

SYLLABUS FOR THE YEAR 2020-2021

CLASS : XII (SCIENCE)

ENGLISH CORE	
Quarterly Examination	<p>Prose/Flamingo : Lesson 1 The last lesson Lesson 2 The Lost Spring.</p> <p>Poetry/Flamingo : Poem 1 My Mother at sixty six Poem 2. An Elementary Classroom In a Slum</p> <p>Vistas : Lesson 1 The Third level</p> <p>Reading : Unseen passage</p> <p>Writing : Notice , Letter to the editor/Application for job.</p>
Half-yearly Examination	<p>Prose/Flamingo : Lesson 1 The last lesson Lesson 2 The Lost Spring Lesson 3 Deep Water Lesson 4 The Rattrap Lesson 5 Indigo</p> <p>Poetry/Flamingo : Poem 1 My Mother at sixty six Poem 2. An Elementary Classroom In a Slum Poem 3. Keeping Quiet Poem 4. A Thing of Beauty</p> <p>Vistas : Lesson 1 The Third level Lesson 4 The Enemy Lesson 5 Should The Wizard hit Mommy</p> <p>Reading : Unseen Passage</p> <p>Writing : Quarterly Course, Invitation and Report/ Article Writing</p>
Annual Examination	Full Course as per CBSE Syllabus
PHYSICS	
<p>DELETED TOPICS – CLASS XII ENGLISH CORE 2020-21 READING : NOTE MAKING AND SUMMARY WRITING LITERATURE FLAMINGO : 1. POETS AND PANCAKES. 2. THE INTERVIEW. 3 GOING PLACES. FLAMINGO : POETRY 1 : A ROADSIDE STAND VISTAS: THE TIGER KING. 2. JOURNEY TO THE END OF THE EARTH. 3. MEMORIES OF CHILDHOOD WRITING : POSTER MAKING. BUSINESS OR OFFICIAL LETTERS FOR MAKING ENQUIRIES, REGISTERING COMPLAINTS, ASKING FOR AND GIVING ORDERS AND SENDING REPLIES. SPEECH AND DEBATE</p>	
Quarterly Examination	<p>Chapter 1,2,3,4,5 (as per NCERT Chapter Numbers)</p> <p>DELETED PORTION Chapter-1 Electric charges and fields uniformly charged thin spherical shell (field inside and outside). Chapter-2 NOTHING IS DELETED Chapter-3 Current Electricity Carbon resistors, colour code for carbon resistors; series and parallel combinations of resistors Chapter-4 Moving Charges and Magnetism Cyclotron Chapter-5 Magnetism and Matter 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; Para-, dia- and ferro - magnetic substances, with examples. Electromagnets and factors affecting their strengths, permanent magnets. Chapter -6 NOTHING IS DELETED FROM THIS CHAPTER</p>
PHYSICS	
<p>DELETED TOPICS – CLASS XII ENGLISH CORE 2020-21 READING : NOTE MAKING AND SUMMARY WRITING LITERATURE FLAMINGO : 1. POETS AND PANCAKES. 2. THE INTERVIEW. 3 GOING PLACES. FLAMINGO : POETRY 1 : A ROADSIDE STAND VISTAS: THE TIGER KING. 2. JOURNEY TO THE END OF THE EARTH. 3. MEMORIES OF CHILDHOOD WRITING : POSTER MAKING. BUSINESS OR OFFICIAL LETTERS FOR MAKING ENQUIRIES, REGISTERING COMPLAINTS, ASKING FOR AND GIVING ORDERS AND SENDING REPLIES. SPEECH AND DEBATE</p>	
Half-Yearly Examination	Chapter 6,7,8,11,12,13 + Quarterly Course (as per NCERT Chapter Numbers)

