ESE 2025 Prelims

Offline Test Series

Commencing from
9TH March, 2025

MADE EASY

Total 22 Tests

Paper-I : 11 Tests
GS & Engineering Aptitude

- 8 Multiple Subject Tests of 50 Questions (**400 Ques**)
  Time : 60 minutes
- 2 Full Syllabus Tests of 100 Questions (**300 Ques**)
  Time : 120 minutes
- **+ 1 Anubhav Test**
  Full Syllabus

Paper-II : 11 Tests
Engineering Discipline

- 8 Multiple Subject Tests of 75 Questions (**600 Ques**)
  Time : 90 minutes
- 2 Full Syllabus Tests of 150 Questions (**450 Ques**)
  Time : 180 minutes
- **+ 1 Anubhav Test**
  Full Syllabus

Each question carries 2 marks • **Negative marking = 2/3 marks**

Latest Pattern — Tests are designed as per latest syllabus, trend and pattern of ESE. Paper-I (GS and Engineering aptitude) and Paper-II (Technical) both are covered.

Care for Accuracy — All care has been taken to ensure the highest level of accuracy.

Cyclic Revision — Dynamic test series for cyclic revision of subjects. Tests are time tabled with "New Topics" and "Repeat Topics" to maintain the continuity and a perfect balance between tech and non tech subjects.

Quality Questions — Quality Questions framed by experienced research and development team of MADE EASY.

Illustrated Solutions — Well explained, step-by-step illustrated solutions for easy understanding of aspirants..

All India Rank — Opportunity to evaluate yourself on All India Basis. Compare your performance with quality students of MADE EASY.

Fee Structure	₹ 3,000 + GST	₹ 2,000 + GST	₹ 1,000 + GST	Nil
	Non-MADE EASY students	Ex. MADE EASY Students Enrolled in Postal or any long term/ short term classroom course	If student opts this test in live-online mode	For Current Session Students Enrolled in ESE + GATE 2025 Batches.

Scan to Enroll

Note: Anubhav Tests are part of the ESE Offline Prelims 2025 test series.
For outside students Anubhav Tests are free of cost. It will be conducted at all our MADE EASY and NEXT IAS centres across India.

Click to Enroll www.madeeasy.in

Test Series Venues

Delhi	Visvesvaraya House : 250, Westend Marg, Opposite ITDC Showroom, Near Saket Metro Station, Saidulajab, New Delhi -110030 **Ph:** 8851176827; Email: infodelhi@madeeasy.in
Hyderabad Centre	3rd Floor, Reliance Trends Building, Road No 2, Near Omni Hospital, Laxmi Nagar Colony, Kothapet, Hyderabad, Telangana-500035 **Ph:** 9021300500; Email : infohyderabad@madeeasy.in
Bhopal Centre	Plot No. 46, Zone - 2, M.P. Nagar, Bhopal - 462021 **Ph:** 0755-4004612, 7290068507; Email : infobhopal@madeeasy.in
Jaipur Centre	A-1, Lion's Colony, Sitabari, Near The Theme Hotel, Tonk Road, Jaipur, Rajasthan - 302018 **Ph:** 9021300500, 7290068512; Email : infojaipur@madeeasy.in
Kolkata Centre	Sealdah Commercial Complex, 6th Floor, Beliaghata Main Road, Near Sealdah Station, Kolkata-700014 **Ph:** 9021300500, 7290068511; Email : infokolkata@madeeasy.in
Pune Centre	2nd Floor, Business Bay, Plot No. 84, Near R.T.O. Shivaji Nagar, Pune - 411001 **Ph:** 9021300500, 7290068508; Email : infopune@madeeasy.in

