JIMP PIONEER SCHOOL DEHRADUN, UTTARAKHAND

SYLLABUS DIVISION [CLASS-X 2026-27
SUBJECT: ENGLISH LANGUAGE & LITERATURE (184)

I CYCLE OF WEEKLY TEST (TERM 1): APRIL 21, 2026
Syllabus-Unseen Passage, Tenses, Diary Entry
First Flight: Chapter- A Letter to God
II CYCLE OF WEEKLY TEST (TERM 1): JULY 7, 2026
Syllabus-Unseen Passage, Subject Verb Agreement, Letter to Editor
First Flight: Chapter- Nelson Mandela, Poem: Fire and Ice
Footprints Without Feet: A Triumph of Surgery
I PRE-BOARD OCTOBER27, 2026 TO NOVEMBER 14,2026
Complete Syllabus
II PRE-BOARD DECEMBER 12, 2026 TO DECEMBER 30, 2026
Complete Syllabus

Month	Book	Unit / Topic	Writing	Grammar	Speaking
April	Lit. Reader Suppl. Reader	➢ **A Letter to God** ➢ **Nelson Mandela: Long Walk to Freedom** ➢ **Dust of Snow (Poem)** ➢ **Fire & Ice (Poem)** ➢ **A Tiger in the Zoo (Poem)** ➢ **A Triumph of Surgery**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem • Poetic Devices ❖ **Letter to Editor**	**Tenses** Integrated Grammar Exercises	**Subject Enrichment Activity:** Introduction by the Students Group discussion Narration: Based on Personal Experience

May	Lit. Reader Suppl. Reader	➢ **Two Stories about Flying** **His First Flight** **Black Aero plane** ➢ **How to Tell Wild Animals (Poem)** ➢ **The Ball Poem (Poem)** ➢ **Amanda (Poem)** ➢ **The Thief's Story** ➢ **The Midnight Visitor**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem • Poetic Devices ❖ **Complaint Letter**	**Determiners** Integrated Grammar Exercises	Discussion: Characters, plot& theme Group discussion Debate
June	**SUMMER BREAK**				
July	Lit. Reader Suppl. Reader	➢ **From the Diary of Anne Frank** ➢ **The Trees (Poem)** ➢ **A Question of Trust** ➢ **Footprints without Feet**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem • Poetic Devices ❖ **Enquiry Letter**	**Subject-Verb Agreement** Integrated Grammar Exercises	**Subject Enrichment Activity:** Describing one's role model /Best friend Group Discussion Narrating an event Making a PPT on any one of the chapters

Aug.	Lit. Reader Suppl. Reader	➢ **Glimpses of India-I, II &III** ➢ **Mijbil the Otter** ➢ **Fog (Poem)** ➢ **The Making of a Scientist**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem Poetic Devices ❖ **Letter of Placing an Order**	**Reported Speech** Statements, Commands, Requests, Interrogatives Integrated Grammar Exercises	Group Discussion Sharing an experience of travelling Speech on the significance of Hobbies in human life
Sep.	Lit. Reader Suppl. Reader	➢ **Madam Rides the Bus** ➢ **The Tale of Custard the Dragon (Poem)** ➢ **For Anne Gregory (Poem)** ➢ **The Necklace** ➢ **Bholi**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem • Poetic Devices ❖ **Analytical Paragraph**	**Modals** Integrated Grammar Exercises	Sharing incidents Explaining the PPT made Narrating a story based on the given opening line /outline
Oct.	Lit. Reader Suppl. Reader	➢ **The Sermon at Benares** ➢ **The Proposal (Play)** ➢ **The Book That Saved the Earth**	• LA, SAT/ QA • Ref. to Context • Character sketches of the main characters in the story. • Q/A Global and Local Comprehension • Extrapolation • Central idea of the poem • Poetic Devices	**Revision** Integrated Grammar Exercises	Discussion: Characters, plot & theme Group Discussion Debate

JIMP PIONEER SCHOOL DEHRADUN, UTTARAKHAND

SYLLABUS BREAK-UP (2026-2027)

CLASS X

MATHEMATICS

First Weekly Test- 05-May-2026

Syllabus-(Chapter-2, Chapter-3)

Second Weekly Test- 28-July-2026

Syllabus-(Chapter 1, Chapter 6, Chapter 7)

I Pre-Board Examination(October 27, 2026- November 14, 2026)

Syllabus- (Chapters- 1 to 14)

II Pre-Board Examination(December 12, 2026 – December 30, 2026)

Syllabus-(Chapters- 1 to 14)