	<p>DELETED PORTION Chapter -6 NOTHING IS DELETED FROM THIS CHAPTER Chapter-7 Alternating Current power factor, wattless current. Chapter 8 Electromagnetic Waves Basic idea of displacement current, Chapter-11 Dual Nature of radiation and matter Davisson-Germer experiment CHAPTER-12 NOTHING IS DELETED Chapter 13 Nuclei Radioactivity, alpha, beta and gamma particles/rays and their properties; radioactive decay law, half life and mean life binding energy per nucleon and its variation with mass number</p>
Annual Examination	FULL COURSE AS PER CBSE SYLLABUS 2020-21
	<p>DELETED PORTION Chapter 9 Ray Optics and Optical Instruments Reflection of light, spherical mirrors,(recapitulation) mirror formula , Scattering of light - blue colour of sky and reddish appearance of the sun at sunrise and sunset. resolving power of microscope and astronomical telescope, polarisation, plane polarised light, Brewster's law, uses of plane polarised light and Polaroids Chapter -10 NOTHING IS DELETED Chapter 14 Semiconductor Electronics: Materials, Devices and Simple Circuits Zener diode and their characteristics, zener diode as a voltage regulator. Practicals: No investigatory project and Activity to be demonstrated 8 experiments (clubbed based on skills) in place of 12</p>
CHEMISTRY	
Quarterly Examination	Ch.-4,5,8,9,10
	<p>Omitted Topics : Unit IV : Chemical Kinetics - Concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation. Unit V : Surface Chemistry - emulsion - types of emulsions, catalysis: homogenous and heterogeneous, activity and selectivity of solid catalysts; enzyme catalysis, Unit VIII : d and f Block Elements : Chemical reactivity of lanthanoids, Actinoids –Electronic configuration, oxidation states and comparison with lanthanoids. Preparation and properties of KMnO_4 and $\text{K}_2\text{Cr}_2\text{O}_7$ Unit IX : Coordination Compounds - Structure and stereoisomerism, importance of coordination compounds (in qualitative analysis, extraction of metals and biological system). Unit X : Haloalkanes and Haloarenes - Uses and environmental effects of -dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.</p>
Half-Yearly Examination	Quarterly + chapter -1,2,3,7,11,12 + practical
	<p>Omitted Topics : Unit I : Solid State - Electrical and magnetic properties. Band theory of metals, conductors, semiconductors and insulators and n and p type semi conductors. Unit II - Solutions : Abnormal molecular mass, Van't Hoff factor Unit III : Electrochemistry - Lead accumulator, fuel cells, corrosion, law of electrolysis (elementary idea), dry cell- electrolytic cells and Galvaniccells Unit VI : General Principles and Processes of Isolation of Elements – (Entire unit is omitted) Unit VII : p-Block Elements - Preparation and properties of Phosphine, Sulphuric Acid: industrial process of manufacture, Oxides of Nitrogen (Structure only); Phosphorus - allotropic forms, compounds of Phosphorus: Preparation and properties of Halides and Oxo acids (elementary idea only). Unit XI : Alcohols, Phenols and Ethers - uses with special reference to methanol and ethanol. Unit XII : Aldehydes, Ketones and Carboxylic Acid (Nothing Deleted)</p>

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Pre-Board/annual	Full Course as per CBSE Syllabus
	<p>Omitted topics : Unit XIII : Amines - Diazonium salts : Preparation, chemical reactions and importance in synthetic organic chemistry. Unit XIV : Biomolecules - Oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen), importance of carbohydrates. Vitamins– classification and functions. Enzymes. Hormones - Elementary idea excluding structure.</p>

	Unit XV : Polymers (Entire Unit is omitted) Unit XVI : Chemistry in Everyday life (Entire Unit is omitted)								
BIOLOGY									
Quarterly Examination	Chapter 2, 3, 4, 8 Chapter 2 – Sexual Reproduction in Flowering Plants Chapter 3 – Human Reproduction Chapter 4 – Reproductive Health Chapter 8 – Human Health and Disease								
Half-Yearly Examination	Quarterly + chapter-5,6,10 + practical Chapter 5 – Principles of Inheritance and Variation Chapter 6 – Molecular Basis of Inheritance Chapter 10 – Microbes in Human Welfare								
Annual Examination	Full course + practical								
	ASSESSMENT AREAS THEORY 2020-21 TIME : 3 HRS MAXIMUM MARKS : 70								
	<table border="1"> <thead> <tr> <th colspan="2">COMPENTENCIES</th> </tr> </thead> <tbody> <tr> <td>Demonstrate knowledge and understanding</td> <td style="text-align: center;">50%</td> </tr> <tr> <td>Application of Knowledge</td> <td style="text-align: center;">30%</td> </tr> <tr> <td>Analyse, Evaluate and Create</td> <td style="text-align: center;">20%</td> </tr> </tbody> </table>	COMPENTENCIES		Demonstrate knowledge and understanding	50%	Application of Knowledge	30%	Analyse, Evaluate and Create	20%
COMPENTENCIES									
Demonstrate knowledge and understanding	50%								
Application of Knowledge	30%								
Analyse, Evaluate and Create	20%								
	TYPE OF QUESTIONS : VSA Including MCQs, Assertion Reasoning Type questions, SA; LA-I, LA-II Source Based / Case Based / Passage Based Internal Choice of 33%								
DELETED PORTIONS :									
Unit 6	Chapter 1 Asexual Reproduction Topic Deleted Reproduction, its Features, Modes of Reproduction Deleted								
Unit 7	Chapter 7 Evolution (Entire Chapter Deleted)								
Unit 8	Chapter 9 Strategies for Enhancement in Food Production (Entire Chapter Deleted)								
Unit 10	Chapter 14 Ecosystem (Deleted Completely)								
	Chapter 16 Environmental Issues (Deleted Completely)								
MATHEMATICS									
Quarterly Examination (Pre Mid-Term) <i>Maximum marks to be converted into 10 marks</i>	Chapter 2. Inverse Trigonometry Function Chapter 3. Matrices Chapter 4. Determinants Chapter 5. Differentiability & Continuity Chapter 6. Application of Derivatives Chapter 10. Vector Algebra Chapter 12. Linear Programming Problems								
Half-Yearly Examination (Mid-Term) <i>Maximum marks to be converted into 10 marks</i>	Chapter 7. Integration Chapter 8. Application of Integration Chapter 9. Differential Equation + Quarterly Course								
Pre-Board Examination (Post-Mid Term) <i>Maximum marks to be converted into 10 marks</i>	Full Course(Except deleted topic)								
Remarks : The Best two performance will be taken and converted into 10 marks									

