

## STUDY PLAN

| Ashish SIR : UEE            |                                                                                    |               | Ashish Sir : Power Systems   |                                                                         |                 |
|-----------------------------|------------------------------------------------------------------------------------|---------------|------------------------------|-------------------------------------------------------------------------|-----------------|
|                             |                                                                                    |               | Date                         | Topic                                                                   | Timing          |
|                             |                                                                                    |               | Monday, February 2, 2026     | Introduction to Power Systems                                           | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Tuesday, February 3, 2026    | Generation (Thermal Power plant, Hydro Power Plant)                     | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Wednesday, February 4, 2026  | Generation (Nuclear Power Plant), Renewable & Non renewable power plant | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Thursday, February 5, 2026   | Economic Load factors (Load factor, capacity factor etc.)               | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Friday, February 6, 2026     | Per unit method Part-1                                                  | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Monday, February 9, 2026     | Per unit method Part-2                                                  | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Tuesday, February 10, 2026   | Question practice Session                                               | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Wednesday, February 11, 2026 | Power factor improvement Part-1                                         | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Thursday, February 12, 2026  | Power factor improvement Part-2                                         | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Friday, February 13, 2026    | Power factor improvement Part-3                                         | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Monday, February 16, 2026    | Power factor improvement Part - 4                                       | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Tuesday, February 17, 2026   | Question practice Session                                               | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Wednesday, February 18, 2026 | Transmission line parameters Part-1                                     | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Thursday, February 19, 2026  | Transmission line parameters Part-2                                     | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Friday, February 20, 2026    | Transmission line parameters Part-3                                     | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Monday, February 23, 2026    | Short circuit of fault analysis Part -1                                 | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Tuesday, February 24, 2026   | Short circuit of fault analysis Part -2                                 | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Wednesday, February 25, 2026 | Question practice Session                                               | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Thursday, February 26, 2026  | Short circuit of fault analysis Part -3                                 | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Friday, February 27, 2026    | Power system stability Part - 1                                         | 5:00PM - 6:00PM |
|                             |                                                                                    |               | Monday, March 2, 2026        | Power system stability Part - 2                                         | 5:00PM - 6:00PM |
| Date                        | Topic                                                                              | Timing        |                              |                                                                         |                 |
| Monday, January 12, 2026    | Type of Motor and Characteristics                                                  | 2:30PM 3:30PM |                              |                                                                         |                 |
| Tuesday, January 13, 2026   | Type of loads                                                                      | 2:30PM 3:30PM |                              |                                                                         |                 |
| Wednesday, January 14, 2026 | System of electric traction and track electrification                              | 2:30PM 3:30PM |                              |                                                                         |                 |
| Thursday, January 15, 2026  | Speed-time curves for different services                                           | 2:30PM 3:30PM |                              |                                                                         |                 |
