YOUNG PHOENIX PUBLIC SCHOOL

Affiliated to CBSE, New Delhi, Aff. No – 1530218
BHUBANESWAR - 751002

SESSION: 2025-2026
SYLLABUS OF STD-XII

Class Teacher: Mrs. Pinky rani panda (8249593324)

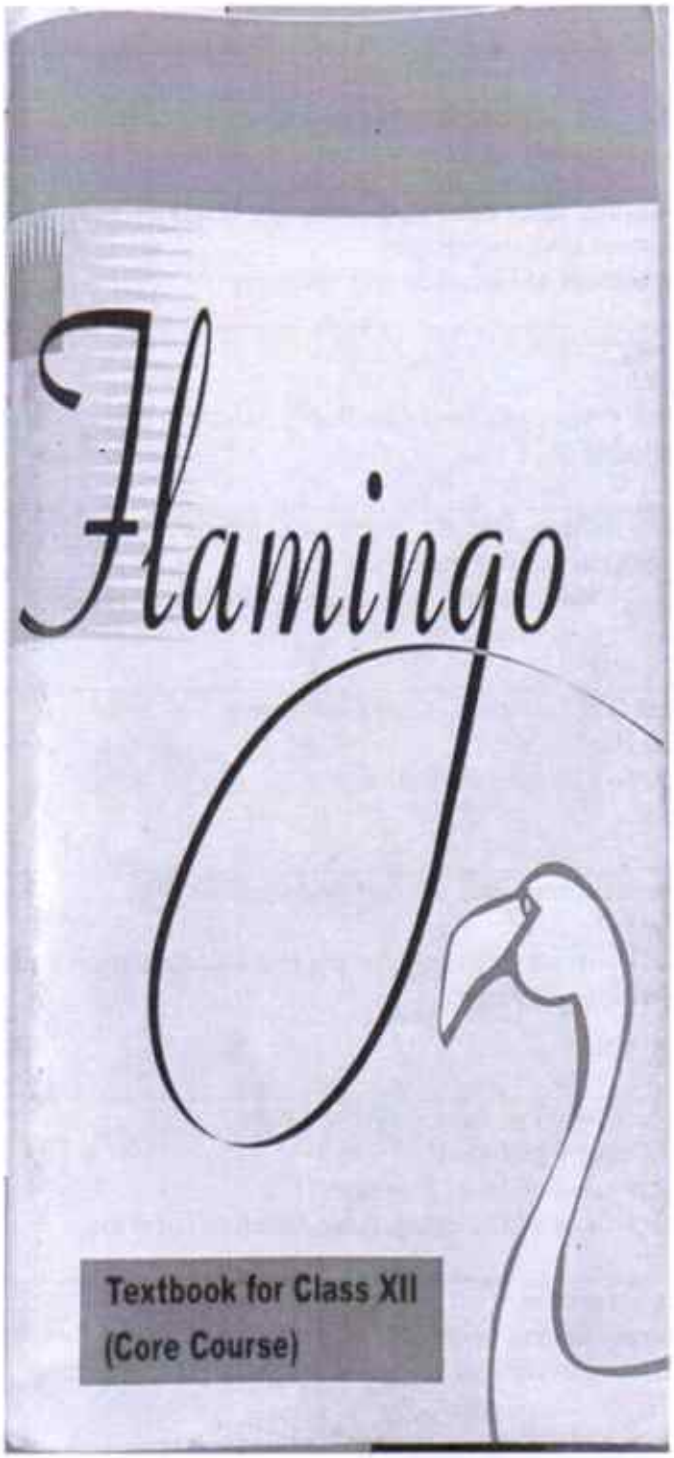
Name of the student: .....

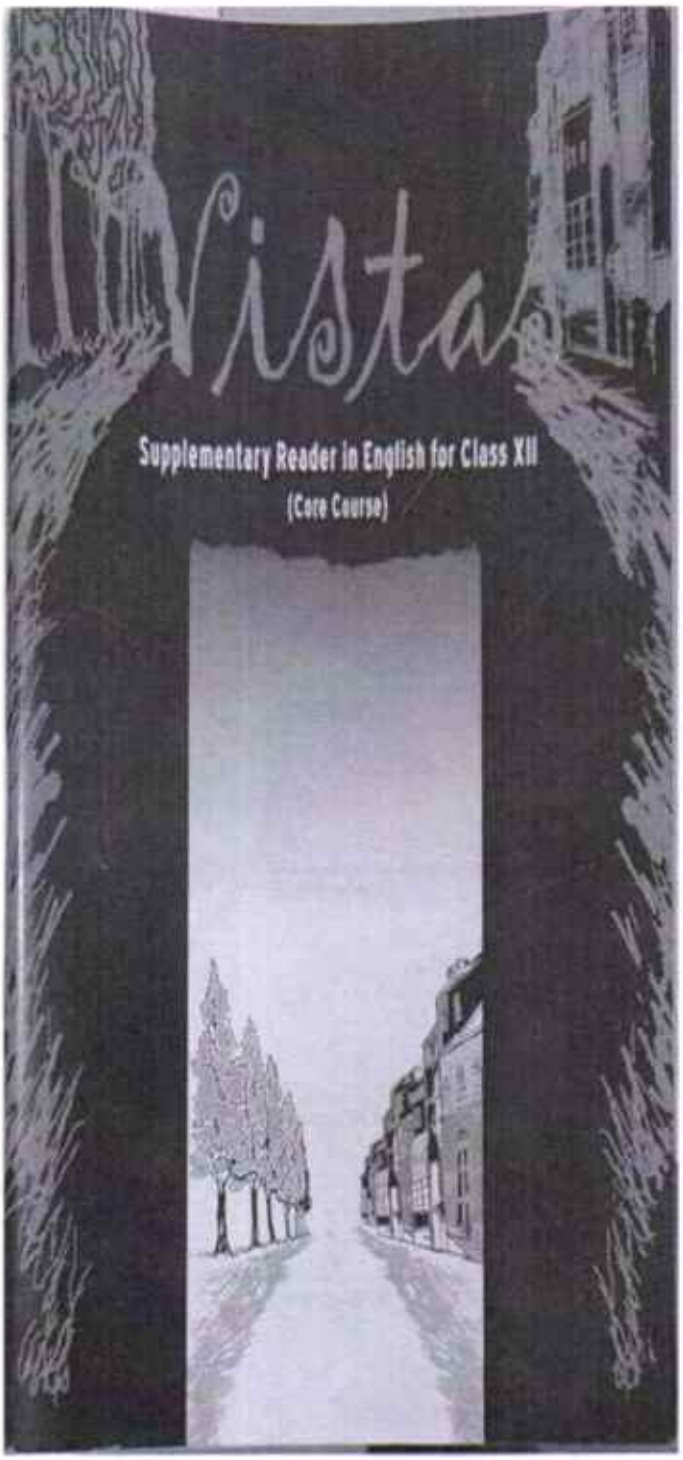
Section: ..... ***Roll No. :*** .....

CONTENTS OF THE SYLLABUS

PRINCIPAL
YOUNG PHOENIX PUBLIC SCHOOL
BHUBANESWAR

TEXTBOOK FOR ENGLISH





SUBJECT TEACHER – MR. RAJESH SAHOO

CONTACT - 8917210248

STD – XII
ENGLISH CORE (SUBJECT CODE – 301)
SYLLABUS FOR SESSION (2025-26)

Sl. No.	Month	Contents
1.	April	FLAMINGO - The Last Lesson, My Mother AtSixty-six (poem) VISTAS – The Third Level
2.	May	FLAMINGO – Keeping quiet (poem), Lost Spring WRITING SKILLS – Notice writing, Formal Invitation Reply ACTIVITY –Assessment of Listening and Speaking
3.	June	FLEMINGO – Deep Water VISTAS – Tiger King WRITING SKILLS – Informal Invitation Reply Article Writing ACTIVITY – Speaking Skill
4.	July	FLAMINGO – The Rattrap, The things of beauty (poem) VISTAS – Journey to the end of the earth WRITING SKILLS – Application for a job with Bio data or resume, Article writing
5.	August	FLAMINGO –Poet and Pancakes, A road side stand VISTAS – On The Face of it WRITING SKILLS – Letter to the Editor ACTIVITY- A.S.L.
6.	September	FLAMINGO –Poet and Pancakes, A road side stand VISTAS – On The Face of it WRITING SKILLS – Report Writing, Descriptive and Analytical Article ACTIVITY-Project Presentation
7.	October	FLAMINGO – The Interview, Aunt Jennifer's tiger VISTAS – Memories of Childhood WRITING SKILLS –Formal letter Revision ACTIVITY – Assessment of Listening, Assessment of speaking
8.	November	FLAMINGO –Going places VISTAS – We too are human being WRITING SKILLS – Revision of Notice writing and Article writing ACTIVITY – A.S .L
9.	December	Revision

