

#### UNIT IX: 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.

#### UNIT X: Oscillations and Waves

- Periodic motion-period, frequency, displacement as a function of time. Periodic functions. 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.
- Wave motion. 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. Beats. Doppler effect.

### CONTENTS OF CLASS XII SYLLABUS

#### UNIT I: Electrostatics

- Electric charges and their conservation. Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution.
- 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 flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside)
- Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges: equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipoles in an electrostatic field.
- 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.

#### UNIT II: Current Electricity

- Electric current, flow of electric charges in a metallic conductor, drift velocity and mobility, and their relation with electric current; Ohm's law, electrical resistance,  $V-I$  characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity.
- 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.
- Kirchhoff's laws and simple applications. 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.

#### UNIT III: Magnetic Effects of Current and Magnetism

- Concept of magnetic field, Oersted's experiment. Biot-Savart law and its application to current carrying circular loop.
- Ampere's law and its applications to infinitely long straight wire, straight and toroidal solenoids. Force on a moving charge in uniform magnetic and electric fields. Cyclotron.
- 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. Torque on a magnetic dipole (bar magnet) in a uniform magnetic field; bar magnet as an equivalent solenoid, magnetic field lines; Earth's magnetic field and magnetic elements.
- Para-, dia- and ferro-magnetic substances, with examples.
- Electromagnetic and factors affecting their strengths. Permanent magnets.

#### UNIT IV: Electromagnetic Induction and Alternating Currents

- Electromagnetic induction; Faraday's law, induced emf and current; Lenz's Law, Eddy currents. Self and mutual inductance.
- Alternating currents, peak and rms value of alternating current/ voltage; reactance and impedance; LC oscillations (qualitative treatment only), LCR series circuit, resonance; power in AC circuits, wattless current.
- AC generator and transformer.

#### UNIT V: Electromagnetic Waves

- 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.

#### UNIT VI: Optics

- Reflection of light, spherical mirrors, mirror formula. Refraction of light, total internal reflection and its applications optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens-maker's 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.
- *Optical instruments*: 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.
- *Wave optics*: Wavefront and Huygens' principle, reflection and refraction of plane wave at a plane surface using wavefronts.
- Proof of laws of reflection and refraction using Huygens' principle.
- Interference, Young's double hole experiment and expression for fringe width, coherent sources and sustained interference of light.
- Diffraction due to a single slit, width of central maximum.
- Resolving power of microscopes and astronomical telescopes. Polarisation, plane polarized light; Brewster's law, uses of plane polarized light and Polaroids.

#### UNIT VII: Dual Nature of Matter and Radiation

- Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation- particle nature of light.
- Matter waves- wave nature of particles, de Broglie relation. Davisson-Germer experiment (experimental details should be omitted; only conclusion should be explained).

#### UNIT VIII: Atoms and Nuclei

- Alpha- particle scattering experiments; Rutherford's model of atom; Bohr model, energy levels, hydrogen spectrum. Composition and size of nucleus, atomic masses, isotopes, isobars; isotones.
- Radioactivity- alpha, beta and gamma particles/ rays and their properties decay law. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number, nuclear fission and fusion.

#### UNIT IX: 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. Logic gates (OR, AND, NOT, NAND and NOR). Transistor as a switch.

# CHEMISTRY

## CONTENTS OF CLASS XI SYLLABUS

### UNIT I: Some Basic Concepts of Chemistry

- *General Introduction:* Important and scope of chemistry.
- Laws of chemical combination, *Dalton's atomic theory:* concept of elements, atoms and molecules.
- 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. 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.

### UNIT III: 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.

### UNIT IV: 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). Hydrogen bond.

### UNIT V: 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, Charles'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).

### UNIT VI : Thermodynamics

- First law of thermodynamics-internal energy and enthalpy, heat capacity and specific heat, measurement of  $\Delta U$  and  $\Delta H$ , Hess's law of constant heat summation, enthalpy of : bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization, solution and dilution.
- 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.

### UNIT VII: Equilibrium

- Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of chemical equilibrium, equilibrium constant, factors affecting equilibrium-Le Chatelier's principle; ionic equilibrium- ionization of acids and bases, strong and weak electrolytes, degree of ionization, ionization of polybasic acids, acid strength, concept of  $P_H$ , Hydrolysis of salts (elementary idea), buffer solutions, Henderson equation, solubility product, common ion effect (with illustrative examples).

### UNIT VIII: Redox Reactions

- Concept of oxidation and oxidation and reduction, redox reactions oxidation number, balancing redox reactions in terms of loss and gain of electron and change in oxidation numbers.

### UNIT IX: 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: s-Block Elements (Alkali and Alkaline earth metals)

- *Group 1 and group 2 elements:*
- 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.

### UNIT XI: Some p-Block Elements

- General Introduction to p-Block Elements.

- *Group 13 elements*: 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: borax, boric acids, boron hydrides. Aluminium: uses, reactions with acids and alkalis.
- *General 14 elements*: 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: uses of some important compounds: oxides.
- Important compounds of silicon and a few uses: silicon tetrachloride, silicones, silicates and zeolites, their uses.

#### UNIT XII: Organic Chemistry- Some Basic Principles and Techniques

- General introduction, methods of purification qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds.
- Electronic displacements in a covalent bond: inductive effect, electromeric effect, resonance and hyper conjugation.
- Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carbanions; electrophiles and nucleophiles, types of organic reactions.

#### UNIT XIII: Hydrocarbons

- *Alkanes*- Nomenclature, isomerism, conformations (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.
- *Alkenes*-Nomenclature, structure of double bond (ethene), geometrical isomerism, physical properties, methods of preparation: chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.
- *Alkynes*-Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of- hydrogen, halogens, hydrogen halides and water.
- *Aromatic hydrocarbons*- Introduction, IUPAC nomenclature; Benzene; resonance, aromaticity; chemical properties: mechanism of electrophilic substitution- Nitration sulphonation, halogenation, Friedel Craft's alkylation and acylation; directive influence of functional group in mono-substituted benzene; carcinogenicity and toxicity.

#### UNIT XIV: 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.

### CONTENTS OF CLASS XII SYLLABUS

#### UNIT I: 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.

#### UNIT II: Solutions

- Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, colligative properties- relative lowering of vapour pressure, Raoult's law, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties abnormal molecular mass. Van Hoff factor.

#### UNIT III: Electrochemistry

- Redox reactions, conductance in electrolytic solutions, specific and molar conductivity variation of conductivity with concentration, Kohlrausch's Law, electrolysis and Laws of electrolysis (elementary idea), dry cell- electrolytic cells and Galvanic cells; lead accumulator, EMF of a cell, standard electrode potential, Relation between Gibbs energy change and EMF of a cell, fuel cells; corrosion.

#### UNIT IV: 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.

#### UNIT V: Surface Chemistry

- *Adsorption*-physisorption and chemisorption; factors affecting adsorption of gases on solids, catalysis homogeneous and heterogeneous, activity and selectivity: enzyme catalysis; colloidal state: distinction between true solutions, colloids and suspensions; lyophilic, lyophobic multimolecular and macromolecular colloids; properties of colloids; Tyndall effect, Brownian movement, electrophoresis, coagulation; emulsions- types of emulsions.

#### UNIT VI: 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.

#### UNIT VII: p- Block Elements

- *Group 15 elements*: 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: preparation and properties of phosphine, halides ( $\text{PCl}_3$ ,  $\text{PCl}_5$ ) and oxoacids (elementary idea only).
- *Group 16 elements*: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; dioxygen: preparation, properties and uses; classification of oxides; ozone. Sulphur – allotropic forms; compounds of sulphur: preparation, preparation, properties and uses of sulphur dioxide; sulphuric acid: industrial process of manufacture, properties and uses, oxoacids of sulphur (structures only).
- *Group 17 elements*: General introduction, electronic configuration, oxidation states, occurrence, trends in physical and chemical properties; compounds of halogens: preparation, properties and uses of chlorine and hydrochloric acid, interhalogen compounds oxoacids of halogens (structures only).
- *Group 18 elements*: General introduction, electronic configuration, occurrence, trends in physical and chemical properties, uses.

