

VIBRANT All India Test Series(VAITS) for Pre-Medical-XI-(Target : NEET(UG)2022)

| S.No. | Test Name & Dates | Physics | Chemistry | Botany | Zoology |
|-------|---------------------------|--|---|--|--|
| 1 | PT-1 (NEET) 19-07-2020 | Mathematical Tools, Rectilinear Motion (Distance, displacement, Velocity, Average velocity, Average acceleration, Motion with uniform acceleration Graphs, Motion under gravity with graphs) | Atomic Structure IUPAC Nomenclature (Introduction of Organic Compounds, Hybridisation in carbon compounds, tetravalency of carbon, Bonding in organic compounds (Sigma and pi bonds), Structural representation of Organic Compounds, Some important definitions, Nomenclature of Alkane /Alkene/ Alkyne, Nomenclature of Cyclic Compounds, common naming of aliphatic compounds (iso, neo, etc.), Nomenclature of Organic Compounds with non chain Terminating functional group, (Ketone, Sulphonic acid, Alcohol), Nomenclature of Organic Compounds with non chain Terminating functional group, (All) two or more than two functional groups of same and different type) | Cell Biology (Cell : The Unit of life - Introduction, Cell Theory, Types of Cell, Structure of Prokaryotic cell, Cell wall, Cell membrane, Functions of cell membrane, Cell organelles - Plastids, Mitochondria) | Animal Kingdom – General Account & Non chordates (General Account, Basis of classification, Porifera, Cnidaria, Ctenophora, Platyhelminthes, Aschelminthes, Annelida) |
| 2 | PT-2 (NEET) 16-08-2020 | Mathematical Tools, Rectilinear Motion, Projectile Motion, Relative Motion, Newton's law of Motion (NLM) (NLM 1st, 2nd, 3rd Law (Action Reaction), Free Body Diagrams) | Atomic Structure, Mole concept IUPAC Nomenclature | Cell Biology (Cell : The Unit of life - Introduction, Cell Theory, Types of Cell, Structure of Prokaryotic cell, Cell wall, Cell membrane, Functions of cell membrane, Cell organelles - Plastids, Mitochondria, Endomembrane system- (Endoplasmic reticulum), Golgi body, Lysosome, Ribosome, Centriole, Microbodies, Cytoskeleton structure (Cilia & Flagella), Nucleus, Chromosome) | Animal Kingdom – General Account & Non chordates (General Account, Basis of classification, Porifera, Cnidaria, Ctenophora, Platyhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca, Echinodermata, Hemichordata) |

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| 3 | PT-3 (NEET) 13-09-2020 | NLM, Friction, Work, Power & Energy (WPE)(Definition of work & Calculation of work by constant force, W.D. By variable force, area under graph Spring force & work done by spring force, Kinetic energy & work energy Theorem) | Mole Concept | Basic Inorganic Nomenclature, Periodic table and properties | Cell Biology, Plant Diversity (Biological Classification) (Biological Classification-Introduction, Kingdom Monera) | Animal Kingdom – Chordates (Protochordata, Pisces, Amphibia, Reptilia, Aves, Mammalia, protozoa) |
| 4 | PT-4 (NEET) 04-10-2020 | Mathematical Tools, Rectilinear Motion, Projectile Motion, Relative Motion, NLM, Friction, WPE, Circular Motion, Centre of Mass (COM) (Calculation of COM of system of N particles, COM of continuous distributed mass, Ring, disc, sphere, Cavity concept (Negative Mass concept), Motion of COM, Linear momentum conservation) | Atomic Structure, Mole Concept & Gaseous State | Basic Inorganic Nomenclature, Periodic table and properties, Chemical Bonding (Types of bonding (Definitions of Ionic bond Covalent bond and Metallic bond), Octet rule, Limitations of octet rule, VBT, bond, Formal charge, Writing the lewis dot structure, Writing resonating structures, finding average bond order, Stability of resonating structures, Finding bond order in oxoanions and their acids, VBT, overlapping of orbital) | Plant Diversity (Biological Classification), Plant Kingdom | Animal Kingdom, Biomolecules |
| 5 | PT-5 (NEET) 25-10-2020 | Circular Motion, COM, Rigid Body Dynamics (RBD) (Definition and types of motion, Moment of Inertia, Moment of Inertia of continuous system, Theorems, Radius of gyration, Torque, point of application of force, Equilibrium, Rotation about fixed axis, Derivation of $\tau = I\alpha$, Angular momentum, Angular momentum conservation) | Thermodynamics, Gaseous State | Chemical Bonding (VSEPR, hybridisation) | Plant Kingdom, Plant Morphology (Root, Stem, Leaves) | Digestion and Absorption, Body Fluids & Circulation (Blood, Blood groups, Blood clotting) |

