Subject Wise Syllabus (Session: 2022-23) Class - IX

Periodic Test

English	*Beehive*	1. The Fun They Had 2. The Sound of Music
	Beehive (Poetry)	1. The Road Not Taken 2. Wind
	Moments	1. The Lost Child 2. The Adventures of Toto
	Grammar	1. Tenses
	Workbook	Unit - 1, 2
	Writing	1. Informal letter based on given situation 2. Descriptive Paragraph (Person)
	Reading	1 Factual Passage 2. Discursive Passage
Maths **Teaching Aids** 1.Parallel box 2. Abacus 3.Algebra Kit		**UNIT II : ALGEBRA 1. POLYNOMIALS** (Ch.-2.) **-** Definition of a polynomial in one variable, its coefficients, with examples and counter examples, its terms, zero polynomial. Degree of a polynomial. Constant, linear, quadratic, cubic polynomials; monomials, binomials, trinomials. Factors and multiples. Zeros of a polynomial. State and motivate the Remainder Theorem with examples. Statement and proof of the Factor Theorem. Factorization of $ax^2 + bx + c$, $a \neq 0$ where a, b, c are real numbers, and of cubic polynomials using the Factor Theorem. Recall of algebraic expressions and identities. Further verification of identities of the type $(x + y + z)^2 = x^2 + y^2 + z^2 + 2xy + 2yz + 2zx$, $(x \pm y)^3 = x^3 \pm y^3 \pm 3xy\ (x \pm y)$, $x^3 \pm y^3 = (x \pm y)\ (x^2 \mp xy + y^2)$, $x^3 + y^3 + z^3 - 3xyz = (x + y + z)\ (x^2 + y^2 + z^2 - xy - yz - zx)$ and their use in factorization of polynomials. **UNIT IV: COORDINATE GEOMETRY1. COORDINATE GEOMETRY-** (Ch.-3.) The Cartesian plane, coordinates of a point, names and terms associated with the coordinate plane, notations, plotting points in the plane. **UNIT III: GEOMETRY: 1. INTRODUCTION TO EUCLID'S GEOMETRY:** (Ch.-5.) History - Geometry in India and Euclid's geometry. Euclid's method of formalizing observed phenomenon into rigorous mathematics with definitions, common/obvious notions, axioms/postulates and theorems. The five postulates of Euclid. Equivalent versions of the fifth postulate. Showing the relationship between axiom and theorem, for example. (Axiom) 1. Given two distinct points, there exists one and only one line through them. (Theorem) 2. (Prove) two distinct lines cannot have more than one point in common. **Tables: 2 to 20 (New students) , 2 to 35 (old students)**
Science	**Physics**	**Motion:** Distance and displacement, velocity; uniform and non-uniform motion along a straight line ; acceleration; Distance-time and velocity-time graphs for uniform and Non uniform accelerated motion, derivation of equations of motion by graphical method; Elementary idea of uniform circular motion.
	Chemistry	Matter in Our Surrounding: Definition of matter ; solid , liquid & gas; characteristics – shape , volume , density , change of state – solid to liquid i.e. melting, liquid to gas – boiling, freezing , evaporation, condensation, sublimation. All factors effecting evaporation. Practical:- (i) Determination the melting point of ice and the boiling point of water. (ii) Separation of the components of a mixture of sand, Common salt and ammonium chloride.
	Biology	**Unit-1: Organization in the living world: Cell : The Fundamental unit of life:** Prokaryotic and Eukaryotic cells, structure of cell, plasma membrane, cell wall, cytoplasm, cell organelles and cell inclusions, Endoplasmic reticulum, Golgi apparatus, mitochondria, chloroplasts, vacuoles, nucleus, Chromosomes-basic structure, number. *Practical: To prepare stained temporary mounts of (a) onion peel and (b) human cheek cells and to record observations and draw their labelled diagrams.*