Chapters	Topics	Number of Periods	
1. Chapter-2	**Polynomials**		(08)Periods
	2.1Introduction	1	07.04.2025 To 17.04.2025
	2.2 Geometrical Meaning of the Zeroes of a polynomial.	2	
	2.3 Relationship between Zeroes and Coefficients of a Polynomial	2	
	2.4 Summary	2	
Activity 1	Graphical representation of zeroes of a Polynomial	1	
2. Chapter-3	**Pair of Linear Equations in Two variables**		(10)Periods
	3.1 Introduction	1	21.04.2025 To 01.05.2025
	3.2 Graphical Method of solution of a Pair of Linear Equations	2	
	3.3 Algebraic Methods of Solving a Pair of Linear Equations 3.3.1 Substitution Method 3.3.2 Elimination Method	4	
	3.4 Summary	2	
Activity 2	Graphical representation of Linear Equations in Two Variables	1	
3. Chapter-1	**Real Numbers**		(7)Periods
	1.1 Introduction	1	02.05.2025 To 13.05.2025
	1.2The Fundamental Theorem of Arithmetic	2	
	1.3 Revisiting Irrational Numbers	2	
	1.4 Summary	2	
4. Chapter-6	**Triangles**		(10)Periods
	6.1Introduction	1	14.05.2025 To 27.05.2025
	6.2 Similar Triangles	1	
	6.3 Similarity of Triangles	2	
	6.4 Criteria for Similarity of Triangles	3	
	6.5 Summary	2	
Activity 3	Basic Proportionality Theorem	1	
5. Chapter-7	**Coordinate Geometry**		(7)Periods
	7.1 Introduction	1	28.05.2025 To 30.05.2025 (SUMMER BREAK) 01.07.2025 To 04.07.2025
	7.2 Distance Formula	1	
	7.3 Section Formula	2	
	7.4 Summary	2	
Activity -4	To verify Section Formula by graphical method	1	
6. Chapter-8	**Introduction to Trigonometry**		(09)Periods
	8.1 Introduction	1	07.07.2025 To
	8.2 Trigonometric Ratios	2	
	8.3Trigonometric Ratios of Some Specific Angles	2	
	8.4 Trigonometric Identities	2	

	8.5 Summary	2	18.07.2025

7. Chapter-11	**Areas Related to Circles**		(05)Periods
	11.1 Areas of Sector and Segment of a Circle	3	21.07.2025 To 28.07.2025
	11.2 Summary	2	
8. Chapter-14	**Probability**		(05)Periods
	14.1 Probability – A Theoretical approach	3	29.07.2025 To 04.08.2025
	14.2 Summary	2	
9. Chapter-4	**Quadratic Equations**		(07)Periods
	4.1 Introduction	1	05.08.2025 To 13.08.2025
	4.2 Quadratic Equations	1	
	4.3 Solution of a Quadratic Equation by Factorization	2	
	4.4 Nature of Roots	1	
	4.5 Summary	1	
Activity5	Solution of Quadratic Equation	1	
10. Chapter-5	**Arithmetic Progressions**		(12)Periods
	5.1 Introduction	1	14.08.2025 To 29.08.2025
	5.2 Arithmetic Progressions	1	
	5.3 n^{th} Term of an AP	2	
	5.4 Sum of First n Terms of an AP	2	
	5.5 Summary (Optional Exercise)	2	
Activity 6	Arithmetic Progressions	1	
Activity 7	Sum of n Natural Numbers	1	
Activity 8	Sum of n Terms of an A.P.	1	
Activity 9	Sum of First n Odd Numbers	1	
11. Chapter-9	**Some Applications of Trigonometry**		(05)Periods
	9.1 Heights and Distances	3	01.09.2025 To 08.09.2025
	9.2 Summary	2	
12. Chapter-10	**Circles**		(05)Periods
	10.1 Introduction	1	09.09.2025 To 15.09.2025
	10.2 Tangent to a Circle	1	
	10.3 Number of Tangents from a point on a circle	1	
	10.4 Summary	1	
Activity-10	Tangents to a Circle from an External Point	1	
13. Chapter-12	**Surface Areas and Volumes**		(7) Periods
	12.1 Introduction	1	16.09.2025 To 25.09.2025
	12.2 Surface Area of a Combination of Solids	2	
	12.3 Volume of a Combination of Solids	2	
	12.4 Summary	2	
14. Chapter-13	**Statistics**		(7) Periods
	13.1Introduction	1	26.09.2025 To 09.10.2025
	13.2 Mean of Grouped Data	2	
	13.3 Mode of Grouped Data	1	
	13.4 Median of Grouped Data	2	
	13.5 Summary	1	
	Revision for Pre-Boards		10.10.2025 To 24.10.2025
	Activity Based Test Conduction		Before First Pre-Board Examination in the month of the October 2025

