



Online Ranker Test Schedule

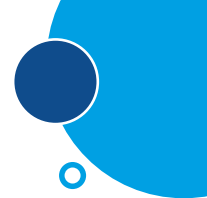
for Class XI Students (2024-25)

Online Test Schedule for Class XI (1st Year)

Test	Date	Day	TOPIC
UT -1	25-05-2024	Saturday	Physics - Units & Measurements, Motion in a Straight Line Chemistry - Some Basic Concepts of Chemistry Botany - Cell: The Unit of Life Zoology - Structural Organisation in Animals - Animal Tissues
UT -2	08-06-2024	Saturday	Physics - Motion in a Plane, Laws of Motion Chemistry - Structure of Atom, Classification of Elements and Periodicity in Properties Botany - Cell Cycle and Cell Division, The Living World Zoology - Biomolecules, Breathing and Exchange of Gases
PT-1	29-06-2024	Saturday	Test on Topics covered in Test -1 & Test -2
UT -3	17-08-2024	Saturday	Physics - Work, Energy and Power, System of Particles and Rotational Motion Chemistry - Chemical Bonding and Molecular Structure, Thermodynamics Botany - Biological Classification, Morphology of Flowering Plants, Anatomy of Flowering Plants Zoology - Body Fluids and Circulation, Excretory Products and their Elimination, Locomotion and Movement, Neural Control and Coordination
UT -4	07-09-2024	Saturday	Physics - Gravitation, Mechanical Properties of Solids, Mechanical Properties of Fluids Chemistry - Equilibrium Botany - Plant Kingdom, Photosynthesis in Higher Plants Zoology - Chemical Coordination and Integration, Animal Kingdom- General Account and Non-Chordates
PT-2	21-09-2024	Saturday	Test on Topics covered in Test -3 & Test -4
CT-1	05-10-2024	Saturday	Test on Topics covered in Test -1 to Test -3
UT-5	23-11-2024	Saturday	Physics - Thermal Properties of Matter, Thermodynamics, Kinetic Theory Chemistry - Redox Reactions, The p-Block Elements (XI) Botany - Respiration in Plants, Plant Growth and Development Zoology - Animal Kingdom (General Account & Chordates), Structural Organisation in Animals - Animal Morphology
UT-6	14-12-2024	Saturday	Physics - Oscillations, Waves Chemistry - Organic Chemistry - Some Basic Principles and Techniques, Hydrocarbons Botany - Photosynthesis in Higher Plants, Respiration in Plants, Plant Growth and Development Zoology - Breathing and Exchange of Gases, Body Fluids and Circulation, Excretory Products and their Elimination, Locomotion and Movement, Neural Control and Coordination
PT-3	02-01-2025	Thursday	Test on Topics covered in Test -5 & Test -6
CT-2	04-01-2025	Saturday	Test on Topics covered in Test -4 to Test -6
FST-1	11-01-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI)
FST-2	18-01-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI)
FST-3	25-01-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI)

UT- Unit Test | PT- Part Test | CT- Cumulative Test | FST- Full Syllabus Test
The Schedule for 2nd Year (Class XII) shall be provided in April, 2025





Joint Package Schedule

For Class- XI (2024-25)

NCERT Practice Test Schedule & Syllabus

Sr.No.	Test Name	Test Syllabus
1	Physics Daily Test-1	Units & Measurements:- Introduction, International system of units, Measurement of length, Mass, Time, Accuracy, Precision of instruments, Errors in measurements.
2	Chemistry Daily Test-1	Some Basic Concepts of Chemistry:- Importance of chemistry, Nature of matter, Properties of matter and their measurement: Mass and weight, volume, density, temperature, Uncertainty in measurement, Scientific notation, Multiplication and division, Addition and subtraction, Significant figures, Dimensional analysis, Laws of chemical combination: Law of conservation of mass, Law of definite proportions, Law of multiple proportions, Gay Lussac's law of gaseous volumes, Avogadro law, Dalton's atomic theory, Atomic and molecular masses: Atomic mass, Average atomic mass, Molecular mass, Formula mass.
3	Botany Daily Test-1	Cell: The Unit of Life:- Introduction, What is a cell?, Cell theory, An overview of cell, Prokaryotic cell-structure, Gram staining, Eukaryotic cell structure, Difference between prokaryotic and eukaryotic cell, difference between plant cell and animal cell.
4	Zoology Daily Test-1	Structural Organisation in Animals–Animal Tissues:- Epithelial Tissue: General features, Basement membrane, Types of Epithelial tissues-Simple, Compound Epithelium, specialized epithelial tissues, glandular epithelium, Types of simple & compound gland.
5	Physics Daily Test-2	Units & Measurements:- Significant figures.
6	Chemistry Daily Test-2	Some Basic Concepts of Chemistry:- Mole concept.
7	Botany Daily Test-2	Cell: The Unit of Life:- Plasma membrane, Cell wall, endomembrane system- endoplasmic reticulum, golgi body, Lysosome, Vacuole
8	Zoology Daily Test-2	Structural Organisation in Animals–Animal Tissues:- Connective Tissue: Connective tissue proper, Loose connective tissue, Dense connective tissues- characters with examples. Supportive connective tissue: Cartilage, Types of cartilage-Hyaline, Elastic, white fibrocartilage & Calcified cartilage, Supportive Connective Tissue: Bone, its structure & composition, Types of bones: Compact bone, Spongy bone, Differences between cartilage & bone: Dried bone & decalcified bone. Cartilage, Investing bone, Sesamoid bone and Visceral bone.
9	Physics Daily Test-3	Units & Measurements:- Dimensions of physical quantities, Dimensional formula & dimensional equations, Dimensional analysis and its applications.
10	Chemistry Daily Test-3	Some Basic Concepts of Chemistry:- Percentage composition, Empirical formula, Stoichiometry and Stoichiometric calculations.
11	Botany Daily Test-3	Cell: The Unit of Life:- ; Mitochondria, Plastid. Ribosome, Cytoskeleton





