

ST. THOMAS SCHOOL, SAHIBABAD
SYLLABUS (2021-2022) MATHEMATICS
CLASS - X

Name of the Book : MATHEMATICS – TEXTBOOK FOR CLASS -X

Name of the Publisher : NCERT

PERIODIC TEST -1

(M. Marks-20)

S. No	Chapter Number	Name of the Month	Name of the Chapter
1	1	April	Real Numbers
2	2	April	Polynomials
3	14	May	Statistics

SUBJECT ENRICHMENT ACTIVITY:

1.	To verify the conditions of consistency of a system of Linear equations in two variables by graphical representation.
----	---

PERIODIC TEST - 2/ HALF YEARLY EXAM :

(M. Marks - 40)

S. No	Chapter Number	Name of the Month	Name of the Chapter
1	1	April	Real Numbers
2	2	May	Polynomials
3	3	April	Pair of Linear Equations in two Variables
4	6	May - July	Triangles
5	8	July	Introduction to Trigonometry
6	9	August	Coordinate geometry
7	14	April -May	Probability

SUBJECT ENRICHMENT ACTIVITY:

1.	To verify Basic Proportionality Theorem experimentally.
2.	To find the formula for CSA and TSA of cone Experimentally.
3.	To set the idea of probability of an event through a double colour card experiment
4.	To compare the volumes of two right circular cylinders which are formed from two rectangular sheets of same dimensions.

CLASS –X (2021-22)**FIRST TERM**

One Paper

90 Minutes

S.NO	UNIT NAME	MARKS
I	NUMBER SYSTEMS (Real Number)	6
II	ALGEBRA(Polynomials, Linear equation in two variable)	10
III	COORDINATEGEOMETRY (Coordinate geometry)	6
IV	GEOMETRY (Triangles)	6
V	TRIGONOMETRY (Introduction to trigonometry)	5
VI	MENSURATION (Area related to circles)	4
VII	STATISTICS & PROBABILITY (Probability)	3
	TOTAL	40
	INTERNAL ASSESSMENT	10
	TOTAL	50

INTERNAL ASSESSMENT	MARKS
Periodic Tests	3
Multiple Assessments	2
Portfolio	2
Student Enrichment Activities-practical work	3
Total	10

CHAPTER	DETAILED SYLLABUS FOR TERM 1
REAL NUMBERS	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.

POLYNOMIALS	Zeroes of a polynomial. Relationship between zeroes and coefficients of quadratic polynomials only.
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
COORDINATE GEOMETRY	Review: Concepts of coordinate geometry, graphs of linear equations. Distance formula. Section formula (internal division)
TRIANGLES	<p>Definitions, examples, counter examples of similar triangles.</p> <ol style="list-style-type: none"> 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.
INTRODUCTION TO TRIGONOMETRY	<p>Trigonometric ratios of an acute angle of a right-angled triangle. Proof of their existence (well defined). Values of the trigonometric ratios of 30°, 45° and 60°. Relationships between the ratios.</p> <p>TRIGONOMETRIC IDENTITIES</p> <p>Proof and applications of the identity $\sin^2 A + \cos^2 A = 1$. Only simple identities to be given</p>

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

English Language and Literature
Code No. 184
Class X (2021-22)
Term wise Syllabus
Term – I & Half Yearly Syllabus

READING

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

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

WRITING SKILL

1. Formal letter based on a given situation.

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

INTEGRATED GRAMMAR (Editing, Gap Filling)

1. Tenses
2. Modals
3. Subject-Verb Concord
4. Determiner
5. Reported Speech
6. Commands and Requests
7. Statements
8. Questions

LITERATURE

FIRST FLIGHT

1. A Letter to God
2. Nelson Mandela
3. Two Stories About Flying
4. From the Diary of Anne Frank
5. The Hundred Dresses 1
6. The Hundred Dresses 2

POEMS

1. Dust of Snow
2. Fire and Ice
3. A Tiger in the Zoo
4. The Ball Poem

FOOTPRINTS WITHOUT FEET

1. A Triumph of Surgery
2. The Thief's Story
3. Footprints Without Feet

ST THOMAS SCHOOL

Class X

SUBJECT: SCIENCE

Term – 1 / Half Yearly Syllabus

TERM - I

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 Light – 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 colourful 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.

TERM-I

LIST OF EXPERIMENTS

1. A. Finding the pH of the following samples by using pH paper/universal indicator:
 - (i) Dilute Hydrochloric Acid
 - (ii) Dilute NaOH solution
 - (iii) Dilute Ethanoic Acid solution
 - (iv) Lemon juice
 - (v) Water
 - (vi) Dilute Hydrogen Carbonate solutionB. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:
 - a) Litmus solution (Blue/Red)
 - b) Zinc metal
 - c) Solid sodium carbonate

Unit-I:(Chapter-2)
2. Performing and observing the following reactions and classifying them into:
 - A. Combination reaction
 - B. Decomposition reaction
 - C. Displacement reaction
 - D. Double displacement reaction
 - (i) Action of water on quicklime
 - (ii) Action of heat on ferrous sulphate crystals
 - (iii) Iron nails kept in copper sulphate solution
 - (iv) 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:
 - (i) $\text{ZnSO}_4(\text{aq})$
 - (ii) $\text{FeSO}_4(\text{aq})$
 - (iii) $\text{CuSO}_4(\text{aq})$
 - (iv) $\text{Al}_2(\text{SO}_4)_3(\text{aq})$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 (i) Concave mirror and (ii) 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.

