

SARDAR PATEL UNIVERSITY
Programme: B.Sc
Semester: III
Syllabus with effect from: June-2012

Paper Code: US03EELE01	Total Credit: 2
Title of Paper: Fundamentals of Computer Hardware	

Unit	Description in detail	Weightage (%)
I	System Concepts Primary Storage Unit System concept: Input unit, Output unit, Storage unit, Arithmetic and logic unit, control unit, central processing unit Computers for individual: desktop computer, workstations, notebook, tablet computers, handheld computers, smart phones, Computers for organisations: network servers, mainframe computer, supercomputer, Primary Storage unit: storage locations and addresses, storage capacity, fixed and variable word length storage, RAM, ROM, PROM , EPROM, CACHE memory, Registers	
II	Secondary Storage Devices: Sequential and direct access devices, Magnetic storage devices: magnetic tape, magnetic disc, hard disk, removable disk, diskettes, Optical storage devices: CDROM, DVDROM, Recordable optical technology, Flash memory, smart memory.	
III	Input Devices Key board, Mouse, Devices for the hand held : Pen, Touch screen, Game controller, Optical input devices: Barcode reader, magnetic – ink character reader(MICR), Scanner, Image scanner, Optical character reader, Audio input devices: microphone, other audio input devices, Video input devices: digital camera.	
IV	Output Devices Monitors : CRT monitors, flat panel monitors – LCD and other types of monitors, Comparing monitors: Size, Resolution, Refresh rate, Dot pitch Printers: Types of printers: impact an nonimpact printer, Dot matrix printer, Inkjet printer, Laser printer, Comparisons of printer: image quality, speed, initial cost, cost of operation, Photo printer, Thermal wax printer, dye –sub printer, Plotters	

Basic Text & Reference Books:

- Computer Fundamentals By P.K. Sinha (BPB Publications)
- Introduction To Computers By Peter Norton (sixth edition) (The McGraw– Hill Companies)