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Sr.No.	Test Name	Test Syllabus
12	Zoology Daily Test-3	Structural Organisation in Animals–Animal Tissues:- Muscular Tissue: Types of Muscles: Striated and non-striated/Smooth muscles (Single unit & Multiunit smooth muscles; Cardiac muscle), Nervous Tissue: Structure of neuron and its parts, Different types of neuron; Myelinated & Nonmyelinated neurons, Neuroglia cells-Types of glial cells.
	Physics Daily Test-4	Motion in a Straight Line:- Introduction, Position, Path length and displacement, Average velocity & average speed.
14	Chemistry Daily Test-4	Some Basic Concepts of Chemistry:- Calculations regarding limiting reagents, Reactions in solutions: Mass percentage or weight percentage, Mole-fraction, Molarity, Molality.
	Botany Daily Test-4	Cell: The Unit of Life:- Centrosome and centrioles, Cilia and flagella, Nucleus, Chromosomes, Microbodies.
16	Zoology Daily Test-4	Biomolecules:- Primary and secondary metabolites, Carbohydrates, Saccharides, Monosaccharides, Triose, Pentose, Hexose, Heptose, Derivatives of monosaccharides, Oligosaccharides, Functions of small carbohydrates, Polysaccharides-homopolysaccharides & heteropolysaccharides storage & structural polysaccharides.
	Physics Daily Test-05	Motion in a Straight Line:- Differential calculus, Integral calculus, Applications of calculus, Graphs (slope, area etc.), Instantaneous velocity & speed, acceleration.
18	Chemistry Daily Test-5	Structure of Atom:- Sub-atomic particles: Discovery of electron, Charge to mass ratio of electron, Charge on electron, Discovery of proton and neutron. Thomson model of atom, Rutherford's nuclear model of atom, Atomic and Mass number, Isobars and isotopes, Particle nature of electromagnetic radiation: Plank's quantum theory, Photoelectric effect, Dual behaviour of electromagnetic radiation, Emission and absorption spectra, Line spectrum of hydrogen, Bohr's model for hydrogen atom, Explanation of Bohr's model, Dual behaviour of matter, Heisenberg's uncertainty principle, Significance of uncertainty principle, Reason for the failure of the Bohr model.
	Botany Daily Test-5	Cell Cycle & Cell Division:- Introduction, Cell cycle–phases of cell cycle, Mitosis–definition, Karyokinesis, cytokinesis, significance, Meiosis–definition.
20	Zoology Daily Test-5	Biomolecules:- Aminoacids: Structure, types, Polar, Non polar, acidic, basic, neutral, alcoholic aromatic, heterocyclic, functions of amino acids. Peptide bond formation, Structure of protein-Primary, secondary, tertiary, quaternary, Properties of protein; Types of proteins and their functions, Lipids: Structure and classification of lipids, simple lipids, conjugated lipids, derived lipids, functions of lipids, Nitrogenous bases, nucleosides, nucleotides, higher nucleotides, types of nucleotides, functions of nucleotides, Nucleic acid–DNA, RNA structure, types of it and function
	Physics Daily Test-6	Motion in a Straight Line:- Kinematic equations for uniformly accelerated motion.
22	Chemistry Daily Test-6	Structure of Atom:- Quantum mechanics, Hydrogen atom and the Schrodinger equation, Orbitals and Quantum numbers, Shapes of atomic orbitals, Energies of orbitals, Filling of orbitals in atom: Aufbau principle.





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Sr.No.	Test Name	Test Syllabus
23	Botany Daily Test-6	Cell Cycle & Cell Division:- Meiosis-I, Meiosis-II, significance of meiosis.
24	Zoology Daily Test-6	Biomolecules:- Enzymes: Importance, activation energy, chemical nature, active site, Classes of enzymes: Oxidoreductase, Transferase, Hydrolase, Lyase, Isomerase, Ligase; Properties of enzymes, Working of enzymes-Lock & Key model, Induce fit theory, Enzymes: Factors affecting the enzyme activity: substrate concentration, Km value, Product concentration, Temperature, pH; Enzyme inhibition-competitive, Non competitive, Allosteric enzymes, Isoenzymes and proenzymes.
25	Physics Daily Test-7	Motion in a Straight Line:- Motion under gravity.
26	Chemistry Daily Test-7	Structure of Atom:- Pauli exclusion principle, Hund's rule of maximum multiplicity, Electronic configuration of atoms, Stability of completely filled and half filled sub-shells.
27	Botany Daily Test-7	The Living World:- Introduction, What is living?, Characteristics of living beings, Diversity in the living world, Nomenclature, Need for classification, Classification -Taxonomy, Systematics.
28	Zoology Daily Test-7	Breathing & Exchange of Gases:- Respiratory passage, structure of larynx, sound production, lungs, pleurae, external structure of lungs, Internal structure, alveoli.
29	Physics Daily Test-8	Motion in a Straight Line:- Relative velocity.
30	Chemistry Daily Test-8	Classification of Elements and Periodicity in Properties:- Genesis of periodic classification, Modern periodic law and the present form of the periodic table. Nomenclature of elements with atomic numbers > 100, Electronic configurations in periods, Groupwise electronic configuration, s, p, d & f-block elements, Metals, Non-metals and metalloids.
31	Botany Daily Test-8	The Living World:- Taxonomic categories, Taxonomical aids- Herbarium, Botanical gardens, Museum, Zoological parks, Key, Flora, Manual, Monographs, Catalogues.
32	Zoology Daily Test-8	Breathing & Exchange of Gases:- Mechanism of breathing-Inspiration, expiration, thoracic & abdominal breathing, Respiratory/Pulmonary volumes/ Respiratory capacities.
33	Physics Daily Test-9	Motion in a Plane:- Introduction, Scalars & Vectors, Multiplication of vectors by real numbers, Addition & subtraction of vectors, Resolution of vectors.
34	Chemistry Daily Test-9	Classification of Elements and Periodicity in Properties:- Trends in physical properties: Atomic radius, Ionic radius, Ionisation enthalpy, Electron gain enthalpy, Electronegativity, Periodic trends in chemical properties: Oxidation states, Anomalous properties of second period elements. Periodic trends and chemical reactivity.





