

**Chapter 1 : NEET Pattern, Syllabus and Exam Schedule**

*NEET Syllabus: Candidate those desire to be a doctor and preparing for the NEET to crack as you know National Eligibility cum Entrance Test or NEET is a qualifying cum entrance exam.*

Electromagnetic waves and their characteristics qualitative ideas only. Transverse nature of electromagnetic waves. Electromagnetic spectrum radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays including elementary facts about their uses. Optics Reflection of light, spherical mirrors, mirror formula. Magnification, power of a lens, combination of thin lenses in contact combination of a lens and a mirror. Refraction and dispersion of light through a prism. Scattering of light- blue colour of the sky and reddish appearance of the sun at sunrise and sunset. Human eye, image formation and accommodation, correction of eye defects myopia and hypermetropia using lenses. Microscopes and astronomical telescopes reflecting and refracting and their magnifying powers. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Matter waves- wave nature of particles, de Broglie relation. Davisson-Germer experiment experimental details should be omitted; only conclusion should be explained. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, nuclear fission and fusion. Electronic Devices Energy bands in solids qualitative ideas only , conductors, insulators and semiconductors; semiconductor diode- I-V characteristics in forward and reverse bias, diode as a rectifier; I-V characteristics of LED, photodiode, solar cell, and Zener diode; Zener diode as a voltage regulator. Junction transistor, transistor action, characteristics of a transistor; transistor as an amplifier common emitter configuration and oscillator. Transistor as a switch. Important and scope of chemistry. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry. Structure of Atom Atomic number, isotopes and isobars. Classification of Elements and Periodicity in Properties Modern periodic law and long form of periodic table, periodic trends in properties of elements- atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity, valence. Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, valence bond theory, resonance, geometry of molecules, VSEPR theory, concept of hybridization involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules qualitative idea only. 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. Introduction of entropy as state function, Second law of thermodynamics, Gibbs energy change for spontaneous and non-spontaneous process, criteria for equilibrium and spontaneity. Third law of thermodynamics- Brief introduction. Redox Reactions Concept of oxidation and reduction, redox reactions oxidation number, balancing redox reactions in terms of loss and gain of electron and change in oxidation numbers. Hydrogen Occurrence, isotopes, preparation, properties and uses of hydrogen; hydrides- ionic, covalent and interstitial; physical and chemical properties of water, heavy water; hydrogen peroxide-preparation, reactions, uses and structure; UNIT X: General introduction, electronic configuration, occurrence, anomalous properties of the first element of each group, diagonal relationship, trends in the variation of properties such as ionization enthalpy, atomic and ionic radii , trends in chemical reactivity with oxygen, water, hydrogen and halogens; uses. Preparation and Properties of Some important Compounds: Sodium carbonate, sodium chloride, sodium hydroxide and sodium hydrogencarbonate, biological importance of sodium and potassium. Industrial use of lime and limestone, biological importance of Mg and Ca. General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of first element of the group; Boron, some important compounds: General introduction, electronic configuration, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous behaviour of first element. Carbon, allotropic forms, physical and chemical properties: Important compounds of silicon and a few uses: Electronic