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Maths Activity	Throughout the Academic Session any 10 activities shall be performed by a student out of 10, One will be given in an year end test on the activity
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	Record Keeping	5 marks	
	Year End Test	3 marks	
	Viva Voce	2 marks	
	TOTAL	10 marks	

Annual Exam / Board Exam Time Duration : 3 Hours M.M. : 80 Marks	33% internal choices will be given		
	Full Course		
	Objective / VSA	1 × 20	20 Marks
	SA Type I	2 × 6	12 Marks
	SA Type II	4 × 6	24 marks
	Long Answers	4 × 6	24 marks
	TOTAL	80 marks	

CHAPTERWISE DELETED SUB-TOPICS MARKED AS ● FOR BOARD EXAMINATION 2021

Unit1 : Relations and Functions

1. Relations and Functions ● composite functions, inverse of a function.

2. Inverse Trigonometric

Functions : ● Graphs of inverse trigonometric functions ● Elementary properties of inverse trigonometric functions

Unit2: Algebra

1. Matrices

● existence of non-zero matrices whose product is the zero matrix.

● Concept of elementary row and column operations.

● proof of the uniqueness of inverse, if it exists.

2. Determinants ● properties of determinants ● Consistency, inconsistency and number of solutions of system of linear equations by examples,

Unit-III: Calculus

1. Continuity and Differentiability ● Rolle's and Lagrange's Mean Value Theorems (without proof) and their geometric interpretation.

2. Applications of Derivatives ● rate of change of bodies ● use of derivatives in approximation

3. Integrals following type

● $\int \sqrt{ax^2 + bx + c} dx$,

● $\int (ax + b)\sqrt{ax^2 + bx + c} dx$

● Definite integrals as a limit of a sum

4. Applications of the Integrals ● Area between any of the two above said curves

5. Differential Equations ● formation of differential equation whose general solution is given.

● Solutions of linear differential equation of the type:

$\frac{dx}{dy} + px = q$, where p and q are functions of y or constants.

Unit-IV: Vectors and Three- Dimensional Geometry

1. Vectors ● scalar triple product of vectors.

2. Three - dimensional Geometry ● Angle between (i) two lines, (ii) two planes, (iii) a line and a plane

Unit-V: Linear Programming

1. Linear Programming ● mathematical formulation of L.P. problems ● (unbounded)

Unit-VI: Probability

1. Probability ● mean and variance of random variable. ● Binomial probability distribution

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CLASS : XII (SCIENCE)

COMPUTER SCIENCE (COMPUTER SCIENCE WITH PYTHON CLASS-XII)