| Friday, January 16, 2026    | Calculation of various quantities of Electrical Traction                           | 2:30PM 3:30PM |                              |                                                                         |                 |
| Monday, January 19, 2026    | Methods of Electrical Heating                                                      | 2:30PM 3:30PM |                              |                                                                         |                 |
| Tuesday, January 20, 2026   | Methods of Electrical Welding                                                      | 2:30PM 3:30PM |                              |                                                                         |                 |
| Wednesday, January 21, 2026 | Introduction and terms used in Illumination                                        | 2:30PM 3:30PM |                              |                                                                         |                 |
| Thursday, January 22, 2026  | Discharge Lamps, MV and SV Lamps                                                   | 2:30PM 3:30PM |                              |                                                                         |                 |
| Friday, January 23, 2026    | Basic Principle of Light Control, Types and design of lightning and flood lighting | 2:30PM 3:30PM |                              |                                                                         |                 |
| END OF SUBJECT              |                                                                                    |               |                              |                                                                         |                 |
| Ashish Sir : Control system |                                                                                    |               |                              |                                                                         |                 |
| Date                        | Topic                                                                              | Timing        |                              |                                                                         |                 |
| Monday, January 26, 2026    | Basic of Control System                                                            | 2:30PM 3:30PM |                              |                                                                         |                 |
| Tuesday, January 27, 2026   | Transfer Function Analysis of AC and DC servomotor                                 | 2:30PM 3:30PM |                              |                                                                         |                 |
| Wednesday, January 28, 2026 | Control system Representation                                                      | 2:30PM 3:30PM |                              |                                                                         |                 |
| Thursday, January 29, 2026  | Time Response Analysis Part-1                                                      | 2:30PM 3:30PM |                              |                                                                         |                 |

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| Friday, January 30, 2026           | Time Response Analysis Part-2                             | 2:30PM 3:30PM | Tuesday, March 3, 2026                 | Switchgear and protection Part-1                                  | 5:00PM - 6:00PM |
| Monday, February 2, 2026           | Routh Hurwitz Criterion, Root Locus                       | 2:30PM 3:30PM | Wednesday, March 4, 2026               | Switchgear and protection Part-2                                  | 5:00PM - 6:00PM |
| Tuesday, February 3, 2026          | Bode Plotting using semi log graph paper                  | 2:30PM 3:30PM | Thursday, March 5, 2026                | Switchgear and protection Part-3                                  | 5:00PM - 6:00PM |
| Wednesday, February 4, 2026        | Compensator                                               | 2:30PM 3:30PM | Friday, March 6, 2026                  | Switchgear and protection Part-4                                  | 5:00PM - 6:00PM |
| Thursday, February 5, 2026         | Controller                                                | 2:30PM 3:30PM | Monday, March 9, 2026                  | Switchgear and protection Part-5                                  | 5:00PM - 6:00PM |
| <b>Ashish Sir - Network Theory</b> |                                                           |               | Tuesday, March 10, 2026                | Question practice Session                                         | 5:00PM - 6:00PM |
| <b>Date</b>                        | <b>Topic</b>                                              | <b>Timing</b> | Wednesday, March 11, 2026              | Cables, insulators Part -1                                        | 5:00PM - 6:00PM |
| Tuesday, February 10, 2026         | Electric Potential                                        | 2:30PM 3:30PM | Thursday, March 12, 2026               | Cables, insulators Part -2                                        | 5:00PM - 6:00PM |
| Wednesday, February 11, 2026       | Ohms law, Concept of Resistance                           | 2:30PM 3:30PM | Friday, March 13, 2026                 | Circuit Breakers Part -1                                          | 5:00PM - 6:00PM |
