SYLLABUS FOR ENTRANCE EXAMINATION
SRMJEEE 2027
B.TECH (UG)

PART 1: PHYSICS (35 Questions)

Unit 1: Units and Measurement

Mechanics Units for measurement, system of units, S.I., fundamental and derived units, measurements, errors in measurement, significant figures, dimensions, dimensional analysis, applications. Laws of Motion: Concept of force, Newton's laws of motion, projectile motion, uniform circular motion, friction, laws of friction, applications, centripetal force. Work, Energy and Power: Work, energy, potential energy and kinetic energy, power, collision, elastic and inelastic collisions.

Unit 2: Gravitation, Mechanics of Solids and Fluids Gravitation:

The universal law of gravitation, acceleration due to gravity, variation of 'g' with altitude, latitude and depth, gravitation potential, escape velocity and orbital velocity, geostationary satellites. Mechanics of Solids and Fluids: Hooke's law, Moduli of elasticity, surface tension, capillarity, applications, viscosity, Poiseuille's formula, Stokes law, applications, streamline and turbulent flow, Reynolds number, Bernoulli's theorem, applications.

Unit 3: Electrostatics

Electric charge, Conservation laws, Coulomb's law, principle of superposition, Distribution of charges in a conductor and action at points, continuous charge distribution, electric field, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field, Electric flux, Gauss's theorem, field due to infinitely long straight wire, uniformly charged infinite equipotential surfaces, electrical potential energy, 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, energy stored in a capacitor.

Unit 4: Current Electricity

Electric current, drift velocity, mobility, Ohm's law, V-I characteristics, electrical energy and power, electrical resistivity and conductivity, temperature dependence, Internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's laws, applications, Wheatstone bridge, Metre bridge, Potentiometer, comparison of EMF of two cells, measurement of internal resistance of a cell, Thermo electric current.

Unit 5: Magnetism and Magnetic Effects of Current

Earth's magnetic field and magnetic element, tangent law, tangent galvanometer, deflection magnetometer, Magnetic effects of electric current, Biot Savart's law, moving coil galvanometer, conversion of a galvanometer into voltmeter and ammeter, Ampere's law.

Unit 6: Electromagnetic Induction, Alternating Currents and Electromagnetic Waves

Electromagnetic induction, Faraday's laws, induced EMF and current, Lenz's Law, Eddy currents, Self and mutual induction, Alternating currents, peak and RMS value of alternating current/voltage, reactance and impedance, LC oscillations, LCR series circuit, resonance, AC generator and transformer, Electromagnetic waves, characteristics, Electromagnetic spectrum.

Unit 7: Optics

Reflection of light, refraction of light, total internal reflection, optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism. Wave front

and Huygen's principle, reflection and refraction of plane wave at a plane surface, laws of reflection and refraction using Huygen's principle, Interference, Young's double slit experiment and expression for fringe width, Diffraction due to a single slit, width of central maximum, Polarisation.

Unit 8: Dual Nature of Radiation and Matter & Atomic Physics

Dual nature of 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, Alpha-particle scattering experiment, Rutherford's model of atom, Bohr model, hydrogen spectrum.

Unit 9: Nuclear Physics

Nuclear radius, mass, binding energy, density, isotopes, mass defect, Bainbridge mass spectrometer, nuclear forces, neutron discovery, artificial radio activity, radio isotopes, radio carbon dating, radiation hazards. Nuclear fission, nuclear reactor, nuclear fusion, hydrogen bomb, cosmic rays, elementary particles.

Unit 10: Electronic Devices

Semiconductors, doping, types, intrinsic semiconductor, extrinsic semiconductor, PN junction diode, biasing, diode as a Rectifier, Special purpose PN junction diodes, LED, photodiode, solar cell, transistors, transistor characteristics, logic gates, basic logic gates, NOT, OR, AND, NOR, NAND, universal gates, De Morgan's theorem.

PART 2: CHEMISTRY (35 Questions)

Unit 1: Solutions

Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Henry's law, Raoult's law, ideal and non-ideal solutions, colligative properties, relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, and determination of molecular masses using colligative properties, abnormal molar mass, van't Hoff factor.

Unit 2: Electrochemistry

Redox reactions, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and laws of electrolysis (elementary idea), Electrolytic cells and Galvanic cells, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, batteries, dry cell and lead accumulator, fuel cells, Corrosion.