Quarterly Examination	<p>Unit-I: Computational Thinking and Programming-2</p> <ul style="list-style-type: none"> • Revision of the basics of Python covered in Class XI • Functions • Using Python Libraries: Create and import Python Libraries <p>Unit-III: Database Management</p> <ul style="list-style-type: none"> • Data Base Concepts • Relational Data Model • Structured Query Language • Data Types • SQL Commands <p>(Note: SQL commands: Create table, Drop Table, Alter Table, Update-Set, Insert, Delete are deleted)</p> <ul style="list-style-type: none"> • SQL Functions • Joins • Interface of Python with an SQL Database (Connecting SQL with Python, Creating Database connectivity Applications, Performing Insert, Update, Delete Queries, Display data by using fetchone(), fetchall(), rowcount)
Half-Yearly Examination	<p>Unit-I: Computational Thinking and Programming-2</p> <ul style="list-style-type: none"> • File Handling • Text File • Binary File • CSV File • Data Structure-I Linear Lists • Data Structure-II Stacks and Queues using Lists <p>(Note: Recursion and Idea of efficiency are deleted)</p> <p>Rev: Quarterly Course</p> <p>Note: Project / Practical as per CBSE Guidelines</p>
Pre-Board Examination	<p>Unit-II: Computer Networks</p> <ul style="list-style-type: none"> • Evolution of Networking • Data Communication Terminologies • Transmission Media • Network Devices • Network Topologies • Network Protocol • Mobile Telecommunication Technologies • Network Security Concepts <p>(Note: Web Scripting Client Side (VB Scripts, Java Scripts, PHP) and Server Side (ASP, JSP, PHP), Web 2.0 (For Social Networking), E-Commerce payment transaction using online banking, mobile banking, payment apps and services are deleted)</p> <p>Rev. : Full Course and Project / Practical as per CBSE guidelines</p>
PHYSICAL EDUCATION	
Unit Test I	<p>Unit 1 – Planning in Sports</p> <p>(a) Meaning and objectives of Planning (b) Various Committees and its responsibilities (Pre, during, Post) (c) Tournament – Knock out, League or Round Robin and Combination (d) Procedure to draw fixtures – Knock out and League</p>
Quarterly Examination	<p>Unit II – Sports and Nutrition</p> <p>(a) Balanced Diet (b) Nutritive & Non Nutritive Components of Diet (c) Eating for weight control – A Healthy weight, the pitfalls of dieting, food intolerance and food myths.</p> <p>Unit III – Yoga & Life Style</p>

	<p>(a) Asanas as Preventive Measures (b) Obesity (c) Diabetes (d) Asthma (e) Hypertension (Procedure, Benefits and Contraindications of all Asana Related to these life style diseases).</p> <p>Unit IV – Physical Education & Sports for CWSN (a) Concept of disability & disorder (b) Types of disability, its causes and nature (Cognitive disability, intellectual disability and physical disability) (c) Types of disorder, its causes and nature (ADHD, SPD, ASD, ODD, OCD) (d) Disability etiquettes (e) Strategies to make physical activities assessable for children with special needs.</p> <p>Unit V – Children and Women in Sports (a) Motor development & factors affecting it. (b) Exercise Guidelines at different stages of growth and development (c) Common postural deformities – Knock Knee, Flat Foot, Round Shoulders, Lordosis, Kyphosis, Bow Legs and Scoliosis and their corrective measures (d) Sports participation of women in India.</p>
Half-Yearly Examination	<p>Unit I to Unit VII + Practical Exam (Unit I to Unit V already mention till Quarterly Syllabus) Unit VI – Test & Measurement in Sports (a) Motor Fitness Test (b) Measurement of Cardio Vascular Fitness (c) Rikli & Jones – Senior Citizen Fitness Test</p> <p>Unit VII – Physiology & Injuries in Sports (a) Physiological factor determining component of physical fitness (b) Effect of exercise on cardio respiratory system (c) Effect of exercise on muscular system (d) Sports Injuries – Classification (all the soft tissue injuries) (e) Bone and Joint Injuries – Types, Causes, Prevention and Treatment. (f) First-Aid : Aim and Objectives</p> <p>Practical Exam – Motor Fitness Test</p>
Unit Test II	<p>Unit VIII – Biomechanics & Sports (a) Meaning and Importance of Biomechanics in Sports (b) Types of Movements (Flexion, Extension, Abduction and Adduction) (c) Newton's Law of Motion and its application in Sports.</p>
Annual Examination	<p>FULL COURSE + PRACTICAL EXAM UNIT I TO UNIT X + Practical Exam : Motor Fitness Test [Unit I to Unit VIII already mention the Syllabus Till Unit Test - 2] Unit IX – Psychology & Sports (a) Personality : Its definition and Types – Traits & Types (Sheldon & Jung Classification) & Big Five Theory (b) Meaning, concept and types of aggressions in sports.</p> <p>Unit X – Training in Sports (a) Strength : Definition Types & Methods of improving strength – Isometric, Isotonic and Isokinetic (b) Endurance – Definition, Types & Methods of develop Endurance – Continuous Training, Interval Training & Fartlet Training. (c) Speed – Definition, Types and Methods to develop speed – Acceleration Run and Pace Run (d) Flexibility – Definition, Types & Methods to improve flexibility. (e) Coordinative Abilities – Definition & types</p>
