





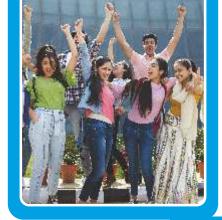
Joint Package Schedule

For Repeater Students (XII Passed 2024-25)

Study Material Dispatch Schedule

Dispatch	Dispatch Date	Day	Details
1	18-06-2024	Tuesday	Study Package-1 (PCBZ)
2	18-06-2024	Tuesday	Study Package-2 (PCBZ)
3	16-07-2024	Tuesday	Study Package-3 (PCBZ)
4	20-08-2024	Tuesday	Study Package-4 (PCBZ)
5	17-09-2024	Tuesday	Study Package-5 (P)







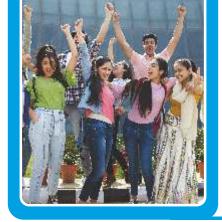


Online Test Schedule for Class XII Passed

Test	Date	Day	TOPIC
UT -1	13-07-2024	Saturday	Physics -Units & Measurements, Motion in a Straight Line Chemistry - Some Basic Concepts of Chemistry, Structure of Atom Botany - Cell: The Unit of Life, Cell Cycle and Cell Divison, The Living World Zoology - Structural Organisation in Animals - Animal Tissues, Biomolecules
UT -2	27-07-2024	Saturday	Physics - Motion in a Plane, Laws of Motion Chemistry - Classification of Elements and Periodicity in Properties, Chemical Bonding and Molecular Structure Botany - Biological Classification Zoology - Breathing and Exchange of Gases, Body Fluids and Circulation
UT -3	17-08-2024	Saturday	Physics - Work, Energy and Power, System of Particles and Rotational Motion Chemistry - Thermodynamics Botany - Morphology of Flowering Plants, Anatomy of Flowering Plants Zoology - Excretory Products and their Elimination, Locomotion & Movement
PT-1	24-08-2024	Saturday	Test on Topics covered in Test -1 to Test -3
UT -4	07-09-2024	Saturday	Physics - Gravitation, Mechanical Properties of Solids, Mechanical Properties of Fluids Chemistry - Equilibrium, Redox Reactions, Electrochemistry Botany - Plant Kingdom, Photosynthesis in Higher Plants Zoology - Neural Control & Coordination, Chemical Coordination & Integration
UT -5	21-09-2024	Saturday	Physics - Thermal Properties of Matter, Thermodynamics, Kinetic Theory Chemistry - Solutions, Chemical Kinetics Botany - Respiration in Plants, Plant Growth and Development Zoology - Animal Kingdom (General Account & Non chordates), Animal Kingdom (Chordates)
UT-6	11-10-2024	Friday	Physics - Oscillations, Waves Chemistry - Organic Chemistry. Some Basic Principles and Techniques, Hydrocarbons, Haloalkanes and Haloarenes Botany - Sexual Reproduction in Flowering Plants, Principles of Inheritance & Variation Zoology - Structural Organisation in Animals (Animal Morphology)
PT-2	26-10-2024	Saturday	Test on Topics covered in Test - 4 to Test -6
CT-1	09-11-2024	Saturday	Test on Topics covered in Test - 1 to Test - 6
UT-7	23-11-2024	Saturday	Physics - Electric Charges and Field, Electrostatic Potential and Capacitance, Current Electricity Chemistry - Alcohols, Phenols and Ethers, Aldehydes, Ketones and Carboxylic Acids Botany - Molecular Basis of Inheritance Zoology - Human Reproduction, Reproductive Health, Evolution











Joint Package Schedule

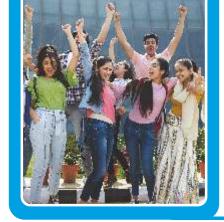
For Repeater Students (XII Passed 2024-25)

Online Test Schedule for Class XII Passed

Test	Date	Day	TOPIC
UT-8	07-12-2024	Saturday	Physics - Moving Charges & Magnetism, Magnetism and Matter Chemistry - Amines (Organic Compound containing Nitrogen), Coordination Compounds Botany - Microbes in Human Welfare, Organisms and Populations Zoology - Human Health & Disease
PT-3	14-12-2024	Saturday	Test on Topics covered in Test - 7 to Test -8
UT-9	28-12-2024	Saturday	Physics - Electromagnetic induction, Alternating Current, Electromagnetic Waves, Ray Optics & Optical Instruments Chemistry - The d & f.Block Elements, The p.Block Elements Botany - Ecosystem Zoology - Biotechnology.Principles and Processes
UT-10	11-01-2025	Saturday	Physics - Wave Optics, Dual Nature of Radiation and Matter, Atoms Chemistry - Biomolecules, Principles related to practical chemistry Botany - Biodiversity and Conservation Zoology - Biotechnology and its Applications, Evolution
UT-11	25-01-2025	Saturday	Physics - Nuclei, Semiconductor, Experimental skills Chemistry - The p-Block elements, Equilibrium, Aldehydes, Ketones and Carboxylic acids Botany - Organisms and Populations, Ecosystem, Biodiversity and Conservation Zoology - Biotechnology.Principles and Processes, Biotechnology and its Applications, Human Reproduction
PT-4	08-02-2025	Saturday	Test on Topics covered in Test - 9 to Test -11
CT-2	22-02-2025	Saturday	Test on Topics covered in Test - 7 to Test - 11
FST-1	15-03-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI)
FST-2	22-03-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XII)
FST-3	29-03-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI & XII)
FST-4	05-04-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI & XII)
FST-5	12-04-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI & XII)
FST-6	19-04-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI & XII)
FST-7	26-04-2025	Saturday	Complete Syllabus Test - NEET Pattern (Class XI & XII)



