

CLASS-X

Syllabus

**MAHARSHI
PATANJALI VIDYA
MANDIR**



ENGLISH

Month	Literature		Grammar & Writing Skills
	First Flight	Footprints Without Feet	
April	Chap. 1 Letter to God. Poems -Dust of snow. Fire and ice	Chap. 1 The Triumph of Surgery	4. Tenses *.Formal letter based on a given situation in about 100-120 words.
May	Chap. 2 Nelson Mandela Long walk to freedom Poem- ATiger in a zoo	Chap. 2 The Thief's Story	• Modals
July	Chap. 3 & 4 Two stories about flying Part 1& 2 Poem – How to Tell Wild Animals Poem- The Ball poem.	Chap. 3 The Midnight Visitor Chap.. 4 A Question of Trust	• Subject-Verb Concord
August	Chap. 4 From the diary of Anne Frank Poem - Amanda Chap. 7 Glimpses of India I. A Baker from Goa	Chap. 5 Footprints without feet Chap. 6 The Making of a Scientist	• Reported Speech -command and requests, -statements, -questions • Writing an analytical paragraph on the basis of the given map/chart/report/line graph, etc. in about 100-120 words.
September	Chap. 7 Glimpses of India II. Coorg III. Tea from Assam Poem – The Trees Chap.8.	Chap. 7 The Necklace	

	Mijbil the Otter Poem- Fog		
October	Chap. 9 Madam Rides the Bus . Poem :The Tale of Custard the Dragon Chap. 10 The Sermon at Benares.	The Necklace cont.....	• Determiners
November	Poem – For Anne Gregory 11. The Proposal	Chap. 9 Bholi Chap 10 The Book That Saved The Earth	
DECEMBER	PRE BOARD THE ENTIRE SYLLABUS		
JANUARY			
Unit Test I	Chap. 1 & 2 -Dust of snow. - Fire and ice - A Tiger in a zoo	Chap. 1 & 2	Tenses, Formal letter based on a given situation in about 150-200 words.
Half Yearly Examination	Chap.1,2,3,4, Poems- *Dust of snow. *Fire and ice *A Tiger in a zoo *How to tell wild *Animals *The Ball poem, *Amanda	Chap. 1,2,3&,4	Tenses, Modals, Subject-Verb Concord, Reported Speech, Formal letter,Writing an analytical paragraph

HINDI

पाठ्य पुस्तकें:

- क्षितिज भाग 2
- कृतिका भाग 2
- व्याकरण

1. अप्रैल:	गद्य- नेताजी का चश्मा पद्य- सूरदास के पद व्याकरण – वाच्य
2. मई	गद्य : बालगोबिन भगत व्याकरण : रचना के आधार पर वाक्य भेद कृतिका : माता का आँचल
3. जुलाई	गद्य : लखनवी अंदाज़ पद्य : राम लक्ष्मण परशुराम संवाद * उत्साह * अट नहीं रही है व्याकरण:: 1. विज्ञापन लेखन 2. पद परिचय
4. अगस्त	गद्य : एक कहानी यह भी पद्य : * यह दंतुरित मुस्कान * फसल व्याकरण: ईमेल- लेखन, स्ववृत्त लेखन विज्ञापन लेखन कृतिका: साना- साना हाथ जोड़ि
5. सितंबर	गद्य : एक कहानी यह भी पद्य : आत्मकथ्य व्याकरण: अनुच्छेद लेखन सन्देश लेखन पत्र लेखन (औपचारिक एवं अनौपचारिक) अलंकार (उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, मानवीकरण) कृतिका: (शेषांश)