ESE 2025 Prelims
OFFLINE TEST SERIES

CIVIL ENGINEERING

Test No.	Date/Day	Time	Subject	Marks
1.	9th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A : New Topic — Reasoning & Aptitude (All Topics) Section B : New Topic — Engineering Mathematics (All Topics)	100
2.		5:00 PM to 6:30 PM	Section A: New Topic — Geo-technical & Foundation Engineering (All Topics) Section B : New Topic — Environmental Engineering (All Topics)	150
3.	16th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Energy and Environment (All Topics) Section B : New Topic — Basics of Material Science (All Topics) Section C : Repeat Topic of Test 1 — Engineering Mathematics + Reasoning & Aptitude (All Topics)	100
4.		5:00 PM to 6:30 PM	Section A: New Topic — Solid Mechanics (All Topics) Section B : Repeat Topic of Test 2 — Geo-technical & Foundation Engineering - 1 (Part Syllabus) Topics: Properties of soil, classification, various tests and inter-relationships; permeability and seepage, compressibility, consolidation and shearing resistance, earth pressure theories and stress distribution in soil Section C : Repeat Topic of Test 2 — Environmental Engineering -1 (Part Syllabus) Topics: Water supply Engineering, Air, Noise pollution and ecology	150
5.	23rd Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — General Principles of Design, Drawing, Importance of Safety (All Topics) Section B : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics) Section C : Repeat Topic of Test 3 — Basics of Material Science (All Topics)	100
6.		5:00 PM to 6:30 PM	Section A: New Topic — Design of Steel Structure (All Topics) + Surveying and Geology (All Topics) Section B : Repeat Topic of Test 4 — Solid Mechanics - 1 (Part Syllabus) Topics: Properties of Materials, Simple Stress-strain and elastic constants, Plain Stress-strain, Mohr circle of stress and strain, Bending stress, SFD & BMD Section C : Repeat Topic of Test 2 — Geo-technical & Foundation Engg. - 2 (Part Syllabus) Environmental Engg. - 2 (Part Syllabus) Topics: Soil exploration - planning and methods, properties and uses of geo-synthetics, types of foundations and selection criteria, bearing capacity, settlement analysis, design and testing of shallow and deep foundations; slope stability analysis, earthen embankments, dams and earth retaining structure : types, analysis and design, Principles of ground modifications + Topics: Waste water engg, soild waste management	150
7.	30th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Project Management (All Topics) Section B : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics) Section C : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics)	100
8.		5:00 PM to 6:30 PM	Section A: New Topic — CPM PERT + Hydrology and Water Resource Engineering (All Topics) Section B : Repeat Topic of Test 6 — Design of Steel Structure - 1 (Part Syllabus) + Surveying and Geology - 1 (Part Syllabus) Topics: **Steel :** Connections, Tension Members, Compression Members; **Surveying & Geology :** Classification of surveys, various methodologies, instruments and analysis of measurement of distances, elevation and directions Section C : Repeat Topic of Test 4 — Solid Mechanics - 2 (Part Syllabus) Topics: Torsion, Principle stress, theories of failure & shear stress	150
9.	6th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Ethics and values in Engineering profession (All Topics) Section B : Repeat Topic of Test 7 — Basics of Project Management (All Topics) Section C : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics)	100
10.		5:00 PM to 6:30 PM	Section A: New Topic — Structural Analysis (All Topics) Section B : Repeat Topic of Test 8 — CPM PERT -1 (Part Syllabus) + Hydrology and Water Resource Engineering - 1 (Part Syllabus) Topics : Construction - Planning, Equipment, Site investigation and Management including Estimation with latest project management tools and network analysis for different Types of works;+ Hydrological cycle, Ground water hydrology, Well hydrology and related data analysis; Streams and their gauging; River morphology; Flood, drought and their management; Capacity of Reservoirs. Section C : Repeat Topic of Test 6 — Design of Steel Structure - 2 (Part Syllabus) + Surveying and Geology - 2 (Part Syllabus) Topics: **Steel :** Plastic Analysis, Beams, Columns bases, Plate Girder, Gantry girder, roof trusses; **Survey & Geology :** Field astronomy, Global Positioning systems; Map Layout for culverts, canals, bridges, road/railway alignmet and buildings, setting out of curves; Basic knowledge of Engineering geology and its application in projects	150