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Sr.No.	Test Name	Test Syllabus
35	Botany Daily Test-9	Biological Classification:- Introduction, Kingdom system of classification- two kingdom, three kingdom, four kingdom, five kingdom, Six kingdom, Domains of life, Kingdom Monera- Characters of monera, Shape of bacteria, Bacterial Life process - Respiration, Nutrition.
36	Zoology Daily Test-9	Breathing & Exchange of Gases:- Exchange of gases between alveoli & blood; exchange of gases between blood & tissue cells, Transport of oxygen, Bohr's effect; Transport of carbon dioxide, Chloride shift (Hamburger's phenomenon), Haldane effect, Regulation of respiration: Neural regulation, chemical regulation, Respiratory disorders, Bronchitis, Asthma, Emphysema, Occupational respiratory disorder.
37	Physics Daily Test-10	Motion in a Plane:- Motion in plane, Motion in a plane with constant acceleration.
38	Chemistry Daily Test-10	Chemical Bonding and Molecular Structure:- Kossel-Lewis approach to chemical bonding, Octet rule, Covalent bond, Lewis representation of simple molecules, Formal charge, Limitations of octet rule: Incomplete octet of the central atom, odd-electron molecule, The expanded octet.
39	Botany Daily Test-10	Biological Classification:- Reproduction- Asexual, Sexual recombination, Economic importance of bacteria, Archaeobacteria-methanogens, halophiles, thermoacidophiles, Eubacteria - Cyanobacteria, Mycoplasma.
40	Zoology Daily Test-10	Body Fluids & Circulation:- Fluid connective tissue-Blood & composition of blood-blood cells & plasma, blood coagulation, clotting factors, lymph.
41	Physics Daily Test-11	Motion in a Plane:- Relative velocity in two dimensions.
42	Chemistry Daily Test-11	Chemical Bonding and Molecular Structure:- Ionic or electrovalent bond, Lattice enthalpy bond parameters: Bond length, Bond angles, Bond enthalpy, Bond-order, Resonance structures, Polarity of bonds: Dipole moment, Percentage ionic character, The valence shell electron pair repulsion theory, Valence bond theory: Orbital overlap concept, Directional properties of bonds, Overlapping of atomic orbitals.
43	Botany Daily Test-11	Biological Classification:- Protista-General characters, Chrysophytes, Dinoflagellates, Euglenoids, Slime moulds, Protozoans-major groups with some salient features.
44	Zoology Daily Test-11	Body Fluids & Circulation:- Circulatory pathways, Human circulatory system-external structure of heart, Internal structure-Atria, Ventricle, Valves, Histology of heart wall, working of heart.
45	Physics Daily Test-12	Motion in a Plane:- Projectile motion - Equation of path of projectile. Maximum height of projectile, Horizontal range of projectile. Time of flight
46	Chemistry Daily Test-12	Chemical Bonding and Molecular Structure:- Types of overlapping and nature of covalent bonds. Strength of s & p-bonds, Hybridisation: Features and conditions, Types of hybridisation: sp, sp ² , sp ³ , dsp ² , sp ³ d, sp ³ d ² and hybridisation.





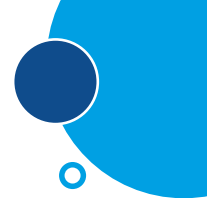
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Sr.No.	Test Name	Test Syllabus
47	Botany Daily Test-12	Biological Classification:- Fungi-general characters, Reproduction in fungi, Characters of different classes of fungi - Phycomycetes, Ascomycetes, Basidiomycetes, Salient features of Agaricus & Puccinia, Deuteromycetes
48	Zoology Daily Test-12	Body Fluids & Circulation:- Cardiac cycle, Heart sounds, conducting system of heart, ECG-Normal ECG & changes as indication of heart diseases.
49	Physics Daily Test-13	Motion in a Plane:- Uniform circular motion.
50	Chemistry Daily Test-13	Chemical Bonding and Molecular Structure:- Molecular orbital theory: Features, Linear combination of atomic orbitals, Conditions for the combination of atomic orbitals, Types of molecular orbitals, Energy level diagram for molecular orbitals, Electronic configuration and molecular behaviour, Bonding in some homonuclear diatomic molecules, Hydrogen bonding.
51	Botany Daily Test-13	Biological Classification:- Virus-introduction, discovery, structural components, Structure of some viruses (TMV, bacteriophages), Reproduction in virus, Diseases, Sub-viral agents – Viroids, Virusoids, Prions; Lichens, Mycorrhiza.
52	Zoology Daily Test-13	Body Fluids & Circulation:- Double circulation, heart beat, regulation of heart beat- Neural regulation, hormonal regulation, Blood Vessels-Aorta, Arteries, Arterioles, Capillaries, Venules, Veins, Vena Cava, Lymphatic system, Disorders of circulatory system-Hypertension, Coronary artery diseases, Angina, Heart failure.
53	Physics Daily Test-14	Law of Motion:- Introduction, Aristotle's fallacy, The law of inertia, Newton's first law of motion, Momentum, Conservation of momentum (Rocket Propulsion).
54	Chemistry Daily Test-14	Thermodynamics:- Thermodynamic terms: System and surroundings, Types of system, The state of the system, The internal energy as a state function: Work & Heat, First law of thermodynamics, Isothermal and free expansion of an ideal gas. Extensive and intensive properties.
55	Botany Daily Test-14	Morphology of Flowering Plants:- Introduction, Root-types, function, regions, modifications, Introduction of stem, bud, function of stem, modification of stem.
56	Zoology Daily Test-14	Excretory Products & their Elimination:- Mode of excretion- Ammonotelism, Ureotelism, uricotelism (brief account), Different types of excretory structures in various animals, Human excretory system-structure of kidney, ureter, urinary bladder.
57	Physics Daily Test-15	Law of Motion:- Newton's 2nd law of motion.
58	Chemistry Daily Test-15	Thermodynamics:- Heat capacity, Relation between C_v & C_p for an ideal gas; Calorimetry, enthalpy and thermochemical equation. Hess's law of constant heat summation, Enthalpy of combustion, Atomization, Bond-dissociation, Solution, Lattice and neutralisation.