#### UNIT VIII: d and f Block Elements

- General introduction, electronic configuration, characteristics of transition metals, general trends in properties of the first row transition metals- metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation. Preparation and properties of  $\text{K}_2\text{Cr}_2\text{O}_7$  and  $\text{KMnO}_4$ .
- *Lanthanoids*- electronic configuration, oxidation states, chemical reactivity, and lanthanoid contraction and its consequences.
- *Actinoids*: Electronic configuration, oxidation states and comparison with lanthanoids.

#### UNIT IX: Coordination Compounds

- *Coordination compounds*: Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds, isomerism (structural and stereo) bonding, Werner's theory VBT,CFT; importance of coordination compounds (in qualitative analysis, biological systems).

#### UNIT X: Haloalkanes and Haloarenes

- *Haloalkanes*: Nomenclature, nature of C–X bond, physical and chemical properties, mechanism of substitution reactions. Optical rotation.
- *Haloarenes*: Nature of C-X bond, substitution reactions (directive influence of halogen for monosubstituted compounds only).
- Uses and environment effects of – dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

#### UNIT XI: 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.
- *Phenols*: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols.
- *Ethers*: Nomenclature, methods of preparation, physical and chemical properties uses.

#### UNIT XII: 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.

### UNIT XIII: 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.

### UNIT XIV: Biomolecules

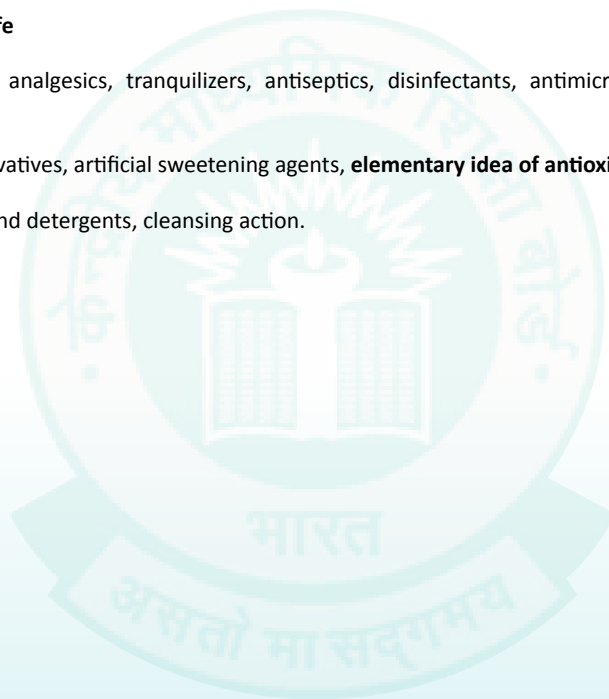
- *Carbohydrates*- Classification (aldoses and ketoses), monosaccharide (glucose and fructose), D.L. configuration, oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen): importance.
- *Proteins*- Elementary idea of – amino acids, peptide bond, polypeptides, proteins, 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

### UNIT XV: Polymers

- *Classification*- Natural and synthetic, methods of polymerization (addition and condensation), copolymerization. Some important polymers: natural and synthetic like polyesters, bakelite; rubber, Biodegradable and non-biodegradable polymers.

### UNIT XVI: 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.



# BIOLOGY

## CONTENTS OF CLASS XI SYLLABUS

### UNIT I: 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.
- 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).

### UNIT II: 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). (Brief account only)

### UNIT III: 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 division: Cell cycle, mitosis, meiosis and their significance.

### UNIT IV: 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).
- Mineral nutrition: 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: 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.
- Respiration: 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

### UNIT V: Human Physiology

- Digestion and absorption; Alimentary canal and digestive glands; Role of digestive enzymes and gastrointestinal hormones; Peristalsis, digestion, absorption and assimilation of proteins, carbohydrates and fats; Caloric value of proteins, carbohydrates and fats; Egestion; Nutritional and digestive disorders – PEM, indigestion, constipation, vomiting, jaundice, diarrhea.
- Breathing and Respiration: Respiratory organs in animals (recall only); Respiratory system in humans; Mechanism of breathing and its regulation in humans-Exchange of gases, transport of gases and regulation of respiration Respiratory volumes; Disorders related to respiration-Asthma, Emphysema, Occupational respiratory disorders.
- Body fluids and circulation: Composition of blood, blood groups, coagulation of blood; Composition of lymph and its function; Human circulatory system-Structure of human heart and blood vessels; Cardiac cycle, cardiac output, ECG, Double circulation; Regulation of

cardiac activity; Disorders of circulatory system-Hypertension, Coronary artery disease, Angina pectoris, Heart failure.

- Excretory products and their elimination: Modes of excretion- Ammonotelism, ureotelism, uricotelism; Human excretory system-structure and function; Urine formation, Osmoregulation; Regulation of kidney function-Renin-angiotensin, Atrial Natriuretic Factor, ADH and Diabetes insipidus; Role of other organs in excretion; Disorders; Uraemia, Renal failure, Renal calculi, Nephritis; Dialysis and artificial kidney.
- 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.
- 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, exophthalmic goiter, diabetes, Addison's disease).

*(Imp: Diseases and disorders mentioned above to be dealt in brief.)*

## CONTENTS OF CLASS XII SYLLABUS

### UNIT I: Reproduction

- Reproduction in organisms: Reproduction, a characteristic feature of all organisms for continuation of species; Modes of reproduction – Asexual and sexual; Asexual reproduction; Modes-Binary fission, sporulation, budding, gemmule, fragmentation; vegetative propagation in plants.
- Sexual reproduction in flowering plants: Flower structure; Development of male and female gametophytes; Pollination-types, agencies and examples; Outbreeding devices; Pollen-Pistil interaction; Double fertilization; Post fertilization events-Development of endosperm and embryo, Development of seed and formation of fruit; Special modes-apomixis, parthenocarpy, polyembryony; Significance of seed and fruit formation.
- Human Reproduction: Male and female reproductive systems; Microscopic anatomy of testis and ovary; Gametogenesis-spermatogenesis & oogenesis; Menstrual cycle; Fertilisation, embryo development upto blastocyst formation, implantation; Pregnancy and placenta formation (Elementary idea); Parturition (Elementary idea); Lactation (Elementary idea).
- Reproductive health: Need for reproductive health and prevention of sexually transmitted diseases (STD); Birth control-Need and Methods, Contraception and Medical Termination of Pregnancy (MTP); Amniocentesis; Infertility and assisted reproductive technologies – IVF, ZIFT, GIFT (Elementary idea for general awareness).

### UNIT II: Genetics and Evolution

- Heredity and variation: Mendelian Inheritance; Deviations from Mendelism-Incomplete dominance, Co-dominance, Multiple alleles and Inheritance of blood groups, Pleiotropy; Elementary idea of polygenic inheritance; Chromosome theory of inheritance; Chromosomes and genes; Sex determination-In humans, birds, honey bee; Linkage and crossing over; Sex linked inheritance-Haemophilia, Colour blindness; Mendelian disorders in humans-Thalassemia; Chromosomal disorders in humans; Down's syndrome, Turner's and Klinefelter's syndromes.
- Molecular basis of Inheritance: Search for genetic material and DNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central dogma; Transcription, genetic code, translation; Gene expression and regulation-Lac Operon; Genome and human genome project; DNA finger printing.
- Evolution: Origin of life; Biological evolution and evidences for biological evolution from Paleontology, comparative anatomy, embryology and molecular evidence); Darwin's contribution, Modern Synthetic theory of Evolution; Mechanism of evolution-Variation (Mutation and Recombination) and Natural Selection with examples, types of natural selection; Gene flow and genetic drift; Hardy-Weinberg's principle; Adaptive Radiation; Human evolution.

### UNIT III: Biology and Human Welfare

- Health and Disease; Pathogens; parasites causing human diseases (Malaria, Filariasis, Ascariasis, Typhoid, Pneumonia, common cold, amoebiasis, ring worm); Basic concepts of immunology-vaccines; Cancer, HIV and AIDS; Adolescence, drug and alcohol abuse.
- Improvement in food production; Plant breeding, tissue culture, single cell protein, Biofortification; Apiculture and Animal husbandry.



- Microbes in human welfare: In household food processing, industrial production, sewage treatment, energy generation and as biocontrol agents and biofertilizers.