PORTION FOR: ENGLISH LANGUAGE AND LITERATUR-CLASS XII (2025-26)

BLUEPRINT/PATTERN

CHAPTER	FLAMINGO	POEM	VISTAS	PT- 1	HALF YEARLY	PT-2	ANNUAL BOARD
NO.1	THE LAST LESSON	MY MOTHER AT SIXTY SIX	THE THIRD LEVEL	✓	✓		✓
NO.2	LOST SPRING	KEEPING QUITE	THE TIGER KING	✓	✓		✓
NO.3	DEEP WATER	A THING OF BEAUTY	JOURNEY TO THE END OF THE EARTH		✓		✓
NO.4	THE RAT TRAP				✓		✓
NO.5	INDIGO				✓		✓
NO.6	POET AND PANCAKES	A ROAD SIDE STAND	THE ENEMY			✓	✓
NO.7	THE INTERVIEW	AUNT JENNIFER'S TIGER	ON THE FACE OF IT			✓	✓
NO.8	GOING PLACES		MEMORIES OF CHILDHOOD			✓	✓

PATTERN FOR: PERIODIC-1/PERIODIC-2 ASSESSMENT.

1. UNSEEN PASSAGE (10 MARKS)
2. WRITING SKILL (10 MARKS)
   -JOB APPLICATION AND RESUME/BIO-DATA
   -LETTER TO EDITOR/ARTICLE/REPORT
3. LANGUAGE AND LITERATURE (20 MARKS)

TOTAL MARK = 40 MARKS

PATTERN FOR: HALF YEARLY / ANNUAL BOARDASSESSMENT

SECTION A: READING SKILLS (22 Marks)

1. Discursive passage of 400-450 words(12marks)
2. Case-based factual passage (with visual input-statistical data, chart, etc.) of 200-250 words. (10 marks) Multiple Choice Questions/Objective Type Questions, and Short Answer Questions (to be answered in 30 40 words) will be asked to assess comprehension, interpretation, analysis, inference, evaluation and vocabulary.

SECTIONB: CREATIVE WRITING SKILLS (18 Marks)

3. Notice, up to 50 words. One out of the two given questions to be answered. (4 Marks: Format:1/Content:2/AccuracyofSpellingandGrammar:1).

4. Formal/Informal Invitation and Reply, up to 50 words. One out of the two given questions to be answered. (4 Marks: Format: 1 / Content: 2 / Accuracy of Spelling and Grammar: 1).

5. Letters based on verbal/visual input, to be answered in approximately 120-150 words. Letter types include application for a job with bio data or resume. Letters to the editor (giving suggestions or opinion on issues of public interest). One out of the two given questions to be answered. (5 Marks: Format: 1 / Organization of Ideas: 1/Content: 2 / AccuracyofSpellingandGrammar:1).

6. Article/Report Writing, descriptive and analytical in nature, based on verbal inputs, to be answered in 120-150 words. One out of the two given questions to be answered. (5 Marks: Format: 1 /Organization of Ideas: 1/Content: 2 / Accuracy of Spelling and Grammar: 1)

SECTION C: LANGUAGE THROUGH LITERATURE (40 Marks)

7. One Poetry extract out of two, from the book Flamingo, to assess comprehension, interpretation, analysis, inference and appreciation.(6x1=6Marks)

8. One Prose extract out of two, from the book Vistas, to assess comprehension, interpretation, analysis, evaluation and appreciation.(4x1=4Marks)

9. One prose extract out of two from the book Flamingo, to assess comprehension, interpretation, analysis, inference and evaluation.(6x1=6Marks)

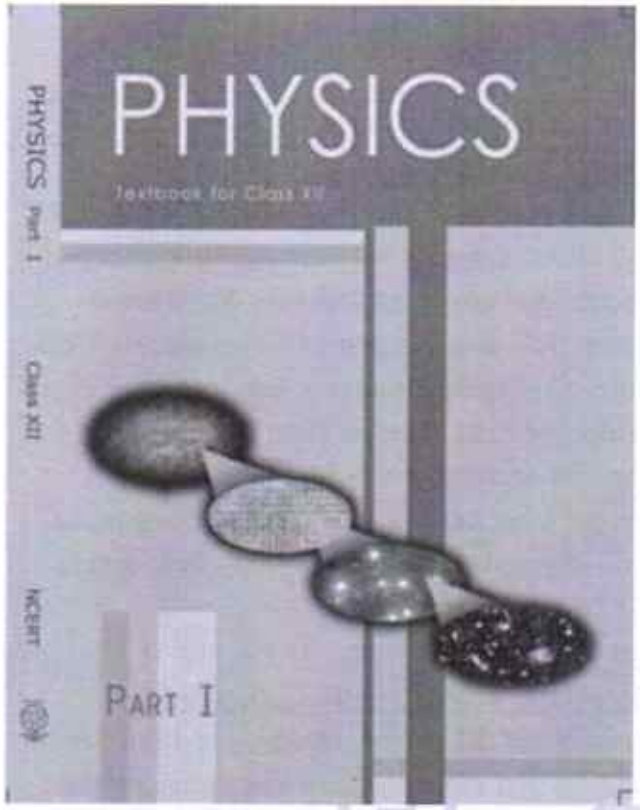
10. Short answer type questions (from Prose and Poetry from the book Flamingo), to be answered in 40-50 words each. Questions should elicit inferential responses through critical thinking. Five questions out of the six given, are to be answered.(5x2=10Marks)

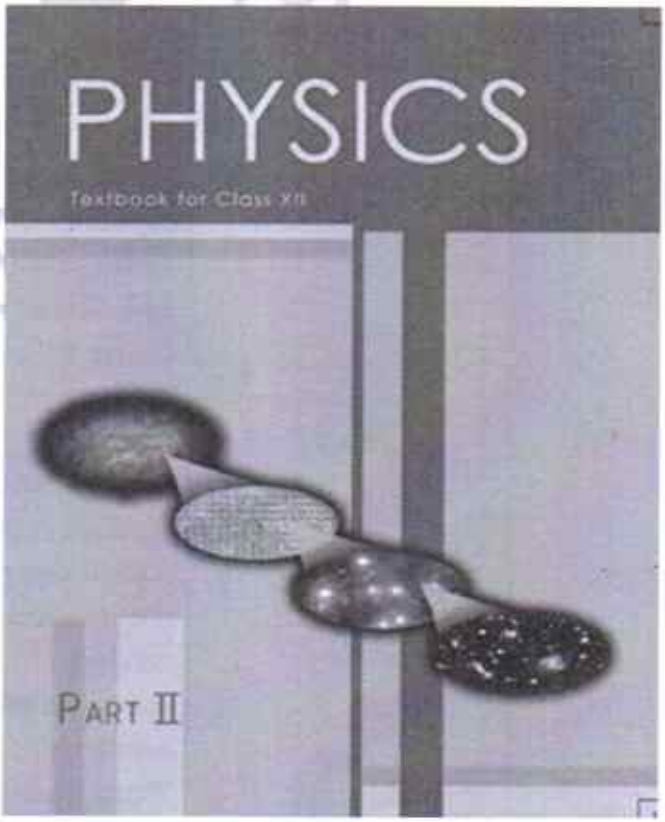
11. Short answer type questions, from Prose (Vistas), to be answered in 40- 50 words each. Questionsshouldelicitinferentialresponsésthroughcriticalthinking.Anytwooutof three questions to be done. (2x2=4 Marks)

12. One Long answer type question, from Prose/Poetry (Flamingo), to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from the student. Any one out of two questions to be done. (1x5=5 Marks)

13. One Long answer type question, based on the chapters from the book Vistas, to be answered in120-150 words, to assess global comprehension and extrapolation beyond the text. Questions to provide analytical and evaluative responses using incidents, events, themes, as reference points. Anyone out of two questions to be done.(1x5=5Marks)

TEXTBOOK FOR PHYSICS





SUBJECT TEACHER – MR. NEERAJ SINGH

CONTACT NO. - 7008247369

STD – XII
PHYSICS (SUBJECT CODE – 042)
SYLLABUS FOR SESSION (2025 – 26)