6. अक्टूबर	<p>गद्य : नौबतखाने में इबादत</p> <p>पद्य : संगतकार</p> <p>व्याकरण:</p> <p>अपठित गद्यांश</p> <p>अपठित पद्यांश</p> <p>औपचारिक एवं अनौपचारिक पत्र का अभ्यास</p>
7. नवंबर	<p>गद्य : संस्कृति</p> <p>कृतिका- मैं क्यों लिखता हूँ</p> <p>व्याकरण : पुनरावृत्ति</p>
8. दिसंबर	पढ़ाए गए सभी पाठों की पुनरावृत्ति एवं अभ्यास
9. क्रिया कलाप	<ul style="list-style-type: none"> आशु भाषण श्रवण कला कौशल परीक्षा

❖ प्रथम इकाई परीक्षा :

गद्य- नेताजी का चश्मा

पद्य- सूरदास के पद

कृतिका – माता का आँचल

व्याकरण –

- वाच्य
- वाक्य

❖ अर्धवार्षिक परीक्षा :

गद्य-

- नेताजी का चश्मा
- लखनवी अंदाज़

- * बालगोबिन भगत
- * एक कहानी यह भी

पद्य-

- सूरदास के पद
- उत्साह
- आत्म कथ्य

- * राम लक्ष्मण परशुराम संवाद
- * अट नहीं रही है

कृतिका –

- माता का आँचल
- साना- साना हाथ जोड़ि

व्याकरण –

- वाच्य
- विज्ञापन लेखन
- ईमेल लेखन
- अपठित गद्यांश
- अनुच्छेद लेखन
- पत्र लेखन
- * वाक्य
- * पद परिचय
- * स्ववृत्त लेखन
- * अपठित पद्यांश
- * सन्देश लेखन
- * अलंकार

परियोजना कार्य : समसामयिक विषयों पर विज्ञापन लेखन

❖ प्री बोर्ड : संपूर्ण पाठ्यक्रम

Mathematics

April

- **Real Numbers**

- Introduction
- The Fundamental Theorem of Arithmetic
- Revisiting Irrational Numbers

- **Polynomials**

- Introduction
- Geometric Meaning of the Zeros of a Polynomial
- Relationship Between the Zeros and Coefficients of a Polynomial

May

- **Linear Equations in Two Variables**

- Introduction
- Graphical Methods of Solution of a Pair of Linear Equations
- Algebraic Methods of Solving a Pair of Linear Equations
 - Substitution Method
 - Elimination Method

July

- **Quadratic Equations**

- Introduction
- Solutions of Quadratic Equations by Factorization
- Nature of Roots

- **Arithmetic Progression (A.P.)**

- Introduction
- Types of Arithmetic Progression
- n th Term of an A.P.
- Sum of First n Terms of an A.P.

August

- **Introduction to Trigonometry**

- Introduction
- Trigonometric Ratios
- Trigonometric Ratios of Specific Angles
- Trigonometric Identities

September

- **Triangles**

- Introduction to Similarity of Triangles
- Similar Figures
- Criteria for Similarity of Triangles

- **Statistics**

- Introduction
- Mean of Grouped Data
- Mode of Grouped Data
- Median of Grouped Data

Assessments

- **1st Unit Test:** Topics from April to May

- Real Numbers
- Polynomials
- Linear Equations in Two Variables

- **Half Yearly Exam:** All topics covered till September

October

- **Coordinate Geometry**

- Introduction to Types
- Distance Formula
- Section Formula

- **Some Applications of Trigonometry**

- Introduction
- Heights and Distances (Angles of Elevation and Depression: 30° , 45° , 60°)

- **Probability**

- Introduction
- Classical Definition of Probability
- Sample Problems on Finding the Probability of an Event

November

- **Circles**

- Tangents to a Circle at a Point of Contact
- The Tangent at Any Point of a Circle is Perpendicular to the Radius
- Lengths of Tangents from an External Point to a Circle

- **Areas Related to Circles**

- Areas of Sectors and Segments of a Circle
- Problems Based on Areas and Perimeter/Circumference (Restricted to Central Angles: 60° , 90° , 120°)

December

- **Surface Areas and Volumes**

- Introduction
- Surface Area of Combination of Solids
- Volume of Combination of Solids

Pre-Board Exam

- Comprehensive assessment covering all topics up to December.