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Sr.No.	Test Name	Test Syllabus
59	Botany Daily Test-15	Morphology of Flowering Plants:- Leaf-introduction, parts, venation, types (simple and compound leaf), Leaf-Phyllotaxy, Modifications, Inflorescence - racemose and cymose, Flowers-terminology, symmetry.
60	Zoology Daily Test-15	Excretory Products & their Elimination:- Nephron: Structure including glomerulus, Bowman's capsule, PCT, Loop of Henle & DCT; and its types i.e., cortical and juxtamedullary nephrons.
61	Physics Daily Test-16	Law of Motion:- Newton's third law of motion, Equilibrium of a particle.
62	Chemistry Daily Test-16	Thermodynamics:- Spontaneity and entropy, Second law of thermodynamics, Free energy change and criteria for spontaneity, Third law of thermodynamics.
63	Botany Daily Test-16	Morphology of Flowering Plants:- Position of floral parts on thalamus, parts of flower (calyx and corolla), aestivation, Androecium- adhesion, cohesion; Gynoecium, Placentation, Fruits-parts, types, edible parts.
64	Zoology Daily Test-16	Excretory Products & their Elimination:- Urine formation: Glomerular filtration- Structure of Malpighian body, Ultra filtration mechanism, glomerular filtration rate, filtration fraction, autoregulation of glomerular filtration, Tubular reabsorption & secretion, countercurrent mechanism.
65	Physics Daily Test-17	Law of Motion:- Common forces in mechanics.
66	Chemistry Daily Test-17	Equilibrium:- Chemical equilibrium: Liquid-vapour, Solid-liquid and solid-vapour equilibria, General characteristics of equilibria involving physical and chemical process, Law of chemical equilibrium and equilibrium constant, Application of equilibrium constants. Predicting the extent and the direction of reactions. Calculating equilibrium concentrations, Relationship between equilibrium constant, Reaction quotient and Gibb's energy, Change in concentration, pressure, temperature and effect of catalyst and effect of addition of inert gas.
67	Botany Daily Test-17	Morphology of Flowering Plants:- Structure of dicotyledonous and monocotyledonous seed, Families- brassicaceae, fabaceae, solanaceae, liliaceae.
68	Zoology Daily Test-17	Excretory Products & their Elimination:- Regulation of kidney function: Osmoregulation, control by juxta glomerular apparatus, Renin-angiotensin aldosterone system (RAAS) Atrial Natriuretic factor, ADH and Diabetes insipidus.
69	Physics Daily Test-18	Law of Motion:- Friction.
70	Chemistry Daily Test-18	Equilibrium:- Acids bases: Arrhenius, Bronsted-Lowry and Lewis concepts, Ionisation of acids and bases, Ionisation constant of water and its ionic product, The pH scale, ionisation constants of weak acids and weak bases, Relation between K_a and K_b . Di and Polybasic acid and bases.





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Sr.No.	Test Name	Test Syllabus
71	Botany Daily Test-18	Anatomy of Flowering Plants:- Tissue, meristematic tissue - characters, types, shoot and root apex organisation, Primary permanent tissues i.e., parenchyma, collenchyma and sclerenchyma w.r.t. nature, distribution, cell wall and cell structure and functions, Complex permanent tissue-Xylem - components of xylem and their structures, Primary and secondary xylem, primary xylem- protoxylem and metaxylem.
72	Zoology Daily Test-18	Excretory Products & their Elimination:- Urine: Its composition, micturition mechanism, role of other organs like, kidney, lungs, liver and skin in excretion. Disorders-uremia, renal failure, renal calculi, nephritis. Dialysis and artificial kidneys & kidney transplantation.
73	Physics Daily Test-19	Law of Motion:- Circular motion.
74	Chemistry Daily Test-19	Equilibrium:- Factors affecting acid and bases - Strength, Common ion effect in the ionisation of acids and bases, Buffer solution, Salt hydrolysis and solubility product.
75	Botany Daily Test-19	Anatomy of Flowering Plants:- Phloem- components, types of phloem (on the basis of position and origin), Tissue system - epidermal, ground and vascular; Types of vascular bundles.
76	Zoology Daily Test-19	Locomotion & Movement:- Types of movements: Ciliary, protoplasmic streaming, flagellar, muscular; Types of muscles and their structures. Muscle contraction-structure of contractile proteins-actin, myosin, troponin and tropomyosin. Mechanism of muscle contraction-Sliding filament theory, role of calcium and regulatory proteins, power stroke, role of ATP, various stages in cross bridge formation & break down, Properties of muscle contraction: All or none principle, single muscle twitch, energy source of muscle contraction, Cori's cycle, Rigor mortis, red and white muscle fibres, Isometric and isotonic contraction. Treppe or staircase phenomenon, disorders of muscles- Myasthenia gravis, muscular dystrophy, tetany.
77	Physics Daily Test-20	Work, Energy & Power:- Introduction, Scalar Product. Notions of work & kinetic energy, Work, Kinetic energy, Work done by a variable force, work energy theorem
78	Chemistry Daily Test-20	Redox Reactions:- Classification idea of redox reactions, Redox reactions in terms of electron transfer reactions, Competitive electron transfer reactions, Oxidation number and its calculation, Fractional oxidation number, Types of redox reactions: Combination, decomposition, Displacement and disproportionation reactions, Balancing of redox reactions.
79	Botany Daily Test-20	Anatomy of Flowering Plants:- Internal structures of root, stem and leaf.
80	Zoology Daily Test-20	Locomotion & Movement:- Axial skeleton: Skull-cranial bones, facial bones, Hyoid, Ear ossicles malleus, incus, stapes, Vertebral column-cervical, thoracic, lumbar, sacral, coccyx vertebrae, curves of the vertebral column. Ribs-vertebrosternal/True ribs, vertebrachondral/False ribs, Vertebral/Floating ribs, rib cage, sternum.
81	Physics Daily Test-21	Work, Energy & Power:- The concept of potential energy, Various forms of energy, The potential energy of a spring.