Sl. No.	Month	Chapters / Topic
1.	APRIL	**Chapter–1: Electric Charges and Fields** Electric charges, Conservation of charge, 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 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). **Chapter–2: Electrostatic Potential and Capacitance** 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 dipole in an electrostatic field.
2.	MAY	**Chapter–2: Electrostatic Potential and Capacitance** 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 (no derivation, formulae only). **Chapter–3: Current Electricity** Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and non-linear), electrical energy and power, electrical resistivity and conductivity, 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 rules, Wheatstone bridge.
3.	JUNE	**Chapter–4: Moving Charges 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 solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields. Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter.
4.	JULY	**Chapter–5: Magnetism and Matter** Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials-Para-, dia- and ferro – magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties **Chapter–6: Electromagnetic Induction** Electromagnetic induction: Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.
5.	AUGUST	**Chapter–7: Alternating Current** Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer. **Chapter–8: Electromagnetic Waves** Basic idea of displacement current, Electromagnetic waves, their characteristics, their transverse nature (qualitative idea only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses
6.	SEPTEMBER	**Chapter–9: Ray Optics and Optical Instruments** Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and 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. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their

		magnifying powers.
7.	**OCTOBER**	**Chapter–10: Wave Optics** Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only). **Chapter–11: Dual Nature of Radiation and Matter** Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect Matter waves-wave nature of particles, de-Broglie relation.
8.	**NOVEMBER**	**Chapter–12: Atoms** Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, velocity and energy of electron in nth orbit, hydrogen line spectra (qualitative treatment only). **Chapter–13: Nuclei** Composition and size of nucleus, nuclear force Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion. **Chapter–14: Semiconductor** Electronics: Materials, Devices and Simple Circuits Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic semiconductors- p and n type, p-n junction Semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode -diode as a rectifier.
9.	**DECEMBER**	Revision

STD – XII
PHYSICS
(MARKING SCHEME)

MARK DISTRIBUTION BLUE PRINT FOR PT – I AND PT - II

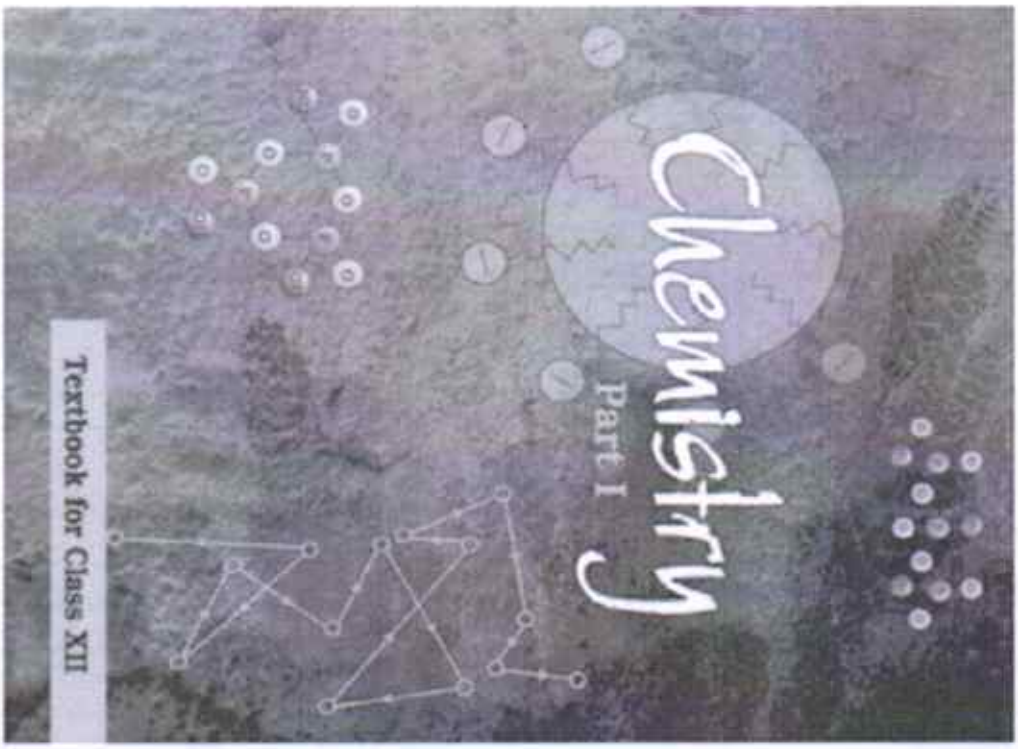
	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
PHYSICS	1 × 8	2 × 3	3 × 4	5 × 1	4 × 1	35
	08	06	12	05	04	35

MARK DISTRIBUTION BLUE PRINT FOR HALF – YEARLY AND ANNUAL EXAM

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
PHYSICS	1 × 16	2 × 5	3 × 7	5 × 3	4 × 2	70
	16	10	21	15	08	70

Unit	Chapters	Marks	PT – I	HALF YEARLY	PT – II	ANNUAL
Unit 1	**Electrostatics**	16				
	Chapter 1: Electric Charges and Fields		✓	✓		✓
	Chapter 2: Electrostatic Potential and Capacitance		✓	✓		✓
Unit 2	**Current Electricity**					
	Chapter 3: Current Electricity		✓	✓		✓
Unit 3	**Magnetic Effects of Current and Magnetism**	17				
	Chapter 4: Moving Charges and Magnetism			✓		✓
	Chapter 5: Magnetism and Matter			✓		✓
Unit 4	**Electromagnetic Induction and Alternating Currents**					
	Chapter 6: Electromagnetic Induction			✓		✓
	Chapter 7: Alternating Current			✓		✓
Unit 5	**Electromagnetic Waves**	18				
	Chapter 8: Electromagnetic Waves				✓	✓
Unit 6	**Optics**					
	Chapter 9: Ray Optics and Optical Instruments				✓	✓
	Chapter 10: Wave Optics				✓	✓
Unit 7	**Dual Nature of Radiation and Matter**	12				
	Chapter 11: Dual Nature of Radiation and Matter					✓
Unit 8	**Atoms and Nuclei**					
	Chapter–12: Atoms					✓
	Chapter–13: Nuclei					✓
Unit 9	**Electronic Devices**	7				
	Chapter 14: Semiconductor Electronics: Materials, Devices and Simple Circuits					✓
	Total	70				

TEXT BOOK FOR CHEMISTRY



SUBJECT TEACHER – MRS. PINKY RANI PANDA

CONTACT NO. - 8249593324

P Panda 10.5.25

CLASS - XII
CHEMISTRY (SUBJECT CODE – 043)
SYLLABUS FOR SESSION (2025-26)

SL. NO.	MONTH	Chapters / topic
1.	APRIL	**Ch - 1 – solution (complete)** **Ch -3 - chemicals kinetics** • Rate of a reaction • Factors affecting rate of a reaction • Order and molecularity of a reaction
2.	MAY	**Ch - 3 – chemicals kinetics** • Rate law and specific rate constant • Integrated rate equations and half-life (1^{st} order and zero order) • Collision theory • Activation energy, Arhenius equation **Ch – 5 - co-ordination compounds** • Legands, coordination number, colour Magnetic properties and shapes • IUPAC nomenclature • Werner's theory • VBT
3.	JUNE	**Ch – 5 – co-ordination compounds** • CFT • Structure and stereoisomerism • Importance of co-ordination number
4.	JULY	**Ch -6 – Haloalkanes:** Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.), **Ch – 10- : Biomolecules** Carbohydrates - Classification (aldoses and ketoses), monosaccahrides (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; enzymes. Hormones - Elementary idea excluding structure. Vitamins - Classification and functions. Nucleic Acids: DNA and RNA.
5.	**AUGUST**	**Ch – 7 – 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 **Ch – 9 – 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.
6.	**SEPTEMBER**	**Ch -8 – 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, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses
7.	**OCTOBER**	**Ch – 2 –Electrochemistry** Redox reactions, 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, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.
8.	**NOVEMBER**	**Ch - 4 –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, preparation and properties of K2Cr2O7 and KMnO4. **Lanthanides -** Electronic configuration, oxidation states, chemical reactivity and lanthanide contraction and its consequences. **Actinides** - Electronic configuration, oxidation states and comparison with lanthanides

STD – XII

CHEMISTRY

EXAM PORTION

CHAPTER	CHAPTER NAME	PT-1	HALF YEARLY	PT - 2	ANNUAL
CHAPTER 1	SOLUTIONS	✓	✓		✓
CHAPTER 2	ELECTROCHEMISTRY				✓
CHAPTER 3	CHEMICAL KINETICS	✓	✓		✓
CHAPTER 4	D -AND F -BLOCK ELEMENTS				✓
CHAPTER 5	COORDINATION COMPOUNDS	✓	✓		✓
CHAPTER 6	HALOALKANES AND HALOARENES		✓		✓
CHAPTER 7	ALCOHOLS, PHENOLS AND ETHERS		✓		✓
CHAPTER 8	ALDEHYDES, KETONES AND CARBOXYLIC ACIDS			✓	✓
CHAPTER 9	AMINES			✓	✓
CHAPTER 10	BIOMOLECULES				✓