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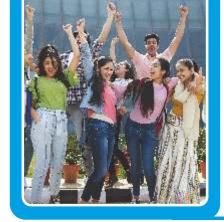




Sr.No.	Test Name	Test Syllabus - Class XI
1	Physics Daily Test-1	Units & Measurements:- Introduction, International system of units, Measurement of length, Mass, Time, Accuracy, Precision of instruments, Errors in measurements.
2	Chemistry Daily Test-1	Some Basic Concepts of Chemistry:- Importance of 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







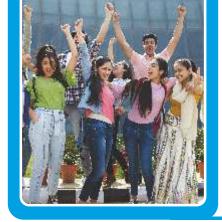




Sr.No.	Test Name	Test Syllabus - Class XI
12	Zoology Daily Test-3	Structural Organisation in Animals–Animal Tissues:- Muscular Tissue: Types of Muscles: Striated and non-striated/Smooth muscles (Single unit & Multiunit smooth muscles; Cardiac muscle), Nervous Tissue: Structure of neuron and its parts, 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.







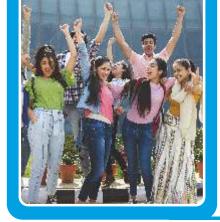




Sr.No.	Test Name	Test Syllabus - Class XI
23	Botany Daily Test-6	Cell Cycle & Cell Division:- Meiosis-I, Meiosis-II, significance of meiosis.
24	Zoology Daily Test-6	Biomolecules:- Enzymes: Importance, activation energy, chemical nature, active site, Classes of enzymes: Oxidoreductase, Transferase, Hydrolase, 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, Noncompetitive, 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, Hunds 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.







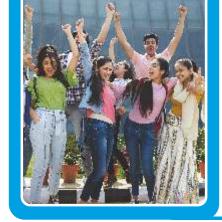




Sr.No.	Test Name	Test Syllabus - Class XI
35	Botany Daily Test-9	Biological Classification:- Introduction, Kingdom system of classification- two kingdom, three kingdom, four kingdom, five kingdom, Six kingdom, Domains of life, Kingdom Monera- Characters of monera, Shape of bacteria, Bacterial Life process - 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, Archaebacteria–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.







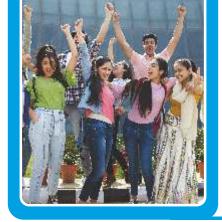




Sr.No.	Test Name	Test Syllabus - Class XI
47	Botany Daily Test-12	Biological Classification:- Fungi-general characters, Reproduction in fungi, Characters of different classes of fungi - Phycomycetes, Ascomycetes, Basidiomycetes, Salient features of Agaricus & Puccinia, Deuteromycetes
48	Zoology Daily 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 Cv & Cp 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.







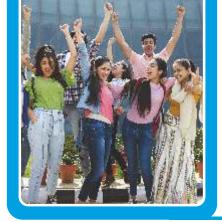




Sr.No.	Test Name	Test Syllabus - Class XI
59	Botany Daily Test-15	Morphology of Flowering Plants:- Leaf-introduction, parts, venation, types (simple and compound leaf), Leaf-Phyllotaxy, Modifications, Inflorescence – racemose and cymose, Flowersterminology, symmetry.
60	Zoology Daily Test-15	Excretory 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, filteration 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 Ka and Kb. Di and Polybasic acid and bases.







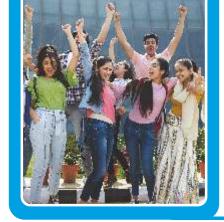




Sr.No.	Test Name	Test Syllabus - Class XI
71	Botany Daily Test-18	Anatomy of Flowering Plants:- Tissue, meristematic tissue – characters, types, shoot and root apex organisation, Primary permanent tissues i.e., parenchyma, collenchyma and sclerenchyma w.r.t. nature, distribution, cell wall and cell structure 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.







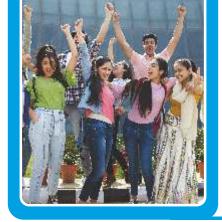




Sr.No.	Test Name	Test Syllabus - Class XI
82	Chemistry Daily Test-21	Redox Reactions: – Redox reactions as the basis for titrations, Limitations of concept of oxidation number, Redox reactions and electrode potentials, Redox couple, Working of Daniell cell, Electrochemical series.3
83	Botany Daily Test-21	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 saddlejoint), 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.