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Sr.No.	Test Name	Test Syllabus
82	Chemistry Daily Test-21	Redox Reactions:- Redox reactions as the basis for titrations, Limitations of concept of oxidation number, Redox reactions and electrode potentials, Redox couple, Working of Daniell cell, Electrochemical series.3
83	Botany Daily Test-21	Anatomy of Flowering Plants:- Secondary growth in dicot stem-annual rings, heartwood and sapwood, Formation and activity of cork cambium in extrastelar region, Secondary growth in dicot root
84	Zoology Daily Test-21	Locomotion & Movement:- Appendicular skeleton: Pectoral girdle, bones of upper limb (Humerus, radius, ulna, carpals, metacarpals and phalanges), pelvic girdle, bones of lower limb (femur, patella, tibia, fibula, tarsals, metatarsals, phalanges). Joints-fibrous, cartilaginous and synovial (Ball and socket, hinge, pivot, gliding and saddle joint), Bone & Joint disorders-Arthritis, Osteoporosis, Gout etc.
85	Physics Daily Test-22	Work, Energy & Power:- The conservation of mechanical energy, (Motion in a Vertical Circle) The law of conservation of energy.
86	Chemistry Daily Test-22	The p-Block Elements:- General electronic configuration and oxidation states of p-block elements, Inert pair effect, The boron family: Physical and chemical properties, Compounds of boron: Borax, Orthoboric acid and diborane, Uses of B, Al and their compounds, The carbon family: Physical properties. ; Chemical properties of group 14 elements, Allotropes of carbon, Compounds of C and Si: CO, CO ₂ , SiO ₂ , silicones, silicates and geolites.
87	Botany Daily Test-22	Plant Kingdom:- Introduction of plant kingdom, Classification systems- artificial, natural and phylogenetic, Branches of taxonomy, Algae-general characters.
88	Zoology Daily Test-22	Neural Control & Coordination:- Human neural system: Central and peripheral neural system, neuron as structural and functional unit of neural system, different types of neurons and their location. Nerve impulse, generation and its transmission-Resting membrane potential, spike potential, action potential, depolarization, repolarization, hyperpolarization, Synapses: Electrical and Chemical, synaptic transmission, mechanism of transmission of nerve impulse through electrical and chemical synapse. Neurotransmitters; excitatory and inhibitory.
89	Physics Daily Test-23	Work, Energy & Power:- Power.
90	Chemistry Daily Test-23	Organic Chemistry: Some Basic Principle & Techniques:- Tetravalence of carbon, Structure of organic compounds, Classification of organic compounds, Some Basic Principle & Techniques:- Nomenclature of organic compounds (excluding functional group), Some Basic Principle & Techniques:- IUPAC nomenclature of organic compounds including mono and bi functional groups.
91	Botany Daily Test-23	Plant Kingdom:- Economic importance of algae, Characters of different classes of algae-chlorophyceae, Phaeophyceae, Rhodophyceae.
92	Zoology Daily Test-23	Neural Control & Coordination:- Structure of Brain: Forebrain, cerebrum, thalamus, hypothalamus, limbic system and their functions, mid brain (corpora quadrigemina and crura cerebri), hind brain (cerebellum, pons, medulla) ventricles of brain and cerebrospinal fluid.





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Sr.No.	Test Name	Test Syllabus
93	Physics Daily Test-24	Work, Energy & Power:- Collisions – elastic and inelastic collision, Collision in one dimension, Collision in two dimensions.
94	Chemistry Daily Test-24	Organic Chemistry: Some Basic Principle & Techniques:- Isomerism: Structural isomerism including tautomerism, Stereoisomerism (Definition), Some Basic Principle & Techniques:- Fundamental concepts in organic reaction, Mechanism: Bond fission, Nucelophile and electrophile.
95	Botany Daily Test-24	Plant Kingdom:- Bryophytes–general characters, Bryophytes & Pteridophytes, Pteridophytes–general characters, classes, Economic importance.
96	Zoology Daily Test-24	Neural Control & Coordination:- Spinal cord & Peripheral nervous system: Cranial nerves (name, origin, distribution, nature and their functions), Spinal nerves–branches, (posterior, anterior, meningeal and visceral) plexuses (cervical, brachial, lumbar, sacral and coccygeal). Autonomic nervous System- sympathetic and parasympathetic nervous system and their functions, Reflex action: Reflex arc, characteristics of reflexes, types of reflexes-unconditioned, conditioned, monosynaptic and polysynaptic reflex and their examples. Detail of knee jerk reflex, importance of reflex action.
97	Physics Daily Test-25	System of Particles & Rotational Motion:- Introduction, Centre of mass, Motion of centre of mass, Linear momentum of system of particles.
98	Chemistry Daily Test-25	Organic Chemistry: Some Basic Principle & Techniques:- Inductive and electromeric effect, Resonance effect, Some Basic Principle & Techniques:- Hyperconjugation, Aromaticity and anti-aromaticity.
99	Botany Daily Test-25	Plant Kingdom:- Gymnosperms – General characters, Salient Features, Economic importance, Angiosperms – general characters, Economic importance, Life cycle patterns.
100	Zoology Daily Test-25	Neural Control & Coordination:- Sensory perception and processing: Human eye, coats of eye, part of eye, content of eye ball (lens, aqueous humour, vitreous humour), extra ocular eye muscle and their nerve supply. Mechanism of vision, accommodation, protective structures of eye, eyebrows, eyelids, Defects of eyes: Myopia, hypermetropia, presbyopia, astigmatism, cataract and glaucoma. Nose: Olfactory receptors, its structure and mechanism/working. Tongue: Different types of papillae & taste buds, its structure and working. Different types of receptors in skin- Tangoreceptor, algesireceptor, thermoreceptor.
101	Physics Daily Test-26	System of Particles & Rotational Motion:- Vector product of two vectors, Angular velocity & its relation with linear velocity, Torque & angular momentum.
102	Chemistry Daily Test-26	Organic Chemistry: Some Basic Principle & Techniques:- Reaction intermediates: Carbocation, Carbanion, Carbon free radicals, Carbene.