STD – XII

CHEMISTRY

(MARK DISTRIBUTION)

MARK DISTRIBUTION BLUE PRINT FOR PT – I AND PT - II

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
CHEMISTRY	1 × 8	2 × 3	3 × 4	5 × 1	4 × 1	35
	08	06	12	05	04	35

MARK DISTRIBUTION BLUE PRINT FOR HALF – YEARLY AND ANNUAL EXAM

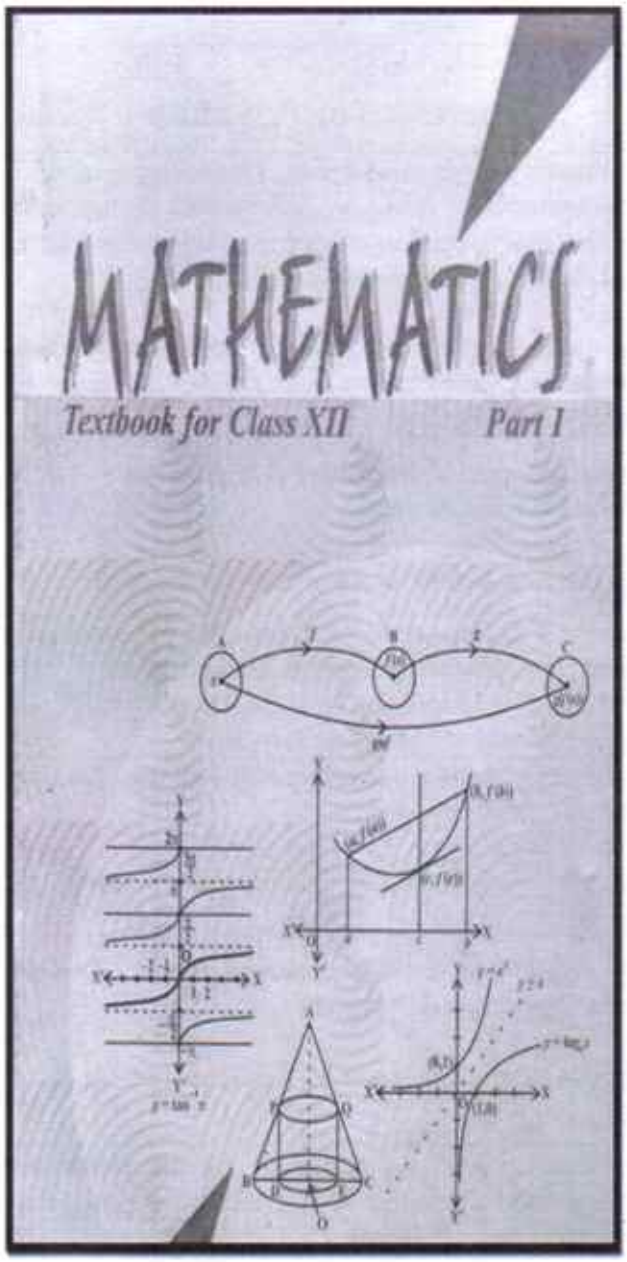
	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
CHEMISTRY	1 × 16	2 × 5	3 × 7	5 × 3	4 × 2	70
	16	10	21	15	08	70

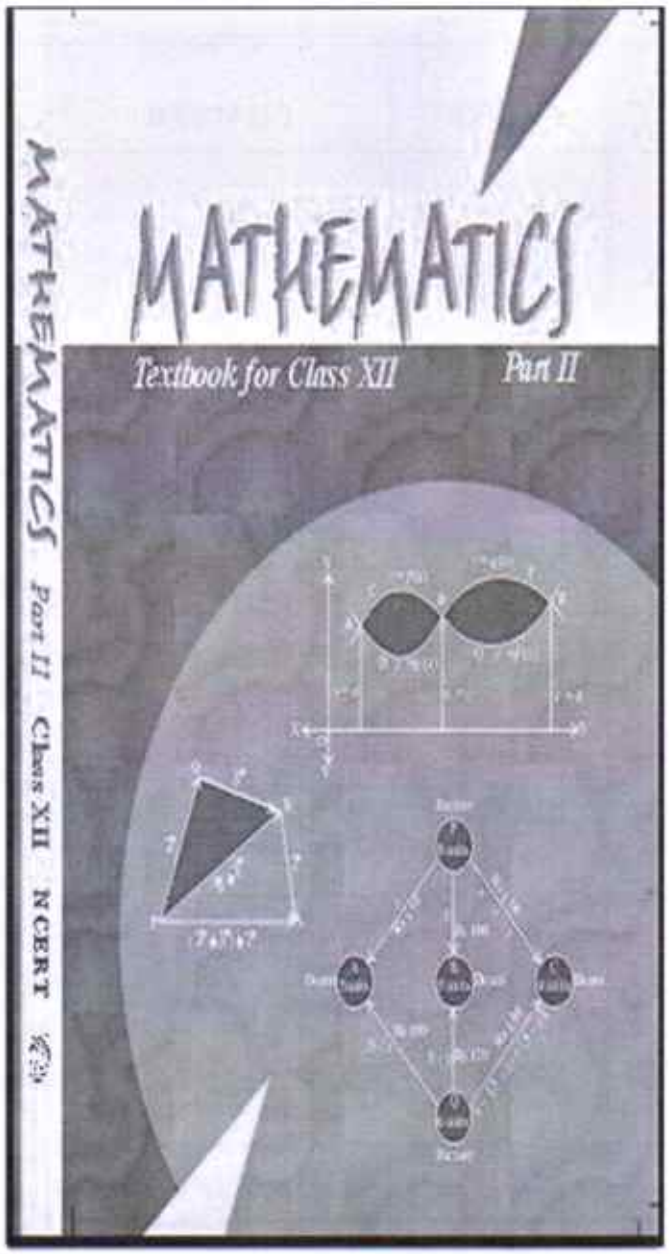
CBSE CLASS 12 CHEMISTRY UNIT-WISE WEIGHTAGE

CHAPTER	TOPIC NAME	MARKS
1	SOLUTIONS	7
2	ELECTROCHEMISTRY	9
3	CHEMICAL KINETICS	7
4	D -AND F -BLOCK ELEMENTS	7
5	COORDINATION COMPOUNDS	7
6	HALOALKANES AND HALOARENES	6
7	ALCOHOLS, PHENOLS AND ETHERS	6
8	ALDEHYDES, KETONES AND CARBOXYLIC ACIDS	8
9	AMINES	6
10	BIOMOLECULES	7
	TOTAL	**70**

10.5.25

TEXTBOOK FOR MATHEMATICS





Part-I Part-II

SUBJECT TEACHER – MR. CHINMAY KUMAR SATHUA

CONTACT – 9853058000, 8847899762

10/05/25

MATHEMATICS(SUBJECT CODE – 041)
SYLLABUS FOR THE SESSION (2025-26)

SL. NO.	MONTH	CHAPTER	TOPICS TO BE COVERED
1	APRIL	**Chapter -3:** Matrices **Chapter -4 :** Determinants	Order, Equality types of Matrices, Transpose, symmetric & skew- symmetric, Addition, Subtraction, multiplication by a scalar, multiplication of Matrices. Invertible Matrices & proof of the Uniqueness of Inverse Minor, cofactors, Area of a triangle, Adjoint & Inverse of a square matrix, consistency, inconsistency, solving system of Linear Equations
2	MAY	**Chapter- 1 :** Relations & Functions **Chapter – 2 :** Inverse Trigonometric functions	Reflexive, symmetric, Transitive & Equivalence Relations. One-one & onto. Range, Domain, principal value and Graphs of ITF
3	JUNE	**Chapter – 5 :** Continuity & Differentiability	Continuity & Differentiability, Derivative of composite functions, ITF, Implicit functions, Derivative of Logarithmic & Exponential function, Derivative of parametric form, second order Derivative.
4	JULY	**Chapter – 6 :** Application of Derivatives **Chapter – 7 :** Integrals	Rate of change, Increasing/decreasing function, Maxima & Minima. Simple problems Substitution Method, Partial fraction and By parts (continuing)
5	AUGUST	**Chapter – 7 :** Integrals **Chapter – 8 :** Application of Integrals	(Continuing)Fundamental Theorem of calculus, Definite Integrals, Properties of Integrals Area under simple curves, lines, Circles, Parabola & Ellipse
6	SEPTEMBER	**Chapter -9 :** Differential Equations **Chapter - 10 :** Vectors	Order, Degree, General & particular solution. Separation variable methods, Homogeneous Differential Equation, Solution of Linear Differential Equation Vectors, scalars, Direction Cosines & Direction ratios. Types of vectors (continuing)
7	OCTOBER	**Chapter -10 :** Vectors **Chapter – 11 :** Three Dimensional Geometry	Continuing Dot product (Scalar) & cross product Cartesian & vector Equation of a line, skew lines, shortest distance between two lines. Angle between two lines
8	NOVEMBER	**Chapter – 12 :** Linear Programming Problem **Chapter – 13 :** Probability	Graphical solution for problems in two variables, feasible and infeasible regions. (Bounded / unbounded) Conditional probability, Multiplication Theorem, Independent Events, Total probability, Bay's Theorem