S.St.	**History**	*Section 1: Events and Processes: (All the three themes are compulsory)* **I. The French Revolution:** ☐ French Society During the Late Eighteenth Century ☐ The Outbreak of the Revolution ☐ France Abolishes Monarchy and Becomes a Republic ☐ Did Women have a Revolution? ☐ The Abolition of Slavery ☐ The Revolution and Everyday Life
	Political Science	**1. What is Democracy? Why Democracy?:** ☐ What is Democracy? ☐ Features of Democracy ☐ WhyDemocracy? ☐ Broader Meaning of Democracy
	Geography	**1. India** ☐ Size and Location ☐ India and the World ☐ India's Neighbours
	Economics	**1. The Story of Village Palampur:** ☐ Overview ☐ Organization of production ☐ Farming in Palampur (Pg No. Up to 7)
Hindi	क्षितिज	<u>गद्य–खण्ड</u> 1. प्रेमचन्द–दो बैलों की कथा <u>पद्य–खण्ड</u> 9. कबीर–साखियाँ एवं सबद
	कृतिका	2. मृदुला गर्ग – मेरे संग की औरतें
	व्याकरण	1. शब्द निर्माण – समास, 2. अलंकार
	रचना	1. पत्र – लेखन
I.T.		**Part-A:** Ch – 1 Communication Skills: 1.1 Demonstration Knowledge of various Methods of Communication (Session 1 and Session 2) **Part-A:** Ch–3 Basic ICT Skill–1:- 3.1 Describe the Role of ICT in Day-to-Day Life (Session1 to Session 4), 3.2 Identify the various components of computer system (Session 1 to Session 4), 3.3 Identify various peripheral devices (Session 1), 3.4 Perform Basic Computer Operations (Session 1 to session 7), 3.5 Connect With World Using Internet and its Application (Session 1 to Session 14)
Art & Craft		1. What is Commercial Art? 2. Basic Materials 3. Starting to Draw (pg 5 to 7)

Max. Marks : 20	**Min. Marks : 07**	**Time : 1.30 Hours**

Note for Exam. : *Students will bring their next days examination books and notebooks.*

Pre – Mid Term Periodic Test

English	*Beehive*	3. The Little Girl 4. A Truly Beautiful Mind 5. The Snake and the Mirror
	Beehive (Poetry)	3. Rain on the Roof 4. The Lake Isle of Innisfree
	Moments	3. Iswaran the Storyteller 4. In the Kingdom of Fools
	Grammar	2. Modals 3. Use of Passive Voice + Periodic Test
	Workbook	Unit - 3, 4, 5
	Writing	1. Descriptive Paragraph (Place and Event) 2. Story Writing
	Reading	1 Factual Passage 2. Discursive Passage
Maths		**2. LINES AND ANGLES:** (Ch.-6.) 1. (Motivate) If a ray stands on a line, then the sum of the two adjacent angles so formed is 180° and the converse. 2. (Prove) If two lines intersect, the vertically opposite angles are equal. 3. (Motivate) Results on corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines. 4. (Motivate) Lines, which are parallel to a given line, are parallel. 5. (Prove) The sum of the angles of a triangle is 180°. 6. (Motivate) If a side of a triangle is produced, the exterior angle so formed is equal to

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Maths **Teaching Aids** 1. Charts 2. Model 3. CD 4. Computer 5. Projector 6. Geometry box	the sum of the two interiors opposite angles. **3. TRIANGLES:** (Ch.-7) 1. (Motivate) Two triangles are congruent if any two sides and the included angle of one triangle is equal to any two sides and the included angle of the other triangle (SAS Congruence). 2. (Prove) Two triangles are congruent if any two angles and the included side of one triangle is equal to any two angles and the included side of the other triangle (ASA Congruence). 3. (Motivate) Two triangles are congruent if the three sides of one triangle are equal to three sides of the other triangle (SSS Congruence). 4. (Motivate) Two right triangles are congruent if the hypotenuse and a side of one triangle are equal (respectively) to the hypotenuse and a side of the other triangle (RHS congruence). 5. (Prove) The angles opposite to equal sides of a triangle are equal. 6. (Motivate) The sides opposite to equal angles of a triangle are equal. 7. (Motivate) Triangle inequalities and relation between 'angle and facing side' inequalities in triangles. **UNIT V: MENSURATION 1. AREAS (Heron's Formula):** (Ch.-12.) Area of a triangle using Heron's formula (without proof) and its application in finding the area of a quadrilateral. **Tables: 2 to 35 (New students) , 2 to 40 (old students)**