| Thursday, February 12, 2026        | Types Of Circuit Elements                                 | 2:30PM 3:30PM | Monday, March 16, 2026                 | Circuit Breakers Part -2                                          | 5:00PM - 6:00PM |
| Friday, February 13, 2026          | Concept of Inductor                                       | 2:30PM 3:30PM | Tuesday, March 17, 2026                | Question practice Session                                         | 5:00PM - 6:00PM |
| Monday, February 16, 2026          | Concept of Capacitance & Laplace transforms               | 2:30PM 3:30PM | <b>Measurement and instrumentation</b> |                                                                   |                 |
| Tuesday, February 17, 2026         | Some Functions & Their Laplace Transforms                 | 2:30PM 3:30PM | <b>Date</b>                            | <b>Topic</b>                                                      | <b>Timing</b>   |
| Wednesday, February 18, 2026       | Resistance in Series and Parallel & Star Delta conversion | 2:30PM 3:30PM | Thursday, March 19, 2026               | Introduction to Electrical & Electronics Engineering Measurements | 5:00PM - 6:00PM |
| Thursday, February 19, 2026        | Capacitance in Series and Parallel                        | 2:30PM 3:30PM | Friday, March 20, 2026                 | Error Analysis Part-1                                             | 5:00PM - 6:00PM |
| Friday, February 20, 2026          | KVL and KCL                                               | 2:30PM 3:30PM | Monday, March 23, 2026                 | Error Analysis Part-2                                             | 5:00PM - 6:00PM |
| Monday, February 23, 2026          | Question Practice Session                                 | 2:30PM 3:30PM | Tuesday, March 24, 2026                | Types of Dampings and torques                                     | 5:00PM - 6:00PM |
| Tuesday, February 24, 2026         | Questions Practice Session                                | 2:30PM 3:30PM | Wednesday, March 25, 2026              | PMMC                                                              | 5:00PM - 6:00PM |
| Wednesday, February 25, 2026       | Network Theorem                                           | 2:30PM 3:30PM | Thursday, March 26, 2026               | Rectifier type instruments                                        | 5:00PM - 6:00PM |
| Thursday, February 26, 2026        | (Superposition Theorem)                                   | 2:30PM 3:30PM | Friday, March 27, 2026                 | Moving iron type instruments -1                                   | 5:00PM - 6:00PM |
| Friday, February 27, 2026          | Thevenin's, Nortons Theorem                               | 2:30PM 3:30PM | Monday, March 30, 2026                 | Moving iron type instruments -2                                   | 5:00PM - 6:00PM |
| Monday, March 2, 2026              | Maximum Power Transfer Theorem                            | 2:30PM 3:30PM | Tuesday, March 31, 2026                |                                                                   | 5:00PM - 6:00PM |
| Tuesday, March 3, 2026             | Tellegen's, Milliman's & Reciprocity Theorem              | 2:30PM 3:30PM | Wednesday, April 1, 2026               | Power factor meter, flux meter, Frequency meter                   | 5:00PM - 6:00PM |
| Wednesday, March 4, 2026           | AC Fundamentals                                           | 2:30PM 3:30PM | Thursday, April 2, 2026                | Measurement of Power-1                                            | 5:00PM - 6:00PM |
| Thursday, March 5, 2026            | Series Resonance                                          | 2:30PM 3:30PM | Friday, April 3, 2026                  | Measurement of Power-2                                            | 5:00PM - 6:00PM |
| Friday, March 6, 2026              | Parallel Resonance                                        | 2:30PM 3:30PM | Monday, April 6, 2026                  | Energy meter -1                                                   | 5:00PM - 6:00PM |

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| Monday, March 9, 2026                  | Performance Parameters of Series and Parallel Resonance                                | 2:30PM 3:30PM | Tuesday, April 7, 2026               | Energy meter -2                          | 5:00PM - 6:00PM |
| Tuesday, March 10, 2026                | Average & RMS values of difference waveforms                                           | 2:30PM 3:30PM | Wednesday, April 8, 2026             | Instrument transformers Part-1           | 5:00PM - 6:00PM |
| Wednesday, March 11, 2026              | Two Port Networks & Graph Theory                                                       | 2:30PM 3:30PM | Thursday, April 9, 2026              | Instrument transformers Part-2           | 5:00PM - 6:00PM |
| Thursday, March 12, 2026               | Graph Theory and Questions                                                             | 2:30PM 3:30PM | Friday, April 10, 2026               | CRO - 1                                  | 5:00PM - 6:00PM |
| Friday, March 13, 2026                 | Poly phase Network                                                                     | 2:30PM 3:30PM | Monday, April 13, 2026               | CRO - 2                                  | 5:00PM - 6:00PM |
| Monday, March 16, 2026                 | Poly phase Network                                                                     | 2:30PM 3:30PM | Tuesday, April 14, 2026              | AC bridges 1                             | 5:00PM - 6:00PM |
