Course Code: 53020		Marks: 80	Credits: 3
Course Title:	Peripheral and Interfacing		

INTERFACING: Interfacing basics: Peripheral devices, adapters, Data highway, I/O operations. Interrupts basics, types, priority. and the interrupt controllers- Daisy chain configuration, 8259A. DMA basics and the 8237 DMA controller. Buses: AGP, PCI and PCI express, USB, SCSI. ***Digital Interfacing:*** Digital Interfacing basics and the Programmable Parallel Port 8255A. Interfacing, Keyboard and Alpha-numeric Display Interfacing. high power devices. Interfacing microcomputer ports to stepper motor and high-power devices. Optical motor shaft encoders. Analog Interfacing: D/A (simple and R-2R ladder circuits) and A/D (parallel, successive approximation and Dual-slope circuits) converters, properties and interfacing, interfacing with different sensors. **PERIPHERALS DEVICES:** Different types of sensors and transducers. Interfacing with Devices: Different Mouse, Joystick, Scanner, Light, Pen, Touch Screen, OMR, OCR, Barcode Reader. Magnetic and Optical disk storage. Keyboard switches, Light Emitting Diodes, CRT and LCD displays, Laser printers: organization, working principle and properties.