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Sr.No.	Test Name	Test Syllabus
103	Botany Daily Test-26	Photosynthesis in Higher Plants:- Introduction, Importance, What do we know?, Historical account, Photosynthetic pigments, Absorption spectrum and action spectrum, What is light reaction?, Electron transport system, Splitting of water, Cyclic and non-cyclic photophosphorylation.
104	Zoology Daily Test-26	Neural Control & Coordination:- Elementary Structure, and functions of sense organs - Ear, Endocrine Glands and hormones, hypothalamus, pituitary and thyroid gland.
105	Physics Daily Test-27	System of Particles & Rotational Motion:- Equilibrium of rigid body, Moment of inertia, Theorems of perpendicular and parallel axis.
106	Chemistry Daily Test-27	Organic Chemistry: Some Basic Principle & Techniques:- Types of organic reactions and mechanism: Substitution reactions, Some Basic Principle & Techniques:- Purification of organic compounds, Qualitative analysis, Quantitative analysis.
107	Botany Daily Test-27	Photosynthesis in Higher Plants:- Chemiosmotic theory, Dark reaction- C ₃ , C ₄ cycles, Difference between C ₃ & C ₄ -plants, Photorespiration, factors affecting photosynthesis.
108	Zoology Daily Test-27	Chemical Coordination & Integration:- Parathyroid glands: Structure, location, hormone and mechanism of regulation of calcium homeostasis, disorders. Adrenal gland: Structure, location, hormones and their functions, disorders-Addison's disease, Cushing syndrome, aldosteronism, adrenal virilism. Pineal and its hormone, Thymus and its hormone. Pancreas-structure, location, hormone with their principal actions and disorders-hypoglycemia, diabetes mellitus.
109	Physics Daily Test-28	System of Particles & Rotational Motion:- Kinematics of rotational motion about a fixed, Dynamics of rotational motion about a fixed axis, Angular momentum in case of rotation about a fixed axis.
110	Chemistry Daily Test-28	Hydrocarbons:- Alkanes: Nomenclature and isomerism, Preparation and Properties.
111	Botany Daily Test-28	Respiration in Plants:- Introduction, Respiratory substrates, Do plant breath?, Glycolysis (mechanism), Fermentation, Aerobic respiration- link reaction, Krebs cycle.
112	Zoology Daily Test-28	Chemical Coordination & Integration:- Gonads(Ovary and testis-structure, location, hormones, principal action and disorders: hypogonadism, precocious puberty eunuchoidism, gynecomastia) hormones of heart, kidney and gastrointestinal tract, mechanism of hormone action (protein and steroid hormone) role of hormones as messengers and regulations, amplification of signals, synergistic and antagonistic effects, hormone receptor complex.
113	Physics Daily Test-29	System of Particles & Rotational Motion:- Rolling motion.
114	Chemistry Daily Test-29	Hydrocarbons:- Alkenes: Nomenclature and isomerism, Preparation & Properties.
115	Botany Daily Test-29	Respiration in Plants:- Electron transport system and oxidative phosphorylation, Respiratory balance sheet, Amphibolic pathway, Respiratory quotient.





Joint Package Schedule

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NCERT Practice Test Schedule & Syllabus

Sr.No.	Test Name	Test Syllabus
116	Zoology Daily Test-29	Animal Kingdom-General Account & Non chordates:- Basis of classification, Levels of organisation, Symmetry, Body-plan, Protostomous, Deuterostomous, Coelom-its types, Open/closed vascular system, Segmentation, Notochord, Broad classification of Kingdom Animalia based on common fundamental features.
117	Physics Daily Test-30	Gravitation:- Introduction, Kepler's laws, Universal law of Gravitation, Gravitational constant, Acceleration due to gravity of the earth, Acceleration due to gravity below & above the surface of the earth.
118	Chemistry Daily Test-30	Hydrocarbons:- Alkynes: Nomenclature and isomerism, Preparation, Properties of Alkyne, Aromatic hydrocarbons: Nomenclature, Preparation.
119	Botany Daily Test-30	Plant Growth and Development:- Growth, differentiation and development. Growth - characteristics, phases of growth, growth curve, growth rates - arithmetic growth and geometric growth, Absolute growth rate and relative growth rate. Differentiation, Dedifferentiation and Redifferentiation, Development, plasticity
120	Zoology Daily Test-30	Animal Kingdom-General Account & Non chordates:- Porifera: General characters, Body wall, Types of cells, Skeleton: Spicules and spongin fibres, Canal system-(General outline), Reproduction: Larva stages with examples.
121	Physics Daily Test-31	Gravitation:- Gravitational potential energy, Escape speed, Earth's satellite, Energy of an orbiting satellite, Geostationary & polar satellite, Weightlessness.
122	Botany Daily Test-31	Plant Growth and Development:- Growth hormones: Auxins, Gibberellins, Cytokinin
123	Zoology Daily Test-31	Animal Kingdom-General Account & Non chordates:- Cnidaria: General characters, Body wall, Nematoblasts-Structures, Hydra-General characters, Polymorphism, Types of Zooids, Polyps, Medusa, Metagenesis, Corals.
124	Physics Daily Test-32	Mechanical Properties of Solids:- Introduction, Plastic behaviour of solids, Stress & strain, Hooke's law, Stress-strain curve.
125	Botany Daily Test-32	Plant Growth and Development:- Growth hormones - Ethylene, abscisic acid, Dormancy - cause of dormancy, breaking of dormancy, seed germination, vivipary, Photoperiodism: Definition and discovery, LDP, SDP and DNP Vernalisation - introduction, discovery, site, requirements, features/characters, examples.
126	Zoology Daily Test-32	Animal Kingdom-General Account & Non chordates:- Ctenophora; General characters, Comb plates, examples, Platyhelminthes: General characters, Symmetry, Parenchyma, Flame cells, Ladder like nervous part, Reproduction, Life cycle of Fasciola hepatica (outline), Life cycle of Taenia solium with general features, Pseudosegmentation, Strobilation, Apolysis, Taenia saginata.
127	Physics Daily Test-33	Mechanical Properties of Solids:- Elastic Potential Energy, Elastic moduli, Applications of elastic behaviour of materials.





