NEET UG 2026

Complete Preparation Guide

Last 30 Days Strategy • High-Yield Topics • Exam Day Plan

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NEET UG 2026 Biology Last-Minute Revision Guide

Chapter 1: High-Yield Biology Topics

Botany Must-Revise Topics

- Photosynthesis (C3/C4/CAM pathways) Know the 3 Calvin cycle steps and RuBisCO's role
- Plant Hormones (auxin, gibberellin, ethylene, cytokinin, abscisic acid) Link each hormone to specific growth responses
- Transpiration and Water Transport Master xylem structure and cohesion-tension theory
- Respiration in Plants Distinguish aerobic vs anaerobic; know ATP yield from glucose
- Seed Germination and Dormancy Remember role of gibberellins vs abscisic acid balance
- Plant Tissue Systems Dermal, ground, and vascular tissue functions and cell types
- Meristem Types and Plant Growth Apical vs lateral meristems; remember cambium produces rings
- Mineral Nutrition Know macronutrients (N, P, K, Ca, Mg, S) vs micronutrients; deficiency symptoms
- Nitrogen Fixation and Symbiosis Rhizobium bacteria; legume-bacteria partnership mechanism
- Flower Structure and Reproduction Parts of carpel and stamen; meiosis timing in pollen/ovule
- Pollination and Fertilization Double fertilization in angiosperms creates endosperm (3n) and embryo (2n)
- Fruit and Seed Development Know difference between true fruit and accessory fruit
- Plant Tissue Culture Totipotency concept; callus formation critical for biotech questions
- Photoperiodism and Flowering Short-day vs long-day plants; phytochrome's red/far-red light sensitivity
- Secondary Growth and Wood Formation Heartwood vs sapwood; annual rings indicate age

Zoology Must-Revise Topics

- Human Skeletal System 206 bones in adult; know major bone types and joint classifications
- Muscular System and Contraction Sliding filament model; Z-disc, A-band, I-band definitions
- Nervous System Organization CNS vs PNS; sympathetic vs parasympathetic functions
- Reflex Arc and Neural Impulse Synapse structure; neurotransmitter release mechanism
- Sensory Organs (Eye and Ear) Retina layers, photoreceptors (rods/cones), cochlear function
- Digestion and Absorption Know all digestive enzymes, their sources, and pH optima

• Nutrition and Metabolic Disorders BMI calculations; kwashiorkor vs marasmus differences

• Respiration in Humans Ventilation, gaseous exchange, hemoglobin-O2 binding curve

• Circulation and Cardiac Cycle Pulmonary vs systemic circulation; ECG wave meanings (P, QRS, T)

• Blood: Composition and Clotting RBC, WBC, platelet counts; clotting cascade steps

• Excretion and Osmoregulation Nephron structure; filtration, reabsorption, secretion at each segment

• Kidney Function and Urine Formation GFR calculation; ADH and aldosterone effects

• Endocrine System All major glands, hormones, and their target tissues and effects

• Reproduction in Humans Oogenesis vs spermatogenesis; menstrual cycle phases

• Immune System and Antibodies Innate vs adaptive immunity; T-cell vs B-cell roles; antibody structure

■ Speed Revision: Biology Facts

1. Photosynthesis produces O2 from water splitting in light-dependent reactions (photolysis)

2. C4 plants concentrate CO2 at rubisco site, reducing photorespiration (more efficient in hot climates)

3. Ethylene ripens fruits; abscisic acid closes stomata during drought stress

4. Xylem transports water upward via cohesion-tension (negative pressure); phloem transports sugars bidirectionally

5. Myelin sheath increases nerve impulse speed; saltatory conduction jumps between Nodes of Ranvier

6. Resting membrane potential is around -70mV due to Na+/K+ ATPase pumping 3 Na+ out, 2 K+ in

7. Synapse uses neurotransmitters for signal transmission; synaptic cleft is 20-40 nanometers wide

8. Retina has 3 layers of neurons: photoreceptors, bipolar cells, ganglion cells (light enters through cornea first)

9. Hemoglobin binds O2 cooperatively (allosteric regulation); Bohr effect: acidic pH decreases O2 affinity

10. Trypsin and chymotrypsin (pancreatic enzymes) require HCO3- environment; pepsin works in acidic stomach

11. Kidney filters ~180 liters daily but reabsorbs 99% to produce 1-2 liters urine

12. Proximal convoluted tubule (PCT) reabsorbs glucose, amino acids, ions actively

13. Aldosterone increases Na+ reabsorption; ADH increases water reabsorption (both increase blood pressure)

14. Insulin lowers blood glucose via GLUT4 transporter; glucagon raises glucose via glycogenolysis and gluconeogenesis

15. Thyroid hormone (T3, T4) increases metabolic rate; TSH from pituitary stimulates thyroid

16. Oogenesis produces one ovum and three polar bodies; spermatogenesis produces four equal sperm

17. HCG hormone maintains corpus luteum in early pregnancy (positive pregnancy test marker)

18. Antibodies are Y-shaped; IgG most abundant in blood; IgA in secretions; IgE in allergies

19. Helper T cells (CD4+) coordinate immune response; cytotoxic T cells (CD8+) kill infected cells

20. Mitochondrial DNA is maternally inherited; each mitochondrion has multiple DNA copies

■ Biology Exam Tips

■ TIMING STRATEGY: Allocate 60% time to Zoology (especially Physiology), 40% to Botany — Physiology is highest weightage

■ GENETICS SHORTCUT: Learn Mendelian ratios (3:1, 9:3:3:1, 1:1:1:1) and pedigree symbols instantly; deduce patterns before calculating

■ DIAGRAM MASTERY: Redraw nephron, neuron synapse, cardiac cycle, mitochondria electron transport chain 3 times each — visual memory locks these in exam

■ PHYSIOLOGICAL PATHWAYS: For digestion, respiration, and excretion questions, always trace the EXACT location and MECHANISM — examiners test mechanism over memorization