Unit-III:(Chapter-11)

Subject- Social Science(code:087)

CLASS – X

SYLLABUS –2021-22

TERM-1 (As given by CBSE)

Name of the Book- History-India and the Contemporary World- II

Geo -Contemporary India-II

Civics-Democratic Politics-II

Eco-Understanding Economic Development

Name of the Publisher–NCERT

HISTORY

Ch-1. The Rise of Nationalism in Europe

GEOGRAPHY

Ch-1. Resources and Development

Ch-3. Water Resources (Only map items will be evaluated in board examination)

Ch-4. Agriculture

POLITICAL SCIENCE

Ch-1. Power Sharing

Ch-2. Federalism

ECONOMICS

Ch-1. Development

Ch-2. Sectors of the Indian Economy

LIST OF MAP ITEMS (TERM-1)

GEOGRAPHY

Ch 1: Resources and Development

a. Major soil Types

Ch-3: Water Resources (Theoretical part to be assessed in the periodic test only)

Dams:

- a. Salal**
- b. Bhakra Nangal**
- c. Tehri**
- d. Rana Pratap Sagar**
- e. Sardar Sarovar**
- f. Hirakud**
- g. Nagarjuna Sagar**
- h. Tungabhadra**

Ch-4 Agriculture

- a. Major areas of Rice and Wheat**
- b. Largest/ Major producer states of Sugarcane, Tea, Coffee, Rubber, Cotton and Jute**

Subject- Social Science
CLASS – X
SYLLABUS –2021-22
PERIODIC TEST -2

History

Ch-1. The Rise of Nationalism in Europe

- **Unit-1 The French Revolution and the idea of the nation**
- **Unit-2 The making of Nationalism in Europe**
- **Unit-3 The age of Revolution 1830-1848**

Geography

Ch-3. Water Resources

Ch-4. Agriculture

Political Science

Ch-1. Power Sharing

Ch-2. Federalism

Economics

Ch-1. Development

Ch-2. Sectors of the Indian Economy

ST.THOMAS SCHOOL SAHIBABAD

SUBJECT- INFORMATION TECHNOLOGY(402)

CLASS- X

TERM- I AND PERIODIC TEST II

SYLLABUS (2021-2022)

S.No	Unit Number		Name of the Chapter
1.	1.	SUBJECT SPECIFIC SKILLS	Digital Documentation (Advanced)
2.	2		Electronic Spreadsheet (Advanced)
3.	3.		Database Management System.
4.	1.	EMPLOYABILITY SKILLS	Communication Skills-II
5.	2.		Information and Communication Technology Skills-II
6.	3.		Self-management Skills-II

हिंदी पाठ्यक्रम -अ (कोड सं. 002) कक्षा 10वीं हिंदी - अ परीक्षा हेतु पाठ्यक्रम विनिर्देशन 2021-22

पी.टी.-2/ परीक्षा भार विभाजन सत्र 1			
	विषयवस्तु	उप भार	कुलभार
1	अपठित गद्यांश व काव्यांश पर चिंतन क्षमता एवं अभिव्यक्ति कौशल पर आधारित बहुविकल्पी प्रश्न।		10
	अ एक अपठित गद्यांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	
	ब एक अपठित काव्यांश 150 से 200 शब्दों का (1x5=5) विकल्प सहित	5	
2	व्याकरण के लिए निर्धारित विषयों पर विषय-वस्तु का बोध, भाषिक बिंदु /संरचना आदि पर बहुविकल्पी प्रश्न प्रश्न (1x16) कुल 20 प्रश्न पूछे जाएँगे जिसमें से केवल 16 प्रश्नों के उत्तर देने होंगे।		16
	1 रचना के आधार पर वाक्य भेद (4 अंक)	4	
	2 वाच्य (4 अंक)	4	
	3 पद परिचय (4 अंक)	4	
	4 रस (4 अंक)	4	
3	पाठ्यपुस्तक क्षितिज भाग - 2		
	अ गद्य खंड	7	
	1 क्षितिज से निर्धारित पाठों में से गद्यांश के आधार पर विषय-वस्तु का ज्ञान बोध, अभिव्यक्ति आदि पर पाँच बहुविकल्पी प्रश्न पूछे जाएँगे। (1x5)	5	
	2 क्षितिज से निर्धारित गद्य पाठों के आधार पर विद्यार्थियों की उच्च चिंतन क्षमताओं एवं अभिव्यक्ति का आकलन करने हेतु दो बहुविकल्पी प्रश्न पूछे जाएँगे। (1x2)	2	14
	ब काव्य खंड	7	
	1 क्षितिज से निर्धारित कविताओं में से काव्यांश के आधार पर पाँच बहुविकल्पी प्रश्न पूछे जाएँगे (1x5)	5	
	2 क्षितिज से निर्धारित कविताओं के आधार पर विद्यार्थियों का काव्यबोध परखने हेतु दो बहुविकल्पी प्रश्न पूछे जाएँगे। (1x2)	2	
4	आंतरिक मूल्यांकन		10
	अ सामयिक आकलन	2.5	
	ब बहुविध आकलन	2.5	
	स पोर्टफोलियो	2.5	
	द श्रवण एवं वाचन	2.5	
	कुल		50

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

गद्य - खंड	काव्य - खंड
स्वयं प्रकाश - नेताजी का चश्मा	सूरदास - पद
रामवृक्ष बेनीपुरी - बालगोबिन भगत	तुलसीदास - राम - लक्ष्मण - परशुराम संवाद