Joint Package Schedule

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NCERT Practice Test Schedule & Syllabus

Sr.No.	Test Name	Test Syllabus
128	Zoology Daily Test-33	Animal Kingdom-General Account & Non chordates:- Aschelminthes / Nematode: General characters, Renette cells, Reproduction with examples, Life cycle of the Ascaris (outline), other nematodes-Ancylostoma, Wuchereria, Enterobius, etc., Annelida: General characters, Reproduction, Larval form, Nereis-Heteronereis, Pheretima, Hirudinaria, Pontobdella, Botryoidal tissue in leech.
129	Physics Daily Test-34	Mechanical Properties of Fluids:- Introduction, Pressure, Pascal's Law, Archimedes Principle.
130	Zoology Daily Test-34	Animal Kingdom-General Account & Non chordates:- Arthropoda: General characters of arthropods, Chitinous exoskeleton, Types of respiration, excretory structures, reproduction, Types of mouthparts in insects, Types of metamorphosis in Insects, Economic importance-Mosquito, Housefly, silkworm, Termites, Lac insect, Mollusca: General characters with examples, Larval form, Pearl formation.
131	Physics Daily Test-35	Mechanical Properties of Fluids:- Streamline flow, Bernoulli's principle.
132	Zoology Daily Test-35	Animal Kingdom-General Account & Non chordates:- Echinodermata: General characters, Water ambulacral system. Hemichordata: General characters, stomochord, examples., Chordates: General characters, 3 subphyla-Urochordata, Cephalochordata, Vertebrata. Urochordata-General characters with examples. Cephalochordates-General characters with examples.
133	Physics Daily Test-36	Mechanical Properties of Fluids:- Viscosity, Reynolds number.
134	Zoology Daily Test-36	Animal Kingdom-Chordates:- Vertebrata: Agnatha & Gnathostomata: Cyclostomata-General characters with examples Petromyzon, Myxine, Pisces: General characters, Classes-Placodermi, Chondrichthyes, Osteichthyes: Differences between cartilaginous & bony fishes, Scoliodon, Chimaera, Exocoetus, Labeo, Lateral line system, Neuromast organs, Types of scales.
135	Physics Daily Test-37	Mechanical Properties of Fluids:- Surface tension.
136	Zoology Daily Test-37	Animal Kingdom-Chordates:- Amphibia: General characters, Parental care and examples, Reptilia: True land vertebrates, General characters, Rhynchocephalia, Squamata, Crocodilia, Chelonia, Poisonous & non poisonous, Snakes.
137	Physics Daily Test-38	Thermal Properties of Matter:- Introduction, Temperature & Heat, measurement of temperature, Ideal gas equation & Absolute temperature, Thermal expansion.
138	Zoology Daily Test-38	Animal Kingdom-Chordates:- Aves: General characters, Mammalia: General characters, Subclasses-Prototheria, Metatheria, Eutheria.
139	Physics Daily Test-39	Thermal Properties of Matter:- Specific heat capacity, Calorimetry, Change of state.
140	Zoology Daily Test-39	Structure Organisation in Animals – Animal Morphology:- Earthworm-Morphology, anatomy (digestive system)





Joint Package Schedule

For Class- XI (2024-25)

NCERT Practice Test Schedule & Syllabus

Sr.No.	Test Name	Test Syllabus
141	Physics Daily Test-40	Thermal Properties of Matter:- Heat transfer-Conduction, Convection.
142	Zoology Daily Test-40	Structural Organisation in Animals- Animal Morphology:- Earthworm: Circulatory System, Excretory System, Nervous System, Reproductive System, Economic Importance.
143	Physics Daily Test-41	Thermal Properties of Matter:- Heat transfer - Radiation, Stefan's Law, Newton's law of cooling, Wien's law.
144	Zoology Daily Test-41	Structural Organisation in Animals- Animal Morphology:- Salient features of the Periplaneta, Habitat, External features, exoskeleton, Head-mouthparts, thorax-thoracic appendages, Abdomen.
145	Physics Daily Test-42	Thermodynamics:- Introduction, Thermal equilibrium, Zeroth law of thermodynamics, Heat internal energy and work, First law of thermodynamics, Specific heat capacity. Thermodynamic state variables & equation of state.
146	Zoology Daily Test-42	Structural Organisation in Animals- Animal Morphology:- Digestive system of Cockroach-peritrophic membrane, Respiratory system and mechanism respiration, Circulating system: Heart, blood sinuses and circulation.
147	Physics Daily Test-43	Thermodynamics:- Thermodynamic processes.
148	Zoology Daily Test-43	Structural Organisation in Animals-Animal Morphology:- Malpighian tubules, Nerve cord, Sense organs of cockroach, Reproductive system of Cockroach-male & female system, fertilization, Development, Moulting.
149	Physics Daily Test-44	Thermodynamics:- Heat engines, Refrigerators & heat pumps, Second law of thermodynamics, Reversible and irreversible process, Carnot's Engine.
150	Zoology Daily Test-44	Structural Organisation in Animals- Animal Morphology:- Frog: Morphology, Anatomy, Digestive System, Respiratory System, Circulatory System, Excretory System, Nervous System, Reproductive System, Economic Importance.
151	Physics Daily Test-45	Kinetic Theory:- Introduction, Molecular nature of matter, Behaviour of gases, Kinetic theory of an ideal gas, Law of equipartition of energy, Specific heat capacity, Mean free path.
152	Physics Daily Test-46	Oscillations:- Introduction, Periodic & oscillatory motions, Simple harmonic motion and uniform circular motion.
153	Physics Daily Test-47	Oscillations:- Velocity and acceleration in simple harmonic motion, Force law for simple harmonic motion, Energy in simple harmonic motion.
154	Physics Daily Test-48	Oscillations:- Some systems executing SHM, Damped simple harmonic motion.
155	Physics Daily Test-49	Waves:- Introduction, Transverse & Longitudinal waves.
156	Physics Daily Test-50	Waves:- Displacement relation in a progressive wave, The speed of a travelling wave.
157	Physics Daily Test-51	Waves:- The principle of super position of waves, Reflection of waves.

