Amrut Sevabhavi Sanstha, Parbhani's

Late Ku. Durga K. Banmeru Science College Lonar Dist. Buldana (Maharashtra)

Programme Specific Outcome (PSOs)

Faculty of Science

- The students get complete insight of electronics as subject.
- Students learn different types of electrical circuit designs, processing and operation.
- Understand the modeling of different circuits as per requirement.
- Could find the position as free lancer or employee in electronic kit production or design industries.

B.Sc. I, 1S	Basic Electronics	electrical and electronic components. Students can recognize the components and their uses in electronics ➢ To learn about electronics component and their application ➢ Learn circuit using electronic component. The student will get knowledge to analyze the circuit ➢ The student will learn different circuit theorem simplification of circuit will be easier using this theorem. ➢ Learn semiconductor material and its properties. Study some simple semiconductor device.
		➢ To develop practical skill, student have to perform some practical in the Laboratory base on the theory which he studies. ➢ Student will perform various experiments using electronic component. ➢ The student will perform experiment on basic digital gates and some digital circuit. ➢ The student will perform some experiment on semiconductor device.
B.Sc. I, 2S	Digital Electronics	➢ Ability to understand the fundamental constructional knowledge of digital electronics and its applications for developing different digital systems. ➢ Understand basic digital electronic systems ➢ Learn function of basic digital circuits and use of transistors and diode to create logic gates in order to perform Boolean logic. ➢ Learn different theorems for simplification of basic Digital electronics circuits. ➢ Understand symbols, Truth tables, Boolean equations, & working principle
		➢ Perform practical on some basic semiconductor devices. ➢ Perform experiment on transistor and its characteristic in different modes. ➢ Student will perform experiment on UJT & FET and their application. ➢ Learn & study some advance digital circuit.
B.Sc. II, 3S	Electronic Devices and Circuits	➢ Ability to understand the principles and working of electronics devices. ➢ Students becomes familiar with the working of electronic circuits and their applications. understand Basic Analog Circuits and their applications using Active ➢ Devices Learn basic function of single stage amplifier, multistage amplifier and power Amplifier and their working principle. ➢ Understand basic construction of feedback circuits and their application in Oscillators analog circuits. ➢ The ability to select a suitable measuring instrument for a given application. ➢ The ability to estimate and correct deviations in measurements

		due to the influence of the instrument and due to the accuracy of the instrument. ➢ Learn basic test instruments such as power supply, function generator, ➢ DFM and CRO and their construction and working principle. ➢ Understand the construction of data convertor circuits and their applications in digital circuits.
		➢ Perform practical on some measuring instrument. ➢ Student will perform experiment on transistor and its application ➢ Student will perform practical on transducers and its application. ➢ Learn and study the oscillator circuits.
B.Sc. II, 4S	Communication Electronics & Microprocessor 8085	➢ Knowledge of the construction of circuits, choose and apply the techniques, resources required for electronic communication and system applications. ➢ Students will also understand architecture of 8085 microprocessor and programming in ALP ➢ Study the basic differential amplifier and their application. ➢ Learn operational amplifier and its characteristics. ➢ Study active and passive filters and its application. ➢ Students understand different types of multivibrator and wave form generator using IC 55. ➢ Students can understand the basic architecture of 8085 microprocessor. ➢ Study the addressing modes and instructions of 8085. ➢ Study complete instruction set of 8085. ➢ To study various program in assembly language.
		➢ Perform practical on various op amp circuits. ➢ Perform practical on multivibrators using IC 555. ➢ Student perform practical on 8085 programming in assembly language. ➢ Student perform practical on active and passive filters.
B.Sc. III, 5S	Measuring Instruments	➢ Knowledge of the principles and working of electronics instrumentation and medical equipments. ➢ Students become well known with operations of electronics equipments and their applications in electronics lab. ➢ Understand the fundamental concept of semiconductor like crystal structure, energy band gap, charge carrier statistics. ➢ Understand the physics, basic characteristics and operation of semiconductor devices such as p-n junctions and Zener diodes. ➢ Have knowledge of fabrication technology for semiconductor devices and integrated circuits.
B.Sc. III, 6S	Advanced Microprocessor	➢ Knowledge of the principles and working of microprocessor 8086 and microcontroller 8051. Students become able to prepare programs in microprocessor ➢ Students should understand interrupt and interrupt service routine. ➢ Understand I/O interfacing and techniques. ➢ Understand advance microprocessor