Unit 3: Chemical Kinetics

Rate of a reaction (Average and instantaneous), factors affecting rate 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 4: Chemical Thermodynamics

System and surroundings, types of systems, work, heat, energy, extensive and intensive properties, state functions; first law of thermodynamics, internal energy and enthalpy, heat capacity and specific heat, measurement of ΔU and ΔH, Hess's law of constant heat summation; enthalpies of bond dissociation, combustion, formation, atomization, sublimation, phase transition, ionization and solution; second law of thermodynamics (brief introduction); entropy as a state function, Gibbs energy change for spontaneous and non-spontaneous processes, criteria for equilibrium; third law of thermodynamics (brief introduction).

Unit 5: p-Block Elements

Group 15 Elements: General introduction, electronic configuration, occurrence, oxidation states, trends in physical and chemical

properties; nitrogen, preparation, properties and uses; ammonia and nitric acid, preparation, properties and uses; oxides of nitrogen (structures only); phosphorus, allotropic forms; phosphine, phosphorus halides (PCl_3, PCl_5) and oxoacids of phosphorus (structures 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, 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 and oxoacids of halogens (structures only).

Group 18 Elements: General introduction, electronic configuration, Occurrence, trends in physical and chemical properties, fluorides and oxides of xenon (structures only), uses.

Unit 6: 'd' and 'f' Block Elements

General introduction, electronic configuration, occurrence and 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. Lanthanoids: Electronic configuration, oxidation states, chemical reactivity, lanthanoid contraction and its consequences. Actinoids: Electronic configuration, oxidation states and comparison with lanthanoids.

Unit 7: Coordination Compounds

Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT, structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological systems).

Unit 8: Haloalkanes and Haloarenes

Haloalkanes: Nomenclature, nature of C-X bond, methods of preparation, physical and chemical properties, mechanism of nucleophilic substitution reactions (SN1 and SN2), optical rotation. Haloarenes: Nature of C-X bond, methods of preparation, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.

Unit 9: Alcohols, Phenols and Ethers

Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), identification of primary, secondary and tertiary alcohols, mechanism of dehydration.

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 10: Aldehydes, Ketones and Carboxylic Acids

Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, and ketones, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties, uses.

Unit 11: Organic Compounds Containing Nitrogen

Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of primary, secondary and tertiary amines.

Diazonium salts: Preparation, chemical reactions and importance in synthetic organic chemistry.

Unit 12: Biomolecules

Carbohydrates - Classification (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration, oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates. Proteins- Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure and quaternary structures (qualitative idea only), denaturation of proteins. Nucleic Acids: DNA and RNA.

Vitamins - Classification and functions.

PART 3: MATHEMATICS (40 Questions)

Unit 1: Sets, Relations and Functions

Sets and their representations, Cartesian product of sets, union, intersection and their algebraic properties, relations, equivalence relations, mappings, one-one, into and onto mappings, composition of mappings.

Unit 2: Complex Numbers and Quadratic Equations

Complex numbers in the form a+ib and their representation in a plane. Quadratic equation in real and complex number system and their solutions. Algebraic properties of complex numbers, Relation between roots and coefficients, nature of roots, formation of quadratic equations with given roots; symmetric functions of roots, equations reducible to quadratic equations.

Unit 3: Matrices, Determinants and their Applications

Determinants and matrices of order two and three, minors, cofactors and applications of determinants in finding the area of a triangle, equality, types, zero and identity matrix, transpose, symmetric and skew symmetric. Evaluation of determinants. Addition and multiplication of matrices, simple properties, adjoint and inverse of matrix, solution of simultaneous linear equations using determinants and matrices using inverses, Consistency of system of linear equations by rank method.

Unit 4: Combinatorics

Permutations and Combinations: Fundamental principle of counting, permutation as an arrangement without repetitions and constraint repetitions, no circular permutations. Combination as selection, problems in P(n,r) and C(n,r), factorial, simple applications.

Unit 5: Algebra

Theory of Equations: The relation between the roots and coefficients in an equation. Solving the equations when two or more roots of it are connected by certain relation. Equation with real coefficients, occurrence of complex roots in conjugate pairs and its consequences. Transformation of equations, Reciprocal Equations.

Unit 6: Differential Calculus and its Applications

Polynomials, rational, trigonometric, logarithmic and exponential functions. Inverse functions. Graphs of simple functions. Limits, continuity, differentiation of the sum, difference, product and quotient of two functions, differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions, up to second order derivatives.

Applications of Differential Calculus: Rate of change of quantities, monotonic, increasing and decreasing functions, maxima and minima of functions of one variable, tangents and normal, Rolle's and Lagrange's mean value theorems. Ordinary differential equations, order and degree.