| Tuesday, March 17, 2026                | Power Triangle, impedance Triangle, charging and discharging of Inductor and Capacitor | 2:30PM 3:30PM | Wednesday, April 15, 2026            | AC bridges 2                             | 5:00PM - 6:00PM |
| <b>Ashish SIR : Electrical Machine</b> |                                                                                        |               | <b>Ashish SIR: Basic Electronics</b> |                                          |                 |
| <b>Date</b>                            | <b>Topic</b>                                                                           | <b>Timing</b> | <b>Date</b>                          | <b>Topic</b>                             | <b>Timing</b>   |
| Recorded                               | Introduction to Electrical Machines                                                    | 2:30PM 3:30PM | Monday, April 20, 2026               | Introduction to Basic Electronics        | 5:00PM - 6:00PM |
| Recorded                               | Basic Concepts of Magnetic Materials                                                   | 2:30PM 3:30PM | Tuesday, April 21, 2026              | Basics of Semiconductor Materials Part-1 | 5:00PM - 6:00PM |
| Recorded                               | Basic concepts of Rotating Machines                                                    | 2:30PM 3:30PM | Wednesday, April 22, 2026            | Basics of Semiconductor Materials Part-2 | 5:00PM - 6:00PM |
| Recorded                               | Working of DC Generators                                                               | 2:30PM 3:30PM | Thursday, April 23, 2026             | Semiconductor Physics Part-1             | 5:00PM - 6:00PM |
| Recorded                               | Construction of DC Machines                                                            | 2:30PM 3:30PM | Friday, April 24, 2026               | Semiconductor Physics Part-2             | 5:00PM - 6:00PM |
| Recorded                               | Commutator & Types of Windings                                                         | 2:30PM 3:30PM | Monday, April 27, 2026               | PN Junction Diode Part-1                 | 5:00PM - 6:00PM |
| Recorded                               | Emf Equation of DC Generators                                                          | 2:30PM 3:30PM | Tuesday, April 28, 2026              | PN Junction Diode Part-2                 | 5:00PM - 6:00PM |
| Recorded                               | Type of DC Generators                                                                  | 2:30PM 3:30PM | Wednesday, April 29, 2026            | Zener Diode Part -1                      | 5:00PM - 6:00PM |
| Recorded                               | Questions on DC Generators                                                             | 2:30PM 3:30PM | Thursday, April 30, 2026             | Zener Diode Part -2                      | 5:00PM - 6:00PM |
| Recorded                               | Armature reaction of DC Generators-1                                                   | 2:30PM 3:30PM | Friday, May 1, 2026                  | Tunnel diode, LED                        | 5:00PM - 6:00PM |
| Recorded                               | Armature reaction of DC Generators-2                                                   | 2:30PM 3:30PM | Monday, May 4, 2026                  | PhotoDiode, Shottcky Diode               | 5:00PM - 6:00PM |
| Recorded                               | Commutation in DC Machines                                                             | 2:30PM 3:30PM | Tuesday, May 5, 2026                 | BJT Part-1                               | 5:00PM - 6:00PM |
| Recorded                               | Methods of improving commutations                                                      | 2:30PM 3:30PM | Wednesday, May 6, 2026               | BJT Part-2                               | 5:00PM - 6:00PM |
| Recorded                               | Characteristics of DC Generators                                                       | 2:30PM 3:30PM | Thursday, May 7, 2026                | BJT Part-3                               | 5:00PM - 6:00PM |
| Recorded                               | Basic Principle of Motor                                                               | 2:30PM 3:30PM | Friday, May 8, 2026                  | BJT Part-4                               | 5:00PM - 6:00PM |
| Recorded                               | Torque Equation of DC Motors                                                           | 2:30PM 3:30PM | Monday, May 11, 2026                 | BJT Part-5                               | 5:00PM - 6:00PM |
| Recorded                               | Speed control of DC Motors                                                             | 2:30PM 3:30PM | Tuesday, May 12, 2026                | BJT Part-6                               | 5:00PM - 6:00PM |

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| Recorded                     | Starting and Braking methods of DC Motors                                                                  | 2:30PM 3:30PM | Wednesday, May 13, 2026  | BJT Part-7                                 | 5:00PM - 6:00PM |
| Recorded                     | Efficiency and testing methods of DC Motors                                                                | 2:30PM 3:30PM | Thursday, May 14, 2026   | FeedBack Amplifier                         | 5:00PM - 6:00PM |