कक्षा-10 हिंदी पाठ्यक्रम विभाजन, कोर्स 'ए', कोड संख्या-002सत्र : 2026-27

पाठ्य पुस्तकें : क्षितिज भाग-2, कृतिका : भाग-2, व्याकरण

प्रथम चरण (I Term) साप्ताहिक परीक्षा-1 (Weekly Test-1)

क्र.	पाठ्यवस्तु
1.	अपठित गद्यांश
2.	व्याकरण : वाच्य
3.	क्षितिज(गद्य) स्वयं प्रकाश : नेताजी का चश्मा
4.	क्षितिज(पद्य) पद : सूरदास

प्रथम चरण (I Term) साप्ताहिक परीक्षा-2 (Weekly Test-2)

क्र.	पाठ्यवस्तु	
1.	अपठित काव्यांश	
2.	अलंकार-उपमा, रूपक, उत्प्रेक्षा	
3.	क्षितिज(पद्य) पद : सूरदास	
4.	क्षितिज(गद्य) - बालगोबिन भगत : रामवृक्ष बेनीपुरी	
5.	रचना के आधार पर वाक्य भेद, रचनान्तरण	
6.	अनुच्छेद लेखन (समसामयिक तथा व्यावहारिक जीवन से संबंधित) लगभग 100 शब्द	
7.	ई-मेल लेखन - (विविध विषयों पर आधारित औपचारिक ई-मेल) लगभग 100 शब्द	

प्री-बोर्ड-1 व 2

क्र.	पाठ्यवस्तु	
1.	**अपठित गद्यांश एवं काव्यांश**	
2.	**व्याकरण :-**	
	अलंकार-उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति तथा मानवीकरण	
	रचना के आधार पर वाक्य भेद, रचनान्तरण	
	वाच्य, वाच्य परिवर्तन	
	पद-परिचय	
3.	**रचनात्मक लेखन :-**	
	अनुच्छेद लेखन (समसामयिक तथा व्यावहारिक जीवन से संबंधित) लगभग 120 शब्द	
	पत्र लेखन (अभिव्यक्ति क्षमता पर आधारित औपचारिक तथा अनौपचारिक पत्र)	
	उपलब्ध रिक्ति के लिए स्ववृत्त लेखन (लगभग 80 शब्द)	
	अथवा	
	ई-मेल लेखन - (विविध विषयों पर आधारित औपचारिक ई-मेल) लगभग 100 शब्द	
	विज्ञापन लेखन (लगभग 40 शब्द)	
	अथवा	
	संदेश लेखन - शुभकामना,पर्व-त्योहार तथा विशेष अवसर (लगभग 40 शब्द)	
4.	**क्षितिज (पद्य)**- सूरदास : पद	
	राम-लक्ष्मण-परशुराम संवाद : तुलसीदास	
	आत्मकथ्य : जयशंकर प्रसाद	
	उत्साह, अट नहीं रही है : सूर्यकान्त त्रिपाठी निराला	
	यह दन्तुरित मुस्कान, फसल : नागार्जुन	
	संगतकार : मंगलेश डबराल	

5.	**क्षितिज (गद्य)**– : नेताजी का चश्मा – स्वयं प्रकाश	
	बालगोबिन भगत : रामवृक्ष बेनीपुरी	
	लखनवी अंदाज : यशपाल	
	एक कहानी यह भी : मन्नू भण्डारी	
	नौबतखाने में इबादत : यतींद्र मिश्र	
	संस्कृति : भदंत आनंद कौसल्यायन	
6.	**कृतिका**– माता का आँचल : शिवपूजन सहाय	
	साना-साना हाथ जोड़ि : मधु कांकरिया	
	मै क्यों लिखता हूँ : अज्ञेय	

आंतरिक आकलन– 20 अंक

1. लिखित परीक्षा **Periodic Test**
2. बहुविध आकलन **Multiple Assessment (**गृहकार्य, विविध प्रतियोगिताओं में प्रतिभाग**)**
3. **Portfolio(**नोटबुक, अभ्यास पत्रक आदि**)**
4. विषय संवर्धन (**Subject Enrichment**)कक्षा परीक्षा, वाचन एवं श्रवण कौशल

JIMP PIONEER SCHOOL DEHRADUN, UTTARAKHAND

SYLLABUS BREAK-UP (2026-2027)