Physics

April & May : Natural Phenomena:- Reflection of Light at curved surface, Images formed by spherical mirrors, centre of curvature, Principal axis, principal focus, focal length. Mirror formula, Magnification. Refraction, laws of refraction, refractive index.

JULY & AUGUST: Refraction of light by spherical lens, Image formed by spherical lenses, lens formula. Magnification, power of lenses- Functioning of a lens in human eye, defects of vision and their corrections,

Applications of spherical mirrors and lenses, Refraction of light through a prism

SEPTEMBER : Effects of current:- Electric current, PD, Ohm's law, Resistance, Resistivity, Factors on which the resistance of a conductor depends, Series and Parallel combination of resistors and its application in daily life.

OCTOBER: Heating effect of electric current & its application in daily life, Electric power, Inter relation between P,V,I and R. Magnetic effect of Current: Magnetic field, field lines, field due to a current carrying conductor, field due to current carrying coil or solenoid; Force on current carrying conductor, Fleming's left hand rule.

NOVEMBER & DECEMBER: Electromagnetic induction, Induced pd, Induced Current. Fleming's right hand rule, Direct current, Alternating current: frequency of AC, Advantage of AC over DC, Domestic electric circuits

First unit test :- Till Reflection of light.

Activity:- Students have also to make assignment copy.

Half yearly:-Light

Activity:- Students have also to give practical examination

Preboard:-Complete syllabus (Light & Effects of Current)

Board examination:- Complete syllabus

Chemistry

MONTH	CHAPTERS	TOPICS
APRIL	Chapter 1: Chemical Reactions and Equations	Chemical equation, Balanced chemical equation, implications of a balanced chemical equation
MAY	Chapter 1: Chemical Reactions and Equations	Types of chemical reactions: combination, decomposition, displacement, double displacement, precipitation. Endothermic Exothermic reactions, REDOX REACTIONS
JULY	Chapter 2: Acids, Bases and Salts	Their definitions in terms of furnishing of H^+ and OH^- ions, General properties, examples and uses, neutralization, concept of pH scale (Definition relating to logarithm not required), importance of pH in everyday life.
AUGUST	Chapter 2: Acids, Bases and Salts (to be continued....) Chapter 3: Metals and Non-metals	Preparation and uses of Sodium hydroxide, bleaching powder, Baking soda, Washing soda and Plaster of Paris. Properties of metals and non-metals; Reactivity series; Formation and properties of ionic compounds.
SEPTEMBER	Chapter 3: Metals and Non-metals (to be continued....)	Basic metallurgical processes; Corrosion and its prevention.
OCTOBER	Chapter 4: Carbon and Its compounds	Covalent bonding in carbon compounds. Versatile nature of carbon. Homologous series. Nomenclature of carbon compounds containing functional groups (halogens, alcohol, ketones, aldehydes, alkanes and alkynes), difference between saturated hydro carbons and unsaturated hydrocarbons. Chemical properties of carbon compounds (combustion, oxidation, addition and substitution reaction).
NOVEMBER & DECEMBER	Chapter 4: Carbon and Its compounds (to be continued....) REVISION	Ethanol and Ethanoic acid (only properties and uses), soaps and detergents.



Practicals



Term-1	<p>1. Performing and observing the following reactions and classifying them into:</p> <p>A. Combination reaction B. Decomposition reaction C. Displacement reaction D. Double displacement reaction</p> <p>(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.</p> <p>2. Finding the pH of the given samples by using pH paper/universal indicator.</p> <p>3. Studying the properties of acids and bases (HCl & NaOH) on the basis of their reaction with:</p> <p>a) Litmus solution (Blue/Red) b) Zinc metal c) Solid sodium carbonate.</p> <p>4. Observing the action of Zn, Fe, Cu and Al metals on the following salt solutions:</p> <p>i) $\text{ZnSO}_4(\text{aq})$ ii) $\text{FeSO}_4(\text{aq})$ iii) $\text{CuSO}_4(\text{aq})$ iv) $\text{Al}_2(\text{SO}_4)_3(\text{aq})$</p> <p>Arranging Zn, Fe, Cu and Al (metals) in the decreasing order of reactivity based on the above result.</p>
Term-2:	<p>5. Study of the following properties of acetic acid (ethanoic acid): (i) Odour (ii) solubility in water (iii) effect on litmus (iv) reaction with Sodium Hydrogen Carbonate</p> <p>6. Study of the comparative cleaning capacity of a sample of soap in soft and hard water.</p>