#### **UNIT IV: Biotechnology and Its Applications**

- Principles and process of Biotechnology: Genetic engineering (Recombinant DNA technology).
- Application of Biotechnology in health and agriculture: Human insulin and vaccine production, gene therapy; Genetically modified organisms-Bt crops; Transgenic Animals; Biosafety issues-Biopiracy and patents.

#### **UNIT V: Ecology and environment**

- 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.
- 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 warning; Ozone depletion; Deforestation; Any three case studies as success stories addressing environmental issues.

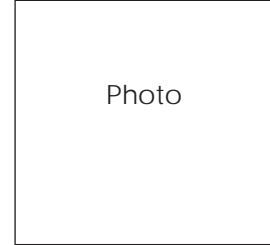


**APPENDIX-II****LIST OF CITIES FOR CENTRES OF NATIONAL ELIGIBILITY CUM ENTRANCE TEST (UG) -2017**

STATE/UT	CITY	City Code	STATE/UT	CITY	City Code
ANDAMAN & NICOBAR	PORT BLAIR	901	MAHARASHTRA	AURANGABAD	944
ANDHRA PRADESH	VIJAYAWADA	902		MUMBAI	945
	VISAKHAPATNAM	903		NAGPUR	946
ARUNACHAL PRADESH	ITANAGAR	904		NASIK	947
ASSAM	DIBRUGARH	905		PUNE	948
	GUWAHATI	906		THANE	949
BIHAR	GAYA	907	MANIPUR	IMPHAL	950
	PATNA	908	MEGHALAYA	SHILLONG	951
CHANDIGARH	CHANDIGARH	909	MIZORAM	AIZAWL	952
CHHATTISGARH	RAIPUR	910	NAGALAND	DIMAPUR	953
DADRA & NAGAR HAVELI	DADRA & NAGAR HAVELI	911		KOHIMA	954
DAMAN & DIU	DAMAN	912	ODISHA	BEHRAMPUR	955
DELHI	DELHI (CENTRAL)	913		BHUBANESHWAR	956
	DELHI (EAST)	914		ROURKELA	957
	DELHI (NORTH)	915	PUDUCHERRY	PUDUCHERRY	958
	DELHI (SOUTH)	916	PUNJAB	BHATINDA	959
	DELHI (WEST)	917		JALANDHAR	960
GOA	PANAJI	918	RAJASTHAN	AJMER	961
GUJARAT	AHMEDABAD	919		JAIPUR	962
	RAJKOT	920		KOTA	963
	SURAT	921		UDAIPUR	964
	VADODARA	922	SIKKIM	GANGTOK	965
HARYANA	FARIDABAD	923	TAMIL NADU	CHENNAI	966
	GURGAON	924		COIMBATORE	967
HIMACHAL PRADESH	HAMIRPUR	925		MADURAI	968
	SHIMLA	926		SALEM	969
JAMMU & KASHMIR	JAMMU	927		TIRUCHIRAPALLI	970
	SRINAGAR	928	TELANGANA	HYDERABAD	971
JHARKHAND	BOKARO	929	WARANGAL	972	
	RANCHI	930	TRIPURA	AGARTALA	973
KARNATAKA	BANGALORE	931	UTTARAKHAND	DEHRADUN	974
	BELGAUM	932		HALDWANI	975
	GULBARGA	933	UTTAR PRADESH	BAREILLY	976
	MANGALORE	934		GHAZIABAD	977
KERALA	ERNAKULAM	935		JHANSI	978
	KOZHIKODE	936		LUCKNOW	979
	TRIVANDRUM	937		NOIDA	980
LAKSHADWEEP	KAVARATTI	938		VARANASI	981
MADHYA PRADESH	BHOPAL	939	WEST BENGAL	DURGAPUR	982
	GWALIOR	940		KOLKATA	983
	INDORE	941		SILIGURI	984
	JABALPUR	942			
	UJJAIN	943			

**SELF DECLARATION PROFORMA FOR CANDIDATES BELONGING TO  
ANDHRA PRADESH, TELANGANA AND J & K**

Regn.  
Number:



I, ..... Son/Daughter of .....

do hereby solemnly affirm and state as follows:

- 1 That I am not eligible to appear for the MBBS/BDS seats in states of Andhra Pradesh/ Telangana/J&K and hence not eligible to seek admission in Medical/Dental Colleges of Andhra Pradesh/ Telangana /J&K.
- 2 That I am not domiciled in Andhra Pradesh/ Telangana /J&K.
- 3 That I further declare that the said declaration is made by me on my own after knowing and understanding all the rules and its implications.
- 4 That if above statement of mine is found incorrect at any time, my candidature/ admission in NEET, MBBS/BDS respectively be cancelled and legal action as deemed fit may be initiated against me.

Date:

Right hand Index finger impression	Signature of candidate

Name:

Father's Name:

Mother's Name:

Address:

This declaration will be auto generated and submitted online only at the time of filling the online application form by the candidates belonging to Andhra Pradesh, Telangana and J & K and claiming 15% seats under All India Quota.

## STATE MEDICAL EDUCATION DIRECTORATES & OFFICES WHERE COUNSELING RELATED INFORMATION MAY BE AVAILABLE

<b>ANDAMAN &amp; NICOBAR ISLANDS</b>	
The Director (Health Services), Directorate of Health Services, Andaman & Nicobar Administration, Secretariat, Port Blair-744101	Telephone No. : 03192-233331 Fax No. : 03192-232910 Website : <a href="http://www.dhs.andaman.gov.in">www.dhs.andaman.gov.in</a> E-mail ID : <a href="mailto:dirdhs.and@nic.in">dirdhs.and@nic.in</a>
<b>ARUNACHAL PRADESH</b>	
The Director (Health Services), Directorate of Health Services Govt. of Arunachal Pradesh, Naharlagun, Arunachal Pradesh-791110 Distt. Papumpare	Telephone No. : 0360-2244248 Fax No. : 0360-2244182 Website : <a href="http://www.apdhte.nic.in/">http://www.apdhte.nic.in/</a> E-mail ID : <a href="mailto:dhsnlg@gmail.com">dhsnlg@gmail.com</a>
<b>ASSAM</b>	
The Director of Medical Education, Office of the Director of Medical Education, Sixmile, Khanapara, Guwahati, Assam, Pin-781022	Telephone No. : 0361-2366236 Fax No. : 0361-2366236 Website : <a href="http://www.dmeassam.gov.in">www.dmeassam.gov.in</a> E-mail ID : <a href="mailto:dmeassam@gmail.com">dmeassam@gmail.com</a> , <a href="mailto:dme@assam.gov.in">dme@assam.gov.in</a>
<b>ANDHRA PRADESH</b>	
The Director of Health, Directorate of Medical Education DM&HS Campus Koti, Hyderabad	Tel. (Off) : 040-24602514-16 Fax No. : 040-24656909, 24600769 Email : <a href="mailto:dmetelangana.gov.in">dmetelangana.gov.in</a> Website : <a href="mailto:dmetelangana@gmail.com">dmetelangana@gmail.com</a>
<b>BIHAR</b>	
The Director of Medical Education Directorate of Health Services, Department of Health & Family Welfare, VikasBhawan Patna-800001, Bihar	Telephone No. :0612-2234992 Website : <a href="http://health.bih.nic.in/">http://health.bih.nic.in/</a> E-mail ID : <a href="mailto:as-health-bih@nic.in">as-health-bih@nic.in</a>
<b>CHANDIGARH</b>	
The Director Principal, Govt. Medical College Hospital, Sector-32, Chandigarh	Telephone No. : 0172-2601023-4321 Fax No. : 0772-2609360 Website : <a href="http://www.gmch.gov.in">www.gmch.gov.in</a> E-mail ID : <a href="mailto:dpgmcc@yahoo.com">dpgmcc@yahoo.com</a>
<b>CHHATISGARH</b>	
The Director of Medical Education Directorate of Medical Education Old Nurses Hostel, Mantralaya Complex, Raipur-492001, Chhatisgarh	Telephone No. : 0771-4264052, 2221621 Fax No. : 0771-2234451 Website : <a href="http://www.cgdme.in">www.cgdme.in</a> E-mail ID : <a href="mailto:cgdme@rediffmail.com">cgdme@rediffmail.com</a>
<b>DADAR AND NAGAR HAVELI</b>	
The Director of Education 1st Floor, Building No.5, P.W.D. Office Complex, Dadra and Nagar Haveli, Silvassa.	Telephone No. : 0260-2630792 Fax No. : 0260-2642006 Website : <a href="http://dnh.nic.in/">http://dnh.nic.in/</a> E-mail ID : <a href="mailto:asde-admn-dnh@nic.in">asde-admn-dnh@nic.in</a>

