# STUDY PLAN

| Avinash sir - Electronics Devices | | | | Digital Electronics | | |
|---|---|---|---|---|---|---|
| **Date** | **Topic** | **Timing** | | **Date** | **Topic** | **Timing** |
| Recorded | Energy Band Diagram | 6:30PM - 7:30PM | | Recorded | **Orientation** | 4 PM - 5 PM |
| Recorded | Types of Semiconductor | 6:30PM - 7:30PM | | Recorded | Introduction to Number systems | 4 PM - 5 PM |
| Recorded | Resistivity and Conductivity of Semiconductor | 6:30PM - 7:30PM | | Recorded | Addition in different base | 4 PM - 5 PM |
| Recorded | Hall Effect | 6:30PM - 7:30PM | | Recorded | Subtraction in Different Base | 4 PM - 5 PM |
| Recorded | Practice Questions | 6:30PM - 7:30PM | | Recorded | Complements | 4 PM - 5 PM |
| Recorded | PN Junction Diodes | 6:30PM - 7:30PM | | Recorded | Interconversions part-1 | 4 PM - 5 PM |
| Recorded | Characteristics of PN Junction Diodes | 6:30PM - 7:30PM | | Recorded | Interconversions part-2 | 4 PM - 5 PM |
| Recorded | Transistion and Diffusion Capacacitance | 6:30PM - 7:30PM | | Recorded | Binary Codes,BCD | 4 PM - 5 PM |
| Recorded | Zener Diode | 6:30PM - 7:30PM | | Recorded | Excess-3 and Gray Codes | 4 PM - 5 PM |
| Recorded | Avalanche and Zener Breakdown | 6:30PM - 7:30PM | | Recorded | Practice Questions | 4 PM - 5 PM |
| Recorded | Rectifiers-1 | 6:30PM - 7:30PM | | Recorded | Axioms and Operations | 4 PM - 5 PM |
| Recorded | Rectifiers-2 | 6:30PM - 7:30PM | | Recorded | Laws of Boolean Algebra | 4 PM - 5 PM |
| Recorded | Clippers | 6:30PM - 7:30PM | | Recorded | SOP and POS representation part-1 | 4 PM - 5 PM |
| Recorded | Clampers | 6:30PM - 7:30PM | | Recorded | SOP and POS representation part-2 | 4 PM - 5 PM |
| Recorded | Practice Questions | 6:30PM - 7:30PM | | Recorded | Basic Gates | 4 PM - 5 PM |
| Recorded | Transistors and Its working | 6:30PM - 7:30PM | | Recorded | Special Gates | 4 PM - 5 PM |
| Recorded | Confuguration and Characteristics of Transistors | 6:30PM - 7:30PM | | Recorded | Universal Gates | 4 PM - 5 PM |
| Recorded | Current Components in BJT | 6:30PM - 7:30PM | | Recorded | Circuits of Gates | 4 PM - 5 PM |
| Recorded | Early Effect | 6:30PM - 7:30PM | | Recorded | Adders | 4 PM - 5 PM |
| Recorded | Mode of Operation | 6:30PM - 7:30PM | | Recorded | Subtractors | 4 PM - 5 PM |
| Recorded | Applications of Transistor | 6:30PM - 7:30PM | | Recorded | Multiplexers part-1 | 4 PM - 5 PM |

| | | | | | | |
|---|---|---|---|---|---|---|
| Recorded | BJT amplifiers - 1 | 6:30PM - 7:30PM | | Recorded | Multiplexers part-2 | 4 PM - 5 PM |
| Recorded | BJT amplifiers - 2 | 6:30PM - 7:30PM | | Recorded | Demultiplexers and Decoders | 4 PM - 5 PM |
| Recorded | Power amplifiers | 6:30PM - 7:30PM | | Recorded | Practice Questions | 4 PM - 5 PM |
| Recorded | Sinusoidal Osciilator & Phase shift Oscillator | 6:30PM - 7:30PM | | Recorded | Introduction to flip flops | 4 PM - 5 PM |
| Recorded | Wien Bridge Oscillator | 6:30PM - 7:30PM | | Recorded | Different types of Flip flops | 4 PM - 5 PM |
| Recorded | Colpitts and Hartley Oscillators | 6:30PM - 7:30PM | | Recorded | Counters Basics | 4 PM - 5 PM |
| Recorded | Multivibrator - 1 | 6:30PM - 7:30PM | | Recorded | Counters Basics | 4 PM - 5 PM |
| Recorded | Multivibrator - 2 | 6:30PM - 7:30PM | | Recorded | Practice Questions | 4 PM - 5 PM |
| Friday, December 26, 2025 | Practice Questions | 6:30PM - 7:30PM | | Friday, December 26, 2025 | A/D Convertors | 4 PM - 5 PM |