STD – XII

EXAM PORTION

CHAPTER	CHAPTER NAME	PT-1	HALF YEARLY	PT - 2	ANNUAL
CHAPTER 1	RELATIONS & FUNCTIONS	✓	✓		✓
CHAPTER 2	INVERSE TRIGONOMETRIC FUNCTIONS	✓	✓		✓
CHAPTER 3	MATRICES	✓	✓		✓
CHAPTER 4	DETERMINANTS	✓	✓		✓
CHAPTER 5	CONTINUITY & DIFFERENTIABILITY		✓		✓
CHAPTER 6	APPLICATION OF DERIVATIVES		✓		✓
CHAPTER 7	INTEGRALS			✓	✓
CHAPTER 8	AAPLICATION OF INTEGRALS			✓	✓
CHAPTER 9	DIFFERENTIAL EQUATION			✓	✓
CHAPTER 10	VECTOR ALGEBRA				✓
CHAPTER 11	THREE DIMENSIONAL GEOMETRY				✓
CHAPTER 12	LINEAR PROGRAMMING PROBLEMS		✓		✓
CHAPTER 13	PROBABILITY				✓

STD – XII
MATHEMATICS
(MARK DISTRIBUTION)

MARK DISTRIBUTION BLUE PRINT FOR PT – I AND PT - II

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
MATHEMATICS	1 × 10	2 × 5	3 × 2	5 × 2	4 × 1	40
	10	10	06	10	04	40

MARK DISTRIBUTION BLUE PRINT FOR HALF – YEARLY AND ANNUAL EXAM

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
MATHEMATICS	1 × 20	2 × 5	3 × 6	5 × 4	4 × 3	80
	20	10	18	20	12	80

CBSE CLASS 12 MATHEMATICS ANNUAL EXAM PATTERN

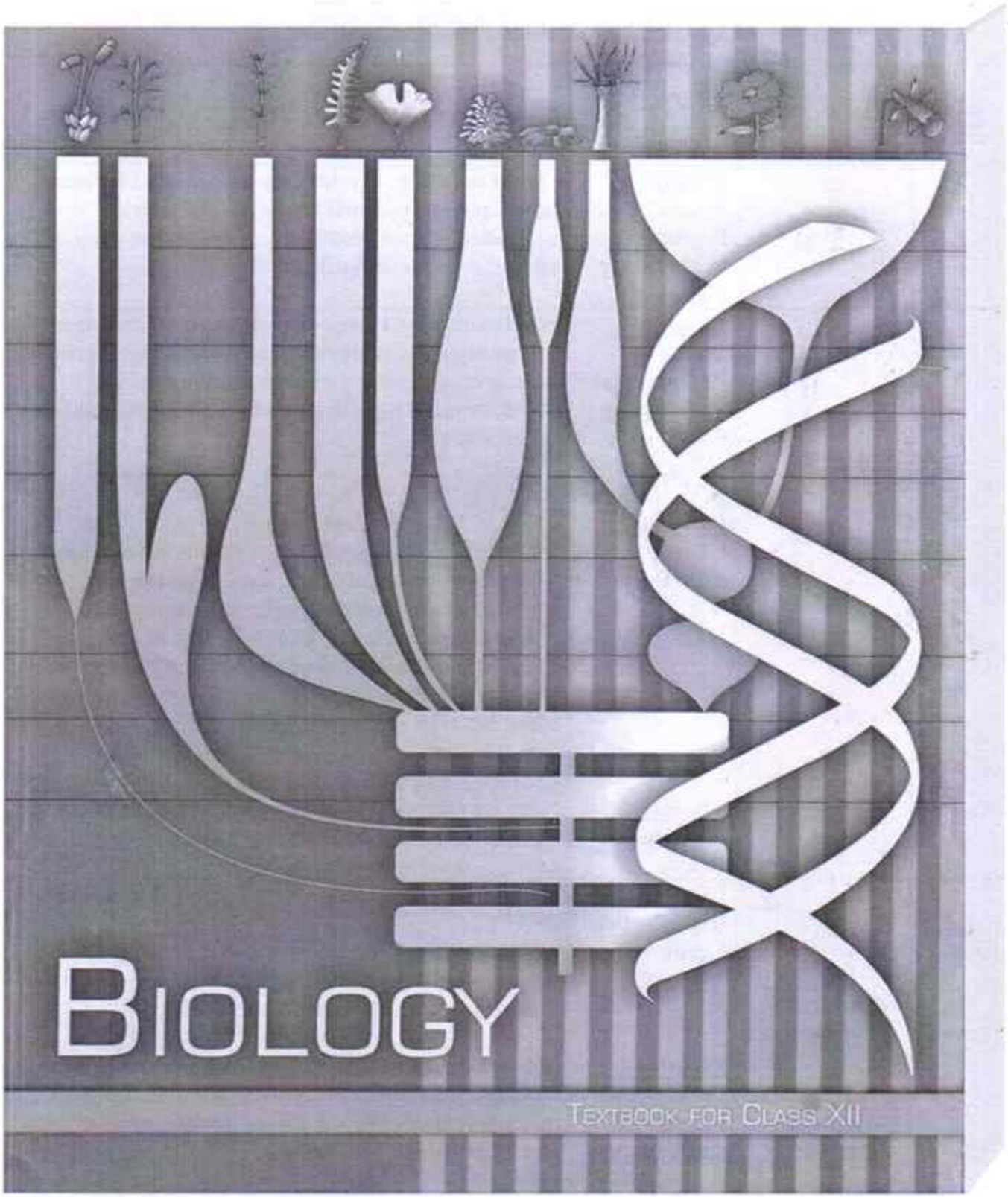
SECTION	QUESTION TYPE	NUMBER OF QUESTIONS	MARKS PER QUESTION	TOTAL MARKS
A	MCQS (SIMPLE/COMPLEX)	18 (Q. NO. 01 – 18)	1	1 X 18 = 18
	ASSERTION-REASONING	02 (Q. NO. 19 – 20)	1	1 X 02 = 02
B	VERY SHORT ANSWER (VSA)	05 (Q. NO. 21 – 25)	2	2 X 05 = 10
C	SHORT ANSWER (SA)	06 (Q. NO. 26 – 31)	3	3 X 06 = 18
D	LONG ANSWER (LA)	04 (Q. NO. 32 – 35)	5	5 X 04 = 20
E	SOURCE/CASE/PASSAGE-BASED QUESTIONS	03 (Q. NO. 36 – 38)	4	4 X 03 = 12
	INTERNAL CHOICE	~33% ACROSS SECTIONS		
	TOTAL MARKS			**80**

CBSE CLASS 12 MATHEMATICS UNIT-WISE WEIGHTAGE

S. NO.	UNIT	MARKS
1.	I. RELATIONS & FUNCTIONS	08
2.	II. ALGEBRA	10
3.	III. CALCULUS	35
4.	IV. VECTORS & THREE-DIMENSIONAL GEOMETRY	14
5.	V. LINEAR PROGRAMMING PROBLEMS	05
6.	VI. PROBABILITY	08
	TOTAL	**80**

10/05/25

TEXT BOOK FOR BIOLOGY



SUBJECT TEACHER – MISS MAHIMA BEHURA

CONTACT NO. - 8144413090

BIOLOGY(SUBJECT CODE – 044)
SYLLABUS FOR THE SESSION (2025 – 26)

