



**STEPHENS INTERNATIONAL
PUBLIC SCHOOL**

TERM 1 – SYLLABUS

CLASS X (2021 – 22)

ENGLISH

Reading-

Question based on the following kinds of unseen passages to assess inference, evaluation, vocabulary, analysis and interpretation:

- Discursive passage (400-450 words)
- Case based Factual passage (with visual input/ statistical data/ chart etc. 300-350 words)

Writing-

Formal letter based on a given situation.

- Letter to the Editor
- Letter of Complaint (Official)
- Letter of Complaint (Business)

Grammar

- Tenses
- Modals
- Subject-Verb Concord
- Determiner
- Reported Speech
- Commands and Requests
- Statements
- Questions

Literature

Questions based on extracts / texts to assess interpretation, inference, extrapolation beyond the text and across the texts.

FIRST FLIGHT

- A Letter to God
- Nelson Mandela
- Two Stories About Flying
- From the Diary of Anne Frank
- The Hundred Dresses 1
- The Hundred Dresses 2

Poems

- Dust of Snow
- Fire and Ice
- A Tiger in the Zoo
- The Ball Poem

FOOTPRINTS WITHOUT FEET

- A Triumph of Surgery
- The Thief's Story
- Footprints without Feet

कक्षा 10वीं हिंदी 'ब' परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2021 -2022 प्रथम सत्र

परीक्षा भार विभाजन प्रथम सत्र			
	विषयवस्तु	उपभार	कुलभार
1	अपठित गद्यांश (चिंतन क्षमता एवं अभिव्यक्ति कौशल पर बहुविकल्पात्मक प्रश्न पूछे जाएंगे)		10
	अ चार अपठित गद्यांशों में से कोई दो गद्यांश करने होंगे। (200-250 शब्दों के) 2 गद्यांश (1अंक x 5 प्रश्न)	10	
2	व्याकरण :पाठ्यपुस्तक में दिए गए भाषा-अध्ययन के आधार पर बहुविकल्पात्मक प्रश्न (1 अंक x16 प्रश्न)		16
	1 पदबंध (5 में से किन्हीं 4 के उत्तर)	04	
	2 रचना के आधार पर वाक्य रूपांतरण (5 में से किन्हीं 4 के उत्तर)	04	
	3 समास (5 में से किन्हीं 4 के उत्तर)	04	
	4 मुहावरे (केवल 4 प्रश्न, सभी अनिवार्य)	04	
3	पाठ्य पुस्तक स्पर्श भाग - 2		14
	काव्य खंड पठित पद्यांश पर चार बहुविकल्पी प्रश्न।	04	
	गद्य खंड-दो पठित गद्यांशों पर पाँच-पाँच बहुविकल्पी प्रश्न।	10	
4	आंतरिक मूल्यांकन	10	10
	सामयिक आकलन	2.5	
	बहुविध आकलन	2.5	
	पोर्टफोलियो	2.5	
	श्रवण एवं वाचन	2.5	
	कुल		50

पाठ्यपुस्तक स्पर्श भाग -2 सत्र-1 2021-22 में निम्नलिखित पाठ सम्मिलित किए गए हैं -

पद्य - खंड	गद्य - खंड
कबीर - साखी	प्रेमचंद -बड़े भाई साहब
मीरा - पद	लीलाधर मंडलोई - तताँरा - वामीरो कथा
	निदा फ़ाज़ली - अब कहाँ दूसरे के दुख से दुखी होने वाले

MATHEMATICS

UNIT-NUMBER SYSTEMS

1. REAL NUMBER

Fundamental Theorem of Arithmetic - statements after reviewing work done earlier and after illustrating and motivating through examples. Decimal representation of rational numbers in terms of terminating/non-terminating recurring decimals.

UNIT- ALGEBRA

2. POLYNOMIALS

Zeroes of a polynomial. Relationship between zeroes and coefficients of quadratic polynomials only.

3. PAIR OF LINEAR EQUATIONS IN TWO VARIABLES

Pair of linear equations in two variables and graphical method of their solution, consistency/inconsistency. Algebraic conditions for number of solutions. Solution of a pair of linear equations in two variables algebraically - by substitution and by elimination. Simple situational problems. Simple problems on equations reducible to linear equations.

