TEST NUMBER	TEST DATE	PHYSICS	CHEMISTRY	BIOLOGY	TEST PATTERN
11	03/12/2017	Syllabus of Test # 8, 9 & 10	Syllabus of Test # 8, 9 & 10	Syllabus of Test # 8, 9 & 10	NEET-UG Quarter Syllabus Test
12	17/12/2017	GRAVITATION : The universal law of gravitation(Newton's law of Gravitation), Gravitational Field and its Intensity, Brief idea about Inertial and Gravitational mass, Acceleration due to gravity and its variation with altitude and depth. Idea about variation in g due to Shape and Rotation of earth, Gravitational potential energy and gravitational potential, Kepler's laws of planetary motion (The law of orbits, Areas and Periods), Motion of Planets and Satellites in Circular orbits ,Orbital velocity of a satellite, Total Energy and Binding Energy of a satellite, Escape velocity and escape energy, Geostationary satellites, Idea about of polar satellites, Weightlessness. OSCILLATIONS : (SHM, damped and forced oscillations& Resonance) Periodic (harmonic) motion and Oscillatory motion, Periodic motion-period, frequency, displacement as a function of time, Periodic functions, Simple harmonic motion (SHM) and its equation; Velocity, Acceleration and Phase, Oscillations of a spring-restoring force and force constant. Equivalent spring constant of Series and parallel combinations, Energy in SHM – Kinetic and Potential energies, Simple pendulum-derivation of expression for its time period, Superposition of two SHMs of Same Frequency in the same direction, Free, forced and damped oscillations (qualitative ideas only), resonance. Modern Physics : Photoelectric effect(Hertz observation, Hallwach's and Lenard's observations,Einstein's photoelectric equation- particle nature of light (photon),Matter waves(Wave nature of particles, de Broglie relation, Davisson-Germer experiment (experimental details should be omitted; only conclusion should be explained),Atoms(Alpha- particle scattering experiments; Rutherford's model of atom,Bohr model, energy levels, hydrogen spectrum),X-rays and their elementary idea, Nuclei(Composition and size of nucleus,Atomic masses, Isotopes, isobars, isotones and isodiapheres, Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, Nuclear fission and fusion, Nuclear reactor, Nuclear Force and its properties, Radioactivity (Law of Radioactive decay, Alpha decay, Beta decay, Gamma decay)	Alcohols, Phenols and Ethers : Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only); identification of primary, secondary and tertiary alcohols; mechanism of dehydration, uses with special reference to methanol and ethanol. Some commercially important alcohols. Phenols : Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophillic substitution reactions, uses of phenols. Ethers : Nomenclature, methods of preparation, physical and chemical properties, uses. Aldehydes, Ketones and Carboxylic Acids : Aldehydes and Ketones : Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties; and mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes; uses. Carboxylic Acids : Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses. ENVIRONMENTAL CHEMISTRY : Environmental pollution: Air, water and soil pollution, chemical reactions in atmosphere, smogs, major atmospheric pollutants; acid rain ozone and its reactions, effects of depletion of ozone layer, greenhouse effect and global warming-pollution due to industrial wastes; green chemistry as an alternative tool for reducing pollution, strategy for control of environmental pollution.	Ecology and environment & Demography : Organisms and environment: Habitat and niche; Population and ecological adaptations; Population interactions-mutualism, competition, predation, parasitism; Population attributes-growth, birth rate and death rate, age distribution (Demography). Ecosystem: Patterns, components; productivity and decomposition; Energy flow; Pyramids of number, biomass, energy; Nutrient cycling (carbon and phosphorous); Ecological succession; Ecological Services-Carbon fixation, pollination, oxygen release. Biodiversity and its Conservation : Concept of Biodiversity; Patterns of Biodiversity; Importance of Biodiversity; Loss of Biodiversity; Biodiversity conservation; Hotspots, endangered organisms, extinction, Red Data Book, biosphere reserves, National parks and sanctuaries. Environmental Issues : Air pollution and its control; Water pollution and its control; Agrochemicals and their effects; Solid waste management; Radioactive waste management; Greenhouse effect and global warming; Ozone depletion; Deforestation; Any three case studies as success stories addressing environmental issues.	NEET-UG