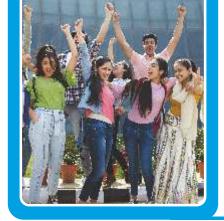




Sr.No.	Test Name	Test Syllabus - Class XI
93	Physics Daily Test-24	Work, Energy & Power:- Collisions – elastic and inelastic collision, Collision in one dimension, Collision in two dimensions.
94	Chemistry Daily Test-24	Organic Chemistry: Some Basic Principle & Techniques:- Isomerism: Structural isomerism 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 & Pteridophtes, 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 occular 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.







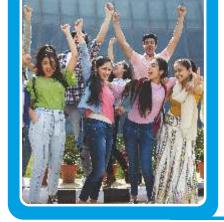




Sr.No.	Test Name	Test Syllabus - Class XI
103	Botany Daily Test-26	Photosynthesis in Higher Plants:- Introduction, Importance, What do we know?, Historical account, Photosynthetic pigments, Absorption spectrum and action spectrum, What is light reaction?, Electron transport system, Splitting of water, 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, pitutary 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– C3, C4 cycles, Difference between C3 & C4-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, gynalcomastia) 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.







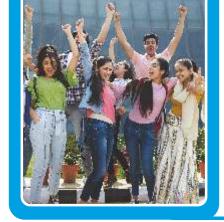




Sr.No.	Test Name	Test Syllabus - Class XI
116	Zoology Daily Test-29	Animal Kingdom–General Account & Non chordates:– Basis of classification, Levels of organisation, Symmetry, Body–plan, Protostomous, Deuterostomous, Coelom–its types, Open/closed vascular system, Segmentation, Notochord, Broad classification 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.







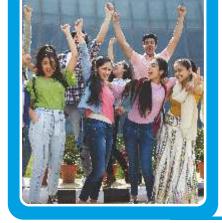




Sr.No.	Test Name	Test Syllabus - Class XI
128	Zoology Daily Test-33	Animal Kingdom–General Account & Non chordates:- Aschelminthes / Nematode: General characters, Renette cells, Reproduction with examples, Life cycle of the Ascaris (outline), other nematodes–Ancylostoma, Wuchereria, Enterobius, etc., 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, silkmoth, 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, Rhynocephalia, 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)











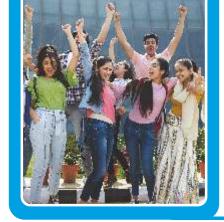
Joint Package Schedule

For Repeater Students (XII Passed 2024-25)

Sr.No.	Test Name	Test Syllabus - Class XI
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.







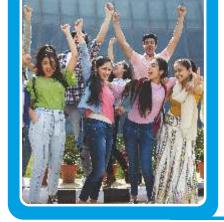




Sr.No.	Test Name	Test Syllabus - Class XII
1	Physics Daily Test-1	Electric Charges & Fields:- Introduction, Electric charges, Conductors and insulators, Charging by induction, Basic properties of electric charges.
2	Chemistry Daily Test-1	Solutions:- Types of solutions, Expressing concentration of solutions. Solubility of a solid in a liquid and gas in a liquid (Henry-law), Vapour pressure of liquid solutions, Raoult's law for binary solutions. Ideal and non-ideal solutions.
3	Botany Daily Test-1	Sexual Reproduction in Organisms:- Introduction, Flower - A fascinating organ of angiosperms, Pre-fertilization - structures and events - Stamen, Microsporangium, Microsporagenesis.
4	Zoology Daily Test-1	Human Reproduction:- Sex organs, Male reproductive system: Testes, Epididymis, Vas deferens, Penis, Accessory glands of male reproductive system, Seminal plasma and semen.
5	Physics Daily Test-2	Electric Charges & Fields:- Coulomb's law, Force between multiple charges.
6	Chemistry Daily Test-2	Solutions:- Colligative properties and determination of molar mass: Relative lowering of vapour pressure, Elevation of boiling point, depression of freezing point, Osmosis and osmotic pressure, reverse osmosis, Abnormal molar masses and van't Hoff factor.
7	Botany Daily Test-2	Sexual Reproduction in Organisms:- Pollen grain, Development of male gametophyte, The pistil, Megasporangium (ovule), Types of ovules.
8	Zoology Daily Test-2	Human Reproduction:- Structure of female reproductive system, Fallopian tubes, uterus, Vagina, Female External genitalia and Accessory genital glands.
9	Physics Daily Test-3	Electric Charges & Fields:- Electric Field, Electric field due to system of charges.
10	Chemistry Daily Test-3	Electrochemistry:- Electrochemical cells, Galvanic cells: S.H.E and measurement of electrode potential, Nernst equation.
11	Botany Daily Test-3	Sexual Reproduction in Organisms:- Megasporogenesis, Embryo sac/Female gametophyte development, Pollination: Objective, Kinds - Autogamy, Geitonogamy, Xenogamy, Agents of pollination - Wind, Water, Insects.
12	Zoology Daily Test-3	Human Reproduction:- Structure of Mammary glands, Spermatogenesis and its hormonal control, Structure of mature sperm.
13	Physics Daily Test-4	Electric Charges & Fields:- Electric field lines, Electric Dipole, Dipole in a uniform external field.
14	Chemistry Daily Test-4	Electrochemistry:- Equilibrium constant from Nernst equation, Gibbs free energy and electrochemical cell and Gibb's energy of the reaction.
15	Botany Daily Test-4	Sexual Reproduction in Organisms:- Outbreeding devices, Pollen-pistil interaction, Double fertilization, Post-fertilization structures and events - Endosperm.
16	Zoology Daily Test-4	Human Reproduction:- Oogenesis and structure of ovum & ovary.