<b>DAMAN &amp; DIU (UT)</b>	
The Assistant Director (Technical Education) UT Administration of Daman & Diu Government Polytechnic, Varkund, MotaFalia Nani Daman-396210	Telephone No. : 0260-2231707, 2230468 Fax No. : 0260-2251351 Website : <a href="http://daman.nic.in">http://daman.nic.in</a> E-mail ID : <a href="mailto:pers.dd@nic.in">pers.dd@nic.in</a> , <a href="mailto:ceodp-dmn-dd@nic.in">ceodp-dmn-dd@nic.in</a>
<b>DELHI</b>	
The Director Health Services, Directorate of Health Services, F-17, Karkardooma, Delhi-110 032	Telephone No. : 011-22309220, Website : <a href="http://www.Health.delhigovt.nic.in">www. Health.delhigovt.nic.in</a> E-mail ID : <a href="mailto:dirdhs@nic.in">dirdhs@nic.in</a>
<b>GOA</b>	
The Assistant Director, Centralized Admission Division (CAD) Directorate of Technical Education, Alto-Porvorim, Goa-403571	Telephone No. : 0832-2416370 Fax No. : 0832-2413572 Website : <a href="http://www.dtegoa.gov.in">www.dtegoa.gov.in</a> E-mail ID : <a href="mailto:dir-dte.goa@nic.in">dir-dte.goa@nic.in</a>
<b>GUJARAT</b>	
The Dean B.J. Medical College, IA Sarwa, Ahmedabad Gujarat	Telephone No. : 079-22680074 Fax No. : 079-22683067 Website : <a href="http://www.bjmc.org">www.bjmc.org</a> E-mail ID : <a href="mailto:dean.bjmc@hotmail.com">dean.bjmc@hotmail.com</a>
<b>HARYANA</b>	
The Director, Medical Education & Research Haryana ParyatanBhawan, Bays No.55-58, Sector-2, Panchkula.	Telephone No. : 0172-2560799 Fax No. : 0172-2566556 Website : <a href="http://haryanahealth.nic.in">haryanahealth.nic.in</a> E-mail ID : <a href="mailto:dmer.haryana@gmail.com">dmer.haryana@gmail.com</a>
<b>HIMACHAL PRADESH</b>	
The Director, Medical Education & Research, Block No.06, SDA Complex, Kusumti, Shimla-171009.	Telephone No. : 0177-2624895 Fax No. : 0177-2620733 Website : <a href="http://www.hp.gov.in/hpdmer">www.hp.gov.in/hpdmer</a> E-mail ID : <a href="mailto:directorateme@yahoo.com">directorateme@yahoo.com</a>
<b>JAMMU &amp; KASHMIR</b>	
The Director (Health Services) Directorate of Health Services, Jammu Division, Near MLA's Hostel, Jammu Tawi Jammu - 180001	Telephone No. : 0191-2546338 (O) Fax No. : 0191-2549632, 2566599 Website : <a href="http://www.jkhealth.org">http://www.jkhealth.org</a> E-mail ID : <a href="mailto:dhsjammu@rediffmail.com">dhsjammu@rediffmail.com</a>
The Director (Health Services) Directorate of Health Services, Old Secretariat (J & K), Srinagar, Kashmir	Telephone No. : 0194-2452052 (O) Fax No. : 0194-24527313 Website : <a href="http://www.jkhealth.org">http://www.jkhealth.org</a> E-mail ID : <a href="mailto:amarist786@gmail.com">amarist786@gmail.com</a> , <a href="mailto:dhsk76@gmail.com">dhsk76@gmail.com</a>
<b>JHARKHAND</b>	
The Controller of Examination Jharkhand Combined Entrance Competitive Examination Board, Science & Technology Campus, SirkhaToli, Namkum-Tupudana Road, Namkum, Ranchi -834023	Telephone No. : 0651-6999170-71 Fax No. : 0651-2230336 Website : <a href="http://www.jceceb.jharkhand.gov.in">www.jceceb.jharkhand.gov.in</a> E-mail ID : <a href="mailto:jceceboard@gmail.com">jceceboard@gmail.com</a>

<b>KARNATAKA</b>	
The Executive Director Karnataka Examinations Authority 18th Cross, Sampige Road, Malleshwaram, Bangalore-560 012.	Telephone No. : 080-2360460 Fax No. : 080-23461576 Website : kea.kar.nic.in E-mail ID : keauthority-ka@nic.in
<b>KERALA</b>	
The Commissioner for Entrance Examinations Vth Floor, Housing Board Buildings, Santhi Nagar, Thiruvananthapuram-695001	Telephone No. : 0471-2332120, 2338487 Fax No. : 0471-2337228 Website : www.cee-kerala.org E-mail ID : ceekinfo@cee.kerala.gov.in
<b>LAKSHADWEEP (UT)</b>	
The Director of Education, Department of Education UT of Lakshadweep.	Telephone No. : 04896-262241 Fax No. : 04896-262264 Website : www.lakshadweep.nic.in E-mail ID : lk-doe@hub.nic.in
<b>MAHARASHTRA</b>	
The Director Medical Education & Research, St. Georges Hospital Campus, Govt. Dental College Building, 4th Floor, Near CST Railway Station, Mumbai-400 001.	Telephone No. : 022-22620361-365, Fax No. : 022-22620562/22652168 Website : www.dmer.org E-mail ID : dmercetcell@gmail.com
<b>MIZORAM</b>	
The Director, Higher & Technical Education, Govt. of Mizoram, Mcdonald Hill, Zarkawt, Aizawl, Mizoram	Telephone No. : 0389-2340926 Fax No. : 0389-2340927 Website : <a href="http://healthmizoram.nic.in">http://healthmizoram.nic.in</a> E-mail ID : director_htemz@yahoo.com
<b>MADHYA PRADESH</b>	
The Director Directorate of Medical Education, SatpuraBhawan, Bhopal, Madhya Pradesh	Telephone No. : 0755-2551307, 2551719 Website : www.medicaleducation.mp.gov.in E-mail ID : dme12001@yahoo.com
<b>MANIPUR</b>	
The Director, (Medical Education) Directorate of Health Services, Imphal, Manipur	Telephone No. : 0385-2411484, 2414629 Fax No. : 0364-2414625 Website : <a href="http://rims.edu.in">http://rims.edu.in</a> E-mail ID : director@rims.edu.in
<b>MEGHALAYA</b>	
The Commissioner & Secretary, Health & Family Welfare, Meghalaya Secretariat, Addl. Building, R.No.315, Shillong-793001 Meghalaya.	Telephone No. : 0364-2223760 Website : www.meghealth.gov.in E-mail ID : kmarb2007@gmail.com