| Monday, December 29, 2025 | Inverter and UPS | 6:30PM - 7:30PM | | Monday, December 29, 2025 | D/A Convertors | 4 PM - 5 PM |
| Tuesday, December 30, 2025 | Working of Triode | 6:30PM - 7:30PM | | Tuesday, December 30, 2025 | Practice Questions | 4 PM - 5 PM |
| Wednesday, December 31, 2025 | Triode Circuits | 6:30PM - 7:30PM | | Wednesday, December 31, 2025 | Memories | 4 PM - 5 PM |
| **END OF SUBJECT** | | | | **Ashish sir - Measurement and instrumentation** | | |
| **Linear Integrated Circuits** | | | | **Date** | **Topic** | **Timing** |
| | | | | Recorded | Introduction to Electrical & Electronics Engineering Measurements | Recorded |
| | | | | Recorded | Method of Measurement and Static Characteristics of Instruments | Recorded |
| **Date** | **Topic** | **Timing** | | Recorded | Static Characteristics of Instruments | Recorded |
| Monday, January 5, 2026 | Introduction | 4 PM - 5 PM | | Recorded | Dynamic Characteristics of Instruments | Recorded |
| Tuesday, January 6, 2026 | Construction and Properties part-1 | 4 PM - 5 PM | | Recorded | Error Analysis Part-1 | Recorded |
| Wednesday, January 7, 2026 | Construction and Properties part-2 | 4 PM - 5 PM | | Recorded | Error Analysis Part-2 | Recorded |
| Thursday, January 8, 2026 | Construction and Properties part-2 | 4 PM - 5 PM | | Recorded | Error Analysis Part-3 | Recorded |
| Friday, January 9, 2026 | Linear applications part-1 | 4 PM - 5 PM | | Recorded | Types of Dampings and torques Part-1 | Recorded |
| Monday, January 12, 2026 | Linear applications part-2 | 4 PM - 5 PM | | Recorded | Types of Dampings and torques Part-2 | Recorded |
| Tuesday, January 13, 2026 | Non Linear applications part-1 | 4 PM - 5 PM | | Recorded | PMMC Part-1 | Recorded |

| | | |
|---|---|---|
| Wednesday, January 14, 2026 | Non Linear applications part-2 | 4 PM - 5 PM |
| Thursday, January 15, 2026 | Voltage regulators | 4 PM - 5 PM |
| Friday, January 16, 2026 | Miscellaneous | 4 PM - 5 PM |
| Monday, January 19, 2026 | Introduction | 4 PM - 5 PM |
| Tuesday, January 20, 2026 | Question on Timers | 4 PM - 5 PM |
| Wednesday, January 21, 2026 | Phase loked loop | 4 PM - 5 PM |
| **END OF SUBJECT** | | |
| **Data Communication and Network** | | |
| **Date** | **Topic** | **Timing** |
| Monday, January 26, 2026 | Data Communication | Recorded |
| Tuesday, January 27, 2026 | Hardware and interface - 1 | Recorded |
| Wednesday, January 28, 2026 | Hardware and interface - 2 | Recorded |
| Thursday, January 29, 2026 | OSI layers | Recorded |
| Friday, January 30, 2026 | LAN, MAN, WAN | Recorded |
| Monday, February 2, 2026 | Network Topologies | Recorded |
| Tuesday, February 3, 2026 | Objective Questions | Recorded |
| Wednesday, February 4, 2026 | Ethernet | Recorded |
| Thursday, February 5, 2026 | IP addresses | Recorded |
| Friday, February 6, 2026 | internet working | Recorded |
| **END OF SUBJECT** | | |
| **Communication Engineering** | | |
| **Date** | **Topic** | **Timing** |
| Recorded | Introduction | Recorded |

| | | |
|---|---|---|
| Recorded | PMMC Part-2 | Recorded |
| Recorded | Rectifier type instruments | Recorded |
| Recorded | Ratio Meter & Megger | Recorded |
| Recorded | Moving iron type instruments -1 | Recorded |
| Recorded | Moving iron type instruments -2 | Recorded |
| Recorded | Power factor meter, flux meter, Frequency meter | Recorded |