Test No.	Date/Day	Time	Subject		Marks
11.	13th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Information and Communication Technologies (ICT) (All Topics)	100
			Section B : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
			Section C : Repeat Topic of Test 7	Basics of Project Management (All Topics)	
12.		5:00 PM to 6:30 PM	Section A: New Topic	Design of concrete and Masonry Structures (All Topics)	150
			Section B : Repeat Topic of Test 10	Structural Analysis - 1 (Part Syllabus) Topics: Analysis of determinate and indeterminate structures (beams and plane frames only), suspended cables	
			Section C : Repeat Topic of Test 8	CPM PERT -2 (Part Syllabus) + Hydrology and Water Resource Engineering - 2 (Part Syllabus) Topics: Analysis of Rates of various types of works; Tendering Process and Contract Management, Quality Control, Productivity, Operation Cost; Land acquisition; Labour safety and welfare.+ Water Resources Engineering : Multipurpose uses of Water, River basins and their potential; Irrigation systems, water demand assessment; Resources - storages and their yields; Water logging, canal and drainage design, Gravity dams, falls, weirs, Energy dissipaters, barrage Distribution works, Cross drainage works and head-works and their design; Concepts in canal design, construction & maintenance; River training, measurement and analysis of rainfall.	
13.	20th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Standards and Quality practices in production, construction, maintenance and services (All Topics)	100
			Section B : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
			Section C : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
14.		5:00 PM to 6:30 PM	Section A: New Topic	Flow of fluids, hydraulic machines and hydro power (All Topics)	150
			Section B : Repeat Topic of Test 12	Design of concrete and Masonry Structures - 1 (Part Syllabus) Topics: Limit state design for bending, shear, axial compression and combined forces; design of beams, Lintels, Tanks and staircases.	
			Section C : Repeat Topic of Test 10	Structural Analysis - 2 (Part Syllabus) Topics: Analysis of determinate and indeterminate trusses, rolling loads, influence lines, free and forced vibrations ' or single degree and multiple degree freedom system, concept and use of computer aided design (matrix analysis)	
15.	27th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Current issues of national and international importance relating to social, economic and industrial development (All Topics)	100
			Section B : Repeat Topic of Test 13	Standards and Quality practices in production, construction, maintenance & services (All Topics)	
			Section C : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
16.		5:00 PM to 6:30 PM	Section A: New Topic	Transportation Engineering + Building Materials (All Topics)	150
			Section B : Repeat Topic of Test 14	Flow of fluids, hydraulic machines and hydro power (All Topics)	
			Section C : Repeat Topic of Test 12	Design of concrete and Masonry Structures - 2 (Part Syllabus) Topics: Design of slabs, foundations and retaining walls; Principles of pre-stressed concrete design including materials and methods; Earthquake resistant design of structures, design of Masonry structure	
17.	4th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test	Paper- I : Non-Technical	200
18.		2 PM to 5 PM	Full Syllabus Test	Paper- II : Technical	300
19.	11th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test	Paper-I : Non-Technical	200
20.		2 PM to 5 PM	Full Syllabus Test	Paper- II : Technical	300

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Anubhav : Simulate Real ESE Prelims Exam

21.	18th May, 2025 Sunday	10 AM to 12 Noon	Non-Technical Paper (Paper-I) : Full Syllabus Test	200
22.		2 PM to 5 PM	Technical Paper (Paper-II) : Full Syllabus Test	300

ESE 2025 Prelims
OFFLINE TEST SERIES

MECHANICAL ENGINEERING

Test No.	Date/Day	Time	Subject	Marks
1.	9th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A : New Topic — Reasoning & Aptitude (All Topics) Section B : New Topic — Engineering Mathematics (All Topics)	100
2.		5:00 PM to 6:30 PM	Section A: New Topic — Thermodynamics (All Topics) Section B : New Topic — Refrigeration and Air-conditioning (All Topics)	150
3.	16th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Energy and Environment (All Topics) Section B : New Topic — Basics of Material Science (All Topics) Section C : Repeat Topic of Test 1 — Engineering Mathematics + Reasoning & Aptitude (All Topics)	100
4.		5:00 PM to 6:30 PM	Section A: New Topic — Production Engineering & Material Science (All Topics) Section B : Repeat Topic of Test 2 — Thermodynamics - 1 (Part Syllabus) Topics: Thermodynamic systems and processes; properties of pure substance; Zeroth, First and Second Laws of Thermodynamics; Entropy. Section C : Repeat Topic of Test 2 — Refrigeration and Air-conditioning - 1 (Part Syllabus) Vapour compression refrigeration, Refrigerants and Working cycles, Compressors, Condensers, Evaporators and Expansion devices, Other types of refrigeration systems like Vapour Absorption	150
5.	23rd Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — General Principles of Design, Drawing, Importance of Safety (All Topics) Section B : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics) Section C : Repeat Topic of Test 3 — Basics of Material Science (All Topics)	100
6.		5:00 PM to 6:30 PM	Section A: New Topic — Fluid Mechanics and Turbo Machinery (All Topics) Section B : Repeat Topic of Test 4 — Production Engineering & Material Science - 1 (Part Syllabus) Topics: Metal joining, metal casting-Metal forming, computer Integrated manufacturing, Basic Crystallography, Heat Treatment, Ferrous and Non Ferrous Metals, Non metallic materials, Section C : Repeat Topic of Test 2 — Thermodynamics - 2 (Part Syllabus) + Refrigeration and Air-conditioning - 2 (Part Syllabus) Topics: Irreversibility and availability, Otto, Diesel and Dual cycles, analysis of thermodynamic cycles related to energy conversion: ideal and real gases; compressibility factor; Gas mixtures + Vapour jet, thermo electric and Vortex tube refrigeration. Psychometric properties and processes, Comfort chart, Comfort and industrial air conditioning, Load calculations and Heat pumps	150
7.	30th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Project Management (All Topics) Section B : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics) Section C : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics)	100
8.		5:00 PM to 6:30 PM	Section A: New Topic — Heat Transfer (All Topics) + IC Engines (All Topics) Section B : Repeat Topic of Test 6 — Fluid Mechanics and Turbo Machinery - 1 (Part Syllabus) Topics: Basic Concepts and Properties of Fluids, Manometry, Fluid Statics, Buoyancy, Equations of Motion, Bernoulli's equation and applications + Reciprocating and Rotary pumps, Pelton wheel, Kaplan and Francis Turbines, velocity diagrams, Impulse and Reaction principles Section C : Repeat Topic of Test 4 — Production Engineering & Material Science - 2 (Part Syllabus) Topics: Machining and machine tool operations, Limits, fits and tolerances, Metrology and inspection + Alloys and Phase diagrams, Basics of Nano-materials, Mechanical Properties & Testing, Corrosion prevention &control	150
9.	6th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Ethics and values in Engineering profession (All Topics) Section B : Repeat Topic of Test 7 — Basics of Project Management (All Topics) Section C : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics)	100
10.		5:00 PM to 6:30 PM	Section A: New Topic — Strength of Materials & Engineering Mechanics (All Topics) Section B : Repeat Topic of Test 8 — Heat Transfer - 1 (Part Syllabus) + IC Engine - 1 (Part Syllabus) Topics: Modes of heat transfer, Steady and unsteady heat conduction, Thermal resistance, Fins, Free and forced convection, Correlations for convective heat transfer + SI and CI Engines, Engine Systems and Components. Section C : Repeat Topic of Test 6 — Fluid Mechanics and Turbo Machinery - 2 (Part Syllabus) Topics : Viscous flow of incompressible fluids, Laminar and Turbulent flows, Flow through pipes and head losses in pipes. + Steam and Gas Turbines, Theory of Jet Propulsion – Pulse jet and Ram Jet Engines, Reciprocating and Rotary Compressors – Theory and Applications	150