UNIT TEST-1: Chapter 1: Chemical Reactions and Equations(Except Redox Reactions)

HALF YEARLY EXAM: Chapter 1: Chemical Reactions and Equations

Chapter 2: Acids, Bases and Salts

PRE-BOARD: Complete syllabus

BIOLOGY

	CLASS-10	
MONTH	FIRST TERM CHAPTERS	TOPICS
April	Life processes	Nutrition in plants and animals. Autotrophic and Heterotrophic nutrition.
May	Life processes	Respiration in plants and animals. Human respiratory system.
July	Life processes	Transportation in plants and animals. Human circulatory system Excretion in plants and animals.
August	Control and Co-ordination in plants and animals	Hormonal co-ordination in plants and animals. Nervous system in animals, reflex action and human brain.
September	How do organisms reproduce	Modes of reproduction in organisms, reproduction in plants. Artificial methods of propagation.

UNIT TEST-1: Nutrition, Respiration.

HALF YEARLY EXAM: Life processes (Nutrition, Respiration Transportation, Excretion), Control and Co-ordination.

Practical Term-1

1. Preparing a temporary mount of a leaf peel to show stomata.
2. Experimentally show that carbon dioxide is given out during respiration.

TERM-II

MONTH	SECOND TERM CHAPTERS	TOPICS
October	How do organisms reproduce	Reproduction in human beings'. Sexually transmitted diseases.
November	Heredity	Mendel's first and second law of inheritance. Blood groups and sex determination in humans.
November	Our environment	Ecosystem and its components, food chain, transfer of energy in food chains.

PRE-BOARD: Complete syllabus

Practical Term-2:

1. Studying (a) binary fission in amoeba, (b) budding in yeast and Hydra with the help of prepared slides.
2. Identification of the different parts of an embryo of a dicot seed(pea, gram or red kidney bean)

History/ Civics

Month	Subject	Chapters
April	History	1 The Rise of Nationalism in Europe.
May	History	1 The Rise of Nationalism in Europe. (continued)
July	Civics	1 Power Sharing
	History	2 The Rise of Nationalism in India
Unit test - 1	History	The Rise of Nationalism in Europe (only till Visualising the Nation)
August	History	2 The Rise of Nationalism in India (continued)
September	Civics	2 Federalism
	History	3 The Making of Global World (sub topics – 1.3 pre modern world to conquest, Disease and Trade) To be evaluated in the board examination.)
Half yearly Examination		Syllabus covered till September
October	Civics Civics	3 Gender, Religion and Caste 4 Political Parties.
November	History	5 Print Culture and Modern World
December	Civics	5 Outcomes of Democracy

GEOGRAPHY

MONTH	LESSON NO.	NAME OF THE LESSON	SUB TOPICS
April	L-1	Resources and development	<ol style="list-style-type: none"> 1. Classifications of Resources 2. Development of resources 3. Sustainable development 4. Resources planning 5. Land resources and land use patterns 6. Soil as a Resource and Classification of soils
July	L-2,L-3	Forest and wildlife , Water resources	<ol style="list-style-type: none"> 1. Biodiversity, flora and fauna 2. What negative factors lead to depletion of flora and fauna 3. Conservation of forests and wildlife in India 4. Types of forests ,community conservation, sacred groves- a wealth of diverse and rare species 5. Water scarcity and Conservation 6. Multi purpose projects 7. Rain water harvesting
August	L-4	Agriculture	<ol style="list-style-type: none"> 1. Types of farming 2. Cropping seasons 3. Major crops:-Food crops, Millet crops Beverage crops Fibre crops, etc 4. Technological and institutional reforms
November	L-5, L-6	Minerals and Energy resources, Manufacturing industries	<ol style="list-style-type: none"> 1. Occurrence of minerals, causes of depletion and conservation methods 2. Energy resources 3. Importance of manufacturing industries, contribution of industry to National economy, industrial Location, Classification of industries ,Environmental Degradation and controls of Environmental Degradation
January	L-7	Life lines of National economy	<ol style="list-style-type: none"> 1. Inter disciplinary project and internal assessment 2. Map work of this chapter will come in final exam