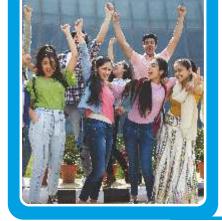




Sr.No.	Test Name	Test Syllabus - Class XII
17	Physics Daily Test-5	Electric Charges & Field:- Electric flux, Gauss's Law, Application of Gauss's law.
18	Chemistry Daily Test-5	Electrochemistry:- Conductance of electrolytic solutions, measurement of the conductivity of ionic solutions, Variation of conductivity and molar conductivity with dilution in case of strong electrolyte and weak electrolyte. Kohlrausch law.
19	Botany Daily Test-5	Sexual Reproduction in Organisms:- Embryo development, Post fertilization, structure and events - Seed, Fruit; Apomixis and Polyembryony.
20	Zoology Daily Test-5	Human Reproduction:- Menstrual cycle: Various events and its hormonal control, Capacitation and acrosomal reactions, Fertilisation fast block and slow block to prevent polyspermy, Embryonic development cleavage, morula, blastula and implantation.
21	Physics Daily Test-6	Electrostatic Potential and Capacitance: – Introduction, electrostatic potential, potential due to a point charge, Potential due to different charge system, potential due to a system of charges.
22	Chemistry Daily Test-6	Electrochemistry: – Electrolytic cells and electrolysis: Faraday laws of electrolysis. Products of electrolysis, Batteries: Primary and secondary batteries fuel cells. Corrosion.
23	Botany Daily Test-6	Principles of Inheritance & Variation:- Mendel's laws of inheritance - Dominance, Segregation, Explanation of the concept of dominance, Incomplete and co-dominance.
24	Zoology Daily Test-6	Human Reproduction: - Gastrulation, fate of three germinal layers, Pregnancy and embryonic development, Major features, function and types of placenta, Parturition and lactation.
25	Physics Daily Test-7	Electrostatic Potential and Capacitance:- Equipotential surfaces, Potential energy of a system of charges, Potential energy in an external field.
26	Chemistry Daily Test-7	Chemical Kinetics:- Rate of a chemical reaction. Factors influencing rate of reactions. Rate expression and rate constant, Order and molecularity of a reaction, Integrated rate equations for zero and first order reactions, Half-life of a reaction.
27	Botany Daily Test-7	Principles of Inheritance & Variation:- Multiple alleles, Pleiotropy, Inheritance of two genes, Law of independent assortment, Complementary genes, Duplicate genes, Epistasis, Polygenic inheritance, Chromosomal theory of inheritance.
28	Zoology Daily Test-7	Reproductive Health:- Reproductive Health, Problems & Strategies, Population explosion, Human population growth.
29	Physics Daily Test-8	Electrostatic Potential and Capacitance:- Electrostatics of conductors, dielectrics and polarization.
30	Chemistry Daily Test-8	Chemical Kinetics:- Pseudo first order reaction, Temperature dependence of the rate of a reaction.