Test No.	Date/Day	Time	Subject		Marks
11.	13th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Information and Communication Technologies (ICT) (All Topics)	100
			Section B : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
			Section C : Repeat Topic of Test 7	Basics of Project Management (All Topics)	
12.		5:00 PM to 6:30 PM	Section A: New Topic	Theory of Machines (All Topics)	150
			Section B : Repeat Topic of Test 10	Strength of Materials & Engineering Mechanics - 1 (Part Syllabus) Topics: Stresses and Strains-Compound Stresses and Strains, Bending Moment and Shear Force Diagrams, Thin and thick Cylinders, Spheres. + Analysis of System of Forces,	
			Section C : Repeat Topic of Test 8	Heat Transfer - 2 (Part Syllabus) + IC Engine - 2 (Part Syllabus) Topics : Radiative heat transfer, Radiation heat transfer coefficient; boiling & condensation, Heat exchanger performance analysis + Performance characteristics and testing of IC Engines; Fuels; Emissions and Emission Control.	
13.	20th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Standards and Quality practices in production, construction, maintenance and services (All Topics)	100
			Section B : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
			Section C : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
14.		5:00 PM to 6:30 PM	Section A: New Topic	Renewable Sources of Energy + Industrial and Maintenance Engineering Robotics & Mechatronics (All Topics)	150
			Section B : Repeat Topic of Test 12	Theory of Machines - 1 (Part Syllabus) Topics: Types of Kinematics Pair & analysis Mobility, Inversions, Velocity & Acceleration Analysis of Planar Mechanisms, Dynamic Analysis – Slider – crank mechanisms, turning moment computations, flywheel, Governors, Free and forced vibration of undamped and damped SDOF systems, Transmissibility Ratio, Vibration Isolation, Critical Speed of Shafts.	
			Section C : Repeat Topic of Test 10	Strength of Materials & Engineering Mechanics - 2 (Part Syllabus) Topics: Theory of Bending Stresses, Slope and deflection, Torsion, Friction, Centroid and Centre of Gravity.	
15.	27th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Current issues of national and international importance relating to social, economic and industrial development (All Topics)	100
			Section B : Repeat Topic of Test 13	Standards and Quality practices in production, construction, maintenance & services (All Topics)	
			Section C : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
16.		5:00 PM to 6:30 PM	Section A: New Topic	Machine Design + Power Plant Engineering (All Topics)	150
			Section B : Repeat Topic of Test 14	Renewable Sources of Energy + Industrial and Maintenance Engineering Robotics & Mechatronics (All Topics)	
			Section C : Repeat Topic of Test 12	Theory of Machines - 2 (Part Syllabus) Topics : CAMs with uniform acceleration and retardation, cycloidal motion, oscillating followers; Gears – Geometry of tooth profiles, Law of gearing, Involute profile, Interference, Helical, Spiral and Worm Gears, Gear Trains- Simple, compound & Epicyclic; balancing of Revolving & Reciprocating masses, Gyroscopes & its effect on automobiles, ships & aircrafts,	
17.	4th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test 1	Paper- I	200
18.		2 PM to 5 PM	Full Syllabus Test 2	Paper- II	300
19.	11th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test	Paper-I : Non-Technical	200
20.		2 PM to 5 PM	Full Syllabus Test	Paper- II : Technical	300