CLASS-X

SUBJECT: SCIENCE

MONTHS	SUBJECTS	CH. NO.	NAME OF THE CHAPTER	SUBTOPICS	NO. OF PERIODS
APRIL-MAY	**PHYSICS**	09	LIGHT : REFLECTION AND REFRACTION	• 9.1 Reflection of light • 9.2 Spherical mirrors • Image formation by spherical mirror • Sign convention for reflection by spherical mirrors • Mirror formula and magnification • Numerical • NCERT Questions and Answers discussion	**01** **02** **02** **01** **01** **03** **01** **Total=11**
APRIL	**CHEMISTRY**	01	CHEMICALS REACTIONS AND EQUATIONS.	**1.1** Chemical equations • Balancing by hit trial method. **1.2** Types of chemical reactions. • Combination reaction • Decomposition reaction • Single displacement reaction • Double displacement reaction • Oxidation – reduction reaction • NCERT question and answer discussion.	**1** **3** **1** **Total= 05**
APRIL	**BIOLOGY**	05	LIFE PROCESSES	• 5.1 WHAT ARE LIFE PROCESSES? • 5.2 NUTRITION [Autotrophic Nutrition, Heterotrophic Nutrition, How do Organisms obtain their Nutrition?, Nutrition in Human Beings]	 **01** **03** **Total=04**

I Written Test (19th May 2026)

Syllabus:

CHAPTER 9: LIGHT - REFLECTION (up to Spherical mirrors and numerical based on mirror formula)

CHAPTER 01: CHEMICALS REACTIONS ANDEQUATIONS.

CHAPTER 6: LIFE PROCESSES (Up to Nutrition)

MONTHS	SUBJECTS	CH. NO.	NAME OF THE CHAPTER	SUBTOPICS	NO. OF PERIODS

MAY-JUNE	**PHYSICS**	09	LIGHT : REFLECTION AND REFRACTION	• 9.3 Refraction of light • 9.3.1 Refraction through a rectangular glass slab • 9.3.2 Refractive index • 9.3.3 Refraction by spherical lenses • 9.3.4 Image formation by lenses • 9.3.6 Sign convention for spherical lenses • 9.3.7 Lens formula and magnification • 9.3.8 Power of a lens • Numerical • NCERT Questions and Answers discussion	**01** **01** **02** **02** **01** **01** **01** **02** **01** **Total=13**

MAY	**CHEMISTRY**	02	ACIDS, BASES AND SALTS	**2.1** Chemical properties of acids and bases. • Chemical properties of acids. • Chemical properties of bases. **2.2** What do all acids and bases have in common? • Dilution of an acid. • Dilution of a base.	**02** **01** **Total=03**
MAY	**BIOLOGY**	05	LIFE PROCESSES	• 5.3 RESPIRATION • 5.4 TRANSPORTATION [Transportation in Human Beings and in plants] • 5.5 EXCRETION [Excretion in Human Beings] • **NCERT** question and answer discussion.	**02** **02** **02** **01** **Total=07**
JULY	**PHYSICS**	10	HUMAN EYE AND THE COLOURFUL WORLD	• 10.1 The human eye • Functioning of lens in human eye • 10.2 Defects of vision and their correction • 10.3 Refraction of light through a prism • 10.4 Dispersion of white light by a glass prism • 10.5 Atmospheric refraction • 10.6 Scattering of light • Applications of scattering of light in daily life (excluding colour of the sun at sunrise and sunset).	**01** **02** **01** **01** **01** **01** **01** **Total=08**

JULY	**CHEMISTRY**	02	ACIDS, BASES AND SALTS	**2.3** pH of different solutions. ✓ Importance of pH in daily life. **2.4** Salts (Definition, classification and Properties) ✓ Common salt. ✓ Sodium hydroxide ✓ Bleaching powder. ✓ Baking soda. ✓ Washing soda. ✓ Plaster of paris **NCERT** question and answer discussion.	**01** **04** **01** **Total=06**
JULY	**BIOLOGY**	06	CONTROL AND COORDINATION	• 6.1 ANIMALS – NERVOUS SYSTEM [Reflex Actions, Human Brain] • 6.2 COORDINATION IN PLANTS [Immediate Response to Stimulus, Movement Due to Growth] • 6.3 HORMONES IN ANIMALS • **NCERT** question and answer discussion.	**03** **03** **01** **01** **Total= 08**
II Written Test (11th August 2026) **Syllabus:** CHAPTER 9: LIGHT- REFRACTION CHAPTER 10: HUMAN EYE AND THE COLOURFUL WORLD CHAPTER 02: ACIDS, BASES AND SALTS CHAPTER 5: LIFE PROCEESES (Except Nutrition)					
AUGUST	**PHYSICS**	11	ELECTRICITY	• 11.1 Electric current and circuit • 11.2 Electric potential and potential difference • 11.3 Circuit diagrams • 11.4 Ohm's law • 11.5 Factors on which the resistance of a conductor depends • 11.6 Resistance of a system of resistors • Resistances in series • Resistances in parallel • 11.7 Heating effect of electric current • Practical applications of heating effect of electric current • 11.8 Electric power • Interrelation between P, V, I and R • Numerical • NCERT Questions and Answers discussion	**01** **01** **01** **01** **01** **01** **01** **02** **01** **Total=10**

