SSGMCE SHEGAON

DEPARTMENT OF ELECTRICAL ENGINEERING

COURSE OUTCOMES OF ALL COURSES OF FIFTH SEMESTER
BE ELECTRICAL (ELECTRONICS & POWER)

5EP01 POWER SYSTEM – I

After completing this course, student will be able to

1. Analyze the transmission system with respect to various electrical parameters
2. Examine the performance of transmission line
3. Describe transmission lines' voltage control and power factor improvement methods
4. Model power system using single line, impedance and reactance diagrams.
5. Illustrate Corona phenomenon, Ferranti effect, various Insulators, its string efficiency and underground cables

5EP02 MICROPROCESSOR & MICROCONTROLLER

After completing this course, student will be able to

1. Identify the architectural and functioning difference between microprocessor 8085,8086 and microcontroller 8051
2. Make use of Assembly Language Programming of Microprocessor 8085
3. Select a peripheral to be interface with microprocessor for control and measurement application
4. Experiment with microprocessor 8085 and peripherals for control and measurement of electrical quantities

5EP03 ELECTRICAL MACHINE – II

After completing this course, student will be able to

1. Describe the construction, working operation & performance characteristics of three phase Induction Motor
2. Analyze the starting, braking and speed control of three phase induction motors by various methods
3. Describe the construction, working operation & performance characteristics of single-phase Induction Motor
4. Demonstrate the construction, working operation & performance characteristics of synchronous machine
5. Explain the construction & working of special motors like Universal, Reluctance, PMSM & BLDC Motor

5EP04 SIGNAL & SYSTEM (Professional Elective – I)

After completing this course, student will be able to

1. Demonstrate the understanding of continuous-time and discrete-time signals and systems
2. Analyze the continuous-time and Discrete time systems using Fourier transform
3. Apply sampling theorem for different applications
4. Analyze DT systems using Z-transforms

5EP04 NETWORK ANALYSIS AND SYNTHESIS (Professional Elective – I)

After completing this course, student will be able to

1. Analyze the transient response of series and parallel A.C. circuits
2. Demonstrate the properties of network functions.
3. Demonstrate the properties of positive Real Functions
4. Synthesize driving point functions of RL, RC and RLC
5. Synthesize two port network functions
6. Design passive filters to meet desired specifications

5EP05 POWER SUPPLY SYSTEM (Open Elective – I)

After completing this course, student will be able to

1. Distinguish between construction and working of various power generation plants
2. Describe layout and working of Substations
3. Compare various power distribution system
4. Explain types of wiring, necessity of earthing and safety precautions.

5EP05 ELECTRICAL DRIVES (Open Elective – I)

After completing this course, student will be able to

1. Explain the basic Concept of electrical drives
2. Describe Power Electronics devices & their applications
3. Demonstrate various starting, braking and speed control methods of D.C. Motors
4. Demonstrate various starting, braking and speed control methods of three phase Induction Motor.
5. Describe the construction, working principle and applications of single-phase Induction Motor special motors.