Anubhav : Simulate Real ESE Prelims Exam

21.	18th May, 2025 Sunday	10 AM to 12 Noon	Technical Paper (Paper-I) : Full Syllabus Test	200
22.		2 PM to 5 PM	Non-Technical Paper (Paper-II) : Full Syllabus Test	300

ESE 2025 Prelims
OFFLINE TEST SERIES

ELECTRICAL ENGINEERING

Test No.	Date/Day	Time	Subject	Marks
1.	9th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A : New Topic — Reasoning & Aptitude (All Topics) Section B : New Topic — Engineering Mathematics (All Topics)	100
2.		5:00 PM to 6:30 PM	Section A: New Topic — Electrical Circuits (All Topics) Section B : New Topic — Digital Electronics + Microprocessors (All Topics)	150
3.	16th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Energy and Environment (All Topics) Section B : New Topic — Basics of Material Science (All Topics) Section C : Repeat Topic of Test 1 — Engineering Mathematics + Reasoning & Aptitude (All Topics)	100
4.		5:00 PM to 6:30 PM	Section A: New Topic — Control Systems + Engineering Mathematics (All Topics) Section B : Repeat Topic of Test 2 — Electrical Circuits - 1 (Part Syllabus) Topics: Circuit elements, KCL, KVL, Node and Mesh analysis, ideal current and voltage sources, Thevenin's, Norton's, Superposition and Maximum Power Transfer theorems, Sinusoidal steady state analysis. Transient response of DC and AC networks, Section C : Repeat Topic of Test 2 — Digital Electronics -1 + Microprocessors - 1 (Part Syllabus) Boolean Algebra, Logic gates, Combinational circuits and multiplexers + Microprocessor basics- interfaces and applications.	150
5.	23rd Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — General Principles of Design, Drawing, Importance of Safety (All Topics) Section B : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics) Section C : Repeat Topic of Test 3 — Basics of Material Science (All Topics)	100
6.		5:00 PM to 6:30 PM	Section A: New Topic — Electrical Machines (All Topics) Section B : Repeat Topic of Test 4 — Control Systems - 1 + Engineering Mathematics - 1 (Part Syllabus) Topics: Principles of feedback, transfer function, block diagrams and signal flow graphs, transient response analysis, steady-state errors, transforms and their applications; Routh-hurwitz criterion, root loci + Matrix theory, Eigen values & Eigen vectors, system of linear equations, Numerical methods for solution of non-linear algebraic equations & differential equations, integral calculus, partial derivatives, maxima &minima, Line, Surface & Volume Integrals. Section C : Repeat Topic of Test 2 — Electrical Circuits - 2 + Digital Circuits - 2 (Part Syllabus) Topics: Basic filter concepts, two-port networks, Network graphs, Magnetically coupled circuits + Sequential logic circuits, multivibrators, sample and hold circuits and A/D-D/A converters.	150
7.	30th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Project Management (All Topics) Section B : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics) Section C : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics)	100
8.		5:00 PM to 6:30 PM	Section A: New Topic — Power Systems (All Topics) Section B : Repeat Topic of Test 6 — Electrical Machines - 1 (Part Syllabus) Topics: 1-phase & 3-phase transformers - connections, parallel operation, auto-transformer, energy conversion principles, Induction motors - principles, types, performance characteristics, starting and speed control, servo and stepper motors. Section C : Repeat Topic of Test 4 — Control Systems - 2 + Engineering Mathematics - 2 (Part Syllabus) Topics: Nyquist techniques, Bode plots, lag, lead and lead-lag compensation, stability analysis, frequency response analysis, state space model, state transition matrix, controllability and observability, linear state variable feedback, PID and industrial controllers + Fourier series, linear, nonlinear and partial differential equations, initial and boundary value problems, complex variables, Taylor's and Laurent's series, residue theorem, probability and statistics fundamentals, Sampling theorem, random variables, Normal and Poisson distributions, correlation and regression analysis.	150
9.	6th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Ethics and values in Engineering profession (All Topics) Section B : Repeat Topic of Test 7 — Basics of Project Management (All Topics) Section C : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics)	100
10.		5:00 PM to 6:30 PM	Section A: New Topic — Power Electronics and Drives (All Topics) Section B : Repeat Topic of Test 8 — Power Systems - 1 (Part Syllabus) Topics: Basic power generation concepts, steam, gas and water turbines, transmission line models and performance, cable performance, insulation, corona and radio interference, power factor correction, Radial and ring-main distribution systems,voltage control and economic operation, HVDC transmission and FACTS, distributed generation, solar and wind power, smart grid concepts, environmental implications, fundamentals of power economics. Section C : Repeat Topic of Test 6 — Electrical Machines - 2 (Part Syllabus) Topics: DC machines - types, windings, generator characteristics, armature reaction and commutation, starting and speed control of motors, Synchronous machines - performance, regulation, parallel operation of generators, motor starting, characteristics and applications	150