AUGUST	**CHEMISTRY**	03	METALS AND NON METALS	**3.1** Physical properties. • Metals. • Non metals. **3.2** Chemical properties of metals. • Reaction in air. • Reaction with water. • Reaction with acids. • Reaction with the solution of other metals. **3.3** reaction of metal and non metals. • Formation of ionic compounds. • Properties of ionic compounds. **3.4** Extraction of metals. • Enrichment of ores. • Extraction of metals on the basis of activity series. • Refining of metals. **3.5** Corrosion. ➢ **NCERT** question and answer discussion. ➢ **Some reasoning questions**	**01** **02** **02** **03** **01** **TOTAL= 09**
AUGUST	**BIOLOGY**	07	HOW DO ORGANISMS REPRODUCE?	• 8.1 DO ORGANISMS CREATE EXACT COPIES OF THEMSELVES? [The Importance of Variation] • 8.2 MODES OF REPRODUCTION USED BY SINGLE ORGANISMS [Fission, Fragmentation, Regeneration, Budding, Vegetative Propagation, Spore Formation] • 8.3 SEXUAL REPRODUCTION[Sexual Reproduction in Flowering Plants, Reproduction in Human Beings, Reproductive Health] • **NCERT** question and answer discussion	**01** **02** **03** **01** **Total=07**
		08	HEREDITY AND EVOLUTION	• 9.1 ACCUMULATION OF VARIATION DURING REPRODUCTION • 9.2 HEREDITY[Inherited Traits, Rules for the Inheritance of Traits – Mendel's Contributions, Sex Determination] • **NCERT** question and answer discussion	**04** **01** **01** **Total=06**
SEPT	**PHYSICS**	12	MAGNETIC EFFECTS OF ELECTRIC CURRENT	• 12.1 Magnetic field and field lines • 12.2 Magnetic field due to a current carrying conductor • 12.2.1 Magnetic field due to current through a straight conductor	**01** **01** **01**

				• 12.2.2 Right hand thumb rule • 12.2.3 Magnetic field due to current through a circular loop. • 12.2.4 Magnetic field due to current in a solenoid. • 12.3 Force on a current carrying conductor in a magnetic field. • Fleming's Left Hand Rule • Direct current, Alternating current, frequency of AC. • Advantage of AC over DC • 12.4 Domestic electric circuits • NCERT Questions and Answers discussion	**01** **01** **01** **01** **01** **01** **Total=09**
SEPT	**CHEMISTRY**	04	CARBON AND ITS COMPOUNDS	**4.1** The covalent bond. • Single covalent bond. • Double covalent bond. • Triple covalent bond. **4.2** Versatile nature of Carbon. • Tetracovalency. • Catenation. • Formation of multiple bonds. • Isomerism. • Homologous series. • **IUPAC** nomenclature of carbon compounds o Hydrocarbons (Alkane, alkene and alkyne). o Alcohols o Carbonyl compounds (Aldehyde and ketons). o Carboxylic acids. **4.3** Chemical properties of carbon compounds. • Combustion reaction. • Oxidation reaction. • Addition reaction. • Substitution reaction. **4.4** Some important carbon compounds. • Ethanol (Physical and chemical properties). • Ethanoic acid (Physical and chemical properties). **4.5** Soaps and detergents • Introduction. • Cleansing action of soaps. **NCERT** question and answer discussion	**01** **04** **02** **02** **01** **01** **TOTAL=11**

SEPT	**BIOLOGY**	13	OUR ENVIRONMENT	• 15.1 ECO-SYSTEM — WHAT ARE ITS COMPONENTS?[Food Chains and Webs] AND RELATED TERMS • OZONE LAYER AND HOW IT IS GETTING DEPLETED • **NCERT** question and answer discussion	**01** **01** **01** **Total=03**
OCT	**REVISION AND PROBLEM-SOLVING SESSION**				**10**
	I PRE-BOARD EXAMINATION NOVEMBER 2026				
	II PRE-BOARD EXAMINATION DECEMBER 2026				
	THE WHOLE SYLLABUS WIIL BE EVALUATED IN I & II PRE-BOARD EXAMINATION				

LIST OF EXPERIMENTS IN PHYSICS

1. To determine of the focal length of a given concave mirror.
2. To determine of the focal length of a given convex lens.
3. To trace 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.
4. To trace the path of the rays of light through a glass prism.
5. To study the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
6. To determine of the equivalent resistance of two resistors when connected in series and parallel.

LIST OF EXPERIMENTS IN CHEMISTRY

FIRSTTERM:

Experiment 1: To find the pH of the following samples using pH paper/ universal indicator.

a) Dilute hydrochloric acid.
b) Dilute NaOH solution.
c) Dilute ethanoic acid solution.
d) Lemon juice.
e) Water.
f) Dilute sodium bicarbonate solution.

