



“ज्ञान, विज्ञान आणि सुसंस्कार यांसाठी शिक्षण प्रसार”

-शिक्षणमहर्षी डॉ. बापूजी साळुंखे

Shri Swami Vivekanand Shikshan Sanstha, Kolhapur's

Ramkrishna Paramhansa Mahavidyalaya, Osmanabad

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

|| NAAC Reaccredited 'B+' Grade || || DBT-STAR College by Govt. of India ||

|| UGC STATUS: College with Potential for Excellence ||



Course Outcomes

Department of Electronics

B.Sc.I (Semester I)	
Paper I- Network Theorems & Semi conductor Devices.	
CO1	Explain the function of different active and passive components & Derivation of different electronics Theorems & their equivalent circuits.
CO2	Explain the operation of different types of diodes
CO3	Describe the working of Transistor, JFET & MOSFET. Explain the operation of different configurations & parameters of the transistor.
CO4	Explain the working of different types of rectifiers and regulated power supplies.
Paper II- Digital Electronics- I	
CO1	Explain Decimal number system, Binary number system, Hexadecimal number system and their interconversions. Solve Binary arithmetic examples. Explain different types of codes and their interconversion with decimal number system.
CO2	Explain the working of different logic gates.
CO3	Describe rules & laws of Boolean algebra & different forms of Boolean expressions. Simplifications of Boolean expressions using K-map.
CO4	Explain working of different types of adders, subtractors, encoder, decoder, Mux & DeMux
B.Sc.I Semester II	
Paper IV- Amplifiers.	
CO1	Describe the methods of different types of biasing of transistor for amplifier.
CO2	Explain the working of different types of BJT & FET Amplifiers.
CO3	Explain different types of feedback amplifiers
CO4	Describe the different types of multistage amplifiers.
Paper V- Digital Electronics-II	
CO1	Explain the operation, Truth table & symbols of different types of flip flops
CO2	Describe the operation of different types of counters.

CO3	Explain the working of different types of shift registers.
CO4	Describe the working of different types of memories.
CO5	Explain the operation of different types of D to A & A to D converters.
B.Sc. II (Semester III)	
Paper VII- Linear Integrated circuits.	
CO1	Explain basic operation of Op- Amp and define different Op-Amp Parameters.
CO2	Describe different amplifications of Op-Amp.
CO3	Explain pin function of timer I.C. & explain its applications as Astable and Monostable multivibrater.
Paper VIII A- 8086 Microprocessor.	
CO1	Explain pin diagram, architecture & minimum and maximum modes of 8086 system.
CO2	Describe different types of Instructions of 8086 microprocessor.
CO3	CO3. Write different types of assembly language programs of 8086 system.
B.Sc.II (Semester IV)	
Paper XI -Communication Electronics	
CO1	Explain different types of modulations in communication electronics.
CO2	Explain the process of modulation and detection in communication electronics.
CO3	Explain different types of transmissions in Digital communication
Paper XIIA - 8086 microprocessor Interfacing	
CO1	Describe the different types of memory interfacing with 8086 system.
CO2	Explain pin function, architecture of programmable Input- output IC 8255. Explain its interfacing with 8086 systems.
CO3	Describe pin diagram of communication interface IC 8251 and its interfacing with 8086 system.
CO4	Explain the pin function and architedure of programmable internal timer IC 8253. Explain its interfacing with 8086 system.
B.Sc.III (Semester V)	
Paper XV-Power Electronics	
CO1	Explain basic functions of SCR, UIT, DIAC, TRAIC & IGBT.
CO2	Describe the operation of proximity and optical sensors
CO3	Explain the internal electronic circuitry and control parameters of DC variable speed drive.
CO4	Describe the converter, intermediate and inverter circuitry of AC drive including control parameters & adjustments
Paper XVI A- Microcontroller-I	

CO1	It provides introduction of microcontroller, difference between microprocessor & microcontrollers, selection criteria of microcontrollers.
CO2	Describe addressing modes and Instruction set of 8051 microcontroller.
CO3	Explain different Interrupts and different modes of timers and serial communications
CO4	Describe basic functional 89C51 & 89C2051 microcontroller & the application of MCS. 51 microcontrollers
B.Sc. III (Semester VI)	
Paper XIXB- Instrumentation	
CO1	Describe performance characteristics and types of errors.
CO2	Describe the operations of different types of display, recorders & recordings.
CO3	Explain different types of Transducers.
Paper XXA- Microcontroller II	
CO1	Write assembly language programs of timers operated in different modes & ALP of counter
CO2	Describe basis of serial communication & Assembly language program of serial port in different modes.
CO3	Explain ALP of Timer Interrupt programming.
CO4	Explain Interfacing of 8051 microcontroller i.e. LCD interfacing, Key board interfacing, ADC & DAC interfacing & sensor interfacing