ELECTRONICS
PAPER I

ELECTRONICS DEVICE:

Device physice, Diodes, BJTS and MOSFETS, Integrated Circuits Fabracation techniques. Diffusion related processes, ion implantation, photolithography, metallization and crystal growth. Circuit layout on silicon.

ELECTRONIC CIRCUITS:

Design and analysis of bipolar circuits. VLSI design – stick diagrams and η based rules for layout.

MICROPROCESSOR :

Architecture of some common Ps. Memory interfacing, in terrupts and timing. Flow charts and pseudo codes. Study of common peripheral chips. Assembly language programming, I/O programming and applications.

ELECTRONICS
PAPER II

SIGNAL PROCESSING:

Discrete Fourier Transform, FFT, Discrete Cosine and sine Transforms, Circular Convolution.

Classification of signals & system, Casualty, stability, Linear Time Invariant (LTI) systems.

Image parameters, edge detection, image segmentation, fuzzy logic, image compression, JPEG and MPEG.

Prefix coding, Huffman coding, lempel- Ziv coding Run- Length code, Block codes.

ANTENNA AND WAVE PROPAGATION:

Antenna and waveguides. Satellite communication and mobile communication.