Formation of differential equations, solution of differential equations by the method of separation of variables. Solution of homogeneous and linear differential equations and those of the type $dy/dx + p(x)y = q(x)$.

Unit 7: Integral Calculus and its Applications

Fundamental integrals involving algebraic, trigonometric, exponential and logarithmic functions. Integration by substitution, integration using trigonometric identities, properties of definite integrals. Evaluation of definite integrals excluding application of definite integrals.

Unit 8: Analytical Geometry

Straight Lines in Two Dimensions: Straight line, Normal form, Illustrations. Straight line, Symmetric form. Straight line, Reduction into various forms. Intersection of two Straight Lines. Slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axes. Family of straight lines, Concurrent lines. Condition for Concurrent lines. Distance of a point from a line, angle between two lines, Cartesian system of rectangular coordinates in plane, distance formula, area of a triangle and condition for the collinearity of three points and section formula, Concurrent lines, properties related to a triangle. Centroid and incentre of a triangle, locus and its equation.

Circles in Two Dimensions: Standard form of equation of a circle, general form of the equation of a circle, its radius and centre, equation of a circle in the parametric form, equation of a circle when the endpoints of a diameter are given, points of intersection of a line and a circle with the centre at the origin and condition for a line to be tangent to the circle.

Conic Sections in Two Dimensions: Sections of cones, equations of conic sections (parabola, ellipse and hyperbola) in standard form. Problems using their geometrical properties.

Unit 9: Vector Algebra

Vectors and scalars, addition of vectors, Direction cosines and direction ratios of a vector. Components of a vector in two dimensions and three-dimensional space, scalar and vector products, scalar and vector triple product. Application of vectors to plane geometry.

Unit 10: Statistics and Probability Distribution

Measures of Central Tendency and Dispersion: Calculation of mean, median and mode of grouped and ungrouped data. Calculation of standard deviation, variance and mean deviation for grouped and ungrouped data. Probability: Probability of an event, addition and multiplication theorems of probability and their applications; Conditional probability; Baye's theorem, probability distribution of a random variable; The Bernoulli distribution, Binomial, Poisson and Normal distributions and their properties.

Unit 11: Trigonometry

Trigonometry ratios, compound angles, solution of triangles, Trigonometric identities and equations, Inverse trigonometric functions, definition, range and domain. Properties of triangles, including incentre, circumcentre and orthocentre, solution of triangles, Problems related to Heights and distances.

PART 4: BIOLOGY (40 Questions)

Unit 1: Diversity of Living World

Biodiversity, Importance of classifications, Taxonomy & Systematics, Concept of species and taxonomical hierarchy, Binomial nomenclature, Tools for study of Taxonomy.

Five kingdom classifications: Monera, Protista, and Fungi into major groups; Lichens; Viruses and Viroids. Salient features of them.

Classification of plants: Major groups, Algae, Bryophytes, Pteridophytes, Gymnosperm and Angiosperm, salient and distinguishing features. Angiosperms, classification up to class, characteristic features and examples. *Alternation of generation in plant life cycles.*

Classification of animals: Non chordate up to phyla level and chordate up to class level, salient and distinguishing features with a few examples of each category.

Unit 2: Structural Organization in Animals and Plants

Plant tissues: Morphology and modifications, Tissues, Anatomy and functions of different parts of flowering plants: Root, stem, leaf, inflorescence, flower, fruit and seed. Description of families: Fabaceae, Solanaceae and Liliaceae.

Animal tissues: Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach) and of frog.

Unit 3: Cell Structure and Function

Cell: 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. Nucleus, nuclear membrane, chromatin, nucleolus.

Chemical constituents of living cells: Biomolecules, structure and function of proteins including Enzymes, types, properties, enzyme action, carbohydrates, lipid and nucleic acids.

Cell division: Cell cycle, mitosis, meiosis and their significance.

Unit 4: Plant Physiology

Transport in plants: Movement of water, gases and nutrients, Cell to cell transport, 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.

Mineral nutrition: Essential minerals, macro and micronutrients and their role, Deficiency symptoms, Mineral toxicity, Elementary idea of Hydroponics, Nitrogen, metabolism, cycle and fixation.

Photosynthesis: Significance, site of photosynthesis, pigments, Photochemical and biosynthetic phases of photosynthesis, Cyclic and non-cyclic photophosphorylation; Chemiosmotic hypothesis; Photorespiration; C3 and C4 pathways; Factors affecting photosynthesis.