Test No.	Date/Day	Time	Subject		Marks
11.	13th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Information and Communication Technologies (ICT) (All Topics)	100
			Section B : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
			Section C : Repeat Topic of Test 7	Basics of Project Management (All Topics)	
12.		5:00 PM to 6:30 PM	Section A: New Topic	BEE + Analog Electronics + Electrical & Electronic Measurements (All Topics)	150
			Section B : Repeat Topic of Test 10	Power Electronics and Drives -1 (Part Syllabus) Topics: Semiconductor power diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs - static characteristics and principles of operation, triggering circuits, phase control rectifiers, bridge converters: fully controlled and half controlled	
			Section C : Repeat Topic of Test 8	Power Systems - 2 (Part Syllabus) Topics: symmetrical components, fault analysis, Matrix representation of power systems, load flow analysis, System stability concepts, Swing curves and equal area criterion. Concepts of power system dynamics, Principles of protection systems, basics of solid state relays and digital protection; Circuit breakers.	
13.	20th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Standards and Quality practices in production, construction, maintenance and services (All Topics)	100
			Section B : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
			Section C : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
14.		5:00 PM to 6:30 PM	Section A: New Topic	Systems & Signal Processing + Communication Systems (All Topics)	150
			Section B : Repeat Topic of Test 12	BEE-1 + Analog Electronics - 1 + Electrical & Electronic Measurements - 1 (Part Syllabus) Topics: Basics of semiconductor diodes and transistors characteristics, junction and field effect transistors (BJT, FET, and MOSFETs) + Operational amplifiers-characteristics and applications + Principles of measurement, accuracy, precision and standards; Bridges and potentiometers; moving coil, moving iron, dynamometer and induction type instruments, measurement of voltage, current, power energy and power factor.	
			Section C : Repeat Topic of Test 10	Power Electronics & Drives - 2 (Part Syllabus) Topics : Principles of choppers and inverters, basis concepts of adjustable speed dc and ac drives, DC-DC switched mode converters, DC-AC switched mode converters, resonant converters, high frequency inductors and transformers, power supplies.	
15.	27th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Current issues of national and international importance relating to social, economic and industrial development (All Topics)	100
			Section B : Repeat Topic of Test 13	Standards and Quality practices in production, construction, maintenance & services (All Topics)	
			Section C : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
16.		5:00 PM to 6:30 PM	Section A: New Topic	Electromagnetic Theory + Computer Fundamentals + Electrical Materials (All Topics)	150
			Section B : Repeat Topic of Test 14	Systems & Signal Processing + Communication Systems (All Topics)	
			Section C : Repeat Topic of Test 12	BEE - 2 + Analog Electronics - 2 (Part Syllabus) + Electrical & Electronic Measurements - 2 (Part Syllabus) Topics : Different types of transistor amplifiers, equivalent circuits and frequency response, oscillators and other circuits, feedback amplifiers + Basics of filter circuits and applications, simple active filters, basics of linear integrated circuits + Instrument transformers, digital voltmeters and multi-meters, phase, time and frequency measurement, q-meters, oscillosocopes, potentiometric recorders, error analysis, basics of sensors, transducers, basics of data acquisition systems,	
17.	4th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test 1	Paper- I	200
18.		2 PM to 5 PM	Full Syllabus Test 2	Paper- II	300
19.	11th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test	Paper-I : Non-Technical	200
20.		2 PM to 5 PM	Full Syllabus Test	Paper- II : Technical	300

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21.	18th May, 2025 Sunday	10 AM to 12 Noon	Technical Paper (Paper-I) : Full Syllabus Test		200
22.		2 PM to 5 PM	Non-Technical Paper (Paper-II) : Full Syllabus Test		300

ESE 2025 Prelims
OFFLINE TEST SERIES

ELECTRONICS & TELECOM ENGG.