SL. NO.	MONTH	CHAPTER	TOPICS TO BE COVERED
1	APRIL	**Chapter-1:** 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
2	MAY	**Chapter-1:** Sexual Reproduction in Flowering Plants **Chapter-2:** Human Reproduction **Chapter-3:** Reproductive Health	Post fertilization events - development of endosperm and embryo, development of seed and formation of fruit; special modes- apomixes, parthenocarpy, polyembryony; Significance of seed dispersal and fruit formation. Chapter-2: Human Reproduction Male and female reproductive systems; microscopic anatomy of testis and ovary; gametogenesis - spermatogenesis and oogenesis; menstrual cycle; fertilization, embryo development upto blastocyst formation, implantation; pregnancy and placenta formation (Elementary idea); parturition (elementary idea); lactation (elementary idea). Chapter-3: Reproductive Health Need for reproductive health and prevention of Sexually Transmitted Diseases (STDs); birth control - need and methods,
3	JUNE	**Chapter-3:** Reproductive Health **Chapter-4:** Principles of Inheritance and Variation	contraception and medical termination of pregnancy (MTP); amniocentesis; infertility and assisted reproductive technologies - IVF, ZIFT, GIFT (elementary idea for general awareness). Mendelian inheritance; deviations from Mendelism incomplete dominance, co-dominance, multiple alleles and inheritance of blood groups, pleiotropy; elementary idea of polygenic inheritance;
4	JULY	**Chapter-4:** Principles of Inheritance and Variation	chromosome theory of inheritance; chromosomes and genes; Sex determination - in humans, birds and 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.
5	**AUGUST**	**Chapter-5:** Molecular Basis of Inheritance	Search for genetic material anDNA as genetic material; Structure of DNA and RNA; DNA packaging; DNA replication; Central Dogma; transcription, genetic code, translation;
6	**SEPTEMBER**	**Chapter-5:** Molecular Basis of Inheritance **Chapter-6:** Evolution **Chapter-7:** Human Health and Diseases	Geneexpression and regulation - lac operon; Genome, Human and rice genome projects; DNAfingerprinting. Chapter-6: Evolution Origin of life; biological evolution and evidences for biological evolution (paleontology, comparative anatomy, embryology and molecular evidences); 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. Chapter-7: 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.
7	**OCTOBER**	**Chapter-8:** Microbes in Human Welfare **Chapter-9:** Biotechnology - Principles and Processes **Chapter-10:** Biotechnology	Chapter-8: Microbes in Human Welfare Microbes in food processing, industrial production, sewage treatment, energy generation and microbes as bio-control agents and bio-fertilizers. Antibiotics; production and judicious use. Chapter-9: Biotechnology - Principles and Processes Genetic Engineering (Recombinant DNA Technology). Chapter-10: Biotechnology and its Applications Application of biotechnology in health and agriculture:

		and its Applications	Human insulin and vaccine production, stem cell technology, gene therapy; genetically modified organisms - Bt crops; transgenic animals; biosafety issues, bio piracy and patents.
8	**NOVEMBER**	**Chapter-11:** Organisms and Populations **Chapter-12:** Ecosystem **Chapter-13:** Biodiversity and its Conservation	Chapter-11: Organisms and Populations Population interactions - mutualism, competition, predation, parasitism; population attributes- growth, birth rate and death rate, age distribution. Chapter-12: Ecosystem Ecosystems: Patterns, components; productivity and decomposition; energy flow; pyramids of number, biomass, energy. Chapter-13: 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.

STD – XII

BIOLOGY

EXAM PORTION

CHAPTER	TOPIC	PT – I	HALF YEARLY	PT - II	ANNUAL
CHAPTER 1	**Sexual Reproduction in Flowering Plants**	✓	✓		✓
CHAPTER 2	**Human Reproduction**	✓	✓		✓
CHAPTER 3	**Reproductive Health**	✓	✓		✓
CHAPTER 4	**Principles of Inheritance and Variation**		✓		✓
CHAPTER 5	**Molecular Basis of Inheritance**		✓		✓
CHAPTER 6	**Evolution**		✓		✓
CHAPTER 7	**Human Health and Diseases**			✓	✓
CHAPTER 8	**Microbes in Human Welfare**		✓		✓
CHAPTER 9	**Biotechnology - Principles and Processes**			✓	✓
CHAPTER 10	**Biotechnology and its Applications**			✓	✓
CHAPTER 11	**Organisms and Populations**				✓
CHAPTER 12	**Ecosystem**				✓
CHAPTER 13	**Biodiversity and its Conservation**				✓

STD – XII

BIOLOGY

(MARK DISTRIBUTION)

MARK DISTRIBUTION BLUE PRINT FOR PT – I AND PT - II

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
BIOLOGY	1 × 8	2 × 3	3 × 4	5 × 1	4 × 1	35
	08	06	12	05	04	35

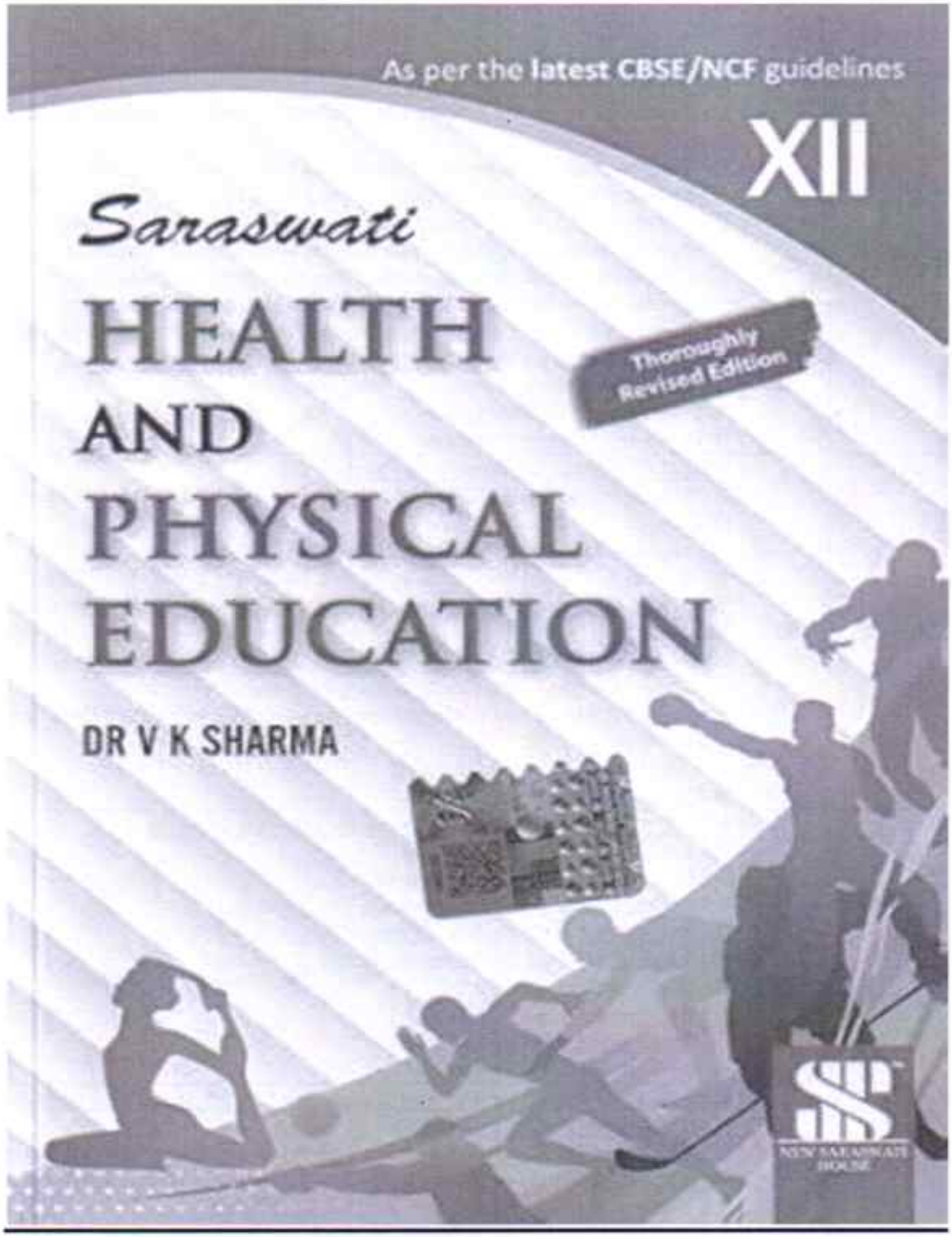
MARK DISTRIBUTION BLUE PRINT FOR HALF – YEARLY AND ANNUAL EXAM

	1 MARK	2 MARKS	3 MARKS	5 MARKS	4 MARKS	TOTAL
BIOLOGY	1 × 16	2 × 5	3 × 7	5 × 3	4 × 2	70
	16	10	21	15	08	70

CBSE CLASS 12 BIOLOGY UNIT-WISE WEIGHTAGE

UNIT	TITLE	MARKS
I	REPRODUCTION	16
II	GENETICS AND EVOLUTION	20
III	BIOLOGY AND HUMAN WELFARE	12
IV	BIOTECHNOLOGY AND ITS APPLICATIONS	12
V	ECOLOGY AND ENVIRONMENT	10
	TOTAL	70