Science	**Physics**	**Force and Newton's Laws:** Force and motion, Newton's laws of motion. Inertia of a body, Inertia and Mass, Momentum, Force and Acceleration, Elementary idea of conservation of momentum, Action and reaction forces.
	Chemistry	**Nature of Matter -** Elements, compounds and Mixture. Heterogeneous and homogenous mixtures, colloids and suspensions. **Practical: (i)** (a) Preparation of true solution of common salt, sugar and alum. (b) Preparation of suspension of soil, chalk powder and fine sand in water. **(c)** A colloidal solution of starch in water, milk in water and egg albumin.
	Biology	Unit : Organization in the living world: Diversity in Living Organisms : Biodiversity - Diversity of plants and animals - basic issues in scientific naming, basis of classification. Hierarchy of categories / groups, Major groups of plants (salient features) (Bacteria, Thallophyta, Bryophyta, Pteridophyta, Gymnosperms and Angiosperms). Major groups of animals (salient features) Non-chordates upto phyla and chordates upto classes. *Practical: 1. To study the characteristic of spirogyra/Agaricus/Moss, Fern, Pinus (either male or female cone) and an Angiospermic plant. Draw and give two identifying features of groups they belong to. 2. To observe and draw the given pictures/charts/models/ specimens and draw earthworm, cockroach, bony fish and bird. For each specimen record. (a) One specific feature of its phylum. (b) one adaptive feature with reference to its habitat. 3. To study the external features of root, stem, leaf and flower of monocot and dicot plants.*

S.St	**History**	**II. Socialism in Europe and the Russian Revolution:** ☐ The Age of Social Change ☐ The Russian Revolution ☐ The February Revolution in Petrograd ☐ What Changed after October? ☐ The Global Influence of the Russian Revolution and the USSR **III. Nazism and the Rise of Hitler:** ☐ Birth of the Weimar Republic ☐ Hitler's Rise to Power ☐ The Nazi Worldview (Pg 49 to 61)
	Political Science	**2. Constitutional Design:** ☐ Democratic Constitution in South Africa ☐ Why do we need a Constitution? ☐ Making of the Indian Constitution ☐ Guiding Values of the Indian Constitution

S.St	**Geography**	**2. Physical Features of India:** ☐ Major Physiographic Divisions
	Economics	**1. The Story of Village Palampur:** ☐ Farming in Palampur ☐ Non-farm activities of Palampur (Pg 8 to 14) **2. People as Resource:** ☐ Overview ☐ Economic activities by men and women (Pg 16 to 20)

Hindi	क्षितिज	गद्य–खण्ड 2. राहुल सांकृत्यायन–ल्हासा की ओर पद्य–खण्ड 10. ललद्यद–वाख 11. रसखान–सवैये
	कृतिका	3. जगदीश चंद्र माथुर – रीढ़ की हड्डी
	व्याकरण	3. अर्थ की दृष्टि से वाक्य भेद,
	रचना	2. संवाद – लेखन

I.T.	**Part A:** Ch – 1 Communication Skills-I: 1.2 Identify Elements of communication Cycle (Session 1 and session 2), 1.3 Identify the factors Affecting our Perspective in Communication (Session 1 and Session 2), Ch – 6 Introduction to IT-ITes Industry (Session 1 to 4), Ch – 7 Data Entry and Keyboarding Skills (Session 1 to 5)
Art & Craft	4. All Drawing …..forms. 5. Fundamentals of Face 6. Proportion (1st Method) 7. Proportion (2nd Method) 8. Figures in Movement (Pg 8 to 12)