■ MOLECULAR BIOLOGY PRIORITY: Focus on DNA replication (Okazaki fragments, leading/lagging strand), transcription (promoter, TATA box, RNA polymerase II), and translation (codon-anticodon pairing) — these appear in 15-20 questions

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Chapter 2: Genetics & Molecular Biology (30%+ of marks)

Must-Know Genetics Topics

• Mendelian Inheritance Laws Know when to apply each law; testcross identifies genotype

• Chromosomal Inheritance and Linkage Genes on same chromosome show reduced crossing over frequency

• Sex-Linked Inheritance X-linked traits appear more in males; criss-cross inheritance pattern

• Gene Interaction (Epistasis) 9:7, 12:3:1 ratios indicate duplicate dominant epistasis

• Mutation Types Point (missense, nonsense, silent), frameshift; consequences on amino acid sequence

• DNA Replication Semiconservative model; Okazaki fragments on lagging strand; ligase seals nicks

• Transcription Promoter recognition; RNA polymerase II for mRNA; intron removal in eukaryotes

• Translation Start codon AUG; stop codons UAA/UAG/UGA; wobble base pairing

• Gene Expression Regulation Operons in prokaryotes (lac operon inducible, trp operon repressible)

• Protein Synthesis Inhibitors Streptomycin blocks initiation; tetracycline blocks elongation (prokaryotes only)

• Chromosomal Aberrations Deletion, duplication, inversion, translocation; polyploidy in plants

• Sex Determination XX/XY system in humans; ZZ/ZW in birds; environmental in some reptiles

• Human Genetics and Pedigrees Identify autosomal dominant, recessive, X-linked patterns

• Biotechnology and Cloning Restriction enzymes cut DNA; PCR amplifies target; DNA fingerprinting uses VNTRs/STRs

One-Liner Genetics Mnemonics

• Operons: "LAC repressed by lactose ABSENT, TRP repressed by tryptophan PRESENT"

• Genetic code: "AUG starts, UAA/UAG/UGA stop; 64 codons for 20 amino acids (wobble)"

• DNA replication: "ATCG paired: A-T (2 bonds), G-C (3 bonds) semiconservative via Okazaki"

• Transcription: "DNA -> mRNA via RNA polymerase II at TATA box promoter; introns removed"

Chapter 3: Ecology (15-20% of marks)

High-Priority Ecology Topics

• Population Ecology Growth models (exponential J-curve, logistic S-curve); carrying capacity

• Community Interactions Predation, competition, symbiosis (commensalism, mutualism, parasitism)

- Succession Primary (bare rock) vs secondary (disturbed habitat); climax community
- Biomes Characteristics, climate, vegetation of tropical rainforest, temperate, tundra, desert
- Energy Flow and Trophic Levels 10% energy transfer rule; GPP vs NPP; food chains vs webs
- Nutrient Cycling Carbon, nitrogen, phosphorus, water cycles; key processes and reservoirs
- Biodiversity and Conservation Hotspots, endemic species, IUCN Red List categories
- Human Population and Resources Doubling time, age pyramid interpretation, resource depletion

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Chapter 4: Last-Minute Fact Sheets

Enzyme

Chapter 2: High-Yield Physics Topics

Most Important Physics Chapters

- ■ - 8-10 questions

Key concepts: Newton's laws, friction, circular motion, energy conservation, power calculations

- ■ - 6-8 questions

Key concepts: Coulomb's law, electric field, potential, capacitance, dielectric constant

- ■ - 6-8 questions

Key concepts: Ohm's law, resistivity, EMF, internal resistance, potentiometer, meter bridge

- ■ - 5-7 questions

Key concepts: Magnetic field, force on current, torque on coil, cyclotron frequency

- ■ - 5-6 questions

Key concepts: Faraday's law, Lenz's law, self-inductance, mutual inductance, transformers

- ■ - 8-10 questions

Key concepts: Refraction, lens formula, prism, dispersion, diffraction, interference, polarization

- ■ - 6-8 questions

Key concepts: Bohr model, energy levels, photoelectric effect, nuclear mass defect, radioactivity

- ■ - 5-7 questions

Key concepts: Wave equation, frequency, intensity, Doppler effect, beats, resonance

- ■ - 5-6 questions

Key concepts: First law, second law, entropy, heat engines, Carnot cycle

- ■ - 4-6 questions

Key concepts: Equation of motion, energy, damping, forced oscillations, resonance

- ■ - 4-5 questions

Key concepts: Moment of inertia, torque, angular momentum, rolling motion

- ■ - 3-4 questions

Key concepts: Pressure, Pascal's law, Bernoulli's equation, viscosity, surface tension

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Must-Remember Formulas

1. F = ma (Newton's second law) [N = kg.m/s^2]
2. v^2 = u^2 + 2as (kinematic equation) [m/s]
3. Work W = F.s.cos(theta) [J = kg.m^2/s^2]
4. Kinetic energy KE = 1/2 m v^2 [J]
5. Potential energy PE = mgh [J]
6. Power P = W/t = F.v [W = J/s]
7. Momentum p = mv [kg.m/s]
8. Impulse J = F.delta_t = delta_p [N.s]
9. Torque tau = F x r = I.alpha [N.m]
10. Angular momentum L = I.omega [kg.m^2/s]
11. Coulomb's law F = k Q1 Q2 / r^2 [N], where k = 9 x 10^9 N.m^2/C^2
12. Electric field E = F/q = k Q / r^2 [N/C]
13. Electric potential V = W/q = k Q / r [V]
14. Capacitance C = Q/V = epsilon_0 A / d [F = Farad]
15. Ohm's law V = IR [V]
16. Resistivity rho = R A / L [ohm.m]
17. Power dissipated P = I^2 R = V^2 / R = VI [W]
18. EMF equation E = I(R + r) where r is internal resistance [V]
19. Magnetic force F = BIL sin(theta) [N]
20. Lorentz force F = q(E + v x B) [N]
21. Lens formula 1/f = 1/v + 1/u [m^-1]
22. Magnification m = v/u = h_i / h_o [dimensionless]
23. Refractive index n = c/v = sin(i) / sin(r) [dimensionless]
24. Snell's law n1 sin(theta_1) = n2 sin(theta_2) [dimensionless]
25. Photoelectric effect hf = phi + KE_max where phi is work function [J]

Numerical Tricks

1. ■

When stuck, check answer dimensions. If options have different units, eliminate immediately. Write down all quantities with units at start prevents calculation errors and saves 30-40 seconds per problem.