displacements in a covalent bond: Homolytic and heterolytic fission of a covalent bond: Hydrocarbons Alkanes- Nomenclature, isomerism, conformations ethane only , physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis. Alkanes-Nomenclature, structure of double bond ethene , geometrical isomerism, physical properties, methods of preparation: Alkynes-Nomenclature, structure of triple bond ethyne , physical properties, methods of preparation, chemical reactions: 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. Solid State Classification of solids based on different binding forces; molecular, ionic covalent and metallic solids, amorphous and crystalline solids elementary idea , unit cell in two dimensional and three dimensional lattices, calculation of density of unit cell, packing in solids, packing efficiency, voids, number of atoms per unit cell in a cubic unit cell, point defects, electrical and magnetic properties, Band theory of metals, conductors, semiconductors and insulators. Chemical Kinetics Rate of a reaction average and instantaneous , factors affecting rates of reaction; concentration, temperature, catalyst; order and molecularity of a reaction; rate law and specific rate constant, integrated rate equations and half life only for zero and first order reactions ; concept of collision theory elementary idea, no mathematical treatment. Activation energy, Arrhenius equation. Surface Chemistry Adsorption- physisorption and chemisorption; factors affecting adsorption of gases on solids, catalysis homogeneous and heterogeneous, activity and selectivity: General Principles and Processes of Isolation of Elements Principles and methods of extraction- concentration, oxidation, reduction electrolytic method and refining; occurrence and principles of extraction of aluminium, copper, zinc and iron. General introduction, electronic configuration, occurrence, oxidation states, trends in physical and chemical properties; preparation and properties of ammonia and nitric acid, oxides of nitrogen structure only ; Phosphorous- allotropic forms; compounds of phosphorous: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; dioxygen: Sulphur  $\hat{\text{e}}$  allotropic forms; compounds of sulphur: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens: General introduction, electronic configuration, occurrence, trends in physical and chemical properties, uses. Lanthanoids- electronic configuration, oxidation states, chemical reactivity, and lanthanoid contraction and its consequences. Electronic configuration, oxidation states and comparison with lanthanoids. Coordination Compounds Coordination compounds: Haloalkanes and Haloarenes Haloalkanes: Nomenclature, nature of C  $\hat{\text{e}}$ X bond, physical and chemical properties, mechanism of substitution reactions. Nature of C-X bond, substitution reactions directive influence of halogen for monosubstituted compounds only. Uses and environment effects of  $\hat{\text{e}}$  dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT. 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. Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Nomenclature, methods of preparation, physical and chemical properties uses. Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties; and mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes; uses. Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses. 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. Preparation, chemical reactions and importance in synthetic organic chemistry. Biomolecules Carbohydrates- Classification aldoses and ketoses , monosaccharide glucose and fructose , D. Proteins- Elementary idea of  $\hat{\text{e}}$  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. Polymers Classification- Natural and synthetic, methods of

polymerization addition and condensation , copolymerization. Chemistry in Everyday Life Chemicals in medicines- 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. Diversity in Living World What is living? Five kingdom classification; salient features and classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids. Salient features and classification of plants into major groups-Algae, Bryophytes, Pteridophytes, Gymnosperms and Angiosperms three to five salient and distinguishing features and at least two examples of each category ; Angiosperms- classification up to class, characteristic features and examples. Salient features and classification of animals-nonchordate up to phyla level and chordate up to classes level three to five salient features and at least two examples. Structural Organisation in Animals and Plants Morphology and modifications; Tissues; Anatomy and functions of different parts of flowering plants: Root, stem, leaf, inflorescence- cymose and racemose, flower, fruit and seed To be dealt along with the relevant practical of the Practical Syllabus. Animal tissues; Morphology, anatomy and functions of different systems digestive, circulatory, respiratory, nervous and reproductive of an insect cockroach. Cell Structure and Function Cell theory and cell as the basic unit of life; Structure of prokaryotic and eukaryotic cell; Plant cell and animal cell; Cell envelope, cell membrane, cell wall; Cell organelles-structure and function; Endomembrane system-endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles; mitochondria, ribosomes, plastids, micro bodies; Cytoskeleton, cilia, flagella, centrioles ultra structure and function ; Nucleus-nuclear membrane, chromatin, nucleolus. Chemical constituents of living cells: Biomolecules-structure and function of proteins, carbohydrates, lipids, nucleic acids; Enzymes-types, properties, enzyme action. Cell cycle, mitosis, meiosis and their significance. Plant Physiology Transport in plants: Movement of water, gases and nutrients; Cell to cell transport-Diffusion, facilitated diffusion, active transport; Plant " water relations" Imbibition, water potential, osmosis, plasmolysis; Long distance transport of water " Absorption, apoplast, symplast, transpiration pull, root pressure and guttation; Transpiration-Opening and closing of stomata; Uptake and translocation of mineral nutrients-Transport of food, phloem transport, Mass flow hypothesis; Diffusion of gases brief mention. Essential minerals, macro and micronutrients and their role; Deficiency symptoms; Mineral toxicity; Elementary idea of Hydroponics as a method to study mineral nutrition; Nitrogen metabolism-Nitrogen cycle, biological nitrogen fixation. Photosynthesis as a means of Autotrophic nutrition; Site of photosynthesis take place; pigments involved in Photosynthesis Elementary idea ; Photochemical and biosynthetic phases of photosynthesis; Cyclic and non cyclic and photophosphorylation; Chemiosmotic hypothesis; Photorespiration C<sub>3</sub> and C<sub>4</sub> pathways; Factors affecting photosynthesis. Exchange gases; Cellular respiration-glycolysis, fermentation anaerobic , TCA cycle and electron transport system aerobic ; Energy relations- Number of ATP molecules generated; Amphibolic pathways; Respiratory quotient. Plant growth and development: Seed germination; Phases of Plant growth and plant growth rate; Conditions of growth; Differentiation, dedifferentiation and redifferentiation; Sequence of developmental process in a plant cell; Growth regulators-auxin,gibberellin, cytokinin, ethylene, ABA; Seed dormancy; Vernalisation; Photoperiodism.