<b>NAGALAND</b>	
The Director Directorate of Technical Education, Kohima, Nagaland	Telephone No. : 0370-2270409 Fax No. : 0370-2270409 Website : <a href="http://www.dtenagaland.org.in">www.dtenagaland.org.in</a> E-mail ID : <a href="mailto:direch.edu-ng@nic.in">direch.edu-ng@nic.in</a> , <a href="mailto:mhasetonakro@yahoo.com">mhasetonakro@yahoo.com</a>
<b>ODISHA</b>	
The Chairman Odisha Joint Entrance Examination JEE Cell, Gandamunda, Khandagiri, Dist. Khurda, Bhubaneswar-751030	Telephone No. : 0674-652455-58 Fax No. : 0674-2352457 Website : <a href="http://www.odishajee.com">www.odishajee.com</a> , <a href="http://www.ojee.nic.in">www.ojee.nic.in</a> E-mail ID : <a href="mailto:odishajee2015@gmail.com">odishajee2015@gmail.com</a>
<b>PUDUCHERRY (UT)</b>	
The Director (Health) Directorate of Medical & F.W. Services, Housing Board Building, Opposite LIC, Health Department Complex, Puducherry-605001	Telephone No. : 0413-2229355 (O) Fax No. : 0413-2339351 Website : <a href="http://health.puducherry.gov.in">http://health.puducherry.gov.in</a> E-mail ID : <a href="mailto:dms.pon@nic.in">dms.pon@nic.in</a>
<b>PUNJAB</b>	
The Vice-Chancellor, Baba Farid University of Health Sciences, Sadiq Road, Faridkot-151203 (Punjab)	Telephone No. : 01639-256232, 256236, 257883-84 Fax No. : 01639-256234, 01639-256235 Website : <a href="http://www.bfuhs.ac.in">www.bfuhs.ac.in</a> E-mail ID : <a href="mailto:generalinfo@bfuhs.ac.in">generalinfo@bfuhs.ac.in</a>
<b>RAJASTHAN</b>	
The Secretary (Medical Education) Directorate of Medical Education Govt. Secretariat Building, C-Scheme, Jaipur.	Telephone No. : 0141-2227132 Fax No. : 0141-2227797 Website : <a href="http://www.medicaleducation.rajasthan.gov.in">www.medicaleducation.rajasthan.gov.in</a> E-mail ID : <a href="mailto:pshrajasthan@gmail.com">pshrajasthan@gmail.com</a>
<b>SIKKIM</b>	
The Secretary Human Resource Development Department, Govt. of Sikkim, Tashiling, Gangtok – 737103	Tel. (Off) : 03592-203050, 03592-221611 Fax No. : 03592-221611 website : <a href="http://sikkimhrdd.org">sikkimhrdd.org</a> E-mail ID : <a href="mailto:techedusk@gmail.com">techedusk@gmail.com</a>
<b>TAMIL NADU</b>	
The Director (Public Health and Preventive Medicine) Directorate of Health Services, 359, Anna Salai, Teynampet, Chennai-600006	Telephone No. : 044-24320802 Fax No. : 044-24323942 Website : <a href="http://www.tnhealth.org">http://www.tnhealth.org</a> E-mail ID : <a href="mailto:dphpm@rediffmail.com">dphpm@rediffmail.com</a>
<b>TRIPURA</b>	
The Director (Medical Education) 2 <sup>nd</sup> Floor Tripura AIDS Control Society Building Opp. IGM Hospital Agartala, Tripura-799001	Telephone No. : 0381-2325232 (O) Fax No. : 0381-2325232 Website : <a href="http://www.tripurahealthservices.in">http://www.tripurahealthservices.in</a> E-mail ID : <a href="mailto:directormetripura@gmail.com">directormetripura@gmail.com</a>
<b>UTTRAKHAND</b>	
The Director General Directorate of Medical Education, 107, Chander Nagar, Dehradun, Uttarakhand.	Telephone No. : 0135-2723026, 2723028 Fax No. : 0135-2723027 Website : <a href="http://www.ua.nic.in">www.ua.nic.in</a> E-mail ID : <a href="mailto:medicaleducation11@gmail.com">medicaleducation11@gmail.com</a>

<b>UTTAR PRADESH</b>	
The Director General (Medical Education & Training) 6th Floor, JawaharBhawan, Ashok Marg, Lucknow(UP)	Telephone No. : 0522-2287653 Fax No. : 0522-2288193 Website : www.updgme.in E-mail ID : dgmededu@gmail.com
<b>WEST BENGAL</b>	
The Chairman Central Selection Committee Medical College, 88, College Street, Kolkata-700 073.	Telephone No. : 033-22123853, 22551633 Fax No. : 033-22123770 Website : medicalcollegekolkata.org. E-mail ID : lahiritapan@yahoo.co.in
<b>DGHS</b>	
<b>Prof(Dr) B. Srinivas</b> <b>The Assistant Director General (ME),</b> Directorate General Of Health Services Room No.352, 'A' Wing, NirmanBhawan, New Delhi	Telephone No. : 011-23062493 Fax No. : 011-23061907 Website : WWW.MCC.NIC.IN E-Mail ID : AIQPMT-MCC@NIC.IN
<b>AFMC, PUNE</b>	
The Nodal Officer, Room No.48A, 'M' Block, DGAFMS/DG-1D, Ministry of Defence, New Delhi.	Telephone No. : 011-23092349 Fax No. : 011-23092562/23092992 Website : <a href="http://www.afmc.nic.in">www.afmc.nic.in</a> , <a href="http://www.afmcdg1d.gov.in">www.afmcdg1d.gov.in</a> E-mail ID : <a href="mailto:ojcexams.afmc@nic.in">ojcexams.afmc@nic.in</a> , <a href="mailto:afmcdg1d@nic.in">afmcdg1d@nic.in</a> , _____ <a href="mailto:ojcadmission@gmail.com">ojcadmission@gmail.com</a>
<b>DELHI UNIVERSITY</b>	
The Dean, Faculty of Medical Sciences, VPCI Building, 6th Floror, University of Delhi, Delhi-110 007	Telephone No. : 011-27662764, 27667647, 27662208 Fax No. : 011-27662763 Website : www.fmssc.ac.in E-mail ID : dean-medical@du.ac.in



**LIST OF STATE CODES**

<b>NAME OF THE STATE/UT</b>	<b>CODE No.</b>
Jammu and Kashmir	01
Himachal Pradesh	02
Punjab	03
Chandigarh	04
Uttarakhand	05
Haryana	06
Delhi	07
Rajasthan	08
Uttar Pradesh	09
Bihar	10
Sikkim	11
Arunachal Pradesh	12
Nagaland	13
Manipur	14
Mizoram	15
Tripura	16
Meghalaya	17
Assam	18
West Bengal	19
Jharkhand	20
Odisha	21
Chhattisgarh	22
Madhya Pradesh	23
Gujarat	24
Daman & Diu	25
Dadra & Nagar Haveli	26
Maharashtra	27
Andhra Pradesh	28
Karnataka	29
Goa	30
Lakshadweep	31
Kerala	32
Tamil Nadu	33
Puducherry	34
Andaman & Nicobar Islands	35
Telangana	36

Foreign Nations will select the name of their country at the appropriate place.

## APPENDIX – VI

### LIST OF CODE OF OCCUPATION

(For Father's/Guardian's/Mother's only)

<b>Occupation</b>	<b>Code</b>
Agriculture	01
Business	02
Medical	03
Engineering	04
Law practice	05
Government service	06
Public sector service	07
Private service	08
Teaching/research	09
Other(including house wife)	10

### LIST OF CODE OF INCOME

(For Father's/Guardian's/Mother's only)

<b>Income</b>	<b>Code</b>
Upto Rs.25000	01
Rs.25001-50000	02
Rs 50001-75000	03
Rs 75001-100000	04
Rs.100001-200000	05
Rs.200001 – 450000	06
Rs.450001 – 550000	07
Rs.550001 – 650000	08
Rs.650001 AND ABOVE	09

### LIST OF CODE OF QUALIFICATION

(For Father's/Guardian's/Mother's only)

<b>Qualification</b>	<b>Code</b>
Illiterate	01
Below class X	02
Class X and class XII	03
Diploma in Engineering	04
Graduate – BA/BSc/BCom/BCA	05
Engineering Graduate – BE/BTech/BSc(Engg)	06
Medicine Graduate – MBBS/BDS/BUMS/BVSC	07
Law Graduate – LLB	08
Post graduate – MA/MSc/MCom/MCA	09
Engineering Post Graduate – ME/MTech/MSc(Tech)	10
Medical Post Graduate – MD/MS/MVSc	11
Law Post Graduate – LLM	12
MBA/CA/ICWA	13
PhD/DPhil/DSc/DM	14