13	31/12/2017	WAVE MOTION AND DOPPLER'S EFFECT : Wave motion, Mechanical Waves, Longitudinal and transverse waves, Equation of Plane Progressive waves, Velocity of Transverse mechanical waves, Intensity of waves , Sound waves: Audible, Infrasonic and Ultrasonic waves , Speed of sound waves: Newton's formula and Laplace correction, Effect of temperature, Pressure and Humidity on speed of Sound waves , Some idea about description of sound waves as Displacement and Pressure waves, Characteristics of sound waves: Pitch, Loudness and Quality, Reflection and transmission of waves & Echo , Principle of superposition of waves, Interference and Beats, Stationary waves, Standing waves in strings and organ pipes, fundamental mode and harmonics.	Organic Compounds Containing Nitrogen : Amines : Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines. Cyanides and Isocyanides - will be mentioned at relevant places. Diazonium salts : Preparation, chemical reactions and importance in synthetic organic chemistry. Polymers : Classification - Natural and synthetic, Molecular mass of polymers, methods of polymerization (addition and condensation), co-polymerization. Some important polymers: natural and synthetic like polyesters, bakelite; rubber, Biodegradable and non-biodegradable polymers. Polymers of commercial importance.	Human Physiology-II : Locomotion and Movement: Types of movement- ciliary, flagellar, muscular; Skeletal muscle-contractile proteins and muscle contraction; Skeletal system and its functions (To be dealt with the relevant practical of Practical syllabus); Joints; Disorders of muscular and skeletal system-Myasthenia gravis, Tetany, Muscular dystrophy, Arthritis, Osteoporosis, Gout. Neural Control and Coordination : Neuron and nerves; Nervous system in humans- central nervous system, peripheral nervous system and visceral nervous system; Generation and conduction of nerve impulse; Reflex action; Sense organs; Elementary structure and function of eye and ear.	NEET-UG

TEST NUMBER	TEST DATE	PHYSICS	CHEMISTRY	BIOLOGY	TEST PATTERN
		Resonance tube , Doppler Effect in Sound waves and Light Waves. Semiconductor and Digital Electronics : Classification of Metals, Conductors and Semi-conductors on the basis of(Conductivity, Energy bands in solids (qualitative ideas only),Intrinsic Semi-conductor,Extrinsic Semi-conductor (n-type and p-type),p-n Junction: p-n junction formation, Barrier potential, Semiconductor diode: I-V characteristics in forward and reverse bias, Application of Junction Diode as a Rectifier and Filter(only qualitative idea),Special purpose p-n junction diodes and their I-V characteristics(LED,Photodiode,Solar cell, Zener diode),Junction Breakdown: Zener and Avalanche breakdown, Zener diode as a voltage regulator, Junction Transistor(n-p-n and p-n-p Transistor structure and action, Characteristics of a transistor, Transistor as an amplifier (common emitter configuration),Transistor as a switch(i.e. ON and OFF), Transistor as a oscillator with feedback effects), Digital Electronics and Logic gates(Law of Boolean algebra, De Morgan's Theorem, Basic Logic gates(OR gate, AND gate, NOT gate)(Combination of gates(NAND gate, NOR gate) Brief Idea about IC's. Principals of Communications : Basic Components of a Communication System, Analog and Digital Communications, Bandwidth of Signals, Bandwidth of Transmission Medium, Propagation of Electromagnetic Waves: Ground Wave, Sky Wave & Space Wave, Modulation and its Necessity, Amplitude Modulation: Modulation Factor, Sideband Frequencies, Production of Amplitude Modulated Wave, Detection of Amplitude Modulated Wave, Power in AM wave, Brief idea about Frequency Modulation	Biomolecules : Carbohydrates - Classification (aldoses and ketoses), monosaccharide (glucose and fructose), D.L. configuration, oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen): importance. Proteins - Elementary idea of – amino acids, peptide bond, polypeptides, proteins, primary structure, secondary structure, tertiary