Respiration: 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, Photoperiodism, Vernalisation.

Unit 5: 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, Egestion; Nutritional and digestive disorders, indigestion, constipation, vomiting, jaundice, diarrhea.

Breathing and Respiration: Respiratory organs in animals, 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, Uremia, Renal failure, Renal calculi, Nephritis, Dialysis and artificial kidney, kidney transplant.

Locomotion and Movement: Types of movement, amoeboid, ciliary, flagellar, muscular, skeletal muscle, contractile proteins and muscle contraction, Skeletal system and its functions, 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, conduction and transmission of nerve impulse, Reflex action, Sensory perception, 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, Thymus, Adrenal, Pancreas, Gonads. Hormones of heart, kidney, and gastrointestinal tract. Mechanism of hormone action, 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.

Unit 6: Reproduction

Reproduction in Organisms: Reproduction, a characteristic feature of all organisms for continuation of species, modes of reproduction, asexual and sexual reproduction, asexual reproduction, binary fission, sporulation, budding, gemmule formation, fragmentation, vegetative propagation in plants. Events in sexual reproduction.

Sexual Reproduction in Flowering Plants: Flower structure, development of male and female gametophytes, pollination, types, agencies and examples, out breeding 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 dispersal and fruit formation.

Human Reproduction: Male and female reproductive systems, microscopic anatomy of testis and ovary, gametogenesis, spermatogenesis and oogenesis, menstrual cycle, fertilization, embryo development up to blastocyst formation, implantation, pregnancy and placenta formation, parturition, lactation.

Reproductive Health: Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs), birth control, need and methods, contraception and medical termination of pregnancy (MTP), amniocentesis, infertility and assisted reproductive technologies, IVF, ZIFT, GIFT, AI.

Unit 7: Genetics and Evolution

Principles of Inheritance and Variation: Heredity and variation, Mendelian inheritance, deviations from Mendelism, incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy, polygenic inheritance, chromosome theory of inheritance, chromosomes and genes, Sex determination in humans, birds, grasshopper and honey bee, linkage and crossing over. Mutation, Pedigree analysis, sex linked inheritance, haemophilia, colour blindness, Mendelian disorders in humans, sickle cell anemia, Phenylketonuria, 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 and replication, Central dogma, transcription, genetic code, translation, gene expression and regulation, lac operon, genome, Human and rice genome projects, DNA fingerprinting.

Evolution: Origin of life, biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences), Lamarck's theory, 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 8: Biology and Human Welfare

Human Health and Diseases: Pathogens, parasites causing human diseases (malaria, dengue, chikungunya, filariasis, ascariasis, typhoid, pneumonia, common cold, amoebiasis, ring worm) and their control, Basic concepts of immunology, vaccines, cancer, HIV and AIDS, Adolescence, drug and alcohol abuse.

Strategies for Enhancement in Food Production: Improvement in food production, Plant breeding, tissue culture, single cell protein, Biofortification, Apiculture and Animal husbandry.

Microbes in Human Welfare: Microbes in food processing, In household food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and biofertilizers. Antibiotics, production and judicious use.

Unit 9: Biotechnology and Its Applications

Biotechnology, Principles and processes: Genetic Engineering (Recombinant DNA Technology).

Biotechnology and its Application: Application of biotechnology in health and agriculture: genetically modified organisms, Bt crops; RNA interference. Human insulin, and vaccine production, stem cell technology, gene therapy, molecular diagnosis, transgenic animals, biosafety issues, bio piracy and patents.

Unit 10: Ecology and Environment

Organisms and Populations: Organisms and environment: Habitat and niche, major abiotic factors, response to abiotic factors, ecological adaptations, population interactions, mutualism, competition, predation, parasitism, commensalism, population attributes, growth, birth rate and death rate, age distribution.

Ecosystem: Structure and function, productivity and decomposition, energy flow, pyramids of number, biomass, energy, nutrient cycles (carbon and phosphorous), ecological succession, ecological services, carbon fixation, pollination, seed dispersal, oxygen release.

Biodiversity and its Conservation: Biodiversity, Concept, patterns, importance, loss of biodiversity, biodiversity conservation, hotspots, endangered organisms, extinction, Red Data Book, Sacred Groves, biosphere reserves, national parks, wildlife sanctuaries and Ramsar sites.

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 climate change impact and mitigation, ozone layer depletion, deforestation, any one case study as success story addressing environmental issue(s).

PART 5: ENGLISH & APTITUDE (20 Questions)