2. ■

For complex motion problems (inclines, circular paths), use energy methods instead of force diagrams. KE + PE + Work by friction = constant. Faster than resolving forces, fewer calculation steps.

3. ■

When comparing two scenarios (different resistances, capacitors, lenses), use ratio formulas directly instead of calculating absolute values. Example: R1/R2 = (rho L1 A2) / (rho L2 A1). This eliminates constants and reduces arithmetic.

4. ■

For optics: use sin(theta) ~ theta (in radians) for small angles. For refraction problems at critical angle, use sin(c) = 1/n directly without calculator. Saves 20 seconds per question.

5. ■

If a quantity changes by x%, use delta(Q)/Q = sum of partial derivatives. Example: If R = V/I and V increases by 5% while I decreases by 2%, then R increases by approximately 5 + 2 = 7%. This avoids recalculation entirely.

Physics Exam Tips

■ **Scan the paper first (2 minutes)**: Read all 45 questions quickly. Mark 5-6 "gimme" questions (definition-based, single-formula problems). Solve these first to build confidence and secure 10-15 marks in first 5 minutes.

■ **Two-pass strategy**: First pass: solve all straightforward numerical problems (Ohm's law, simple kinematics, basic electrostatics). Second pass: tackle multi-step reasoning problems. Never get stuck on one question — move forward and return later if time permits.

■ **Create a quick reference sheet in your mind**: Before exam, memorize the 5 most used equations per chapter (Coulomb's law, lens formula, Ohm's law, photoelectric equation, nuclear mass-energy). In exam, write these on margin immediately. Reference is faster than searching memory.

■ **Modern Physics = High accuracy zone**: Atomic physics and nuclear physics questions are usually straightforward and high-yield. Bohr model, photoelectric effect, and radioactivity have predictable patterns. Practice previous 5 years of these questions — expect 80% repetition.

■ **Avoid calculation traps**: In NEET, wrong answers are designed to catch arithmetic errors. If your answer matches an option immediately, re-check — it's often a trap. Recalculate using different method or work backward from answer. Spend extra 10 seconds here to avoid -1 mark.

Chapter 3: High-Yield Chemistry Topics

Physical Chemistry Key Topics

• Thermodynamics: First Law (dU = q + w), enthalpy changes, Hess's Law, spontaneity (dG = dH - TdS). Focus on predicting reaction feasibility using dG < 0.

• Chemical Equilibrium: Kc and Kp relationships, Le Chatelier's principle, ICE tables. Remember Kp = Kc(RT)^(delta n). Practice shifting equilibrium positions.

• Electrochemistry: Standard cell potential (Edegcell), Nernst equation (E = Edeg - 0.059/n log Q at 25degC), Faraday's laws (Q = nF), redox balancing. Predict spontaneity from Edegcell > 0.

• Kinetics: Rate laws, order of reaction, half-life formulas (t1/2 = 0.693/k for first order), activation energy (Ea = Ea(f) - Ea(r)). Catalyst mechanism problems appear frequently.

• Atomic Structure: Bohr model (En = -13.6/n^2 eV), quantum numbers, orbital diagrams, electron configuration. Use aufbau principle and Hund's rule correctly.

• Solutions & Colligative Properties: Molarity, molality, osmotic pressure (pi = iMRT), vapor pressure depression, boiling point elevation, freezing point depression. Van't Hoff factor i is critical.

• Gaseous State: Ideal gas law (PV = nRT), kinetic energy (KE = 3/2 kT), effusion/diffusion rates (Graham's law: rate ratio = sqrt(M2/M1)). Real gases (van der Waals equation).

• Hydrogen Bonding & Intermolecular Forces: Distinguish between dipole-dipole, London dispersion, H-bonding. Predict physical properties (boiling point, solubility, density) from intermolecular forces.

Organic Chemistry Must-Know Reactions

1. Williamson Ether Synthesis: R-O-Na + R'-X -> R-O-R' + NaX (primary alkyl halide required)

2. Grignard Reaction: R-MgX + C=O -> R-CH(OH)-R' or R-CH2-OH (forms secondary or primary alcohols)

3. Esterification: R-COOH + R'-OH -> R-COO-R' + H2O (Fischer esterification, acid catalyst)

4. Aldol Condensation: Two aldehydes/ketones + base -> beta-hydroxy carbonyl + H2O (alpha-H required)

5. Cannizzaro Reaction: 2 HCHO + KOH -> CH3OH + HCOOK (formaldehyde disproportionation, no alpha-H)

6. Claisen Condensation: Two esters + base -> beta-ketoester + alcohol (forms C-C bond between ester carbons)

7. Friedel-Crafts Alkylation: Benzene + R-X + AlCl3 -> C6H5-R + HX (activating groups ortho/para directing)

8. Friedel-Crafts Acylation: Benzene + RCOCl + AlCl3 -> C6H5-COR + HCl (produces ketones, less rearrangement)

9. Nitration: Benzene + HNO3 + H2SO4 -> C6H5-NO2 + H2O (electrophilic aromatic, deactivating, meta-directing)

10. Sulfonation: Benzene + H2SO4(conc) + heat -> C6H5-SO3H + H2O (reversible, deactivating, meta-directing)

11. Halogenation: Benzene + X2 + AlX3 -> C6H5-X + HX (X2 = Cl2, Br2; activating groups ortho/para)

12. Wurtz Reaction: 2 R-X + 2 Na -> R-R + 2 NaX (couples alkyl halides, limited use)

13. SN1 vs SN2: Tertiary/secondary with weak nucleophile = SN1 (racemization), primary with strong nucleophile = SN2 (inversion)