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| 6 | PT-6 (NEET) 29-11-2020 | Mathematical Tools, Rectilinear Motion, Projectile Motion, Relative Motion, NLM, Friction, WPE, Circular Motion, COM, RBD, Simple Harmonic Motion (SHM) | Atomic Structure, Mole Concept & Gaseous State, Thermodyna | Nomenclature of Organic compounds, VBT, MOT and hydrogen bonding, Structural Isomerism | Plant Kingdom, Plant Morphology (Root, Stem, Leaves, Inflorescence, Flower - Calyx, Corolla, Androecium, Gynoecium, Fruits) | Animal Kingdom, Biomolecules, Digestion and Absorption, Body Fluids and Circulation |
| 7 | PT-7 (NEET) 06-12-2020 | RBD, SHM, KTG & Thermodynamics (Ideal gas, various laws, Maxwell's law, internal energy, first law of thermodynamics, various processes, Cal. of w, Du, Q for various processes, Graphs, Cyclic process, efficiency, Free Expansion, specific heats, Examples on first Law of thermodynamics) | Thermodynamics, Chemical Equilibrium | Inductive effect, resonance, hyperconjugation | Plant Morphology, Plant Anatomy (Plant Tissues - Meristematic Tissue, Complex tissue - Phloem and xylem) | Excretory Products and their Elimination |

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| 8 | PT-8 (NEET) 13-12-2020 | Mathematical Tools, Rectilinear Motion, Projectile Motion, Relative Motion, NLM, Friction, WPE, Circular Motion, COM, RBD, SHM, KTG & Thermodynamics, Calorimetry and thermal expansion, String Wave (Definition, equation of pulse, travelling wave, Speed in string wave, Power, Intensity Superposition, Reflection, Interference) | Atomic Structure, Mole Concept, Gaseous State, Thermodynamics, Chemical Equilibrium & Ionic Equilibrium | Nomenclature of Organic compounds, VBT, MOT, and hydrogen bonding, Structural isomerism, Inductive effect, resonance, hyper conjugation, aromaticity, Application of Electronic Effect (Electron displacement in Organic Compounds(Inductive & Resonance Effect) ,Resonance and identification of delocalisation of electron, Resonance & Mesomeric Effect,Formation of Resonating structure and their stability,Resonance & Mesomeric Effect and its application, Hyperconjugation & Electromeric Effect, Determination of Aromaticity, Bond Fission, Reaction intermediates(carbocation, carbanion, Free Radical) and their stability,Rearrangement of carbocation,Acidic Strength(Acidity of Alcohol, Phenol,Acidity of Carboxylic Acids, benzoic acids ortho effect) | Plant Morphology , Plant Anatomy | Animal Kingdom,Biomolecules,Digestion and Absorption,Body Fluids and Circulation,Excretory Products and their Elimination,Locomotion and Movement |
| 9 | PT-9 (NEET) 20-12-2020 | Calorimetry and Thermal Expansion, String Wave, Sound Wave, Fluid Mechanics | Ionic Equilibrium, Redox Reactions, s-Block | Basic Strength tautomerism, Hydrocarbon (Alkane) | Plant Physiology-II (Photosynthesis, Respiration(Respiration-Introduction, Glycolysis, Link reaction,Kreb's cycle) | Neural Control and Coordination |

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| 10 | PT-10 (NEET) 27-12-2020 | NLM, Friction, WPE, Circular Motion, Centre of Mass, Rigid Body Dynamics, SHM, KTG & Thermodynamics, Calorimetry & Thermal Expansion, String Waves, Sound waves, Fluid Mechanics, ELASTICITY AND VISCOSITY, Surface Tension, Unit & Dimension | Atomic Structure, Mole Concept, Gaseous State, Thermodynamics, Chemical Equilibrium, Ionic Equilibrium, Redox Reactions, s-Block | Nomenclature of Organic compounds, VBT, MOT and hydrogen bonding, Structural isomerism, Inductive effect, resonance, hyperconjugation, aromaticity, Application of Electronic Effect, Hydrocarbon (Alkane, Alkene) | Cell Biology, Plant Physiology-II (Photosynthesis, Respiration), Plant Physiology-I (Transport in plants) | Animal Kingdom, Biomolecules, Digestion and absorption, Body Fluids and Circulation, Excretory products and their Elimination, Locomotion and Movement, Neural Control and Coordination, Chemical Coordination and Integration, Structural Organisation in Animals |
| 11 | FST-1 (NEET) 03-01-2021 | Full Syllabus | Full Syllabus | Full Syllabus | Full Syllabus | Full Syllabus |
| 12 | FST-2 (NEET) 10-01-2021 | Full Syllabus | Full Syllabus | Full Syllabus | Full Syllabus | Full Syllabus |
| • PT: Part Test • FST: Full Syllabus Test | | | | | | |