UNIT-COORDINATE GEOMETRY

4. COORDINATE GEOMETRY

LINES (In two-dimensions)

Review: Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division)

UNIT-GEOMETRY

5. TRIANGLES

Definitions, examples, counter examples of similar triangles.

1. (Prove) if a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

2. (Motivate) if a line divides two sides of a triangle in the same ratio, the line is parallel to the third side.

3. (Motivate) if in two triangles, the corresponding angles are equal, their corresponding sides are proportional and the triangles are similar.

4. (Motivate) if the corresponding sides of two triangles are proportional, their corresponding angles are equal and the two triangles are similar.

5. (Motivate) if one angle of a triangle is equal to one angle of another triangle and the sides including these angles are proportional, the two triangles are similar.

6. (Motivate) if a perpendicular is drawn from the vertex of the right angle of a right triangle to the hypotenuse; the triangles on each side of the perpendicular are similar to the whole triangle and to each other.

7. (Motivate) The ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.

8. (Prove) in a right triangle, the square on the hypotenuse is equal to the sum of the squares on the other two sides.

9. (Motivate) In a triangle, if the square on one side is equal to sum of the squares on the other two sides, the angle opposite to the first side is a right angle.

UNIT- TRIGONOMETRY

6. INTRODUCTION TO TRIGONOMETRY

Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 300, 450 and 600. Relationships between the ratios.

TRIGONOMETRIC IDENTITIES

Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given

UNIT-MENSURATION

7. AREAS RELATED TO CIRCLES

Motivate the area of a circle; area of sectors and segments of a circle. Problems based on areas and perimeter / circumference of the above said plane figures. (In calculating area of segment of a circle, problems should be restricted to central angle of 60° and 90° only. Plane figures involving triangles, simple quadrilaterals and circle should be taken.)

UNIT- STATISTICS & PROBABILITY

8. PROBABILITY

Classical definition of probability. Simple problems on finding the probability of an event.

SOCIAL SCIENCE

Unit 1: India and the Contemporary World – II

Section 1: Events and Processes

The Rise of Nationalism in Europe

- The French Revolution and the Idea of the Nation
- The Making of Nationalism in Europe
- The Age of Revolutions: 1830-1848
- The Making of Germany and Italy
- Visualizing the Nation
- Nationalism and Imperialism

Unit 2: Contemporary India – II

1. Resources and Development

- Types of Resources
- Development of Resources
- Resource Planning in India
- Land Resources
- Land Utilization
- Land Use Pattern in India
- Land Degradation and Conservation
- Measures
- Soil as a Resource
- Classification of Soils
- Soil Erosion and Soil Conservation

3. Water Resources

- Water Scarcity and The Need for Water
- Conservation and Management
- Multi-Purpose River Projects and
- Integrated Water Resources
- Management
- Rainwater Harvesting

Note: The theoretical aspect of chapter 'Water Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination. However, the map items of this chapter as listed will be evaluated in Board Examination.

4. Agriculture

- Types of farming
- Cropping Pattern
- Major Crops

- Technological and Institutional Reforms
- Impact of Globalization on Agriculture

Unit 3: Democratic Politics – II

1. Power Sharing

- Case Studies of Belgium and Sri Lanka
- Why power sharing is desirable?
- Forms of Power Sharing

2. Federalism

- What is Federalism?
- What make India a Federal Country?
- How is Federalism practiced?
- Decentralization in India

Unit 4: Economics Themes

1. Development

- What Development Promises – Different people different goals and other goals
- National Development
- How to compare different countries or states?
- Income and other criteria
- Public Facilities
- Sustainability of development

2. Sectors of the Indian Economy

- Sectors of Economic Activities
- Comparing the three sectors
- Primary, Secondary and Tertiary Sectors in India
- Division of sectors as organized and unorganized
- Sectors in terms of ownership: Public and Private Sectors

LIST OF MAP ITEMS

A. GEOGRAPHY

Chapter 1: Resources and Development

- Major soil Types

Chapter 3: Water Resources

Dams:

- Salal
- Bhakra Nangal
- Tehri
- Rana Pratap Sagar
- Sardar Sarovar
- Hirakud
- Nagarjuna Sagar
- Tungabhadra

Note: The theoretical aspect of chapter 'Water Resources' to be assessed in the Periodic Tests only and will not be evaluated in Board Examination. However, the map items of this chapter as listed above will be evaluated in Board Examination.