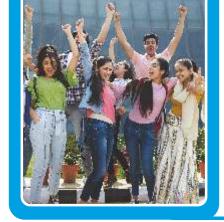




Sr.No.	Test Name	Test Syllabus - Class XII
31	Botany Daily Test-8	Principles of Inheritance & Variation:- Linkage and recombination, Sex determination, Mutations - Gene mutation, Mutations - Chromosomal aberrations, Genomatic mutation.
32	Zoology Daily Test-8	Reproductive Health:- Methods of Birth control, Medical termination of pregnancy (MTP).
33	Physics Daily Test-9	Electrostatic Potential and Capacitance:- Capacitors and capacitance, The parallel plate capacitor, Effect of dielectrics on capacitance.
34	Chemistry Daily Test-9	Chemical Kinetics:- Effect of catalyst, Collision theory of chemical reactions & Assignments.
35	Botany Daily Test-9	Principles of Inheritance & Variation:- Pedigree analysis, Cytoplasmic inheritance, Genetic disorders - Mendelian and Chromosomal disorders.
36	Zoology Daily Test-9	Reproductive Health:- STI (Venereal Diseases), Infertility, ART (Assisted reproductive technology).
37	Physics Daily Test-10	Electrostatic Potential and Capacitance:- Combination of capacitors, Energy stored in a capacitor, Van de Graff Generator.
38	Chemistry Daily Test-10	p-Block Elements:- Group-15: N2, NH3, Oxides of Nitrogen, HNO3, P-Allotropic forms, Ph3.
39	Botany Daily Test-10	Molecular Basis of Inheritance:- Introduction, The DNA-structure of polynucleotide chain, Derivation of DNA structure, DNA packaging in prokaryotes.
40	Zoology Daily Test-10	Evolution: Origin of universe (Big bang theory) Solar system, Theories of origin of life: Panspermia theory, Abiogenesis theory, Theory of biogenesis, Chemical origin of life, Stanley Miller's experiment, Prebiotic system coacervate and microsphere, Geological time scale.
41	Physics Daily Test-11	Current Electricity:- Introduction, Electric current, Electric currents in conductors. Ohm's law, Drift of electrons and the origin of resistivity, Limitations of Ohm's law, Resistivity of various material, Temperature dependence of resistivity, Electrical energy power.
42	Chemistry Daily Test-11	p-Block Elements:- Ozone, Sulphur-Allotropic forms, Phosphorus halides, oxoacids of phosphorus, Group 16: O2, simple oxides, compounds of sulphur.
43	Botany Daily Test-11	Molecular Basis of Inheritance:- Packaging in eukaryotes, The search for genetic material, Transforming principle, Evidence from experiments with bacteriophage, Properties of genetic material, RNA world, Replication of DNA - The experimental proof, The machinery and enzymes







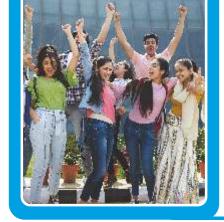




Sr.No.	Test Name	Test Syllabus - Class XII
44	Zoology Daily Test-11	Evolution: Evidences of evolution - Palaentological, Theories & Evidences:- Morphological and anatomical evidences of evolution-Homologous, analogous, Vestigeal organs, Evidences from: Connecting links, Embryological evidences, Biogeographical evidences, Adaptive radiation, Lamarck's theory, Darwin's theory-Darwin novelty.
45	Physics Daily Test-12	Current Electricity:- Combination of resistors, series and parallel.
46	Chemistry Daily Test-12	p-Block Elements:- Group 17 elements: Compounds of chlorine, oxoacids of halogens, interhalogen compounds. Group-18: Physical properties of Inert gases, Xenon compounds.
47	Botany Daily Test-12	Molecular Basis of Inheritance:- Transcription - Transcription unit, Types of RNAs, Process of Transcription in prokaryotes, Transcription in Eukaryotes
48	Zoology Daily Test-12	Evolution: Mutation theory, Hardy Weinberg principle: Gene flow, Gene migration, Genetic drift, Mutation, genetic Recombination, Natural selection,
49	Physics Daily Test-13	Current Electricity:- Cells, emf. Internal resistance, cells in series and in parallel.
50	Chemistry Daily Test-13	d & f-Block Elements:- General properties of d-block elements, Preparation and properties and uses of KMnO4 and K2Cr2O7.
51	Botany Daily Test-13	Molecular Basis of Inheritance: – Genetic code – Salient features, t–RNA – The adapter molecule, Translation.
52	Zoology Daily Test-13	Evolution: Speciation: Allopatric and sympatric, Brief account of evolution: Evolution of plant forms, Evolutionary history of vertebrates through geological period.
53	Physics Daily Test-14	Current Electricity:- Kirchhoff's laws and its application.
54	Chemistry Daily Test-14	d & f-Block Elements:- f-Block elements (General characteristic) and Lanthanoids contraction, The actinoids and some application of d and f block elements.
55	Botany Daily Test-14	Molecular Basis of Inheritance:- Regulation of gene expression, Operon concept, Human genome project - Goals, Methodologies, Salient features, Applications and Future challenges, DNA fingerprinting.
56	Zoology Daily Test-14	Evolution: Human evolution, Prior to Ape man, Ape man to prehistoric man, Prehistoric to modern man.