Test No.	Date/Day	Time	Subject	Marks
1.	9th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A : New Topic — Reasoning & Aptitude (All Topics) Section B : New Topic — Engineering Mathematics (All Topics)	100
2.		5:00 PM to 6:30 PM	Section A: New Topic — Network Theory (All Topics) Section B : New Topic — Digital Circuits (All Topics)	150
3.	16th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Energy and Environment (All Topics) Section B : New Topic — Basics of Material Science (All Topics) Section C : Repeat Topic of Test 1 — Engineering Mathematics + Reasoning & Aptitude (All Topics)	100
4.		5:00 PM to 6:30 PM	Section A: New Topic — Control Systems + Microprocessors and Microcontroller (All Topics) Section B : Repeat Topic of Test 2 — Network Theory - 1 (Part Syllabus) Topics: Ohm's & Kirchoff's laws, Wye-Delta transformation, mesh & nodal analysis, DC circuits. Single-phase AC circuits, Steady state sinusoidal analysis, frequency domain analysis of RLC circuits. Circuit theorems. Linear constant coefficient differential equations - Time domain analysis of RLC circuits, Solution of network equations using Laplace transforms. Section C : Repeat Topic of Test 2 — Digital Circuits - 1 (Part Syllabus) Topics: Boolean Algebra & uses, Logic gates, Combinatorial circuits design& applications, Basics of multiplexers. MUX/ROM/PLA based design.	150
5.	23rd Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — General Principles of Design, Drawing, Importance of Safety (All Topics) Section B : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics) Section C : Repeat Topic of Test 3 — Basics of Material Science (All Topics)	100
6.		5:00 PM to 6:30 PM	Section A: New Topic — Electronic Devices & Circuits + Analog Circuits (All Topics) Section B : Repeat Topic of Test 4 — Control Systems - 1 (Part Syllabus) + Microprocessors and Microcontroller - 1 (Part Syllabus) Topics: Feedback systems-open &close loop types, Signal flow graphs. Transient and Steady state analysis. Stability analysis, Routh-Hurwitz criteria. Root loci + Microprocessors - basics, interrupts, instruction sets. Section C : Repeat Topic of Test 2 — Network Theory - 2 (Part Syllabus) + Digital Circuits - 2 (Part Syllabus) Topics: 2-port network parameters-driving point & transfer functions. Network graphs & matrices. + Sequential circuits design& applications, counters, registers, memories, Moore & Mealy circuit design. Digital IC families. A/D-D/A converters.	150
7.	30th Mar, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Basics of Project Management (All Topics) Section B : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics) Section C : Repeat Topic of Test 3 — Basics of Energy and Environment (All Topics)	100
8.		5:00 PM to 6:30 PM	Section A: New Topic — Analog and Digital Communication Systems (All Topics) Section B : Repeat Topic of Test 6 — Electronic Devices & Circuits - 1 (Part Syllabus) + Analog Circuits Topics - 1 (Part Syllabus) Topics: Basics of semiconductors. Diode basics and characteristics, Diodes for different uses. Basics of Optoelectronics and its applications, Optical sources/detectors + Topics: Diode circuits for different uses, Small signal equivalent circuits of diodes. Biasing & stability of BJT & JFET amplifier circuits. Small signal equivalent circuits of BJTS and FETs, single stage amplifiers. Section C : Repeat Topic of Test 4 — Control Systems - 2 (Part Syllabus) + Microprocessors and Microcontroller - 2 (Part Syllabus) Topics: Frequency response analysis, Nyquist/Bode plots. Design of control systems, compensators, elements of lead/lag compensation, PID and industrial controllers. State equations for networks + DMA, peripheral interfacing, Microcontrollers & uses and Embedded systems.	150
9.	6th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic — Ethics and values in Engineering profession (All Topics) Section B : Repeat Topic of Test 7 — Basics of Project Management (All Topics) Section C : Repeat Topic of Test 5 — General Principles of Design, Drawing, Importance of Safety (All Topics)	100
10.		5:00 PM to 6:30 PM	Section A: New Topic — Signals and Systems + Basic Electrical Engineering (All Topics) Section B : Repeat Topic of Test 8 — Analog & Digital Communication Systems - 1 (Part Syllabus) Topics: Random signals, noise, probability theory. Analog communication Systems - AM, FM, transmitters, receivers, theory, practice, standards, SNR comparison. Section C : Repeat Topic of Test 6 — Electronic Devices & Circuits-2 (Part Syllabus) + Analog Circuits Topics -2 (Part Syllabus) Topics : BJT, JFETs, MOSFETs basics and characteristics + Multi-stage, Feedback amplifiers, oscillators and other circuits. Basics of linear ICs, operational amplifiers and their applications-linear & non-linear, Active filters, timers, multipliers, wave shaping	150