## LIST OF CODES OF THE SCHOOL EDUCATION BOARDS OF CLASS XII

BOARDS	CODES
Andhra Pradesh Board of Intermediate Education	01
Assam Higher Secondary Education Council	02
Bihar Intermediate Education Council	03
Central Board of Secondary Education	04
Chhattisgarh Madhyamik Shiksha Mandal	05
Council for the Indian School Certificate Examinations	06
Goa Board of Secondary and Higher Secondary Education	07
Gujarat Secondary Education Board	08
Haryana Board of Education	09
H P Board of School Education	10
J & K State Board of School Education	11
Jharkhand Academy Council	12
Karnataka Board of Pre-University Education	13
Kerala Board of Public Examinations	14
Madhya Pradesh Board of Secondary Education	15
Maharashtra State Board of Secondary & Higher Secondary Education	16
Manipur Council of Higher Secondary Education	17
Meghalaya Board of Secondary Education	18
Mizoram Board of School Education	19
Nagaland Board of School Education	20
Orissa Council of Higher Secondary Education	21
Punjab School Education Board	22
Rajasthan Board of Secondary Education	23
Tamil Nadu Board of Higher Secondary Education	24
Tripura Board of Secondary Education	25
U.P. Board of High School & Intermediate Education	26
Uttaranchal Shiksha Evam Pariksha Parishad	27
West Bengal Council of Higher Secondary Education	28
National Institute of Open Schooling	29
Jamia Milia Islamia, New Delhi	30
Aligarh Muslim University, Aligarh	31
Dayalbagh Education Institute, Agra	32
Banasthali Vidyapeeth, Rajasthan	33
Vishwa Bharti University, Shantiniketan, Birbhoom, West Bengal	34
Rajiv Gandhi University of Knowledge Technologies, Hyderabad	35
Haryana Open School, Bhiwani	36
Rajasthan State Open School, Jaipur	37
MP State Open School, Bhopal	38
Andhra Pradesh Open School Society	39
Bihar Board of Open Schooling Examination	40
Chhattisgarh State open School	41
Telangana State Board of Intermediate Education	42
Other	99

Specimen copy of the Answer Sheet

ANSWER SHEET

SIDE-1

FILL IN THE FOLLOWING ENTRIES WITH BLUE/BLACK

BALL POINT PEN ONLY

ROLL NUMBER (IN NUMERALS)

--	--	--	--	--	--	--

ROLL NUMBER IN WORDS (in running hand)

NAME OF THE CANDIDATE ( IN CAPITAL LETTERS )

FATHER'S NAME ( IN CAPITAL LETTERS )

CENTRE NUMBER

CENTRE OF EXAMINATION (in running hand)

पृष्ठ-2 पर उत्तर अंकित करने के लिये अनुदेश

INSTRUCTIONS FOR MARKING ON SIDE-2



- केवल नीले/काले बाल पेन से सही गोले को गहरे निशान से भरिए।  
Use Only Blue/Black Ball Point Pen to Darken the appropriate Circle.
- कृपया पूरे गोले को गहरे निशान से भरिए।  
Please darken the complete circle.
- प्रत्येक प्रश्न का उत्तर केवल एक ही पूरे गोले में गहरा निशान लगाकर दीजिए जैसा नीचे दिखाया गया है।  
Darken ONLY ONE CIRCLE for each Question as shown below :

गलत Wrong	गलत Wrong	गलत Wrong	गलत Wrong	सही Correct
● ② ③ ●	● X ② ③ ●	● X ② ③ ✓	● ② ③ ④	① ② ③ ●

- किसी उत्तर के लिए एक बार गोले में निशान लगाने के पश्चात कोई परिवर्तन अनुमत्त नहीं है।  
No Change in the Answer once marked is allowed.
- उत्तर पत्रिका पर अन्य कहीं कोई निशान न लगाइए।  
Please do not make any stray marks on the Answer Sheet.
- इस उत्तर पत्रिका पर कच्चा काम करना मना है।  
Rough work must not be done on the Answer Sheet.
- प्रत्येक प्रश्न का उत्तर, उत्तर-पत्रिका में दिए गए क्रमांक के सामने संगत गोले में निशान लगाकर दीजिए।  
Mark your answer only in the appropriate space in the Answer Sheet against the number corresponding to the question.

EXAMPLE:

ROLL NUMBER IN WORDS (in running hand): Twelve lakh fifty two thousand seven hundred and thirty five

EXAMPLES - HOW TO FILL AND MARK ON SIDE -2 ( WITH BLUE/BLACK BALL POINT PEN ONLY )

<p>If your Roll No. is 11252735</p> <p>Roll No.</p> <table border="1"> <tr><td>1</td><td>1</td><td>2</td><td>5</td><td>2</td><td>7</td><td>3</td><td>5</td></tr> <tr><td>●</td><td>●</td><td>①</td><td>①</td><td>①</td><td>①</td><td>①</td><td>①</td></tr> <tr><td>②</td><td>②</td><td>●</td><td>●</td><td>②</td><td>②</td><td>②</td><td>②</td></tr> <tr><td>③</td><td>③</td><td>③</td><td>③</td><td>③</td><td>③</td><td>●</td><td>③</td></tr> <tr><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td></tr> <tr><td>⑤</td><td>⑤</td><td>⑤</td><td>●</td><td>⑤</td><td>⑤</td><td>⑤</td><td>●</td></tr> <tr><td>⑥</td><td>⑥</td><td>⑥</td><td>⑥</td><td>⑥</td><td>⑥</td><td>⑥</td><td>⑥</td></tr> <tr><td>⑦</td><td>⑦</td><td>⑦</td><td>⑦</td><td>●</td><td>⑦</td><td>⑦</td><td>⑦</td></tr> <tr><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td></tr> <tr><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td></tr> <tr><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td></tr> </table>	1	1	2	5	2	7	3	5	●	●	①	①	①	①	①	①	②	②	●	●	②	②	②	②	③	③	③	③	③	③	●	③	④	④	④	④	④	④	④	④	⑤	⑤	⑤	●	⑤	⑤	⑤	●	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑦	⑦	⑦	⑦	●	⑦	⑦	⑦	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑧	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑩	⑩	⑩	⑩	⑩	⑩	⑩	⑩	<p>If your Centre No. is 1126</p> <p>Centre No.</p> <table border="1"> <tr><td>1</td><td>1</td><td>2</td><td>6</td></tr> <tr><td>●</td><td>●</td><td>①</td><td>①</td></tr> <tr><td>②</td><td>②</td><td>●</td><td>②</td></tr> <tr><td>③</td><td>③</td><td>③</td><td>③</td></tr> <tr><td>④</td><td>④</td><td>④</td><td>④</td></tr> <tr><td>⑤</td><td>⑤</td><td>⑤</td><td>⑤</td></tr> <tr><td>⑥</td><td>⑥</td><td>●</td><td>⑥</td></tr> <tr><td>⑦</td><td>⑦</td><td>⑦</td><td>⑦</td></tr> <tr><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td></tr> <tr><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td></tr> <tr><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td></tr> </table>	1	1	2	6	●	●	①	①	②	②	●	②	③	③	③	③	④	④	④	④	⑤	⑤	⑤	⑤	⑥	⑥	●	⑥	⑦	⑦	⑦	⑦	⑧	⑧	⑧	⑧	⑨	⑨	⑨	⑨	⑩	⑩	⑩	⑩	<p>If your Test Booklet No. is 135364</p> <p>Test Booklet No.</p> <table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>3</td><td>6</td><td>4</td></tr> <tr><td>●</td><td>①</td><td>①</td><td>①</td><td>①</td><td>①</td></tr> <tr><td>②</td><td>②</td><td>②</td><td>②</td><td>②</td><td>②</td></tr> <tr><td>③</td><td>●</td><td>③</td><td>●</td><td>③</td><td>③</td></tr> <tr><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td><td>④</td></tr> <tr><td>⑤</td><td>⑤</td><td>●</td><td>⑤</td><td>⑤</td><td>⑤</td></tr> <tr><td>⑥</td><td>⑥</td><td>⑥</td><td>●</td><td>⑥</td><td>⑥</td></tr> <tr><td>⑦</td><td>⑦</td><td>⑦</td><td>⑦</td><td>⑦</td><td>⑦</td></tr> <tr><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td><td>⑧</td></tr> <tr><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td><td>⑨</td></tr> <tr><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td><td>⑩</td></tr> </table>	1	3	5	3	6	4	●	①	①	①	①	①	②	②	②	②	②	②	③	●	③	●	③	③	④	④	④	④	④	④	⑤	⑤	●	⑤	⑤	⑤	⑥	⑥	⑥	●	⑥	⑥	⑦	⑦	⑦	⑦	⑦	⑦	⑧	⑧	⑧	⑧	⑧	⑧	⑨	⑨	⑨	⑨	⑨	⑨	⑩	⑩	⑩	⑩	⑩	⑩	<p>If your Response to Question Number 027 is (2)</p> <p>Q.No. Response</p> <p>027 ① ● ③ ④</p>	<p><b>IMPORTANT</b></p> <p>The candidate should check carefully that the Test Booklet Code printed on Side-2 of the Answer Sheet is the same as printed on Test Booklet. In case of discrepancy, the candidate should immediately report the matter to the invigilator for replacement of both the Test Booklet and the Answer Sheet.</p>
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SIDE-2

Answer Sheet No.