Max. Marks : 20	Min. Marks : 07	Time : 1.30 Hours

Note for Exam. : *Students will bring their next days examination books and notebooks*

Mid – Term Periodic Test + (Periodic Test + Pre-Mid-Term Periodic Test)

English	*Beehive*	6. My Childhood + Revision: Periodic Test + Pre–Mid Term Periodic Test
	Beehive (Poetry)	5. A Legend of the Northland Revision : Periodic Test + Pre–Mid Term Periodic Test
	Moments	5. The Happy Prince Revision : Periodic Test + Pre – Mid Term Periodic Test
	Grammar	4. Sub–Verb Concord Revision: Periodic Test + Pre–Mid Term Periodic Test
	Workbook	Unit - 6, 7 Revision: Periodic Test + Pre–Mid Term Periodic Test
	Writing	1. Descriptive Paragraph (Diary Entry) 2. Informal letter on given situation Revision: Periodic Test + Pre–Mid Term Periodic Test)
	Reading	1 Factual Passage 2. Discursive Passage

Maths **Teaching Aids** 1. CD 2. Computer 3. Projector	**UNIT I: NUMBER SYSTEMS - 1. REAL NUMBERS:-** (Ch.-1.)Review of representation of natural numbers, integers, rational numbers on the number line. Representation of terminating/non-terminating recurring decimals, on the number line through successive magnification. Rational numbers as recurring/terminating decimals. Examples of nonrecurring/ non terminating decimals. Existence of non-rational numbers (irrational numbers) such as $\sqrt{2}$, $\sqrt{3}$ and their representation on the number line. Explaining that every real number is represented by a unique point on the number line and conversely, every point on the number line represents a unique real number. Definition of nth root of a real number. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.) Rationalization (with precise meaning) of real numbers of the type (& their combinations) $\frac{1}{a+b\sqrt{x}}$ & $\frac{1}{\sqrt{x}+\sqrt{y}}$ where x and y are natural number and a, b are integers. Recall of laws of exponents with integral powers. Rational exponents with positive real bases (to be done by particular cases, allowing learner to arrive at the general laws.)

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Subject		
Maths		**UNIT V: MENSURATION (Contd.) : 2. SURFACE AREAS AND VOLUMES:** (Ch.-13.) Surface areas and volumes of cubes, cuboids, spheres (including hemispheres) and right circular cylinders/cones. **Tables: (For Old Std. 2 to 40) , (For New std. 2 to 35)**
Science	**Physics**	**Gravitation:** Gravitation, Universal law of gravitation, Force of gravitation of the earth (gravity), Acceleration due to gravity, Mass and weight, free fall. **Floatation:** Thrust and Pressure. Archimedes' Principle; Buoyancy; Elementary idea of Relative Density. **Practical: 1.** Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.
	Chemistry	**Particle nature, basic units:** Atoms and molecules, law of constant proportions, Atomic and molecular masses. *Practical : (a) Preparation of mixture , compound using iron filings and sulphur powder by distinguishing between these. (b) To verify the law of conservation of mass in a chemical reaction.*
	Biology	**Unit: Organization in the living world: Tissues:** Structure and functions of plant tissues (Meristematic and permanent) and Animal tissues, (Epithelial, Muscular, Connective and Nervous Tissue). **Practical:** *To identify (a) parenchyma collenchyma and sclerenchyma tissues in plants, (b) striped, smooth and cardiac muscle fibers and nerve cells in animals, from prepared slides and to draw their labelled diagrams.*
S.St.	**Political Science**	**3. Electoral Politics:** ☐ Why Elections? ☐ What is our System of Elections? ☐ What makes elections in India democratic?
	Geography	**3. Drainage:** ☐ Major rivers and tributaries ☐ Lakes ☐ Role of rivers in the economy ☐ Pollution of rivers
	Economics	**2. People as Resource:** ☐ Quality of Population ☐ Unemployment (Pg 20 to 27)
Hindi	क्षितिज	गद्य–खण्ड 4. जाबिर हुसैन–साँवले सपनों की याद पद्य–खण्ड 12. माखनलाल चतुर्वेदी–कैदी और कोकिला
	कृतिका	दोहरान कार्य
	व्याकरण	4. उपसर्ग , 5. प्रत्यय
	रचना	3. अनुच्छेद–लेखन, 4. अपठित गद्यांश / काव्यांश
I.T.		**Part A:** Ch – 1 Communication Skills-1: 1.4: Demonstrate the knowledge of basic writing skills (Session 1 to Session 2), Ch-5 Green Skills: 5.1 Demonstrate the knowledge of the factors influencing natural resources conservation (Session 1 to Session 4), 5.2 Describe the importance of green economy and green skills (session 1 to Session 2) **Part B:** Digital Documentation (Elementary) (Session 1 to Session 6)
Art & Craft		9. Figures in Simple Action Line 10. Light on the Basic Forms (Pg 15 to 16)
Max. Marks : 60		**Min. Marks :20** **Time : 3.00 Hours**
Note for Exam. :		*Students will bring their next days examination books and notebooks.*