Test No.	Date/Day	Time	Subject		Marks
11.	13th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Information and Communication Technologies (ICT) (All Topics)	100
			Section B : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
			Section C : Repeat Topic of Test 7	Basics of Project Management (All Topics)	
12.		5:00 PM to 6:30 PM	Section A: New Topic	Advanced Communication + Electronic Measurements and Instrumentation (All Topics)	150
			Section B : Repeat Topic of Test 10	Signals and Systems - 1 (Part Syllabus) + Basic Electrical Engineering - 1 (Part Syllabus) Topics: Classification and Applications of signals and systems. CTFS, CTFT and their application to continuous time systems. Laplace transform, its applications and realization of continuous time systems + Electro-magnetism, Faraday's & Lenz's laws, induced EMF and its uses; DC machines, and synchronous machines; Electrical power sources- basics: hydroelectric, thermal, nuclear, wind, solar; Basics of batteries and their uses.	
			Section C : Repeat Topic of Test 8	Analog & Digital Communication Systems - 2 (Part Syllabus) Topics: Information theory. Digital communication systems - Analog versus digital communication & applications, basics, sampling, quantizing, coding, PCM, DPCM, multiplexing-audio/video, Digital modulation: ASK, FSK, PSK. multiple accesses: TDMA, FDMA, CDMA.	
13.	20th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Standards and Quality practices in production, construction, maintenance and services (All Topics)	100
			Section B : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
			Section C : Repeat Topic of Test 9	Ethics and values in Engineering profession (All Topics)	
14.		5:00 PM to 6:30 PM	Section A: New Topic	Electromagnetics + Computer Organization and Architecture (All Topics)	150
			Section B : Repeat Topic of Test 12	Advanced Comm. -1 (Part Syllabus) + Electronic Measurements & Instrumentation-1 (Part Syllabus) Topics: Fibre optic communication systems: fibre optics, theory, practice, standards, block schematics, link calculations, system design. Communication networks: Principles, practices, technologies, uses, OSI model, security. Basic packet multiplexed streams and scheduling, protocols (TCP/TCPIP). + Principles of measurement, accuracy, precision and standards, Static/dynamic characteristics of measurement systems, errors, statistical analysis and curve fitting. Analog and Digital systems for measurement, measuring instruments for different applications.	
			Section C : Repeat Topic of Test 10	Signals and Systems - 2 (Part Syllabus) + Basic Electrical Engineering - 2 (Part Syllabus) Topics: Discrete time Fourier transform, Discrete Fourier transform and their application to discrete time systems. Z-transform, its applications and realization of discrete time systems. Digital filters: FIR/IIR types, design, speech/audio/radar signal processing uses + Transformers, efficiency; induction machines.	
15.	27th Apr, 2025 Sunday	4:00 PM to 5:00 PM	Section A: New Topic	Current issues of national and international importance relating to social, economic and industrial development (All Topics)	100
			Section B : Repeat Topic of Test 13	Standards and Quality practices in production, construction, maintenance & services (All Topics)	
			Section C : Repeat Topic of Test 11	Information and Communication Technologies (ICT) (All Topics)	
16.		5:00 PM to 6:30 PM	Section A: New Topic	Advanced Electronics + Materials Science (All Topics)	150
			Section B : Repeat Topic of Test 14	Electromagnetics + Computer Organization and Architecture (All Topics)	
			Section C : Repeat Topic of Test 12	Advanced Comm. -2 (Part Syllabus) + Electronic Measurements & Instrumentation-2 (Part Syllabus) Topics : Microwave & satellite communication: Terrestrial/space type LOS systems, block schematics link calculations, system design. Communication satellites, orbits, characteristics, systems, uses. Cellular networks, types, analysis. + Measurement systems for non-electrical quantities, different types of transducers and displays. Basics of telemetry and data acquisition systems.	
17.	4th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test 1	Paper- I	200
18.		2 PM to 5 PM	Full Syllabus Test 2	Paper- II	300
19.	11th May, 2025 Sunday	10 AM to 12 Noon	Full Syllabus Test	Paper-I : Non-Technical	200
20.		2 PM to 5 PM	Full Syllabus Test	Paper- II : Technical	300

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21.	18th May, 2025 Sunday	10 AM to 12 Noon	Technical Paper (Paper-I) : Full Syllabus Test	200
22.		2 PM to 5 PM	Non-Technical Paper (Paper-II) : Full Syllabus Test	300

- Tests will be conducted as per the above-given schedule.
- Answer Key/Solutions will be uploaded on **Sunday7:00 PM** on www.madeeasy.in
- In case of any discrepancy in the solution, students can challenge the answer key provided by us. The link **"Challenge the solutions"** will be available on the home page of www.madeeasy.in from **Sunday 7:00 PM** to **Monday 5:00 PM**.
- Test result will be uploaded on **Friday 6:00 PM** on www.madeeasy.in

Tests for Absentees

Students are advised not to be absent. If you miss the test(s) due to any unavoidable circumstances, then you can appear on the next day (Monday).

Part Syllabus Test Timing : 4:00 PM to 6:30 PM.

Full Syllabus test Timing : 10:00 AM to 12:00 PM and 12:30 PM to 3:30 PM.

NOTE: Test papers will be evaluated, but RANK will NOT be generated for absentees.