**Chapter 2 : NEET Syllabus - Full Details, Subject wise syllabus**

*NEET Syllabus Have to applied for the NEET examination and now looking for the NEET syllabus? Well, we will give you the list of syllabus for the NEET The NEET examination is going to held in the month of May*

The detailed information on the NEET syllabus is given below: Physical world and measurement Physics: Scope and excitement; nature of physical laws; Physics, technology, and society. Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement; significant figures. Kinematics A frame of reference, Motion in a straight line; Position-time graph, speed, and velocity. Uniform and non-uniform motion, average speed and instantaneous velocity. Uniformly accelerated motion, velocity-time, and position-time graphs, for uniformly accelerated motion graphical treatment. Elementary concepts of differentiation and integration for describing motion. Scalar and vector quantities: Position and displacement vectors, general vectors, general vectors and notation, equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors. Resolution of a vector in a plane-rectangular component. Scalar and Vector products of Vectors. Motion in a plane. Cases of uniform velocity and uniform acceleration-projectile motion. Laws of Motion Intuitive concept of force. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces. Static and Kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion. Centripetal force, examples of circular motion vehicle on the level circular road, vehicle on banked road. Notion of potential energy, the potential energy of a spring, conservative forces; conservation of mechanical energy kinetic and potential energies ; non-conservative forces; motion in a vertical circle, elastic and inelastic collisions in one and two dimensions. Motion of System of Particles and Rigid Body Centre of mass of a two-particle system, momentum conservation and center of mass motion. Centre of a mass of a rigid body; center of mass of uniform rod. Moment of a force,-torque, angular momentum, conservation of angular momentum with some examples. Equilibrium of rigid bodies, rigid body rotation, and equation of rotational motion, comparison of linear and rotational motions; moment of inertia, radius of gyration. Statement of parallel and perpendicular axes theorems and their applications. The universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy; gravitational potential. Escape velocity, orbital velocity of a satellite. Properties of Bulk Matter Elastic behavior, Stress-strain relationship. Surface energy and surface tension, angle of contact, excess of pressure, application of surface tension ideas to drops, bubbles and capillary rise. Heat, temperature, thermal expansion; thermal expansion of solids, liquids, and gases.  $C_p$ ,  $C_v$ - calorimetry; change of state "latent heat. Heat transfer-conduction and thermal conductivity, convection and radiation. Thermodynamics Thermal equilibrium and definition of temperature zeroth law of Thermodynamics. Heat, work and internal energy. First law of thermodynamics. Isothermal and adiabatic processes. The second law of the thermodynamics: Reversible and irreversible processes. Heat engines and refrigerators. Behaviour of Perfect Gas and Kinetic Theory Equation of state of a perfect gas, work done on compressing a gas. Kinetic theory of gases: Assumptions, concept of pressure. Kinetic energy and temperature; degrees of freedom, law of equipartition of energy statement only and application to specific heat capacities of gases; concept of mean free path. Oscillations and Waves Periodic motion-period, frequency, displacement as a function of time. Simple harmonic motion SHM and its equation; phase; oscillations of a spring-restoring force and force constant; energy in SHM "Kinetic and potential energies; simple pendulum-derivation of expression for its time period; free, forced and damped oscillations qualitative ideas only , resonance. Longitudinal and transverse waves, speed of wave motion. Displacement relation for a progressive wave. Principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics. Electrostatics Electric charges and their conservation. Electric field, electric field due to a point charge, electric field lines; electric dipole, electric field due to a dipole; torque on a dipole in a uniform electric field. Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges: Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and

electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor, Van de Graaff generator. Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors; temperature dependence of resistance. Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel. Wheatstone bridge, metre bridge. Potentiometer-principle and applications to measure potential difference, and for comparing emf of two cells; measurement of internal resistance of a cell. Biot-Savart law and its application to current carrying circular loop. Force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field. Force between two parallel current-carrying conductors-definition of ampere. Torque experienced by a current loop in a magnetic field; moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter. Current loop as a magnetic dipole and its magnetic dipole moment. Magnetic dipole moment of a revolving electron. Magnetic field intensity due to a magnetic dipole bar magnet along its axis and perpendicular to its axis. Para-, dia- and ferromagnetic substances, with examples. Electromagnetic and factors affecting their strengths. Self and mutual inductance. AC generator and transformer. Need for displacement current. Electromagnetic waves and their characteristics qualitative ideas only. Transverse nature of electromagnetic waves. Electromagnetic spectrum radio waves, microwaves, infrared, visible, ultraviolet, x-rays, gamma rays including elementary facts about their uses. Optics Reflection of light, spherical mirrors, mirror formula. Magnification, power of a lens, combination of thin lenses in contact combination of a lens and a mirror. Refraction and dispersion of light through a prism. Scattering of light- blue colour of the sky and reddish appearance of the sun at sunrise and sunset. Human eye, image formation and accommodation, correction of eye defects myopia and hypermetropia using lenses. Microscopes and astronomical telescopes reflecting and refracting and their magnifying powers. Diffraction due to a single slit, width of central maximum. Resolving power of microscopes and astronomical telescopes. Matter waves-wave nature of particles, de Broglie relation. Davisson-Germer experiment experimental details should be omitted; only conclusion should be explained. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, nuclear fission and fusion. Electronic Devices Energy bands in solids qualitative ideas only, conductors, insulators and semiconductors; semiconductor diode- I-V characteristics in forward and reverse bias, diode as a rectifier; I-V characteristics of LED, photodiode, solar cell, and Zener diode; Zener diode as a voltage regulator. Junction transistor, transistor action, characteristics of a transistor; transistor as an amplifier common emitter configuration and oscillator. Transistor as a switch. Important and scope of chemistry. Atomic and molecular masses. Mole concept and molar mass; percentage composition and empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry UNIT II: Structure of Atom Atomic number, isotopes and isobars. Classification of Elements and Periodicity in Properties Modern periodic law and long form of periodic table, periodic trends in properties of elements-atomic radii, ionic radii, ionization enthalpy, electron gain enthalpy, electronegativity, valence. Chemical Bonding and Molecular Structure Valence electrons, ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, valence bond theory, resonance, geometry of molecules, VSEPR theory, concept of hybridization involving s, p and d orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear diatomic molecules qualitative idea only. Avogadro number, ideal gas equation.

### Chapter 3 : NEET Notification Application Syllabus Exam Pattern

*NEET is a national level entrance examination which is administered by the CBSE board. NEET Exam pattern is different from previous papers of medical. It is organized for the medical aspirants to get admission in MBBS/BDS to any private/Government colleges.*

### Chapter 4 : NEET Syllabus PDF {CBSE NEET Exam Pattern} | New Neet Pattern

## DOWNLOAD PDF NEET 2017 SYLLABUS

*NEET Syllabus is comprises of Physics, Chemistry and Biology subjects. The National Testing Agency (NTA) organizes a national level entrance exam called as National Eligibility cum Entrance Test (NEET).*

### Chapter 5 : NEET Exam - Notification, Syllabus, Previous Question Paper & solutions - TN calendrierdelas

*NEET Biology Syllabus - Botany & Zoology. Hey NEET aspirants! Here we are bringing for you the list of syllabus of the Biology part. We will give you a separate list of each subject so that you can make it easy while preparing.*

### Chapter 6 : SarvGyan: Career Guidance Portal of India

*NEET Class XI Syllabus. Physics syllabus: (45 questions). Physical world and measurement, Kinematics, Laws of Motion, Work, Energy and Power, Motion of System of Particles and Rigid Body, Gravitation, Properties of Bulk Matter, Thermodynamics, Behaviour of Perfect Gas and Kinetic Theory, Oscillations and Waves.*

### Chapter 7 : NEET SYLLABUS - Physics/ Chemistry/ Biology

*NEET Syllabus contains Physical world and measurement, Laws of Motion, Kinematics, Work, Energy and Power, Motion of System of Particles and Rigid Body, Gravitation, Properties of Bulk Matter, Thermodynamics, Behaviour of Perfect Gas and Kinetic Theory, Oscillations and Waves.*

### Chapter 8 : NEET PG Syllabus and scheme of NEET PG exam | Exams & Results News, calendrierdelasc

*NEET Syllabus Pdf calendrierdelascience.comnts who are appearing or interested can go through the National Eligibility cum Entrance Test syllabus and exam pattern which helps for effective preparation.*

### Chapter 9 : NEET Syllabus | Biology, Physics, Chemistry Official Syllabus By CBSE

*NEET Syllabus for the Academic year is available here. Check National Eligibility Cum Entrance Test Exam Pattern to get admission into MBBS/BDS Courses in India in Medical/Dental Colleges. Download CBSE NEET Study Material for UG.*