Experiment 2: To study the properties of acids and bases (Dil. HCl and Dil. NaOH) by their reaction with

a) Litmus solution (Blue/ Red).
b) Zinc Metal.
c) Solid sodium carbonate.

Experiment 3: To perform and observe the following reaction and classify them into:

a) Action of water on quicklime (Combination reaction)
b) Action of heat on ferrous sulphate solution (Decomposition reaction)
c) Iron nails kept in solution of copper sulphate (Displacement reaction)
d) Reaction between sodium sulphate and barium chloride solutions (double displacement reaction).

Experiment 4: To observe the action of Zn, Fe, Cu and Al metals on the following salts solutions:

(a) $ZnSO_4$ (b) $FeSO_4$ (c) $CuSO_4$ (d) $Al_2(SO_4)_3$

And arrange Zn, Fe, Cu and Al metals in increasing order of reactivity based on the above result.

SECOND TERM:

Experiment 1: To study the following properties of acetic acid (ethanoic acid):

a) Odour
b) Solubility in water
c) Effect on litmus solution
d) Reaction with solid sodium carbonate.

Experiment 2: To compare the foaming capacity of different samples of soap.

LIST OF EXPERIMENTS IN BIOLOGY

1. Preparing a temporary mount of a leaf peel to show stomata.

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

3. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.

4. Identification of the different parts of an embryo of a dicot seed (pea, gram or red kidney bean).

***Note- Change in Topics and subtopics may take place as per latest instructions by CBSE.**

JIMP PIONEER SCHOOL DEHRADUN, UTTARAKHAND

CLASS -X (2026-2027)

SOCIAL SCIENCE (087)

TEXT BOOKS: PUBLISHED BY N.C.E.R.T.	**SUBJECT**	**BOOK TITLE**
	HISTORY	**INDIA & CONTEMPORARY WORLD - II**
	POLITICAL SCIENCE	**DEMOCRATIC POLITICS – II**
	GEOGRAPHY	**CONTEMPORARY INDIA-II**
	ECONOMICS	**UNDERSTANDING ECONOMIC DEVELOPMENT**
CBSE	**DISASTER MANAGEMENT**	**TOGETHER, TOWARDS A SAFER INDIA- PART III**

Month	**Subject**	**Ch. no**	**Name of the Chapter**
APRIL	Political Science	1	Power Sharing
	History	1	The Rise of Nationalism in Europe
	Geography	1	Resources & Development
	Economics	1	Development
WRITTEN TEST -I (13th May 2026)			
MAY-JULY	Political Science	2	Federalism
		4	Gender, Religion and Caste
	History	2	Nationalism in India
	Geography	2	Forest and Wildlife
		3	Water Resources
	Economics	2	Sectors of the Indian Economy
WRITTEN TEST II (4th Aug 2026)			
JULY-AUG	Political Science	6	Political Parties
	History	3	The Making of a Global World **(To be evaluated in the Board Examination subtopics: 1 to 1.3 Pre-Modern World to Conquest, Disease and trade) Interdisciplinary project as part of multiple assessments Subtopics 2 to 4.4- The nineteenth century (1815-1914) to end of Bretton Woods &the beginning of "Globalization"**
	Geography	4	Agriculture
	Geography	5	Minerals and Energy Resources
	Economics	2	Sectors of Indian Economy
AUG-SEPT	Political Science	7	Outcomes of Democracy:
	History	4	The Age of Industrialization **(To be assessed as part of periodic assessment only)**
		5	Print Culture and the Modern World
	Geography	6	Manufacturing Industries
		7	Life Lines of National Economy • **Interdisciplinary Project** • **Only map work will be evaluated in the board exam**
	Economics	3	Money and Credit
		4	Globalization of the Indian Economy • **Interdisciplinary Project**
		5	Consumer Rights OR Social Issues OR Sustainable Development **(To be assessed as Project Work under Subject Enrichment)**
I PRE-BOARD (27TH OCTOBER 2026)			
MAP WORK, REVISION AND PROBLEM-SOLVING SESSION +REVISION TESTS			
II PRE BOARD (12TH DECEMBER 2026)			
ALL THE ABOVE CHAPTERS AND MAP WORK WILL BE EVALUATED IN PRE-BOARD EXAMINATION			

JIMP PIONEER SCHOOL DEHRADUN, UTTARAKHAND

ARTIFICIAL INTELLIGENCE (SUBJECT CODE 417) CLASS - X (SESSION 2026-27)

Total Marks : 100 (Theory-50 + Practical-50)