| Recorded | Measurement of Power-1 | Recorded |
| Recorded | Measurement of Power-2 | Recorded |
| Recorded | Energy meter -1 | Recorded |
| Recorded | Energy meter -2 | Recorded |
| Recorded | Instrument transformers Part-1 | Recorded |
| Recorded | Instrument transformers Part-2 | Recorded |
| Recorded | CRO - 1 | Recorded |
| Recorded | CRO - 2 | Recorded |
| Recorded | AC bridges=1 | Recorded |
| Recorded | AC bridges=2 | Recorded |
| Recorded | Transducers Part-1 | Recorded |
| Recorded | Transducers Part-2 | Recorded |
| **END OF SUBJECT** | | |
| **Ashish SIR : Network Theory** | | |
| **Date** | **Topic** | **Timing** |
| Recorded | Classification of Element | Recorded |
| Recorded | Circuit Element (R,L,C) | Recorded |
| Recorded | Classification of Source | Recorded |
| Recorded | Ohm's Law and Kirchoff's Law | Recorded |

| | | | | | | |
|---|---|---|---|---|---|---|
| Recorded | Modulation requirements | Recorded | | Recorded | Nodal Analysis and Source Transformation | Recorded |
| Recorded | Amplitude modulation part-1 | Recorded | | Recorded | Mesh Analysis | Recorded |
| Recorded | Amplitude modulation part-2 | Recorded | | Recorded | Current and Voltage Division Rule, Star-Delta Conversion | Recorded |
| Recorded | Amplitude modulation part-2 | Recorded | | Recorded | Equivalent Connection of Source and Tellegen's Theorem | Recorded |
| Recorded | DSBSC Modulation and demodulation | Recorded | | Recorded | Thvenin's and Norton's Theorem | Recorded |
| Recorded | SSB SC Modulation and demodulation | Recorded | | Recorded | Maximum Power Transfer Theorem and Compensation Theorem | Recorded |
| Recorded | VSB modulation and demodulation | Recorded | | Recorded | Superposition Theorem and Substitution Theorem | Recorded |
| Recorded | Practice Questions | Recorded | | Recorded | Millliman's Theorem and Reciprocity Theorem | Recorded |
| Recorded | Introduction | Recorded | | Recorded | Alternating Voltage and Current | Recorded |
| Recorded | Phase and frequency modulation parameters | Recorded | | Recorded | Why Sine Waveform? Generation of Alernating Volatge and Current | Recorded |
| Recorded | Modulation and demodulation techniques | Recorded | | Recorded | Important AC terminology | Recorded |
| Recorded | Recievers part-1 | Recorded | | Recorded | Complex Waveform and Phasor Representation of Sinusoidal Quantities | Recorded |
| Recorded | Recievers part-2 | Recorded | | Recorded | AC Circuit containing Pure R (or) L (or ) C Only | Recorded |
| Recorded | Recievers part-3 | Recorded | | Recorded | R-L Series A.C. Circuit | Recorded |
| Recorded | Block Diagram of PCM | Recorded | | Recorded | R-C Series A.C Circuit | Recorded |
| Recorded | Sampling criteria | Recorded | | Recorded | R-L-C Series A.C Circuit and Resonance in series AC Circuit | Recorded |
| Recorded | Quantization | Recorded | | Recorded | Variation of Voltages Across R/L/C with Frequency | Recorded |
| Recorded | Intersymbol interference | Recorded | | Recorded | Quality Factor, Bandwidth of series RLC Circuit | Recorded |
| Recorded | Frequency division multiplexing | Recorded | | Recorded | Parallel RLC Circuit and Resonance in parallel AC Circuit | Recorded |
| Recorded | Time division multiplexing | Recorded | | Recorded | Bandwidth, Cutoff Frequencies and Variation of Voltages Across R/L/C with Frequency of parallel resonance circuit | Recorded |