14. Elimination (E1/E2): Zaitsev's rule predicts more substituted alkene. E2 with strong base (KOH, tert-butoxide), E1 with weak base (H2O, acid)

15. Hydration of Alkenes: R-CH=CH2 + H2O + H+ -> R-CH(OH)-CH3 (Markovnikov's rule: OH on more substituted carbon)

16. Hydrogenation: R-CH=CH-R' + H2 + Ni/Pt/Pd -> R-CH2-CH2-R' (syn addition, reduces unsaturation)

17. Addition of HX to Alkenes: R-CH=CH2 + HX -> R-CHX-CH3 (Markovnikov, forms carbocation intermediate)

18. Diels-Alder Reaction: Diene + Dienophile (alpha,beta-unsaturated carbonyl) -> cyclohexene product (concerted, endo selectivity typical)

19. Oxidation of Alcohols: Primary alcohol + KMnO4/K2Cr2O7 -> aldehyde -> carboxylic acid (secondary -> ketone, tertiary resistant)

20. Decarboxylation of Carboxylic Acids: R-COOH + heat + soda lime -> R-H + CO2 + H2O (removes COOH group, reduces chain length by 1)

Inorganic Chemistry Rapid Revision

• Periodic Table Trends: Ionization energy and electronegativity increase left to right and up the group. Atomic radius increases down and left. Metallic character increases left and down. Practice predicting element behavior from position.

• s, p, d Block Elements: Group 1 (alkali metals) high reactivity, soft, form +1 ions. Group 17 (halogens) high electronegativity, form -1 ions. d-block (transition metals) variable oxidation states, colored complexes, magnetic properties.

• Coordination Chemistry: Ligands donate electron pairs, coordination number = number of ligands attached to metal. EDTA is hexadentate. Strong field ligands (CN-, CO) cause large crystal field splitting. Predict geometry from VSEPR or crystal field theory.

• Common Oxidation States: Fluorine always -1 (except OF2). Oxygen usually -2 (except peroxides -1, OF2 +2). Sulfur in SO4^2- is +6, in S2O3^2- is mixed (+5, +6). Determine oxidation states before balancing redox equations.

• Metallurgy: Three steps concentration (gravity/magnetic/flotation), reduction (carbon/CO/H2/electrolysis), refining (electrolytic/zone refining). Distinguish between reducing agent type (C for ores, H2 for oxides, electrolysis for active metals).

• Group 13-18 Elements: Boron electron deficient, accepts electron pairs. Aluminum amphoteric oxide, forms complexes with OH-. Carbon tetrahedral, forms multiple bonds. Silicon similar to carbon but tetravalent in all compounds. Phosphorus, Sulfur variable oxidation states, form oxoacids.

• Lanthanides & Actinides: Lanthanide contraction explains similar chemistry within lanthanides. Actinides radioactive, variable oxidation states (U shows +3 to +6). Rare earth elements used in catalysts, magnets, electronics.

• Bonding Types: Ionic (high melting point, soluble in polar solvents, conduct in molten/solution state). Covalent (low melting point, variable solubility, don't conduct). Metallic (malleable, ductile, conduct electricity). Hydrogen bonding weak, affects physical properties.

• Acid-Base Properties of Oxides: Basic oxides (Na2O, CaO, BaO) form hydroxides with water. Amphoteric oxides (Al2O3, ZnO) dissolve in both acids and bases. Acidic oxides (CO2, P2O5, Cl2O7) form oxoacids. Predict based on element electronegativity.

• Qualitative Analysis: Flame test colors Na (yellow), K (violet), Ca (brick-red), Sr (crimson), Cu (blue-green). Gas tests NH3 (pungent, turns moist red litmus blue), H2S (rotten egg smell, blackens Pb paper), Cl2 (bleaches litmus). Precipitate formation AgNO3 + halide (AgX white precipitate), Ba(NO3)2 + SO4^2- (white BaSO4).

Chemistry Exam Tips

■ Time Management: Allocate 5 minutes to read entire paper, 45 minutes to Physical Chemistry (15 questions worth 45 marks), 60 minutes to Organic Chemistry (20 questions worth 90 marks),

25 minutes to Inorganic Chemistry (15 questions worth 45 marks). Review last 5 minutes.

■ Named Reaction Strategy: Before exam, create a quick reference chart of 20 major reactions with one reactant example and product structure. During exam, match reaction conditions (catalyst, reagent, temperature) to identify which reaction is being asked. Spend 2 seconds identifying reaction type, 3 seconds on mechanism/product.

■ Numerical Problem Approach: For equilibrium/kinetics/electrochemistry calculations — (1) identify given data and what's asked, (2) select correct formula, (3) unit conversion first, (4) substitute values carefully, (5) check answer magnitude (is 10^8 reasonable for Kc?). Show one-line working, avoid erasing.

■ Organic Structure Prediction: When given reagent and starting material — (1) count carbons/hydrogens (atoms conserved), (2) identify functional group and predict reactivity, (3) track electron flow, (4) ensure charge balance and valence, (5) compare with

Chapter 4: 30-Day Study Plan

■ How to Use This Plan

This plan prioritizes high-weightage topics and frequently asked questions from previous NEET papers. Allocate 8-10 hours daily, focusing on active recall and problem-solving rather than passive reading. Adjust topics based on your weak areas, but maintain the Physics-Chemistry-Biology rotation to prevent burnout.