ROLL No.

CENTRE No.

TEST BOOKLET No.

1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
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1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
0	0	0	0

1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9
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Test Booklet Code

A



Q.No.	Response	Q.No.	Response	Q.No.	Response	Q.No.	Response	Q.No.	Response
001	1 2 3 4	037	1 2 3 4	073	1 2 3 4	109	1 2 3 4	145	1 2 3 4
002	1 2 3 4	038	1 2 3 4	074	1 2 3 4	110	1 2 3 4	146	1 2 3 4
003	1 2 3 4	039	1 2 3 4	075	1 2 3 4	111	1 2 3 4	147	1 2 3 4
004	1 2 3 4	040	1 2 3 4	076	1 2 3 4	112	1 2 3 4	148	1 2 3 4
005	1 2 3 4	041	1 2 3 4	077	1 2 3 4	113	1 2 3 4	149	1 2 3 4
006	1 2 3 4	042	1 2 3 4	078	1 2 3 4	114	1 2 3 4	150	1 2 3 4
007	1 2 3 4	043	1 2 3 4	079	1 2 3 4	115	1 2 3 4	151	1 2 3 4
008	1 2 3 4	044	1 2 3 4	080	1 2 3 4	116	1 2 3 4	152	1 2 3 4
009	1 2 3 4	045	1 2 3 4	081	1 2 3 4	117	1 2 3 4	153	1 2 3 4
010	1 2 3 4	046	1 2 3 4	082	1 2 3 4	118	1 2 3 4	154	1 2 3 4
011	1 2 3 4	047	1 2 3 4	083	1 2 3 4	119	1 2 3 4	155	1 2 3 4
012	1 2 3 4	048	1 2 3 4	084	1 2 3 4	120	1 2 3 4	156	1 2 3 4
013	1 2 3 4	049	1 2 3 4	085	1 2 3 4	121	1 2 3 4	157	1 2 3 4
014	1 2 3 4	050	1 2 3 4	086	1 2 3 4	122	1 2 3 4	158	1 2 3 4
015	1 2 3 4	051	1 2 3 4	087	1 2 3 4	123	1 2 3 4	159	1 2 3 4
016	1 2 3 4	052	1 2 3 4	088	1 2 3 4	124	1 2 3 4	160	1 2 3 4
017	1 2 3 4	053	1 2 3 4	089	1 2 3 4	125	1 2 3 4	161	1 2 3 4
018	1 2 3 4	054	1 2 3 4	090	1 2 3 4	126	1 2 3 4	162	1 2 3 4
019	1 2 3 4	055	1 2 3 4	091	1 2 3 4	127	1 2 3 4	163	1 2 3 4
020	1 2 3 4	056	1 2 3 4	092	1 2 3 4	128	1 2 3 4	164	1 2 3 4
021	1 2 3 4	057	1 2 3 4	093	1 2 3 4	129	1 2 3 4	165	1 2 3 4
022	1 2 3 4	058	1 2 3 4	094	1 2 3 4	130	1 2 3 4	166	1 2 3 4
023	1 2 3 4	059	1 2 3 4	095	1 2 3 4	131	1 2 3 4	167	1 2 3 4
024	1 2 3 4	060	1 2 3 4	096	1 2 3 4	132	1 2 3 4	168	1 2 3 4
025	1 2 3 4	061	1 2 3 4	097	1 2 3 4	133	1 2 3 4	169	1 2 3 4
026	1 2 3 4	062	1 2 3 4	098	1 2 3 4	134	1 2 3 4	170	1 2 3 4
027	1 2 3 4	063	1 2 3 4	099	1 2 3 4	135	1 2 3 4	171	1 2 3 4
028	1 2 3 4	064	1 2 3 4	100	1 2 3 4	136	1 2 3 4	172	1 2 3 4
029	1 2 3 4	065	1 2 3 4	101	1 2 3 4	137	1 2 3 4	173	1 2 3 4
030	1 2 3 4	066	1 2 3 4	102	1 2 3 4	138	1 2 3 4	174	1 2 3 4
031	1 2 3 4	067	1 2 3 4	103	1 2 3 4	139	1 2 3 4	175	1 2 3 4
032	1 2 3 4	068	1 2 3 4	104	1 2 3 4	140	1 2 3 4	176	1 2 3 4
033	1 2 3 4	069	1 2 3 4	105	1 2 3 4	141	1 2 3 4	177	1 2 3 4
034	1 2 3 4	070	1 2 3 4	106	1 2 3 4	142	1 2 3 4	178	1 2 3 4
035	1 2 3 4	071	1 2 3 4	107	1 2 3 4	143	1 2 3 4	179	1 2 3 4
036	1 2 3 4	072	1 2 3 4	108	1 2 3 4	144	1 2 3 4	180	1 2 3 4

Before handing over the Answer Sheet to the invigilator, the candidate should check that Roll No., Centre No. & Test Booklet No. have been filled in and marked correctly.

SIGNATURE OF CANDIDATE (in running hand)

SIGNATURE OF INVIGILATOR



**DETAILS OF MEDICAL/DENTAL COLLEGES**

- The list of Medical Colleges is available on website <http://www.mciindia.org/>.
- The list of Dental Colleges is available on website <http://www.dciindia.org.in/>.



**CERTIFICATE OF LOCOMOTOR DISABILITY**

(For Admission to Medical Courses in All India Quota)

Vardhman Mahavir Medical College & Safdarjang Hospital, New Delhi – 110029  
All India Institute of Physical Medicine and Rehabilitation, Hazi Ali, Mumbai – 100034  
Institute of Post Graduate Medical Education & Research, Kolkata – 700020  
Madras Medical College, Park Town, Chennai – 600003  
(Select and tick-mark any one of the above)

Certificate No. \_\_\_\_\_ Dated \_\_\_\_\_

This is to certify that Dr./Mr./Ms. \_\_\_\_\_

Aged \_\_\_\_\_ Years Son/Daughter of Mr. \_\_\_\_\_

R/o \_\_\_\_\_

Rank No. \_\_\_\_\_ is suffering From \_\_\_\_\_ (Name of

The Disease) and has Permanent Physical Impairment (PPI) of Left/Right/Both Lower Limb. He/She is Locomotor disabled and has the percentage of \_\_\_\_\_ (in words) \_\_\_\_\_ (in Figure) of (40% - 70%) disability of lower limbs.

He/She is eligible/NOT eligible for admission in Medical/Dental Courses as per the MCI/DCI guidelines subject to his being otherwise medically fit.

Recent Passport size photograph of the candidate duly attested by the issuing authority

Sign.& Name \_\_\_\_\_  
(Specialist, Deptt.PMR)

Sign. & Name \_\_\_\_\_  
(Specialist, Deptt.Ortho.)

Sign. & Name \_\_\_\_\_  
(Specialist, Deptt. PMR/ Ortho.)

## APPENDIX-XI

### PROFORMA FOR SCHEDULED CASTE AND SCHEDULED TRIBE CERTIFICATE

Form of certificate as prescribed in M.H.A., O.M., No. 42/21/49-N.G.S. dated the 28.1.1952, as revised in Dept. of Per- & A.R. letter No. 36012/6/76-Est. (S.CT), dated the 29.10.1977, to be produced by candidate belonging to a Scheduled Caste or a Scheduled Tribe in support of his/her claim.

