

EEE II YEAR -I SEM SUBJECTS

MATHEMATICS –III

CO1:-Identify the ordinary points, singular points of differential equations.

CO2:-Analyze the series solutions of differential equations around singular points & regular points.

CO3:-Apply the infinite series method to generate solution to second –order ODEs with variable coefficients.

CO4:-Analyze the Legendre's polynomials & Bessel's functions.

CO5:-Demonstrate knowledge of Argand's diagram, Euler's formula, De Moivre's theorem and their applications.

CO6:-Demonstrate knowledge of integration in the complex plane, use the Cauchy integral theorem and Cauchy integral formula, manipulate and use power series, understand residues and their use in integration.

ELECTROMAGNETIC FIELDS

CO1:-Define electric and magnetic fields

CO2:-Calculate electric and magnetic fields from stationary and dynamic charge and current distributions

CO3:-Solve simple electrostatic boundary problems

CO4:-Describe simple models for electromagnetic interaction with media

CO5:-Choose adequate models and solution methods for specific problems
Solve problems analytically and numerically

Electronic Devices and Circuits:

CO1:-Develop the knowledge of semiconductor devices and circuits, and explain their use in communication applications.

CO2:-Design and construct a simple DC power supply.

CO3:-Ability to understand field effect devices and carry out their DC analysis.

CO4:-Ability to use amplifier in various applications.

CO5:-Use devices in real life applications

CO6:-Design small signal model for BJT, FET.

ELECTRICAL CIRCUITS

CO1:-Derive the equations that characterise the performance of an electric circuit as well as

CO2:-solving both single phase and three-phase circuits in sinusoidal steady state.

CO3:-Explain operation and the main features of electric machines and their applications.

CO4:-Acquire skills in using electrical measuring devices.

CO5:-Solve the AC and DC theorems

ELECTRICAL MACHINES-I

- CO 1.** Analyze the electromechanical energy conversion process
- CO 2.** Differentiate various types of excitations that are used for dc machines.
- CO 3.** Identify various parts and windings of the generator.
- CO 4.** Analyze the armature reaction process in DC generators and motors.
- CO 5.** Analyze the process of commutation and to choose best method of commutation.
- CO 6.** Differentiate various types of generators and interpret the performance of different types of generators.
- CO 7.** State the Principle of D.C. Motors and demonstrate the techniques for speed control and starters.
- CO 8.** Able to design and conduct experiments on D.C. Machines.