	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
PART A	**Employability Skills**			
	Unit 1: Communication Skills-II	10		2
	Unit 2: Self-Management Skills-II	10		2
	Unit 3: ICT Skills-II	10		2
	Unit 4: Entrepreneurial Skills-II	10		2
	Unit 5: Green Skills-II	10		2
	Total	**50**		**10**
PART B	**Subject Specific Skills**	**Theory (hours)**	**Practical (hours)**	**Marks**
	Unit 1: Revisiting AI Project Cycle & Ethical Frameworks for AI	11	4	7
	Unit 2: Advanced Concepts of Modeling in AI	18	7	11
	Unit 3: Evaluating Models	21	4	10
	Unit 4: Statistical Data	–	28	–
	Unit 5: Computer Vision	10	20	4
	Unit 6: Natural Language Processing	20	7	8
	Unit 7: Advance Python		10	–
	Total	**160**		**40**
PART C	**Practical & Project Work:**			**Marks**
	Practical File with minimum 15 Programs			15
	Practical Examination • Unit 4: Statistical Data • Unit 5: Computer Vision • Unit 6: Natural Language Processing • Unit 7: Advance Python			15
	Viva Voce			5
	Project Work / Field Visit / Student Portfolio (Anyone to be done)			10
	Viva Voce (related to project work)			5
	Total			**50**
	GRAND TOTAL	**210**		**100**

Week/Month	Chapters/Topics	Subtopics	Periods
PART B - SUBJECT SPECIFIC SKILLS			
15th April – 22nd April	**Unit 1: Revisiting AI Project Cycle & Ethical Frameworks for AI**	**AI Project Cycle** Introduction to AI Domains - Three domains of AI and their applications. **Ethical Frameworks of AI** : Types of Ethical Frameworks, Bioethics and a case study in bioethics.	3 Theory
24th April – 30th April	**Unit 2 : Advance Concepts of Modeling in AI**	Differentiate between AI, ML, and DL Common terminologies used with data **Modeling** - Types of AI Models : Rule Based Approach, Learning Based Approach **Categories of Machine learning based models:** Supervised Learning , Unsupervised Learning , Reinforcement Learning **Subcategories of Supervised Learning Model:** Classification Model, Regression Model, **Subcategories of Unsupervised Learning Model**: Clustering, Association **Subcategories of Deep Learning :** Artificial Neural networks (ANN), Convolutional Neural Network (CNN) **Artificial Neural Networks** - What is Neural Network? How does AI make a Decision?	6 Theory
1st May – 17th May	**Unit 3: Evaluating Models**	• Importance of Model Evaluation • What is evaluation? • Need of model evaluation • Splitting the training set data for Evaluation • Train-test split • Accuracy and Error- Accuracy , Error • Evaluation metrics for classification- What is Classification? • Classification metrics - Different types of evaluation techniques in AI, such as Accuracy, Precision, Recall and F1 Score, Confusion Matrix. • Ethical concerns around model evaluation- Bias, Transparency, Accuracy	6 Theory
19th May – 24th May	**Unit 5: Computer Vision (To be assessed through Theory)**	Introduction to Computer Vision, Applications of CV **Concepts of Computer Vision-** ● Computer Vision Tasks ● Basics of Images-Pixel, Resolution, Pixel value ● Grayscale and RGB images	3 Theory
1st July- 25th July	**Unit 6: Natural Language Processing (To be assessed through Theory)**	• Features of natural languages, • Introduction to Natural Language Processing • Applications of Natural Language Processing • Various real-life applications of NLP • Activity - Keyword Extraction https://cloud.google.com/natural-language • Stages of Natural Language Processing (NLP), Various stages of NLP that involve in understanding and processing human language. • Chatbots - Script Bot V/s Smart Bot • Concepts of Natural Language Processing : Text Processing, Text Normalisation, Bag of Words Data Processing , TFIDF	6 Theory