| Recorded | Wave Propagation - 1 | Recorded | | Recorded | Methos of Solving Parallel AC Circuit | Recorded |

| | | | | | | |
|---|---|---|---|---|---|---|
| Recorded | Wave Propagation - 2 | Recorded | | Recorded | Important Admittance in parallel AC Circuit | Recorded |
| Recorded | Equivalent Circuit of TL | Recorded | | Recorded | Concept of Three phase Circuit - Star/Delta Connection and Power Relation | Recorded |
| Recorded | Lossless and distortionless TL | Recorded | | Recorded | Basic of Magnetism | Recorded |
| Recorded | Input impedance of TL | Recorded | | Recorded | Concept of Electromagnetism and Force on Current Carrying Cunductor | Recorded |
| Recorded | Reflection coefficient and VSWR | Recorded | | Recorded | Important terms of Magnetic Circuit | Recorded |
| Recorded | Practice Questions | Recorded | | Recorded | B-H Curve and Hystersis Loss | Recorded |
| Recorded | Smith Chart | Recorded | | Recorded | Basic of Electromagnetic Induction-Self and mutual induction | Recorded |
| Recorded | Radar range equation | Recorded | | Recorded | Inductor in series and parallel with and without mutual inductance | Recorded |
| Recorded | Satellite Communication - 1 | Recorded | | Recorded | Cells and Batteries | Recorded |
| Recorded | Satellite Communication - 2 | Recorded | | Recorded | Concept of Graph, Cut-set and Loops | Recorded |
| Recorded | Cellular Communication - 1 | Recorded | | Recorded | Concept of graph Theory | Recorded |
| Recorded | Cellular Communication - 2 | Recorded | | Recorded | Loop and Cut-set Analysis | Recorded |
| **Ashish Sir : Control system** | | | | Recorded | Impedance (Z) and Admittance (Y) Parameter | Recorded |
| | | | | Recorded | Transmission (ABCD) , Hybrid (h), and Inverse Hybrid Parameter | Recorded |
| | | | | Recorded | Interconnection Two Port Networks | Recorded |
| **Date** | **Topic** | **Timing** | | Recorded | Basic of Transient | Recorded |
| Recorded | Basic of Control System | 3:00 PM - 4:00 PM | | Recorded | Source Free Circuits (RL and RC) | Recorded |
| Recorded | Transfer Function Analysis of AC and DC servomotor | 3:00 PM - 4:00 PM | | Recorded | Source Free Circuits (series and parallel RLC) | Recorded |
| Recorded | Control system Representation | 3:00 PM - 4:00 PM | | Recorded | Step Response of First Order Circuits (RL and RC) | Recorded |
| Recorded | Time Response Analysis Part-1 | 3:00 PM - 4:00 PM | | Recorded | Step Response of Second Order Circuits (Series and Parallel RLC) | Recorded |
| Recorded | Time Response Analysis Part-2 | 3:00 PM - 4:00 PM | | **Microprocessor & Microcontroller** | | |
| Recorded | Routh Hurwitz Criterion, Root Locus | 3:00 PM - 4:00 PM | | | | |
| Recorded | Bode Plotting using semi log graph paper | 3:00 PM - 4:00 PM | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Recorded | Compensator | 3:00 PM - 4:00 PM | | **Date** | **Topic** | **Timing** |
| Recorded | Controller | 3:00 PM - 4:00 PM | | Recorded | Microprocessor-1 | Recorded |
| | | | | Recorded | Microprocessor-2 | Recorded |
| | | | | Recorded | Microprocessor-3 | Recorded |
| | | | | Recorded | Microprocessor-4 | Recorded |
| | | | | Recorded | Microprocessor-5 | Recorded |
| | | | | Recorded | Microprocessor-6 | Recorded |
| | | | | Recorded | Microprocessor-7 | Recorded |
| | | | | Recorded | Microprocessor-8 | Recorded |
| | | | | Recorded | Microprocessor-9 | Recorded |
| | | | | Recorded | Microprocessor-10 | Recorded |