| Recorded                     | Basics of Transformers                                                                                     | 2:30PM 3:30PM | Friday, May 15, 2026     | Power amplifier                            | 5:00PM - 6:00PM |
| Recorded                     | Construction of transformers & Emf Equation of transformers,                                               | 2:30PM 3:30PM | Monday, May 18, 2026     | FET introduction and working               | 5:00PM - 6:00PM |
| Recorded                     | Equivalent circuit, O.C. & S.C. Tests                                                                      | 2:30PM 3:30PM | Tuesday, May 19, 2026    | MCQs on FET                                | 5:00PM - 6:00PM |
| Recorded                     | Voltage regulation of transformers, Losses and efficiency of transformers                                  | 2:30PM 3:30PM | Wednesday, May 20, 2026  | MOSFET introduction and working            | 5:00PM - 6:00PM |
| Recorded                     | 3 Phase transformers, Parallel operation of transformers                                                   | 2:30PM 3:30PM | Thursday, May 21, 2026   | Op-amp Part-1                              | 5:00PM - 6:00PM |
| Recorded                     | Construction & Working of 3-Phase Induction Machines                                                       | 2:30PM 3:30PM | Friday, May 22, 2026     | Op-amp Part-2                              | 5:00PM - 6:00PM |
| Recorded                     | Working & Equivalent Circuit of 3-Phase Induction Machines                                                 | 2:30PM 3:30PM | Monday, May 25, 2026     | Op-amp Part-3                              | 5:00PM - 6:00PM |
| Recorded                     | Torque Equation of 3-Phase induction Machines                                                              | 2:30PM 3:30PM | Tuesday, May 26, 2026    | Number system Part-1                       | 5:00PM - 6:00PM |
| Recorded                     | Torque slip characteristics of 3-phase induction Motors                                                    | 2:30PM 3:30PM | Wednesday, May 27, 2026  | Number system Part-2                       | 5:00PM - 6:00PM |
| Recorded                     | Starters & Braking methods of 3-Phase induction machines                                                   | 2:30PM 3:30PM | Thursday, May 28, 2026   | Boolean algebra                            | 5:00PM - 6:00PM |
| Recorded                     | Speed control of 3-Phase induction motors                                                                  | 2:30PM 3:30PM | Friday, May 29, 2026     | Logic Gates                                | 5:00PM - 6:00PM |
| Monday, December 22, 2025    | Losses, efficiency, Cogging, Crawling of 3-Phase induction Motors                                          | 2:30PM 3:30PM | Monday, June 1, 2026     | Basics of Power Electronics Part-1         | 5:00PM - 6:00PM |
| Tuesday, December 23, 2025   | Construction and working of 1-Phase induction motors                                                       | 2:30PM 3:30PM | Tuesday, June 2, 2026    | Basics of Power Electronics Part-2         | 5:00PM - 6:00PM |
| Wednesday, December 24, 2025 | Split phase Induction Motors, Capacitor start, Capacitor start capacitor run, Shaded pole Induction Motors | 2:30PM 3:30PM | Wednesday, June 3, 2026  | SCR Part-1                                 | 5:00PM - 6:00PM |
| Thursday, December 25, 2025  | Hysteresis, Switched Reluctance motors, stepper motors                                                     | 2:30PM 3:30PM | Thursday, June 4, 2026   | SCR Part-2                                 | 5:00PM - 6:00PM |
| Friday, December 26, 2025    | Construction & Working of 3-phase Synchronous Machines                                                     | 2:30PM 3:30PM | Friday, June 5, 2026     | Types of Switches and their working Part-1 | 5:00PM - 6:00PM |
| Monday, December 29, 2025    | Armature reaction of 3-Phase synchronous generators at unity, Lagging pf & Leading pf                      | 2:30PM 3:30PM | Monday, June 8, 2026     | Types of Switches and their working Part-2 | 5:00PM - 6:00PM |
| Tuesday, December 30, 2025   | Voltage Regulation of 3-Phase Synchronous generators                                                       | 2:30PM 3:30PM | Tuesday, June 9, 2026    | Types of Switches and their working Part-3 | 5:00PM - 6:00PM |
| Wednesday, December 31, 2025 | Power flow, Synchronous condenser & important curves in synchronous machines in Synchronous Machines       | 2:30PM 3:30PM | Wednesday, June 10, 2026 | Miscellaneous                              | 5:00PM - 6:00PM |
| Thursday, January 1, 2026    | Parallel Operation of Synchronous Machines                                                                 | 2:30PM 3:30PM |                          |                                            |                 |
| Friday, January 2, 2026      | Working of 3-Phase synchronous motors                                                                      | 2:30PM 3:30PM |                          |                                            |                 |
| Monday, January 5, 2026      | Starting methods of synchronous motors, Synchronizing coefficient                                          | 2:30PM 3:30PM |                          |                                            |                 |
| Tuesday, January 6, 2026     | Testings in Synchronous Machines                                                                           | 2:30PM 3:30PM |                          |                                            |                 |