PART A - EMPLOYABILITY SKILLS			
29th July - 8th Aug	**Unit 1: Communication Skills-II**	**Methods of communication –** Verbal, Non-verbal, Visual **Descriptive and specific feedback** 1. Communication cycle and importance of feedback 2. Meaning and importance of feedback 3. Descriptive feedback - written comments or conversations 4. Specific and non-specific feedback **Measures to overcome barriers in communication** 1. Barriers to effective communication – types and factors 2. Measures to overcome barriers in effective communication **Principles of communication** 1. Principles of effective communication 2. 7 Cs of effective communication **Basic writing skills** Writing skills to the following : Sentence, Phrase, Kinds of Sentences, Parts of Sentence, Parts of Speech, Articles, Construction of a Paragraph	4 Theory
11th Aug – 14th Aug	**Unit 2: Self-Management Skills-II**	**Stress management techniques** 1. Meaning and importance of stress management 2. Stress management techniques – Physical exercise, yoga, meditation , Enjoying, going to vacations and holidays with family and friends, Taking nature walks Ability to work independently 1. Importance of the ability to work independently 2. Types of self-awareness 3. Meaning of self motivation and self-regulation	3 Theory
18th Aug – 23rd Aug	**Unit 3: ICT Skills-II**	**Operating System** : 1. Classes of operating systems 2. Menu, icons and task bar on the desktop 3. File concept, file operations, file organization, directory structures, and file-system structures 4. Creating and managing files and folders **Importance and need of care and maintenance of computer :** Cleaning computer components, Preparing maintenance schedule, Protecting computer against viruses, Scanning and cleaning viruses and removing SPAM files, temporary files and folders	3 Theory
25th Aug - 29th Aug	**Unit 4: Entrepreneurial Skills-II**	**Characteristics of successful entrepreneur** 1. Entrepreneurship and society 2. Qualities and functions of an entrepreneur 3. Role and importance of an entrepreneur 4. Myth about entrepreneurship 5. Entrepreneurship as a career option	2 Theory
1st Sep- 4th Sep	**Unit 5: Green Skills-II**	**Importance, problems and solutions related to sustainable development** 1. Definition of sustainable development 2. Importance of sustainable development 3. Problems related to sustainable development	2 Theory

PART C - PRACTICAL			
8th Sep – 12th Sep	**Unit 4: Statistical Data (To be assessed through Practicals)**	**No code AI tool** • Introduction to Data Science & its applications • Meaning of No-Code AI • No-Code and Low-Code. • Some no-code tools Orange Data Mining Tool: https://orangedatamining.com/download/ •Important concepts in Statistics. • **Orange data mining** • AI project cycle in Orange data mining (Palmer penguins case study) Activity: MS Excel for Statistical Analysis. Link: https://docs.google.com/spreadsheets/d/1f5GJXyP7EV2fy1hax47YVaH5gyq8KZy Case study using Orange data mining (Palmer Penguins) Link: https://drive.google.com/drive/u/0/folders/1fmcRVbilTyUhmUv4DWT1BFsaCoQ2BmF	3 Practical
15th Sep – 20th Sep	**Unit 5: Computer Vision (To be assessed through Practicals)**	**No-Code AI Tools** Introduction to Lobe: https://www.lobe.ai/ Machine: https://teachablemachine.withgoogle.com/ ● Activity: Build a Smart Sorter Orange Data Mining Tool: https://orangedatamining.com/download/ ● Activity: Build a real-world Classification Model: Coral Bleaching (Use Case Walkthrough) ● Link to the steps involved in project development and dataset: https://drive.google.com/drive/folders/1ppJ4d8yOFJ2G22rHHpjNrK0ejdIAe5Q/ Image Features & Convolution Operator - Understanding Convolution operator **Convolution Neural Network**- Introduction to CNN ● Understanding CNN ● Kernel ● Layers of CNN	3 Practical
22th Sep – 30th Sep	**Unit 6: Natural Language Processing (To be assessed through Practicals)**	**Examples of Code and No-code NLP Tools** Applications of NLP - Introduction to Sentiment Analysis Hands-on: Case Walkthrough – Steps involved in project development Link to steps and dataset: https://drive.google.com/drive/u/2/folders/1geFLXxV5890kfcakMfEg_KsH1LPcS_Iz/	2 Practical
3rd Oct- 10th Oct	**Unit 7: Advance Python (To be assessed through Practicals)**	**Jupyter Notebook** - creating virtual environments, installing Python Packages **Introduction to Python**- variables, data types, operators, and control structures **Python Basics** - Python built-in functions and libraries.	2 Practical
3rd Oct- 10th Oct	**Practical Work**	**Programs List** ● Write a program to add the elements of the two lists. ● Write a program to calculate mean, median and mode using Numpy ● Write a program to display line chart from (2,5) to (9,10). ● Write a program to display a scatter chart for the following points (2,5), (9,10),(8,3),(5,7),(6,18).	

		● Read the csv file saved in your system and display 10 rows. ● Read csv file saved in your system and display its information ● Write a program to read an image and display using Python ● Write a program to read an image and identify its shape using Python	
PART D - PROJECT WORK			
	<u>AI Project Development Using (Sample Projects)</u> 1. Statistical Data for AI: Prediction of palmer penguin species 2. Computer Vision: Early detection of coral bleaching 3. Natural Language Processing: Sentiment Analysis **<u>Students' participation in the following - (Field Work)</u>** ● AI for Youth Bootcamp ● AI Fests/ Exhibition ● Participation in any AI training sessions ● Virtual tours of companies using AI to get acquainted with real-life usage		
13th Oct - 17th Oct	**REVISION**		
Entire syllabus will be considered in Pre-Board Exam			