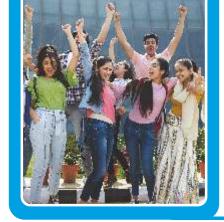




Sr.No.	Test Name	Test Syllabus - Class XII
57	Physics Daily Test-15	Current Electricity:- Wheatstone bridge, Meter Bridge, Potentiometer.
58	Chemistry Daily Test-15	Coordination Compounds:- Werner's theory of coordination compounds, Definition of some important terms pertaining to coordination compounds, Nomenclature of coordination compounds, Isomerism in coordination compounds.
59	Botany Daily Test-15	Microbes in Human Welfare:- Introduction, Microbes in household products, Industrial products.
60	Zoology Daily Test-15	Human Health & Disease:- Health-Various types of diseases in Human-Bacterial, Viral, Fungal: Ringworms, Helminthic: Ascariasis, Elephantiasis.
61	Physics Daily Test-16	Moving Charges and Magnetism:- Introduction, Magnetic force, Motion in a magnetic field, Motion in combined Electric and Magnetic fields.
62	Chemistry Daily Test-16	Coordination Compounds:- Valence bond theory of complex compounds, Crystal field theory colour of coordination complexes, Bonding in metal carbonyls & organometallics, Stability of coordination compounds, Importance & Application of coordination compounds.
63	Botany Daily Test-16	Microbes in Human Welfare:- Microbes in sewage treatment, Biogas production, Biocontrol agents, Biofertilizers.
64	Zoology Daily Test-16	Human Health & Disease:- Protozoan: Life cycle of Plasmodium vivax and Entamoeba histolytica, Types of Immunity-Innate and acquired, Humoral mediated Immunity.
65	Physics Daily Test-17	Moving Charges and Magnetism: – Biot-savart's law, Magnetic field on the axis of a circular current loop, Cyclotron, Magnetic field due to a current element.
66	Chemistry Daily Test-17	Haloalkanes and Haloarenes:- Classification of Halogen compounds, Nomenclature of Halogen compounds, Nature of C-X bond and methods of preparation of Haloalkanes & Haloarenes, Physical properties of Haloalkanes, optical activity, Nucleophilic substitution reactions of haloalkanes.
67	Botany Daily Test-17	Organisms and Populations:- Introduction, Levels of organisation, Major Biomes, Abiotic Factors - Temperature, Light, Water, Soil, Response to Abiotic Factors, Adaptations.
68	Zoology Daily Test-17	Human Health & Disease:- Cell Mediated Immunity, Active & Passive Immunity, Vaccination and Immunisation, Allergies, Autoimmunity, Immune system of the body, Lymphoid organs: Primary and Secondary.







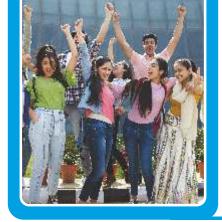




Sr.No.	Test Name	Test Syllabus - Class XII
69	Physics Daily Test-18	Moving Charges and Magnetism:- Ampere' Circuital Law, The solenoid and the toroid, Force between two parallel currents, the ampere.
70	Chemistry Daily Test-18	Haloalkanes and Haloarenes:- Elimination reactions in haloalkanes, Elimination versus substitution, Reactions of R-X with Na.
71	Botany Daily Test-18	Organisms and Populations:- Population - Characteristics, Growth, Growth models, Population interactions.
72	Zoology Daily Test-18	Human Health & Disease:- AIDS-Cause, Detection, Symptoms, Prevention.
73	Physics Daily Test-19	Moving Charges and Magnetism:- Torque on current loop, Magnetic dipole, Moving coil Galvanometer.
74	Chemistry Daily Test-19	Haloalkanes and Haloarenes:- Aromatic nucleophilic substitution, Elimination addition Reaction, Electrophilic substitution of ArX, Polyhalogen compounds.
75	Botany Daily Test-19	Ecosystem:- Introduction, Types of Ecosystem, Components of Ecosystem, Ecosystem Structure, Productivity and decomposition.
76	Zoology Daily Test-19	Human Health & Disease:- Cancer-Causes, detection & diagnosis, Treatment.
77	Physics Daily Test-20	Magnetism and Matter:- Introduction, The Bar Magnet, Magnetism and Gauss's Law, The Earth's magnetism.
78	Chemistry Daily Test-20	Alcohols, Phenols and Ethers:- Common and IUPAC names of alcohols and ethers, Preparation of aliphatic alcohols.
79	Botany Daily Test-20	Ecosystem:- Energy flow, Ecological pyramids, Nutrient cycling, Ecological succession, Ecosystem services.
80	Zoology Daily Test-20	Human Health & Disease:- Alcohol and Tobacco Opioids, Cannabinoids, Sedatives, Hallucinogens, Stimulants, Adolescence, Addiction & dependence, Effects of drugs & alcohol abuse, Prevention & control.
81	Physics Daily Test-21	Magnetism and Matter:- Tangent Law and its applications, Magnetization and magnetic intensity, Magnetic properties of materials, Permanent magnets and electromagnets.
82	Chemistry Daily Test-21	Alcohols, Phenols and Ethers:- Preparation of aromatic alcohols and Physical properties, Chemical reactions of alcohols, phenols.