Test No.	Test Date	Date of Display of Answer Key	Result Date	Subject	Topics
Practice Test-1 Online	18.08.2024	NA	Practice Test Results can be viewed after submission of Test	Phy.	Units & Measurements, Motion in a Straight Line
				Chem.	Some Basic Concepts of Chemistry, Structure of Atom
				Bio.	Cell: The Unit of Life, Structural Organisation in Animals: Animal tissues only, Biomolecules
1.	25.08.2024	27.08.2024	31.08.2024	Phy.	Units & Measurements, Motion in a Straight Line
				Chem.	Some Basic Concepts of Chemistry, Structure of Atom
				Bio.	Cell: The Unit of life, Structural Organisation in Animals: Animal tissues only, Biomolecules
2.	20.10.2024	22.10.2024	26.10.2024	Phy.	Motion in a Plane
				Chem.	Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure
				Bio.	Cell Cycle & Cell Division, The Living World, Breathing & Exchange of Gases, Body Fluids and Circulation
3.	15.12.2024	17.12.2024	21.12.2024	Phy.	Laws of Motion, Work, Energy and Power
				Chem.	Thermodynamics, Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure
				Bio.	Biological Classification, Morphology of Flowering Plants-I: (Upto inflorescence), Excretory Products and Their Elimination, Locomotion and Movement
4.	19.01.2025	21.01.2025	25.01.2025	Phy.	System of Particles & Rotational Motion, Gravitation
				Chem.	Equilibrium, Redox Reactions
				Bio.	Morphology of Flowering Plants-II (From Flowers to Gramineae), Anatomy of Flowering Plants, Neural Control and Coordination, Chemical Coordination and Integration
5.	23.02.2025	25.02.2025	29.02.2025	Phy.	Mechanical Properties of Solids, Mechanical Properties of Fluids, Thermal Properties of Matter
				Chem.	The p-Block Elements (Group 13 & 14), Equilibrium, Redox Reactions
				Bio.	Plant Kingdom, Photosynthesis in Higher Plants, Animal Kingdom-I: Non chordates
6.	09.03.2025	11.03.2025	15.03.2025	Phy.	Thermodynamics, Kinetic Theory, Oscillations, Waves
				Chem.	Organic Chemistry-Some Basic Principles & Techniques, Hydrocarbons
				Bio.	Respiration in Plants, Plant Growth & Development, Animal Kingdom-II: Chordates and Structural Organisation in Animal: Animal Morphology (Cockroach, Frog & Earthworm)
7.	23.03.2025	25.03.2025	29.04.2025	PCB	Complete Syllabus Test of Class XI
8.	06.04.2025	08.04.2025	12.04.2025	PCB	Complete Syllabus Test of Class XI

Test Duration : 200 Minutes

Students can find Answer Key & Text Solutions in their AESL account on www.aakash.ac.in.

Step-01 : Login to your account with user id & password.

Step-02 : Go to side bar for Answer Key & Text Solutions. Click on 'Answer Key & Text Solutions'.

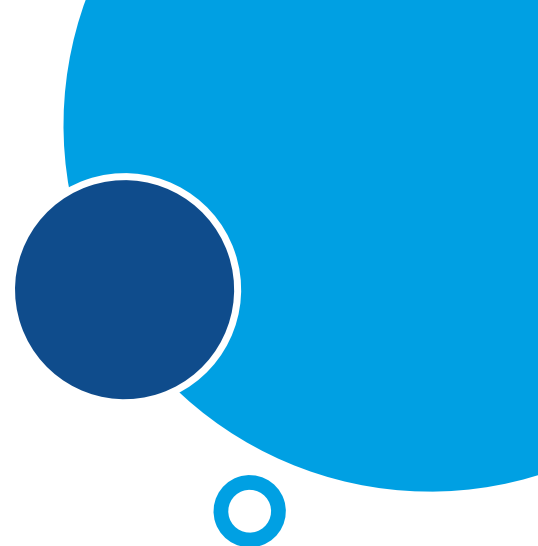
The AIATS tests shall be conducted in offline mode. However, if the test is conducted in online mode, then following instructions will be applicable:

The AIATS tests shall be available to attempt online for 48 hours from its scheduled date of test. *e.g.*, If a test is scheduled on 25th August 2024, then the test shall be made live at 10:00 AM on 25th August and will be available till 10:00 AM on 27th August, 2024. Post that students shall not be able to attempt the test to get All India Rank however tests shall be available for attempt later also, wherein students shall be able to get reference ranking only. Test Timings are subject to change hence please check the Timings from the respective Centre / DLP department before the Exam Date. The venue of AIATS is subject to change in short notice in case the exam is scheduled in offline mode.

Note in case of online mode:

- ❖ Parents to ensure students give exam with full honesty and continuity.
- ❖ Students giving test early is recommended and not to wait for 48 hours to finish.





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Summary for Class XI & XII

RANKER PACKAGE

Year Syllabus	1 st Year Class XI	2 nd Year Class XII
AIATS	9	16
Unit Tests	6	12
Part Tests	3	4
Cumulative Tests	2	2
Full Syllabus Tests	3	7
Daily Practice Tests	157	112