#### CASTE CERTIFICATE

This is to certify that Shri/Smt./Kum.\* -----son/daughter\* of -----of village/town\*-----  
-----in district/Division\*-----of the State/Union Territory\* -----belongs to the -----Caste/  
Tribe which is recognized as a Scheduled Caste/Scheduled Tribe\*under:

- The Constitution (Scheduled Caste) Order, 1950
- The Constitution (Scheduled Tribe) Order, 1950
- The Constitution (Scheduled Caste) (Union Territories) Order, 1951
- The Constitution (Scheduled Tribe) (Union Territories) Order, 1951

%1. (as amended by the Scheduled Caste and Scheduled Tribe Lists (Modification) order, 1956, the Bombay Re-organization Act, 1960, the Punjab Re- organization Act, 1966, the State of Himachal Pradesh Act, 1970 the North Eastern Areas (Re-organization) Act, 1971 and the Scheduled Castes and Scheduled Tribes Orders, (Amendment) Act, 1976).

- The Constitution (Jammu and Kashmir) Scheduled Caste Order, 1956.
- The Constitution (Andaman and Nicobar Islands) Scheduled Tribes Order, 1959.
- The Constitution (Dadar and Nagar Haveli) Scheduled Caste Order, 1962.
- The Constitution (Dadar and Nagar Haveli) Scheduled Tribes, Order, 1962.
- The Constitution (Puducherry) Scheduled Caste Order, 1964
- The Constitution (Uttar Pradesh) Scheduled Tribes, Order, 1967.
- The Constitution (Goa, Daman & Diu) Scheduled Caste Order, 1968.
- The Constitution (Goa, Daman & Diu) Scheduled Tribes, Order, 1968.
- The Constitution (Nagaland) Scheduled Tribes Order, 1970.
- The Constitution (Sikkim) Scheduled Caste Order, 1978.
- The Constitution (Sikkim) Scheduled Tribes Order, 1978.

%2. Applicable in the case of Scheduled Caste/Schedule Tribe persons who have migrated from one State/Union Territory Administration:

This certificate is issued on the basis of the Scheduled Caste/Scheduled Tribe\* certificate issued to Shri/Smt\*  
-----father/mother of Shri/Smt/Kum\*-----of village/town\*-----in  
District/Division\* -----of the State/Union Territory\*-----who belongs to the -----cas  
te/tribe which is recognized as a Scheduled Caste/Scheduled Tribe\* in the State/Union Territory\* -----issued  
by the -----(name of prescribed authority) vide their No-----date -----% 3. Shri\*/Smt.\*/Kum\*  
-----and/or his/her\* family ordinary reside (s) in village/town\* -----of the State/Union Territory of  
-----

Signature-----

Place----- State/Union Territory

\*\* Designation-----

Date----- (With seal of Office)

\* Please delete the words which are not applicable.

• Please quote specific Presidential Order.

% Delete the paragraph which is not applicable.

\*\* Should be signed by the Authorities empowered to issue Scheduled Caste/Scheduled Tribe certificates as specified above.



**PROFORMA FOR OTHER BACKWARD CLASS (OBC) CERTIFICATE**

**(CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASS APPLYING FOR ADMISSION TO CENTRAL EDUCATIONAL INSTITUTE (CEIS) UNDER THE GOVERNMENT OF INDIA)**

This is to certify that Shri/Smt./Kum./Dr. \_\_\_\_\_ Son/Daughter of Shri/ Dr. \_\_\_\_\_ of Village/Town \_\_\_\_\_ District/Division \_\_\_\_\_ in the \_\_\_\_\_ State belongs to the \_\_\_\_\_ Community which is recognized as a backward class under:

- (i) Resolution No. 12011/68/93-BCC(C) dated 10/09/93 published in the Gazette of India Extraordinary part I Section I No. 186 dated 13/09/93.
- (ii) Resolution No. 12011/9/94-BCC dated 19/10/94 published in the Gazette of India Extraordinary part I Section I No. 163 dated 20/10/94.
- (iii) Resolution No. 12011/7/95-BCC dated 24/05/95 published in the Gazette of India Extraordinary part I Section I No. 88 dated 25/05/95.
- (iv) Resolution No. 12011/96/94-BCC dated 09/03/96.
- (v) Resolution No. 12011/44/96-BCC dated 06/12/96 published in the Gazette of India Extraordinary part I Section I No. 120 dated 11/12/96.
- (vi) Resolution No. 12011/13/97-BCC dated 03/12/97.
- (vii) Resolution No. 12011/99/94-BCC dated 11/12/97.
- (viii) Resolution No. 12011/68/98-BCC dated 27/10/99.
- (ix) Resolution No. 12011/88/98-BCC dated 06/12/99 published in the Gazette of India Extraordinary part I Section I No. 270 dated 06/12/99.
- (x) Resolution No. 12011/36/99-BCC dated 04/04/2000 published in the Gazette of India Extraordinary part I Section I No. 71 dated 04/04/2004.
- (xi) Resolution No. 12011/44/99-BCC dated 21/09/2000 published in the Gazette of India Extraordinary part I Section I No. 210 dated 21/09/2000.
- (xii) Resolution No. 12015/09/2000-BCC dated 06/09/2001.
- (xiii) Resolution No. 12011/01/2001-BCC dated 19/06/2003.
- (xiv) Resolution No. 12011/04/2002-BCC dated 13/01/2004.
- (xv) Resolution No. 12011/09/2004-BCC dated 16/01/2006 published in the Gazette of India Extraordinary part I Section I No. 210 dated 16/01/2006.
- (xvi) Resolution No. 20012/129/2009/-BC-II dated 04/03/2014 published in the Gazette of India Extraordinary Part I section I no. 63 dated 04/03/2014.

Shri/Smt./Kum. \_\_\_\_\_ and/or his family ordinarily reside(s) in the \_\_\_\_\_ District/Division of \_\_\_\_\_ State.

This is also to certify that he/she does not belong to the persons/section (creamy layer) mentioned in Column 3 of the Scheduled to the Government of India. Department of Personnel & Training O.M. No. 36012/22/93-Estt. (SCT) dated 08/09/93 which is modified vide OM No. 36033/3/2004 Estt. (Res.) dated 09.03.2004 or the latest notification of the Government of India.

Dated:

District Magistrate/Competent Authority  
Seal

**NOTE:**

- (a) The Term Ordinarily used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.
- (b) The authorities competent to issue Caste Certificates are indicated below:
  - (i) District Magistrate/Additional Magistrate/1st Class Stipendiary Magistrate/Sub-Divisional Magistrate/Taluka Magistrate/Executive Magistrate/ Extra Assistant Commissioner (not below the rank of 1<sup>st</sup> Class Stipendiary Magistrate.)
  - (ii) Chief Presidency Magistrate/Additional Chief presidency Magistrate/Presidency magistrate.
  - (iii) Revenue Officer not below the rank of Tehsildar.
  - (iv) Sub-Divisional Officer of the area where the candidate and/or his family resides.
- (c) The annual income/status of the parents of the applicant should be based on financial year ending March 31, 2017.

**IMPORTANT INFORMATION AT A GLANCE****1 Fee Details**

Schedule for on-line submission of application forms	31.01.2017 to 01.03.2017
Last date for successful final transaction of fee	01.03.2017
Date of uploading of Admit-Cards on website	15.04.2017
Date of Examination, NEET(UG) – 2017	07.05.2017
Display of OMR Sheet	Will be intimated through website
Display of Answer Key	Will be intimated through website
Declaration of Result	08.06.2017

**2 Time Schedule NATIONAL ELIGIBILITY CUM ENTRANCE TEST NEET (UG)-2017**

- (a) Entry in the Examination Hall : 7.30 AM to 9.30 AM
- (b) Checking of Admit Cards by the invigilator : 9.30 AM to 9.45 AM
- (c) Distribution of Test Booklet : 9.45 AM
- (d) Seal of the Test Booklet to be broken/opened to take out the Answer Sheet : 9.55 AM
- (e) Latest Entry in the Examination Hall : 9.30 AM
- (f) Test Commences : 10.00 AM
- (g) Test Concludes : 01.00 PM
- 3** Material to be brought on the day of examination : Admit Card, Passport size Photograph and Post Card Size Photograph affixed on proforma.
- 4** Rough Work : All rough work is to be done in the Test Booklet only. The candidate will not do any rough work or put stray mark on the machine gradable Answer Sheet.
- 5** Use of Blue/Black Ball Point Pen only : Pen will be provided at the centre for writing of particulars on the Test Booklet and responses on the Answer Sheet.