Post Mid - Term Periodic Test

Subject		
English	*Beehive*	7. Packing, 8. Reach for the Top
	Beehive (Poetry)	6. No Men Are Foreign 7. The Duck and the Kangaroo 8. On Killing a Tree
	Moments	6. Weathering the Storm in Ersama 7. The Last leaf 8. A House is Not a Home
	Grammar	5. Reported speech (a) Commands and requests (b) Statements (c) Questions.
	Workbook	Unit - 8, 9
	Writing	1. Informal letter on given situation 2. Story Writing
	Reading	1 Factual Passage 2. Discursive Passage
Maths **Teaching Aids** 1. CD 2. Computer 3. Projector 4. Geometry Box 5. Parallel Board		**UNIT III: GEOMETRY (Contd.): 4. QUADRILATERALS:** (Ch.-8.) 1. (Prove) The diagonal divides a parallelogram into two congruent triangles. 2. (Motivate) In a parallelogram opposite sides are equal, and conversely. 3. (Motivate) In a parallelogram opposite angles are equal, and conversely. 4. (Motivate) A quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal. 5. (Motivate) In a parallelogram, the diagonals bisect each other and conversely. 6. (Motivate) In a triangle, the line segment joining the mid points of any two sides is parallel to the third side and half of it and (motivate) its converse**. 5. AREAS OF PARALLELOGRAMS AND TRIANGLES:** (Ch.-9.) Review concept of area, recall area of a rectangle. 1. (Prove) Parallelograms on the same base and between the same parallels have the same area. 2. (Motivate) Triangles on the same base and between the same parallels are equal in area. **6. CIRCLES:** (Ch.-10.) Through examples, arrive at definitions of circle related concepts, radius, circumference, diameter, chord, arc, secant, sector, segment, subtended angle. 1. (Prove) Equal chords of a circle subtend equal angles at the center and (motivate) its converse. 2. (Motivate) The perpendicular from the center of a circle to a chord bisects the chord and conversely, the line drawn through the center of a circle to bisect a chord is perpendicular to the chord. 3. (Motivate) There is one and only one circle passing through three given non-collinear points. 4. (Motivate) Equal chords of a circle (or of congruent circles) are equidistant from the center(s) and conversely. 5. (Prove) The angle subtended by an arc at the center is double the angle subtended by it at any point on the remaining part of the circle. 6. (Motivate) Angles in the same segment of a circle are equal. 7. (Motivate) If a line segment joining two points subtends equal angle at two other points lying on the same side of the line containing the segment, the four points lie on a circle. 8. (Motivate) The sum of the either pair of the opposite angles of a cyclic quadrilateral is 180° and its converse.**7. CONSTRUCTIONS:** (Ch.-11.) 1. Construction of bisectors of line segments & angles of measure 60°, 90°, 45° etc., equilateral triangles. 2. Construction of a triangle given its base, sum/difference of the other two sides and one base angle. 3. Construction of a triangle of given perimeter and base angles. **Tables 2 to 40**
Science	**Physics**	**Work, Energy and Power:** Work done by a force, Energy, Power , Kinetic Energy & Potential Energy, Law of Conservation of energy. *Practical : 2.* Establishing the relation between the loss in weight of a solid when fully immersed in (a) tap water (b) strongly salty water, with the weight of water displaced by it by taking at least two different solids.
	Chemistry	**Particle nature and their basic units:** Mole Concept: Relationship of mole to mass of the particles and numbers. **Structure of atoms:** Electrons, protons and neutrons. **Practical:-** (a) Iron with copper sulphate solution in water. (b) Burning of magnesium ribbon in air. (c) Zinc with dilute sulphuric acid.(d) Sodium sulphate with barium chloride in the form of their solutions in water. (e) Heating of copper sulphate crystals.