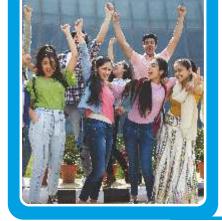




Sr.No.	Test Name	Test Syllabus - Class XII
83	Botany Daily Test-21	Biodiversity and Conservation: - Introduction, Levels of biodiversity, How many species are there on earth and how many in India?, Patterns of biodiversity, Importance of biodiversity to the ecosystem.
84	Zoology Daily Test-21	Biotechnology-Principles and Processes:- Biotechnology-Principles, Tools of recombinant DNA technology.
85	Physics Daily Test-22	Electromagnetic induction:- Introduction, the experiments of Faraday and Henry, Magnetic Flux, Faraday's laws of induction, Lenz's law and conservation of energy, Motional electromotive force.
86	Chemistry Daily Test-22	Alcohols, Phenols and Ethers:- Preparation of ethers, Physical properties of ethers, Chemical propereties of ethers, Some commercially important alcohols and ethers.
87	Botany Daily Test-22	Biodiversity and Conservation: - Loss of biodiversity and its conservation.
88	Zoology Daily Test-22	Biotechnology- Principles and Processes:- Separation and Isolation of DNA fragments Cloning vectors, Competent host, Processes of recombinant DNA technology.
89	Physics Daily Test-23	Electromagnetic induction:- Energy consideration, A quantitative study Eddy currents, Electromagnetic induction:- Inductance.
90	Chemistry Daily Test-23	Aldehydes, Ketones and Carboxylic Acids:- Nomenclature of Aldehydes and Ketones. Structure of carbonyl group, Preparation of Aldehydes & Ketones, Physical properties of aldehydes and ketones. Nucleophilic addition reactions, Nucleophilic addition reaction followed by elimination, Reduction & oxidation reactions of aldehydes & ketones.
91	Zoology Daily Test-23	Biotechnology and its Applications:- Biotechnological applications in agriculture-Bt cotton, Pest resistant plants.
92	Physics Daily Test-24	Alternating Current:- Introduction AC voltage applied to a resistor representation of AC current and voltage by rotating vectors -phasors, AC voltage applied to an inductor, AC voltage applied to a capacitor.
93	Chemistry Daily Test-24	Aldehydes, Ketones and Carboxylic Acids:- Halogenation & Reaction with alkalies, Nomenclature of carboxylic acids, Preparation of carboxylic acids, Physical & Chemical properties of Carboxylic acids.
94	Zoology Daily Test-24	Biotechnology and its Applications:- Biotechnological applications in medicine-Genetically engineered insulin, Gene Therapy, Molecular Diagnosis.
95	Physics Daily Test-25	Alternating Current:- AC voltage applied to a series LCR circuit, Power in AC circuit. The power factor, LC Oscillations, transformers.











Sr.No.	Test Name	Test Syllabus - Class XII
96	Chemistry Daily Test-25	Amines:- Amines: Structure, Nomenclature and preparation of amines.
97	Zoology Daily Test-25	Biotechnology and its Applications:- Transgenic Animals, Ethical Issues, Biopiracy.
98	Physics Daily Test-26	Electromagnetic Waves:- Introduction, Displacement currents, Electromagnetic waves, Electromagnetic spectrum.
99	Chemistry Daily Test-26	Amines:- Chemical reactions of aliphatic and aromatic amines; Diazonium salts.
100	Physics Daily Test-27	Ray Optics & Optical Instruments:- Introduction, Reflection of light spherical mirrors, Refraction.
101	Chemistry Daily Test-27	Biomolecules:- Carbohydrates, Amino acids.
102	Physics Daily Test-28	Ray Optics & Optical Instruments:- Total internal reflection, Refraction at spherical surface, Refraction through lenses.
103	Physics Daily Test-29	Ray Optics & Optical Instruments:- Refraction through a prism, Dispersion by prism, some natural phenomena due to sunlight, Optical instruments - The eye, microscope.
104	Physics Daily Test-30	Ray Optics & Optical Instruments:- Optical instruments - Telescope, microscope.
105	Physics Daily Test-31	Wave Optics:- Introduction, Huygens Principle, Refraction and Reflection of plane waves using Huygens principle, Coherent and incoherent addition of waves, Interference of light waves, Young's experiment.
106	Physics Daily Test-32	Wave Optics:- Diffraction, Polarization.
107	Physics Daily Test-33	Dual Nature of Radiation and Matter:- Introduction, electron emission, photoelectric effect, experimental study of photoelectric effect, photoelectric effect and wave theory of light Einstein's photoelectric equation, energy quantum of radiation, particle nature of light the photons.
108	Physics Daily Test-34	Dual Nature of Radiation and Matter:- Wave nature of matter, Davisson and Germer Experiment.
109	Physics Daily Test-35	Atoms:- Introduction, alpha particle scattering and Rutherford's nuclear model of atom, Atomic spectra, Bohr model of the hydrogen atom, the line spectra of the hydrogen atom, de Broglie's explanation of Bohr's second postulate quantization.
110	Physics Daily Test-36	Nuclei:- Introduction, Atomic masses and composition of nucleus, size of the nucleus, Mass energy and nuclear binding energy, Nuclear force, Radioactivity, Nuclear energy.
111	Physics Daily Test-37	Semiconductor:- Introduction, Classification of metals conductors and semiconductors, Intrinsic semiconductor, Extrinsic semiconductors P - N, semiconductor diode.
112	Physics Daily Test-38	Semiconductor:- Application of junction diode as a rectifier special purpose P-N junction diodes.