TEXTBOOK FOR PHYSICAL EDUCATION



SUBJECT TEACHER – MR. KISANJIT BEHERA

CONTACT - 7653088408

Kisanjit
10/05/25

PHYSICAL EDUCATION (SUBJECT CODE – 048)
SYLLABUS FOR SESSION (2025 – 26)

SL. NO.	MONTH	UNIT	UNIT NAME
01	APRIL	01	**Unit1: Management of Sporting Events** 1.1 Functions of Sports Events Management (Planning, Organising, Staffing, Directing and Controlling) 1.2 Various Committees and their Responsibilities (Pre, During and Post) 1.3 Tournament Knockout, League or Round Robin and Combination 1.4 Fixtures and their Procedures Knockout (Bye and Seeding), League (Staircase, Cyclic and Tabular Method) and Combination Tournaments 1.5 Intramural Tournaments Meaning, Objectives and its Significance 1.6 Extramural Tournaments Meaning, Objectives and its Significance 1.7 Community Sports Programmes (Sports Day, Health Run, Run for Fun, Run for Specific Cause and Run for Unity) 1.8 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
02	MAY	02	**Unit 2: Children and Women in Sports** 2.1 Exercise Guidelines of World Health Organisation (WHO) for Different Age Groups 2.2 Meaning and Concept of Correct Posture 2.3 Common Postural Deformities Knock Knee, Flat Foot, Bow Legs, Round Shoulders, Lordosis, Kyphosis and Scoliosis, and their Respective Corrective Measures 2.4 Women's Participation in Sports Physical, Psychological and Social Benefits 2.5 Special Consideration (Menarche and Menstrual Dysfunction) 2.6 Female Athlete Triad (Osteoporosis, Amenorrhoea and Eating Disorders) 2.7 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
03	JUNE	03	**Unit 3: Yoga as Preventive Measure for Lifestyle Diseases** 3.1 Introduction 3.2 Obesity and its Preventive Asanas 3.3 Diabetes and its Preventive Asanas 3.4 Asthma and its Preventive Asanas 3.5 Hypertension and its Preventive Asanas 3.6 Back Pain and Arthritis 3.7 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
04	JUNE	04	**Unit 4: Physical Education and Sports for CWSN (Children with Special Needs-Divyang)** 4.1 Organisations Promoting Disability-or Adaptive Sports (Special Olympics, Paralympics, Deaflympics) 4.2 Concept of Classification and Divisioning in Sports 4.3 Concept of Inclusion in Sports, its Need, and Implementation 4.4 Advantages of Physical Activities for Children with Special Needs 4.5 Strategies to Make Physical Activities Accessible to Children with Special Needs 4.6 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
05	JULY	05	**Unit 5: Sports and Nutrition** 5.1 Concept of Balanced Diet and Nutrition

			5.2 Macro and Micro Nutrients: Food Sources and Functions 5.3 Nutritive and Non-Nutritive Components of Diet 5.4 Eating for Weight Control A -Healthy Weight, the Pitfalls of Dieting, Food Intolerance and Food Myths 5.5 Importance of Diet in Sports Pre, During and Post Competition Requirements 5.6 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
06	**AUGUST**	**06**	**Unit 6: Test and Measurement in Sports** 6.1 Test and Measurement 6.2 Fitness Test-SAI Khelo India Fitness Test in School 6.3 Measurement of Cardiovascular Fitness Harvard Step Test 6.4 Computing Basal Metabolic Rate (BMR) 6.5 Rikli and Jones Senior Citizen Fitness Test 6.6 Johnsen- Methney Test of Motor Educability (Front Roll, Back Roll. Jumping Half-Turn, Jumping Full-Turn) 6.7 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
07	**SEPTEMBER**	**07**	**Unit 7: Physiology and Injuries in Sports** 7.1 Physiological Factors Determining Components of Physical Fitness 7.2 Effect of Exercise on Muscular System 7.3 Effect of Exercise on Cardio-Respiratory System 7.4 Physiological Changes due to Ageing 7.5 Sports Injuries: Classification 7.6 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
08	**OCTOBER**	**08**	**Unit 8: Biomechanics and Sports** 8.1 Introduction: Biomechanics in Sports 8.2 Newton's Law of Motion and its Application in Sports 8.3 Types of Levers and their Application in Sports 8.4 Equilibrium - Dynamic and Static, and Centre of Gravity and its Application in Sports 8.5 Friction and Sports 8.6 Projectile in Sports A. Constructed Response Questions B. Competency Based Questions
09	**NOVEMBER**	**09**	**Unit 9: Psychology and Sports** 9.1 Personality and its Definition 9.2 Personality Types (Jung Classification and Big Five Theory)' 9.3 Motivation, its Type and Techniques 9.4 Exercise Adherence: Reasons, Benefits and Strategies for Enhancing it 9.5 Meaning Concept and Types of Aggression in Sports 9.6 Psychological Attributes in Sports - Self-Esteem, Mental Imagery, Self-Talk Goal Setting 9.7 Revision Exercise A. Constructed Response Questions B. Competency Based Questions
10	**NOVEMBER**	**10**	**Unit 10: Training in Sports** 10.1 Introduction 10.2 Concept of Talent Identification and Talent Development in Sports 10.3 Introduction to Sports Training Cycle Micro, Meso, Macro Cycle 10.4 Strength-Types and Methods to Develop Strength 10.5 Endurance - Types and Methods to Develop Endurance 10.6 Speed-Types and Methods to Develop Speed

			10.7 Flexibility Types and Methods to Develop Flexibility 10.8 Coordinative Abilities Types and Methods to Develop Coordinative Ability 10.9 Circuit Training Introduction and its Importance 10.10 Revision Exercise. A. Constructed Response Questions B. Competency Based Questions

STD – XII

PHYSICAL EDUCATION

EXAM PORTION

UNIT	NAME	PT 1	Half yearly	PT - 2	Annual
Unit 1	Management in sports	✓	✓		✓
Unit 2	Children and women in sports	✓	✓		✓
Unit 3	Yoga as Preventive Measure for Lifestyle Disease	✓	✓		✓
Unit 4	Physical Education and Sports for CWSN		✓		✓
Unit 5	Sports and Nutrition		✓		✓
Unit 6	Test and Measurement in Sports			✓	✓
Unit 7	Physiology and Injuries in Sports			✓	✓
Unit 8	Biomechanics and Sports			✓	✓
Unit 9	Psychology and Sports				✓
Unit 10	Training in Sports				✓

STD – XII

PHYSICAL EDUCATION

(MARK DISTRIBUTION)

PT -1 & PT – 2 Questions Types

1. All questions are compulsory.

2. The whole paper is divided into 04 sections. Sections-A, B, C, D & E

3. Section-A-Contains 06 questions each question 01 mark.(1× 6 = 6)

4. Section B- contains 03 questions of 02 marks each.(3× 2 = 6)

5. Section-C-Contains 03 questions of 03 marks each.(3× 3 = 9)

6. Section-D-Contains 01 questions of 04 marks. .(1× 4 = 4)

7. Section-E-Contains 02 question of 05 marks. .(5× 2 = 10)

Half Yearly &Annual Questions Type

I. The question paper consists of 5 sections and 37 questions.

II. Section A consists of questions 1-18 carrying 1 mark each and multiple-choice questions. All questions are compulsory.(1× 16 = 16)

III. Section B consists of questions 19-24 carrying 2 marks each and are very short answer types and should not exceed 60-90 words. Attempt any 5.(2× 5 = 10)

IV. Section C consists of questions 25-30 carrying 3 marks each and are short answer types and should not exceed 100-150 words. Attempt any 5. .(3× 5 = 15)

