:** Data Representation in Computers. Number System - Decimal, Binary, Octal, Hexa - Decimal , Character Representation– ASCII, EBCDIC

Computer Software: Types of Software – System Software, Application Software.

System Software – Operating System, utility Program. Assemblers, Compilers and Interpreter, Programming Languages – Machine, Assembly, High level. Computer Virus- Virus, Types of Viruses, Virus detection and prevention.

Level-II – Second Year

MS-OFFICE: MS-Word :- Creating a document, font operation, bullet and numbering, find & replace, hyper linking, mathematical operation, Create table and flow chart, Macro, Mail merge, Correcting grammar, protect files, difference between doc and docx. MS-PowerPoint :- Creating single and multiple slide, Animation, manual and automatic slide show, hyper linking, DFD, shape and style. MS-Excel:- Create sheet and rename sheet, table and operation, cells operation, hyper linking, Function(mathematic, logical), sort and data tools, protection(sheet, workbook).

List of experiments:
1. Create and Design Admission/Enquiry Forms etc.
2. Create bill/leaflets/brochures
3. Create Business Cards using Shapes, text, and colors.
4. Practice hyperlink and create links between word document texts to D: /, Play songs from Microsoft word text, create the link between internal and external files.
5. Create a chart and show the products prices comparison between 2016, 2017 and 2018.
6. Write an birthday invitation and send it to 50 invitees using mail merge option in MSWORD.
7. Create the student marks list of 10 students and declare result using MSEXCEL.
8. Create a power point presentation using about your college using images, tables etc. including animation and hyperlink option.

BOOKS FOR REFERENCE:

1. Alexis Leon and Mathews Leon: Fundamentals of information technology, Leon Tec world Publications.
2. Rajaraman.V: Fundamentals of Computers, Prentice Hall India.
3. Computer Fundamentals 6th Edition –pradeepsinha, preetisinha-BPB Publications
4. Computer Fundamentals-Pradeep K Sinha
5. Introduction to Computers-Peter Norton
6. MSOffice 2000 for everyone-Sanjay Saxena
7. MSOffice 2003 for dummies.
8. Carl Hamacher, ZvonkoVranesic and SafwatZaky, "Computer Organization", Fifth Edition, Tata McGraw Hill, 2002.
9. Learning MS-Office2000 by R Bangia (Khanna Book Pub)
10. Teach yourself MS-Office by Sandlers (BPB Pub).
11. Using MS-Office by Bott(PHI).