Week 1 (Days 1-7): Biology Intensive

Day 1: Cell Biology (Structure & Function) + Make concept maps for organelles, solve 20 MCQs on cell division

Day 2: Photosynthesis & Respiration + Focus on light reactions, dark reactions, and energy calculations, attempt 25 MCQs

Day 3: Plant Anatomy & Morphology + Study secondary growth, tissue systems, and transport in plants, complete 20 MCQs

Day 4: Animal Anatomy (Human Digestive & Excretory Systems) + Create flowcharts for digestion, kidney filtration, and hormonal regulation, solve 25 MCQs

Day 5: Nervous System & Sensory Organs + Focus on reflex arc, neuron structure, and synapse transmission, attempt 30 MCQs

Day 6: Locomotion & Support Systems + Study bone types, muscle contraction mechanism, and joint types, complete 20 MCQs

Day 7: Revision Day for Week 1 + Solve a full Biology mock test (90 questions in 90 minutes), analyze weak areas

Week 2 (Days 8-14): Physics & Chemistry

Day 8: Physics - Mechanics (Motion, Forces, Energy) + Focus on kinematic equations, Newton's laws, and work-energy theorem, solve 30 MCQs

Day 9: Physics - Thermodynamics & Kinetic Theory + Study heat capacity, specific heat, entropy, and ideal gas law, attempt 25 MCQs

Day 10: Chemistry - Atomic Structure & Bonding + Revise quantum numbers, orbital concepts, periodic table trends, and chemical bonding types, complete 30 MCQs

Day 11: Chemistry - Thermodynamics & Equilibrium + Focus on enthalpy, Gibbs free energy, Le Chatelier's principle, and equilibrium constants, solve 25 MCQs

Day 12: Physics - Waves, Sound & Light + Study wave properties, interference, diffraction, and refraction, attempt 25 MCQs

Day 13: Chemistry - Redox Reactions & Electrochemistry + Focus on oxidation states, balancing equations, and electrochemical cells, complete 30 MCQs

Day 14: Revision Day for Week 2 + Solve full Physics and Chemistry mock tests (combined 180 questions), identify calculation errors

Week 3 (Days 15-21): Mixed Revision + Mock Tests

Day 15: Biology - Genetics & Heredity + Study Mendelian inheritance, pedigree analysis, chromosomal inheritance, and genetic disorders, solve 25 MCQs

Day 16: Chemistry - Organic Chemistry (General Concepts) + Revise functional groups, isomerism, and reaction mechanisms, attempt 30 MCQs

Day 17: Physics - Electrostatics & Current Electricity + Focus on Coulomb's law, electric field, potential, and circuit analysis, complete 25 MCQs

Day 18: Biology - Evolution & Ecology + Study natural selection, population ecology, community dynamics, and ecosystem, solve 25 MCQs

Day 19: Chemistry - Solutions, Acids, Bases & Salts + Focus on molarity, pH calculations, buffer solutions, and hydrolysis, attempt 30 MCQs

Day 20: Physics - Magnetism & Modern Physics + Study magnetic field, electromagnetic induction, and atomic models, complete 25 MCQs

Day 21: Full Revision Mock Test Day + Solve complete mock test (180 questions across all subjects), record time and accuracy

Week 4 (Days 22-28): Mock Tests + Weak Areas

Day 22: Analyze Week 4 Mock + Identify 3-4 weak topics, study them with focused notes, solve topic-specific MCQs (40 questions)

Day 23: Biology - Biotechnology & Human Health + Revise genetic engineering, vaccines, antibiotics, and diseases, attempt 25 MCQs + solve previous 2 years NEET questions

Day 24: Chemistry - Rapid Review Sessions + Create quick revision notes for formulas, functional groups, and periodic table trends, solve 40 MCQs

Day 25: Physics - Problem-Solving Focus + Solve 50 numerical problems from mechanics, thermodynamics, and electricity, identify calculation patterns

Day 26: Full Mock Test 2 + Complete timed mock test (180 questions), analyze performance against Day 21 test

Day 27: Target Weak Areas + Spend 6 hours on lowest-scoring topics, solve 50+ MCQs on these topics, watch 1-2 concept clarification videos if needed

Day 28: Full Mock Test 3 + Solve final complete mock test, compare with previous mocks, ensure consistency

Final 2 Days (Days 29-30): Light Revision Only

Day 29: Do NOT study new topics. Review high-weightage formulas (write them 2-3 times), revisit your error log from previous mocks, solve only 30-40 easy MCQs to build confidence, sleep 7-8 hours

Day 30: Exam Day Eve - Relax completely, light reading of formula sheets only (max 1 hour), mentally visualize exam success, prepare exam materials (ID, admit card, stationery), sleep at least 8 hours, avoid any study after 6 PM

Daily Study Schedule Template

Morning Session (6:00 AM - 10:00 AM) - 4 hours

- 6:00-6:30 AM: Light yoga/exercise + healthy breakfast
- 6:30-8:30 AM: Theory study with concept mapping and note-making (high focus period)
- 8:30-10:00 AM: Solve 20-25 MCQs on covered topics with time tracking

Afternoon Session (11:00 AM - 2:00 PM) - 3 hours

- 11:00 AM-12:30 PM: Continuation of theory + solve numericals/numerical problems
- 12:30-1:30 PM: Lunch break + 15-minute power nap
- 1:30-2:00 PM: Solve 10-15 additional MCQs or quick revision

Evening Session (3:00 PM - 8:00 PM) - 5 hours

- 3:00-5:00 PM: Subject rotation (alternate between subjects daily)
- 5:00-5:30 PM: Short break + snacks + meditation
- 5:30-7:30 PM: Solve 25-30 MCQs and analyze answers
- 7:30-8:00 PM: Review error log + plan next day

Night Session (Optional, 8:30 PM - 9:30 PM) - 1 hour

- Light revision of weak areas studied during the day
- Sleep by 10:30 PM for adequate rest