Unit test-1 Resources and development

Half yearly- lesson-1,2,3,4 Plus Maps of all chapters

Pre- Board Examination- all chapters and Maps of all chapters.

ECONOMICS

MONTH	LESSON NO.	NAME OF THE LESSON	SUB TOPICS
May	L- 1	Development	<ol style="list-style-type: none"> 1. What development promises-Different people, Different Goals 2. Income and other Goals 3. National Development 4. How to compare different countries
September	L-2	Sectors of Indian Economy	<ol style="list-style-type: none"> 1. Economic activities 2. Comparing the three sectors 3. Rising importance of tertiary sector 4. Public and Private sectors
October	L-3	Money and Credit	<ol style="list-style-type: none"> 1. Medium of exchange 2. Loan activities of Bank 3. Terms of credit, including all other topics
December	L-4	Globalization	Production across countries, interlinking, Foreign Trade and markets Impact of Globalization in India All topics are inter related so need to be covered
	L-5	Consumer Right	(Will be assessed through project work and internal assessments)

Half yearly- lesson-1,2

Pre-Board Examination- All chapters

IT (Sub. Code – 402)

April	Part B: Unit 3 : Database Management System (Session 1,2,3)
May	Part B: Unit 3 - Database Management System (Session 4,5)
July	Part B: Unit 3 : Database Management System (Session 7 and 8) Part A: Unit 1: Communication Skills – II (All Sessions)
August	Part A: Unit 2: Self-Management Skills-II (All Sessions) Part B: Unit 1: Digital Documentation (Advanced) (All Sessions)
September	Part A: Unit 3: Information and Communication Technology Skills-II (All Sessions)
October	Part B: Unit 2: Electronic Spreadsheet (Advanced) (All

	Sessions)
November	Part B: Unit 4: Maintain Healthy, Safe and Secure Working Environment (All Sessions) Part A: Unit 4: Entrepreneurial Skills-II (All Sessions)
December	Part A: Unit 5: Green Skills-II (All Sessions)

Unit Test 1:- Part B:

- Unit 3 – Database Management System (Session 1,2,3)

Half Yearly Exam: - Part A:

- Unit 1 : Communication Skills-II (All Sessions)
- Unit 2 : Self-Management Skills-II (All Sessions)
- Unit 3 : Information and Communication Technology Skills-II (All Sessions)

Part B:

- Unit 1 : Digital Documentation (Advanced) (All Sessions)
- Unit 3: Database Management System (Sessions 1,2,3,4,5,7,8)

Pre-board Exam: - FULL SYLLABUS (as mentioned below)

Part A:

- Unit 1 : Communication Skills-II (All Sessions)
- Unit 2 : Self-Management Skills-II (All Sessions)
- Unit 3 : Information and Communication Technology Skills-II (All Sessions)
- Unit 4 : Entrepreneurial Skills-II(All Sessions)
- Unit 5 : Green Skills-II (All Sessions)

Part B:

- Unit 1 : Digital Documentation (Advanced) (All Sessions)
- Unit 2 : Electronic Spreadsheet (Advanced) (All Sessions)
- Unit 3: Database Management System (Sessions 1,2,3,4,5,7,8)
- Unit 4: Maintain Healthy, Safe and Secure Working Environment (All Sessions)

