

## **EE206 – Electronics-I**

### **Syllabus:**

BJT operation; Biasing techniques for stabilizing Q-point, in BJTs; BJT equivalent circuits: h-Parameter model,  $\pi$ - model and Ebers-Moll model; FET operation; Biasing techniques for stabilizing Q-point, in FETS; FET equivalent circuits; Constant current source and level shifter; Single and multi-stage amplifiers; Power amplifier: class A, class B and class C amplifier; Tuned amplifier; SCR & UJT; Logic gates design; IC fabrication.

### **References**

1. “*Microelectronics*” By: *Jacob Millman*
2. “*Microelectronics*” By: *Jacob Millman & Grebal*
3. “*Microelectronic Circuits*” By: *A. S. Sedra & K. C. Smith*
4. “*Electronic Circuits-design and integrated*” By: *D. Schilling and C. Belowe*
5. “*Microelectronics: Circuit Analysis and Design*” By: *Donald A. Neamen*