■ Practice free mock tests on EnrollAI: t.me/EnrollAIBot

Chapter 5: Topic Frequency Analysis (2020-2024)

■ Very High Frequency (5+ questions/year)

Physics

- Electrostatics and Coulomb's Law
- Motion in one and two dimensions
- Newton's Laws of Motion and friction
- Work, Energy, and Power
- Circular motion and gravitation
- Simple Harmonic Motion and waves
- Electromagnetic induction and Faraday's Law
- Alternating current circuits
- Optics - refraction and lens formula
- Ray optics and mirror formula

Chemistry

- Chemical bonding and molecular structure
- Acid-base equilibrium and pH calculations
- Redox reactions and electrode potentials
- Thermodynamics and Hess's Law
- Chemical kinetics and rate laws
- Coordination compounds and complex ions
- Aromatic compounds and benzene derivatives
- Alcohols, phenols, and ethers
- Carboxylic acids and their derivatives
- Ionic equilibrium and salt hydrolysis

Biology

- Photosynthesis and cellular respiration
- Cell division (mitosis and meiosis)
- Mendelian genetics and inheritance patterns

- Molecular biology - DNA, RNA, and protein synthesis
- Enzyme kinetics and cofactors
- Plant anatomy - xylem and phloem
- Animal physiology - digestive system
- Nervous system and reflex arc
- Endocrine system and hormones
- Reproduction in plants and animals

High Frequency (3-4 questions/year)

Physics

- Thermodynamics - first and second law
- Kinetic theory of gases
- Rotational motion and moment of inertia
- Oscillations and pendulum motion
- Magnetic field and magnetic force
- DC circuits and Kirchhoff's laws
- Semiconductor devices and diodes
- Atomic structure and Bohr model
- Nuclear physics and radioactivity

Chemistry

- Periodic table properties and trends
- Quantum numbers and orbitals
- Metallurgy and extraction methods
- Halogens and halogen compounds
- Alkali and alkaline earth metals
- s-block and p-block elements
- Esterification and saponification
- Aldehyde and ketone reactions
- Polymers and macromolecules

- Hydrocarbons - alkanes, alkenes, alkynes

Biology

- Photosynthesis - light and dark reactions
- Glycolysis and Krebs cycle
- Evolution and natural selection
- Animal tissues - epithelial and connective
- Circulatory system and blood
- Respiratory system and gas exchange
- Excretory system and osmoregulation
- Plant hormones and growth regulators
- Immune system and antibodies
- Ecological succession and food chains

Moderate Frequency (1-2 questions/year)

Physics

- Wave optics and interference
- Diffraction and polarization
- Photoelectric effect
- X-rays and cathode rays
- Semiconductors and transistors
- Logic gates and digital electronics
- Superconductivity
- Fluid mechanics and Bernoulli's equation
- Surface tension and viscosity
- Elasticity and Young's modulus

Chemistry

- Vapour pressure and Raoult's Law
- Colligative properties and osmosis

- Colloids and colloidal solutions
- Electrochemistry and electroplating
- Corrosion and cathodic protection
- Hydrogen bonding and van der Waals forces
- Reaction mechanisms and intermediates
- Isomerism - structural and stereoisomerism
- Phenolic compounds and reactions
- Amino acids and proteins

Biology

- Bioenergetics and ATP production
- Signal transduction and cell signaling
- Apoptosis and cell death
- Transpiration and translocation
- Mineral nutrition and deficiency
- Nitrogen fixation and symbiosis
- Population dynamics and carrying capacity
- Community interactions - competition and predation
- Biomes and biogeography
- Conservation biology and endangered species

Subject-wise Mark Distribution

Subject | Total Marks | High-Yield % | Recommended Study Time

---|---|---|---

Physics | 180 | 68% | 45 hours

Chemistry | 180 | 72% | 48 hours

Biology | 180 | 70% | 47 hours

TOTAL | 540 | 70% | 140 hours

■ Golden Topics (Never Skip These)

1. Physics - Newton's Laws and Forces
2. Chemistry - Chemical Bonding and Molecular Structure
3. Biology - Photosynthesis and Cellular Respiration
4. Physics - Work, Energy, and Conservation Laws
5. Chemistry - Acid-Base Equilibrium and pH
6. Biology - Cell Division and Meiosis
7. Physics - Electromagnetism and Induction
8. Chemistry - Redox Reactions and Electrochemistry
9. Biology - Genetics and Heredity Patterns
10. Chemistry - Thermodynamics and Kinetics

Strategic Study Recommendations

- Allocate 70% of study time to very high frequency topics
- Complete all golden topics with practice of minimum 10 questions each
- Maintain subject-wise time allocation as shown in distribution table
- For each high-frequency topic, solve at least 5-8 previous year questions
- Revise moderate frequency topics in final 2 weeks before exam
- Focus on numerical problems in Physics and Chemistry
- Practice diagram-based questions in Biology

Chapter 6: Exam Day Strategy

■ Night Before the Exam

■ Sleep by 10 PM - aim for 7-8 hours of quality sleep, not last-minute cramming

■ Prepare exam hall entry documents - keep admit card, ID proof, photocopy of application form ready in a folder

■ Check exam center location and travel route - verify address, identify landmarks, calculate travel time including traffic buffer

■ Arrange transport in advance - book cab/ask for ride to avoid last-minute rush and stress

■ Keep clothes ready - iron formal attire (shirt/top, trousers/skirt), avoid loud colors or patterns

■ Organize stationery - keep pens, pencils, eraser, sharpener in a pouch; verify they are allowed by NEET rules

■ Light dinner and hydration - eat simple, digestible food; avoid heavy meals, caffeine, or new food items that might upset stomach

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■ Exam Day Morning (Before Leaving Home)

■ Wake up 2-2.5 hours before exam start time - gives buffer for fresh shower and breakfast without hurry