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Science	**Biology**	**Health and diseases: Why do we fall ill?:-** Health and its failure. Infectious and Non-infectious diseases, their causes and manifestation. Diseases caused by microbes (virus, bacteria and protozoans) and their prevention, Principle of Treatment and Prevention pulse polio programmes. **Our Environment: Physical Resources:-** Air, Water, Soil, Importance of air, water and soil, Air, water and soil pollution (brief introduction). Holes in ozone layer and the probable damages. **Bio-geochemical cycles in nature:** water, oxygen, carbon, and nitrogen.
S.St.	**History**	**III. Nazism and the Rise of Hitler:** ☐ Youth in Nazi Germany ☐ Ordinary People and the Crimes Against Humanity (Pg 62 to 74) *Section 2: Livelihoods, Economies and Societies:* *Any one theme of the following:* **IV. Forest Society and Colonialism:** ☐ Why Deforestation? ☐ The Rise of Commercial Forestry ☐ Rebellion in the Forest ☐ Forest Transformations in Java
	Political Science	**4. Working of Institutions:** ☐ How is the major policy decision taken? ☐ Parliament ☐ Political Executive ☐ Judiciary
	Geography	**4. Climate:** ☐ Concept ☐ Climatic Controls ☐ Factors influencing India's climate ☐ The Indian Monsoon ☐ Distribution of Rainfall ☐ Monsoon as a unifying bond **5. Natural Vegetation and Wild Life:** ☐ Factors affecting Vegetation ☐ Vegetation types ☐ Wild Life ☐ Conservation
	Economics	**3. Poverty as a Challenge:** ☐ Two typical cases of poverty ☐ Poverty as seen by Social Scientists ☐ Poverty Estimates ☐ Vulnerable Groups ☐ Interstate disparities ☐ Global Poverty Scenario ☐ Causes of Poverty ☐ Anti-poverty measures ☐ The Challenges Ahead **4. Food Security in India:** ☐ Overview ☐ What is Food Security? ☐ Why Food Security? ☐ Who are food insecure? (Pg 42 to 46)
Hindi	**क्षितिज**	**गद्य–खण्ड** 5. चपला देवी– नाना साहब की पुत्री देवी मैना...... 6. हरिशंकर परसाई – प्रेमचंद के फटे जूते **पद्य–खण्ड** 14. केदारनाथ अग्रवाल–चंद्रगहना से लौटती बेर 15. सर्वेश्वरदयाल सक्सेना–मेघ आए
	कृतिका	4. विद्यासागर नौटियाल – माटी वाली
	व्याकरण	6. समास, अलंकार, दोहरान कार्य
	रचना	7. लघुकथा – लेखन
I.T.		**Part A:** Ch -1 Communication skills – I: 1.4 Demonstrate the knowledge of basic writing skills (Session 6 and Session 4), Ch – 4 Entrepreneurial Skills: 4.1 Identify various types of business activities (Session 1 to Session 3), 4.2 Demonstrate the knowledge of distinguishing characteristics of Entrepreneurship (Session 1 to Session 5) , **Part B:** Ch-9 Electronic Spread Sheet (Session 1 to Session 5)