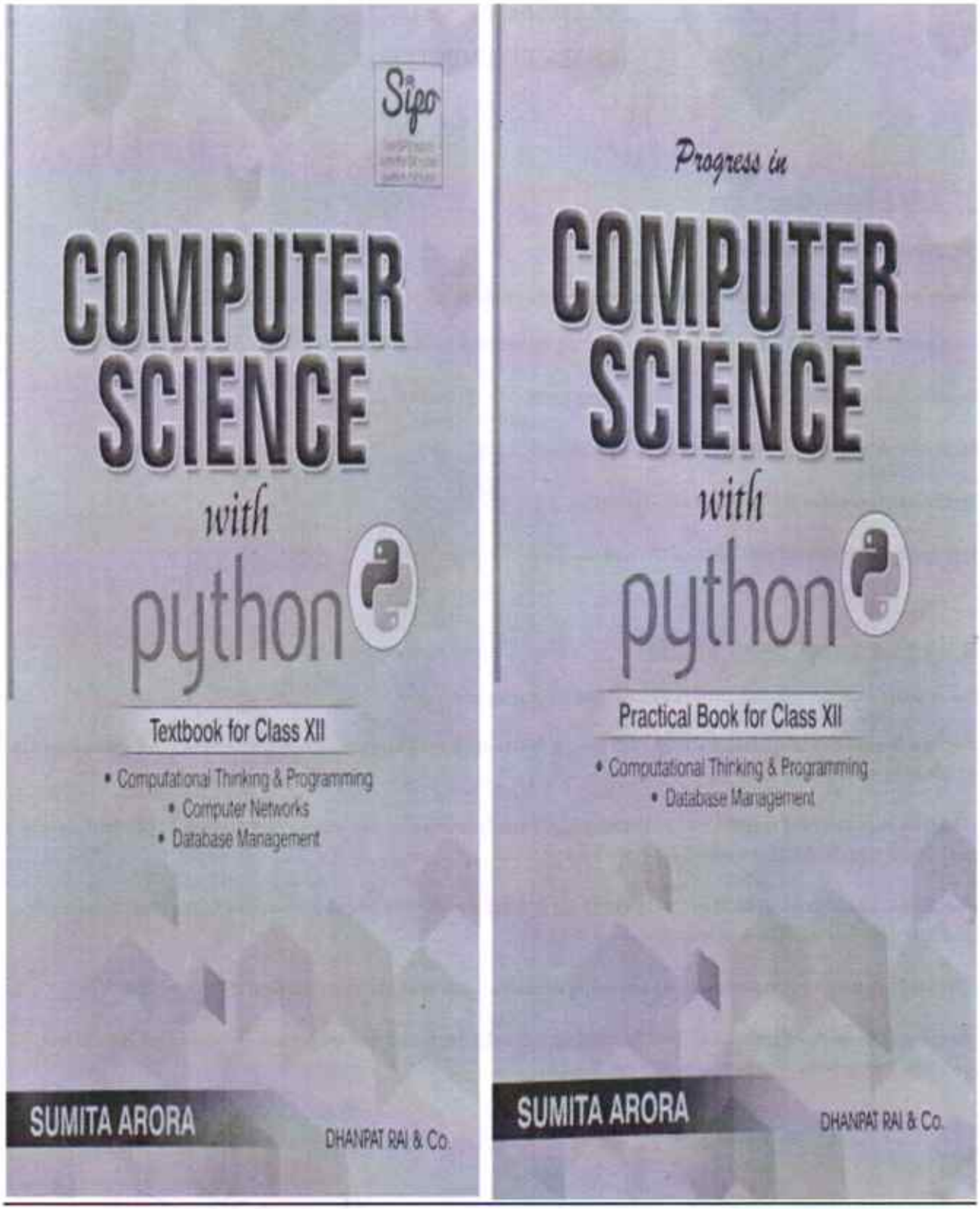
V. Section D consists of question 31-33 carrying 4 marks each and are case studies. .(4× 4 = 16)

VI. Section E consists of questions 34-37 carrying 5 marks each and are long answer types and should not exceed 200-300 words. Attempt any 3. .(5× 3 = 15)

Kisansil
10/05/25

STD – XII

COMPUTER SCIENCE



SUBJECT TEACHER – MR. JYOTI PRAKASH PRADHAN

CONTACT -7978298432

STD – XII
COMPUTER SCIENCE (SUBJECT CODE – 083)
SESSION: 2025– 2026

SL NO.	MONTH	TOPIC
1	APRIL	**Revision Of Python** Tokens in Python, Variables & Assignments, Simple Input & Output, Data Types, Mutable & Immutable Data Types, Type Casting, Operators, Expressions, Math Library Functions Statements of Flow Control:- Conditional Statements :- if Statements , if-else Statements, if-elif Statements, Nested if Statements Looping Statements :- for loop , while loops, loop else statement, nested loops Jump Statements :- break & continue Statements
2	MAY	**Revision Of Python :-** Strings in python, Lists in python, Tuples in python, Dictionaries in python
	MAY	**Functions in Python :-** Types of Function (Built-in Functions, Functions defined in Modules, User Defined Functions) User defined Function :- Creating functions, Calling/ Invoking/ Using functions, Argument & Parameters, Positional/ Required parameters, Default Parameters, Function Returning Values, Scope of Variables
	MAY	**Exception Handling :-** Exception, Exception Handling using try, except and finally blocks
3	JUNE	**File Handling (in Python) :-** Introduction to files, Types of files (Text, Binary & CSV files), Relative and Absolute Path
	JUNE	**File Handling (in Python) :- Working with Text File** Opening a text file (r, r+, w, w+, a, a+) , Closing a file, Opening a file using with clause, Reading from a fileusing read(), readline() and readlines() Writing/Appending data to a file using write() and writelines() Seek() and tell() methods, manipulation of data in a text file
	JUNE	**File Handling (in Python) :- Working with Binary File** Basic operations on a Binary file: Import pickle module, Open a binary files (rb, rb+, wb, wb+, ab, ab+), Closing a file, dump() and load() method Read, Write/ Create, Search operations in a Binary file

		Append and Update operations in a Binary file
4	JULY	**File Handling (in Python) :- Working with CSV File** Import csv module, Opening and Close CSV files, Write into CSV file using writer(), writerow(), writerows() Read from a CSV file using reader()
	JULY	**Data Structure :-** Stack, Implementation of stack using list, Operations on stack (push & pop).
	JULY	**Computer Networks :-** Evolution of Networking :- Introduction to CN, Evolution of networking (ARPANET, NSFNET, Internet)
	JULY	**Computer Networks :-** Data communication Terminologies :- Concept of communication, components of data communication (sender, receiver, message, communication media, protocols), Measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
	JULY	**Computer Networks :-** Transmission Media :- Wired communication media (Twisted pair cable, Co-axial cable, Fibre-Optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
5	AUGUST	**Computer Networks :-** Network Devices :- Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card
	AUGUST	**Computer Networks :-** Network topologies and Network types :- Types of Networks (PAN, LAN, MAN, WAN), Networking Topologies (Bus, Star, Tree)
	AUGUST	**Computer Networks :-** Network Protocol:- HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP
	AUGUST	**Computer Networks :-** Introduction to web services :- WWW, Hyper Text Mark-up Language (HTML), Extensible Mark-up Language (XML), domain names, URL, website, web browser, web servers, web hosting
6	SEPTEMBER	**Database Management :-** Database Concepts : Introduction to database concepts and its need
	SEPTEMBER	**Database Management :-**Relational data model : Relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
	SEPTEMBER, OCTOBER	**Database Management :-**Structured Query Language (SQL) : Introduction, Data Definition Language (DDL) and Data Manipulation Language (DML) , Data type (char(n), varchar(n), int, float, date), Constraints (not null, unique, primary key), Create database, Use database, Show databases, Drop database, Show tables, Create table, Describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select Table operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command,

		aggregate functions (max, min, avg, sum, count), group by, having clause, joins: Cartesian product on two tables, equijoin and natural join
7	**NOVEMBER**	**Database Management :-** Interface of python with an SQL database: Connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using connect(), cursor(), execute(), commit(), fetchone(), fetchall(), rowcount(), creating database connectivity applications, use of %s format specifier or format() to perform queries

SL .NO	NAME OF CHAPTERS	Term1 (35 Marks 1hr 30 min)	Half Yearly (70 Marks 3 hr.)	Term2 (35 Marks 1hr 30 min)	Annual/ Sahodaya (70 Marks, 3 hr.)
1	Revision Of Python (Unit-1)	✓	✓	✓	✓
2	Functions in Python (Unit-1)	✓	✓	✓	✓
3	File Handling (in Python) (Unit-1)		✓	✓	✓
4	Exception Handling (Unit-1)		✓	✓	✓
5	Data Structure (Unit-2)			✓	✓
6	Computer Networks (Unit-2)			✓	✓
7	Database Management (Unit-3)				✓

MARK DISTRIBUTION BLUE PRINT FOR PT – I AND PT – II EXAM

	1 MARK	2 MARKS	3 MARKS	TOTAL
COMPUTER SCIENCE (083)	1 × 19	2 × 5	3 × 2	35
	19	**10**	**6**	**35**

MARK DISTRIBUTION BLUE PRINT FOR HALF YEARLY AND ANNUAL EXAM

	1 MARK	2 MARKS	3 MARKS	4 MARKS	5 MARKS	TOTAL
COMPUTER SCIENCE (083)	1 × 21	2 × 7	3 × 3	4 × 4	5 × 2	70
	21	**14**	**9**	**16**	**10**	**70**

UNIT WISE DISTRIBUTION OF MARKS

UNIT	UNITNAME	MARKS
1	Computational Thinking and Programming–2	40
2	Computer Networks	10
3	Database Management	20
Total		**70**