■ Drink water immediately - rehydrate after sleep; avoid excessive water close to exam to prevent washroom trips

■ Eat light, protein-rich breakfast - toast with peanut butter, banana, milk, or oats; avoid sugar crash and hunger during exam

■ Take prescribed medications if any - if on any health supplements or medicines, take them as usual routine

■ Use washroom before leaving home - empty bladder and bowels to avoid distractions during 3-hour exam

■ Do 5-minute light stretching/breathing - calm nervous system with deep breathing (4 counts in, 6 counts out), 10 shoulder rolls

■ Dress appropriately - wear comfortable, breathable clothing; avoid tight belts, heavy jewelry, or anything that restricts movement

■ Leave home 1.5 hours early - reach exam center 45 minutes before start time to settle nerves and avoid last-minute panic

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■ Documents Checklist

- Admit card (original, printed clearly, with photograph visible)
- Valid government ID proof (Aadhaar/Passport/Driving License/Voter ID)
- Photocopy of online application form (printed from official portal)
- Face mask (if required, check latest guidelines)
- Hand sanitizer (small bottle, personal use)
- Pen/pencil (black/blue ballpoint pens for filling details)
- Small towel or handkerchief (to wipe hands if nervous sweating)
- Watch (analog or basic digital, no smart watch)
- Transparent water bottle (half-filled)
- Any medical certificate if you have extra time allotment
- Notepad with exam center address and contact number written
- Phone (switched off, kept in bag outside exam hall)

■ At the Exam Center

• Arrive 30-45 minutes early to locate exam hall, settle anxiety, use washroom one last time

• Stand in queue for entry check; cooperate with invigilators during document verification

• Keep admit card and ID easily accessible - do not keep in deep pockets

• Listen carefully to all instructions given by invigilator before exam starts; ask clarifications about login/interface if provided

• Do not discuss exam content, marks, or answers with other candidates - maintain silence, focus on your preparation

• Observe the exam hall layout - identify washroom location, water cooler, and invigilator position

• Sit only at assigned seat - do not attempt to change seat without permission

• Read the computer/tablet login instructions carefully if exam is conducted online; practice login process if demo was provided earlier

• Wait for "START" signal before opening question paper or clicking login button

• Avoid eye contact with other candidates or looking at their papers - stay in your own lane mentally and physically

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■■ Time Management During Exam

Exam duration: 180 minutes (3 hours) for 180 questions (60 per subject: Physics, Chemistry, Biology)

1. Minutes 0-2 (Exam Start): Read all instructions carefully; understand negative marking rules (-1 for wrong, 0 for unattempted)

2. Minutes 2-5 (Quick Scan): Scroll through all 180 questions (takes 1-2 minutes per subject); mark easy vs hard questions mentally

3. Minutes 5-60 (Physics - First Pass): Attempt straightforward physics questions you're confident about; aim to complete 35-40 questions; mark 8-10 difficult ones to revisit

4. Minutes 60-115 (Chemistry - First Pass): Chemistry requires less calculation, more facts; attempt 40-45 questions confidently; mark 5-8 tricky ones

5. Minutes 115-170 (Biology - First Pass): Biology tests memory and concepts; attempt 40-45 questions; mark difficult organism-based or diagram-based questions

6. Minutes 170-175 (Review Marked Questions): Revisit marked difficult questions from all three subjects; attempt those where you gain confidence on second reading

7. Minutes 175-179 (Final Check): Do NOT change answers unless absolutely certain; count attempted questions; verify no silly mistakes like marking wrong option

8. Minute 180 (End): Ensure all attempted questions are properly marked/submitted; do not panic if some questions remain unattempted

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■ Attempting Questions Strategy

■ Attempt subjects in order of YOUR strength - if biology is your strongest, attempt it first (Physics -> Chemistry -> Biology OR Biology -> Chemistry -> Physics based on your profile)

■ Within each subject, scan all 60 questions in first minute - identify 35-40 questions you can solve in under 2 minutes each

■ Solve easy questions first - racks up score quickly; builds confidence and momentum; uses your peak mental energy efficiently

■ Skip questions with unclear language or confusing diagrams initially - come back after solving 80% of clear questions

■ Mark questions for review strategically - use bookmark/flag feature; focus on questions where you eliminated 2 options but uncertain between 2 remaining

■ For calculation-heavy questions (especially physics), read question twice - many errors come from misreading numerical values or units

■ For MCQ-based confusion (both options seem correct), think about which is MORE correct - NEET tests subtle concept distinctions, not just right vs wrong

■ Avoid overthinking any single question beyond 2-3 minutes - move forward; come back if time permits; average 1 minute per question is ideal pace

■ Do NOT guess randomly on first attempt - each wrong answer costs 1 mark; only guess when you can eliminate 1-2 options with certainty

■ Leave 5-10 questions unattempted rather than mark wrong - 0 marks is better than -1 mark; unattempted never costs you

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■ Common Exam Day Mistakes

■ Sleeping too late on exam night - reaching exam center exhausted; cannot focus during crucial first hour when you read questions fresh

■ Skipping breakfast - blood sugar drops midway; mental clarity reduces after 90 minutes; risk of headache, dizziness, panic

■ Arriving too early (3+ hours before) - unnecessary waiting increases anxiety; arriving too late causes panic-driven mistakes in first 20 minutes

■ Starting with hardest questions - wastes time, demoralizes you, leaves easier high-scoring questions unattempted due to time shortage

■ Changing answers multiple times - in panic review phase, students often change CORRECT answers to wrong ones; write once, review only when highly uncertain

■ Spending 5+ minutes on single difficult question - this is exam, not homework; leave it, move forward, come back only if time surplus

■ Reading other candidates' answers or getting distracted by speed - you do not know if they're attempting correctly; focus only on your paper

■ Not reading question completely - missing the word "EXCEPT", "NOT", "INCORRECT" costs entire question; read twice for negative keywords