Art & Craft	11. Perspective of Shadow 12. Light and Shade 13. Making Picture 13. Light in a Picture, 14. Depth in a picture (Pg 18 to 24)
Max. Marks : 20	**Min. Marks : 07** **Time : 1.30 Hours**
Note for Exam. :	*Students will bring their next days examination books and notebooks*

Pre- Final Exam + (Post Mid – Term Periodic Test)		
English	*Beehive*	9. The Bond of Love 10. Kathmandu 11. If I were you
	Beehive (Poetry)	9. The Snake Trying 10. A Slumber did My Spirit Seal
	Moments	9. The Accidental Tourist 10. The Beggar
	Grammar	6. Clauses 7. Determiners 8. Prepositions
	Workbook	Unit - 10, 11
	Writing	1. Descriptive Paragraph (Person, Place, Event, Diary entry etc.), 2. Story writing
	Reading	1 Factual Passage 2. Discursive Passage
Maths Teaching Aids 1. Chart 2. Models 3. Dice 4. Coins 5. Playing Cards 6. Coloured Balls		**UNIT II : ALGEBRA (Contd.) 2. LINEAR EQUATIONS IN TWO VARIABLES:** (Ch.-4.) Recall of linear equations in one variable. Introduction to the equation in two variables of the type $ax+by+c=0$. Explain that a linear equation in two variables has infinitely many solutions and justify their being written as ordered pairs of real numbers, plotting them and showing that they seem to lie on a line. Graph of linear equations in two variables. Examples, problems from real life, including problems on Ratio and Proportion and with algebraic and graphical solutions being done simultaneously. **UNIT VI: STATISTICS AND PROBABILITY: 1. STATISTICS:** (Ch.-14.) Introduction to Statistics : Collection of data, presentation of data — tabular form, ungrouped / grouped, bar graphs, histograms (with varying base lengths), frequency polygons, Mean, median, mode of ungrouped data. **2. PROBABILITY:** (Ch.-15.) History, Repeated experiments and observed frequency approach to probability. Focus is on empirical probability. (A large amount of time to be devoted to group and to individual activities to motivate the concept; the experiments to be drawn from real - life situations, and from examples used in the chapter on statistics). **Tables 2 to 40**
Science	**Physics**	**Sound:** Nature of sound and it's propagation in various media, speed of sound. Range of hearing in humans, application of Ultrasound, reflection of sound, echo & SONAR , Structure of the human Ear (Auditory aspect only) **Practical:** 3. Determination of the speed of a pulse propagated through a stretched string / slinky (helical spring) 4. Verification of the laws of reflection of sound.
	Chemistry	**Structure of atom:** Valency, Chemical formula of common compounds, Isotopes and Isobars.
	Biology	Unit: Food: Food Production: Plant and animal breeding and selection for quality improvement and management; use of fertilizers and manures, Protection from pests and diseases; organic farming.
S.St	**History**	**V. Pastoralists in the Modern World:** ☐ Pastoral Nomads and their Movements ☐ Colonial Rule and Pastoral Life ☐ Pastoralism in Africa
	Political Science	**5. Democratic Rights:** ☐ Life without rights ☐ Rights in a Democracy ☐ Rights in the Indian Constitution ☐ Expanding the scope of rights
	Geography	**6. Population:**