AIATS SCHEDULE FOR Repeater Students (XII Passed) 2024-25)

AIATS Test No.	Test Date	Date of Display of Answer Key	Result Date	Subject	Topics
Practice Test-1	20.10.2024	NA	Practice Test Results can be viewed after submission of Test	Phy.	Units & Measurements, Motion in a Straight Line , Motion in a Plane
				Chem.	Some basic concepts of chemistry, Structure of Atom
				Bio.	Cell: the Unit of Life, Cell Cycle and Cell Division, The living world, Structural Organisation in Animals–Animal Tissues, Biomolecules
1.	27.10.2024	29.10.2024	01.11.2024	Phy.	Units & Measurements, Motion in a Straight Line , Motion in a Plane
				Chem.	Some Basic Concepts of Chemistry, Structure of Atom
				Bio.	Cell: The Unit of Life, Cell Cycle and Cell Division, The living world, Structural Organisation in Animals–Animal Tissues, Biomolecules
2.	24.11.2024	26.11.2024	29.11.2024	Phy.	Laws of Motion; Work, Energy and Power
				Chem.	Classification of elements and periodicity in properties, Chemical bonding and molecular structure
				Bio.	Biological Classification, Morphology of Flowering Plants Breathing & Exchange of Gases, Body Fluids & Circulation
3.	22.12.2024	24.12.2024	27.12.2024	Phy.	System of Particles and Rotational Motion, Gravitation, Mechanical Properties of Solids, Mechanical Properties of Fluids
				Chem.	Thermodynamics, Equilibrium, Redox Reactions, Electrochemistry
				Bio.	Anatomy of Flowering Plants, Plant Kingdom, Excretory Products & their Elimination, Locomotion & Movement, Neural Control & Coordination
4.	19.01.2025	21.01.2025	24.01.2025	Phy.	Thermal Properties of Matter, Thermodynamics, Kinetic Theory, Oscillations, Waves
				Chem.	Solutions, Chemical Kinetics, Organic Chemistry- Some Basic Principles and Techniques
				Bio.	Photosynthesis in higher plants, Respiration in plants, Plant Growth and Development, Chemical Coordination & Integration, Animal Kingdom, Structural Organisation in Animals–Animal Morphology (Cockroach, Frog, Earthworm)
5.	09.02.2025	11.02.2025	14.02.2025	Phy.	Electric Charges & Fields, Electrostatic Potential and Capacitance, Current Electricity
				Chem.	Hydrocarbons, Haloalkanes and Haloarenes, Alcohols, Phenols and Ethers, Aldehydes, Ketones and Carboxylic Acids
				Bio.	Sexual reproduction in flowering plants, Principles of Inheritance & Variation, Human Reproduction, Reproductive Health



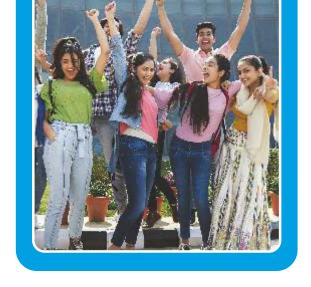


AIATS SCHEDULE FOR Repeater Students (XII Passed) 2024-25)

Phy. Moving Charges and Magnetism, Magnetism and Electromagnetic Induction, Alternating Current, Electromagnetic Waves Chem. Amines, The d & f-Block Elements, Coordination C Bio. Molecular basis of inheritance, Microbes in hu Evolution, Human Health & Disease Phy. Ray Optics & Optical Instruments, Wave optics, D Matter and Radiation; Atoms, Nuclei; Sem Experimental Skills The p-Block Elements, Biomolecules, Principle Practical Chemistry	
Bio. Molecular basis of inheritance, Microbes in hu Evolution, Human Health & Disease Ray Optics & Optical Instruments, Wave optics, D Matter and Radiation; Atoms, Nuclei; Sem Experimental Skills Chem. The p-Block Elements, Biomolecules, Principle	Matter,
Phy. Ray Optics & Optical Instruments, Wave optics, D Matter and Radiation; Atoms, Nuclei; Sem Experimental Skills Chem. The p-Block Elements, Biomolecules, Principle	ompounds
Phy. Matter and Radiation; Atoms, Nuclei; Sem Experimental Skills Chem. The p-Block Elements, Biomolecules, Principle	nan welfare,
7. 23.03.2025 25.03.2025 28.03.2025 Practical Chemistry	Related to
Organisms and Populations, Ecosystem, Biod Bio. conservation, Biotechnology-Principles and Biotechnology and its Applications	
8. 06.04.2025 08.04.2025 11.04.2025 PCB Open Mock Test on Complete Syllabus of NEET-	025
9. 13.04.2025 15.04.2025 18.04.2025 PCB Open Mock Test on Complete Syllabus of NEET-	025
10. 20.04.2025 22.04.2025 25.04.2025 PCB Open Mock Test on Complete Syllabus of NEET-	025
11. 27.04.2025 29.04.2025 02.05.2025 PCB Open Mock Test on Complete Syllabus of NEET-	025

Test Duration: 200 Minutes









Summary for Class XI & XII

JOINT PACKAGE Year Syllabus Class XI & XII **AIATS** 12 **Unit Tests** 11 **Part Tests** 4 **Cumulative Tests** 2 **Full Syllabus Tests** 7 No. of Books **17 NCERT PracticeTests** 269