■ Attempting all questions without strategic skipping - forces guessing on questions where you have no idea; negative marks destroy score

■ Panicking and losing track of time - keeps checking clock, loses 15-20 minutes to anxiety; use watch only at designated review time (minute 170 onwards)

Chapter 7: Last 7 Days Checklist

■ Day 7 to Day 1 Checklist

Day 7: Complete one full-length mock test (3 hours), review Physics formulas (10 most important ones), sleep 7-8 hours, light dinner only

■ Solve previous year questions from Biology (2015-2023), revision of Inorganic Chemistry top 20 compounds, watch one EnrollAI quick recap video, avoid heavy discussions with friends

■ Timed practice on Organic Chemistry reactions (1 hour), revise Mathematical concepts used in Physics, do 50 mixed MCQs from all subjects, maintain normal schedule

■ Focus on weak areas identified in mocks, revise Chemistry equations and balancing, mental math practice for numerical problems, light exercise or walk (20 minutes)

■ Complete revision notes review, solve 30 Biology diagrams and labeling questions, revise all Physics SI units and conversions, early dinner and sleep

■ Quick revision of formulas and key concepts only, solve 20 tricky MCQs from each subject, avoid heavy studying, meditation or breathing exercises (10 minutes)

■ Final checklist - admit card ready, calculator tested, pens prepared, revise ONLY your strongest topics for confidence, sleep 8 hours minimum

■ Things to STOP Doing in Last 7 Days

- ■ Starting any new chapter or topic - revision only mindset
- ■ Watching YouTube tutorials or explanatory videos on new concepts
- ■ Reading textbooks from start to finish - only targeted notes
- ■ Discussing difficult questions or doubts with friends for extended time
- ■ Solving questions from new question banks or unfamiliar sources
- ■ Comparing your preparation with other students or their scores
- ■ Staying awake late into night - maintain 7-8 hour sleep daily
- ■ Heavy junk food, caffeine overdose, or irregular meal timings
- ■ Attempting questions at random without strategy or time management
- ■ Worrying about "what if" scenarios or past mistakes

■ Things to KEEP Doing

- ■ Revising proven high-yield topics (Thermodynamics, Coordination Chemistry, Ecology, etc.)
- ■ Solving previous year question papers and mock tests at exam speed
- ■ Maintaining consistent sleep schedule of 7-8 hours daily
- ■ Regular light exercise or stretching (20-30 minutes daily)
- ■ Healthy meals with adequate nutrition and hydration
- ■ Time management practice - solving questions within strict time limits
- ■ Confidence building by revisiting your strongest topics
- ■ Breathing exercises, meditation, or any relaxation technique you prefer

Chapter 8: Common Mistakes to Avoid

■ Preparation Mistakes

1. ■ - This is the #1 mistake. It causes anxiety and incomplete learning. Stick strictly to revision of already-studied material only.

2. ■ - Identifying weak topics but not dedicating focused time creates panic. Start addressing them at least 1-2 months before exam.

3. ■ - Solving questions without time pressure is useless. Complete mock tests are 5x more valuable than random question solving.

4. ■ - Cramming formulas without understanding concepts leads to mistakes. Understanding comes first, memorization is secondary.

5. ■ - Following 3-4 different coaching materials creates confusion. Stick to one proven study material and one question bank maximum.

6. ■ - Many Biology questions need mathematical calculations. Don't skip math-related biology topics like population ecology, blood relations.

7. ■ - Taking mock tests but not analyzing mistakes is waste of time. Spend 45 minutes analyzing each 3-hour mock test.

8. ■ - Compromising sleep to study more backfires. Sleep deprivation reduces memory, focus, and exam performance significantly.

■ Exam Hall Mistakes

1. ■ - Many students miss marking pattern details, negative marking info, or section-specific rules. Read all instructions in first 2 minutes.

2. ■ - Spending 2 hours on Biology and only 30 minutes on Physics wastes marks. Plan: 1 hour Biology, 1 hour Chemistry, 1 hour Physics minimum.

3. ■ - This wastes time and reduces confidence. Always start with moderate to easy questions, build momentum, then tackle difficult ones.

4. ■ - Your first instinct is usually correct. Changing answers without strong logical reason leads to unexpected failures.

5. ■ - Spending 20 minutes on one question costs you 4-5 other questions. Skip and come back strategy is essential.

6. ■ - Marking random answers when time is running out scores zero. It's better to leave blank (0 marks) than mark wrong (-1 mark each).

7. ■ - Marking in rough copy and forgetting to mark on OMR sheet happens. Transfer marks every 20 minutes, not at the end.

8. ■ - Some students attempt every question fearing "what if I could have gotten it right". Accept that negative marking is intentional filtering mechanism.

■ Final Message from EnrollAI

You have studied hard, prepared well, and now it's time to trust yourself.

The last 7 days are not about learning more - they are about consolidating what you already know and building unshakeable confidence. Every formula you've memorized, every concept you've understood, every question you've practiced - it's all there in your mind, ready to come out.

Remember: NEET is not a test of how much you know, but how accurately you can apply that knowledge under pressure. Your preparation has already happened. Now focus on calm, strategic execution.

On exam day, walk in with your head held high. You belong there. Take deep breaths, read carefully, manage time wisely, and let your preparation shine through.

When you're stuck on a question, it's not because you're weak - it's because the question is designed to be challenging. That's exactly what you've been training for. Every difficult question is an opportunity to separate yourself from the competition.

After the exam, stop analyzing immediately. You did your best. Trust the process, trust your preparation, and trust yourself.

Join thousands of NEET aspirants who are preparing alongside you:

- Free practice tests and instant solutions: t.me/EnrollAIBot
- Complete study materials and doubt resolution: enrollai.in

You've got this. See you on the other side of success!

■ Sleep well tonight. Your brain consolidates learning during sleep. One good night's rest is worth more than three nights of last-minute cramming. GO GET THEM!