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S.St		☐ Size ☐ Distribution ☐ Population Growth and Process of Population Change
	Economics	**4. Food Security in India:** ☐ Food Security in India ☐ What is Buffer Stock? ☐ What is the Public Distribution System? ☐ Current Status of Public Distribution System (Pg 46 to 53)
Hindi	क्षितिज	<u>गद्य–खण्ड</u> 7. महादेवी वर्मा– मेरे बचपन के दिन <u>पद्य–खण्ड</u> 16. चंद्रकांत देवताले – यमराज की दिशा 17. राजेश जोशी – बच्चे काम पर जा रहे हैं
	कृतिका	दोहरान कार्य
	व्याकरण/रचना	दोहरान कार्य , अनुच्छेद – लेखन, लघुकथा – लेखन, संवाद –लेखन, पत्र – लेखन (औपचारिक व अनौपचारिक)
I.T.		**Part A:** Ch – 1: Communication Skills–1: 1.4 Demonstration the knowledge of basic writing skills (Session 6 and Session 7) Ch–2 Self management Skills -1: 2.1 Describe the meaning and importance of self management (Session 1 and Session 2), 2.2 Identify the factors that helps in building self confidence (Session1) Ch–10 Digital Presentation (Session 1 to Session 7)
Art & Craft		15. Model 16. Black and White 18. Light and Shade Contrast 19. Birds and Animals in Pen Work 20. Comics (pg 25 to 33)

Max. Marks : 80	Min. Marks :27	Time : 3.00 Hours

Note for Exam. : *Students will bring their next days examination books and notebooks.*

Final Exam	
English	Revision of whole syllabus
Maths	Revision of whole syllabus
Science	Revision of whole syllabus
S.St	Revision of whole syllabus
Hindi	Revision of whole syllabus
I.T.	Revision of whole syllabus

Max. Marks : 80	Min. Marks :27	Time : 3.00 Hours

S. NO	SUB	BOOKS NAME	PUBLISHER
1	COMP.	INFORMATION TECHNOLOGY	NCERT
2	DRAW	COMMERCIAL ART OF ALL	ARYA
3	ENG	ENGLISH GUIDE	NEW AGE INTERNATIONAL
4	ENG	WORDS & EXPRESSIONS 1 (WORK BOOK)	NCERT
5	ENG	BEEHIVE ENGLISH LITERATURE READER	NCERT
6	ENG	MOMENTS-SUPPLEMENTARY READER	NCERT
7	HINDI	GOLDEN HINDI GUIDE - (COURSE - A)	NEW AGE INTERNATIONAL
8	HINDI	KRITIKA	NCERT
9	HINDI	KSHITIJ	NCERT
10	HINDI	NAVYUG VAVHARIK VYAKARAN & RACHANA	LAXMI Pub.
11	MATHS	MATHEMATICS	NCERT
12	MATHS	MATHEMATICS EXEMPLAR	NCERT
13	MATHS	MATHEMATICS PRACTICAL & LAB MANUAL	RACHANA SAGAR
14	SC.	SCIENCE (BIOLOGY)	S.CHAND
15	SC.	SCIENCE (CHEMISTRY)	S.CHAND
16	SC.	SCIENCE (PHYSICS)	S.CHAND
17	SC.	SCIENCE PRACTICAL & LAB MANUAL -(BIO,PHY,CHE)	RACHANA SAGAR
18	SC.	SCIENCE (NCERT)	NCERT
19	SST	ECONOMICS	NCERT
20	SST	HISTORY (INDIA & THE CONTEMPORARY WORLD)-1	NCERT
21	SST	SOCIAL SCIENCE CONTEMPORARY-1	NCERT
22	SST	LAB MANUAL IN SOCIAL SCIENCE	EVERGREEN PUBLICATION (CANDID)
23	SST	SST.DEMOCRATIC POLITICS-1	NCERT

Instructions:-

1. *Value Education consists of Moral Values, Manners & Etiquettes.*

2. *Value Education will be taught by the class teacher for 10 minutes in zero period everyday.*