Chapter 4: Agriculture

- Major areas of Rice and Wheat
- Largest / Major producer States of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute

SCIENCE

Theme: Materials

Unit I: Chemical Substances - Nature and Behaviour

Chapter -1 Chemical reactions and equations

Chemical reactions: Chemical equation, Balanced chemical equation, implications of a balanced chemical equation, types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation, neutralization, oxidation and reduction.

Chapter – 2 Acids, Bases and Salts

Acids, bases and salts: Their definitions in terms of furnishing of H⁺ and OH⁻ ions, General properties, examples and uses, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life; preparation and uses of Sodium Hydroxide, Bleaching powder, Baking soda, Washing soda and Plaster of Paris.

Chapter – 3 Metals and non – metals

Metals and nonmetals: Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.

Theme: The World of the Living

Unit II: World of Living

Chapter – 6 Life processes

Life processes: 'Living Being'. Basic concept of nutrition, respiration, transport and excretion in plants and animals.

Theme: How Things Work

Unit III: Natural Phenomena

Chapter – 10 Lights – Reflection and Refraction

Reflection of light by curved surfaces; Images formed by spherical mirrors, centre of curvature, principal axis, principal focus, focal length, mirror formula (Derivation not required), magnification.

Refraction; Laws of refraction, refractive index.

Refraction of light by spherical lens; Image formed by spherical lenses; Lens formula (Derivation not required); Magnification. Power of a lens.

Chapter – 11 Human eye and colorful world

Refraction of light through a prism, dispersion of light, scattering of light, applications in daily life.

PRACTICALS

Practical should be conducted alongside the concepts taught in theory classes.

LIST OF EXPERIMENTS

A. Finding the pH of the following samples by using pH paper/universal indicator:

- Dilute Hydrochloric Acid
- Dilute NaOH solution
- Dilute Ethanoic Acid solution
- Lemon juice
- Water
- Dilute Hydrogen Carbonate solution

B. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:

- Litmus solution (Blue/Red)
- Zinc metal
- Solid sodium carbonate

Unit-I: (Chapter-2)

2. Performing and observing the following reactions and classifying them into:

- Combination reaction
- Decomposition reaction
- Displacement reaction
- **Double displacement reaction**
 1. Action of water on quicklime
 2. Action of heat on ferrous sulphate crystals
 3. Iron nails kept in copper sulphate solution
 4. Reaction between sodium sulphate and barium chloride solutions.

Unit-I: (Chapter-1)

3. A. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:

- $\text{ZnSO}_4(\text{aq})$
- $\text{FeSO}_4(\text{aq})$
- $\text{CuSO}_4(\text{aq})$
- $\text{Al}_2(\text{SO}_4)_3(\text{aq})$

B. Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.

Unit-I :(Chapter-3)

4. Experimentally show that carbon dioxide is given out during respiration.

Unit-II: (Chapter-6)

5. Determination of the focal length of

- Concave mirror and
- Convex lens by obtaining the image of a distant object.

Unit-III: (Chapter- 10)

6. Tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. Measure the angle of incidence, angle of refraction, angle of emergence and interpret the result.

Unit-III :(Chapter-10)

7. Tracing the path of the rays of light through a glass prism.

INFORMATION TECHNOLOGY

PART A – Employability Skills

Unit 1: Communication Skills-II

Unit 2: Self-Management Skills-II

Unit 3: Information and Communication Technology Skills-II

PART B – Subject Specific Skills

Unit 1: Digital Documentation (**Advanced**)

Unit 2: Electronic Spreadsheet (**Advanced**)

Unit 3: Database Management System