structure and quaternary structure (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea (excluding structure). Vitamins - Classification and function. Nucleic Acids : DNA and RNA. Chemistry in Everyday Life : Chemicals in medicines (Drugs) - analgesics, tranquilizers, antiseptics, disinfectants, antimicrobials, antifertility drugs, antibiotics, antacids, antihistamines. Chemicals in food- preservatives, artificial sweetening agents, elementary idea of antioxidants. Cleansing agents- soaps and detergents, cleansing action. Methods of purification qualitative and quantitative analysis STATES OF MATTER : Gases and Liquids : Three states of matter, intermolecular interactions, types of bonding, melting and boiling points, role of gas laws of elucidating the concept of the molecule, Boyle's law, Charle's law, Gay Lussac's law, Avogadro's law, ideal behaviour of gases, empirical derivation of gas equation. Avogadro number, ideal gas equation. Kinetic energy and molecular speeds (elementary idea), deviation from ideal behaviour, liquefaction of gases, critical temperature. LIQUID STATE : Vapour pressure, viscosity and surface tension (qualitative idea only, no mathematical derivations).	Chemical Coordination and Regulation : Endocrine glands and hormones; Human endocrine system-Hypothalamus, Pituitary, Pineal, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads; Mechanism of hormone action (Elementary Idea); Role of hormones as messengers and regulators, Hypo-and hyperactivity and related disorders (Common disorders e.g. Dwarfism, Acromegaly, Cretinism, goiter, exopthalmic goiter, diabetes, Addison's disease).	
14	14/01/2018	Syllabus of Test # 8, 9, 10, 12 & 13	Syllabus of Test # 8, 9, 10, 12 & 13	Syllabus of Test # 8, 9, 10, 12 & 13	NEET-UG Half Syllabus Test
15	04/02/2018	Full Syllabus	Full Syllabus	Full Syllabus	NEET-UG
16	18/02/2018	Full Syllabus	Full Syllabus	Full Syllabus	All India Online Open Test NEET-UG 10:00 AM to 01:00 PM
17	04/03/2018	BASIC MATHEMATICS USED IN PHYSICS : ALGEBRA: Quadratic Equation (Roots of quadratic equation. Solution by Factorization and by Shridharacharya Formula, Properties of roots (real, equal, imaginary etc). Application of Quadratic equation in physics), Binomial Theorem and binomial approximation, Logarithm and Exponents (Laws of logarithms and exponents with applications / examples), Series (Arithmetic Progression and its general term and Sum, Sum of first n Natural numbers, Geometrical Progression and its general term and Sum, Sum of infinite GP), Componendo & Dividendo rule. TRIGONOMETRY: Angle & its measurement (Sexagesimal and Circular system), Trigonometric-ratios, Trigonometric identities , Four Quadrants & ASTC rule, T-ratios for general angles, Addition/subtraction Formulae, Small angle Approximation, Ranges ofT-functions.	STRUCTURE OF ATOM: Atomic number, isotopes and isobars. Concept of shells and subshells, dual nature of matter and light, de Broglie's relationship, Heisenberg uncertainty principle, concept of orbital, quantum numbers, shapes of s, p and d orbitals, rules for filling electrons in orbitals- Aufbau principle, Pauli exclusion principles and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals. CLASSIFICATION OF ELEMENTS AND PERIODICITY IN PROPERTIES: Why do we need to classify elements, Genesis of periodic classification. Modern periodic law and long form of periodic table. Nomenclature of elements with atomic number > 100, Electronic configuration of elements and types of elements, periodic trends in properties of elements- atomic radii,	Structural Organization in Plants : Morphology and modifications; Tissues; Anatomy and functions of different parts of flowering plants: Root, stem, leaf, inflorescence-cymose and recemose, flower, fruit and seed (To be deal along with the relevant practical of the Practical Syllabus). DIVERSITY IN LIVING WORLD: What is living?; Biodiversity; Need for classification; Three domains of life; Taxonomy & Systematics; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy -Museums, Zoos, Herbaria, Botanical gardens. Plant Diversity : Five kingdom classification; salient features and classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids. Prokaryotic Cell (Bacteria) Salient features and classification of plants into major groups-	NEET-UG