



**CLASS : IX**

**MONTH: SEPT&OCTOBER 2023**

**SUBJECT: MATHEMATICS**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
Sept. WEEK 1	14. Statistics	Drawing and Reading of Histograms with same and different class width Drawing of frequency polygon	Draw and interpret bar graph, line graphs ,pie charts and histograms .
WEEK 1	13. Surface area and Volume	Surface Area of solids like cube , cuboid,cylinder <b>Activity:</b> Surface area of cone	Students identify the formulae for find the surface area of different solids, such as cubes, cuboids , cylinders, Solves the problems related to surface area of solids using appropriate formulae
WEEK 2	13. Surface area and Volume	Surface Area of solids like cone spheres & hemispheres	Students identify the formulae for find the surface area of different solids, such as cones spheres and hemispheres Solves the problems related to surface area of solids using appropriate formulae
WEEK 3	13. Surface area and Volume	Volume of solids like cube ,cuboid, cylinder,cone spheres & hemispheres	Students identify the formulae for find the volume of different solids, such as cubes, cuboids , cylinders, cones spheres and hemispheres Solves the problems related to volume of solids using appropriate formulae
WEEK4	10. Circles	Basic terms on circles Theorems on circles	Explain the terms related to circles. Prove various theorems pertaining to circles
WEEK5	10. Circles	Theorems on circles	Prove various theorems pertaining to circles. Solve problems related to circles

**SUBJECT: ART**

WEEK	TOPIC	SUB TOPICS	EXPECTED LEARNING OUTCOMES
Week 1 to 5	Design	Pattern Design	Students will be able to identify the different types of design patterns
	human figure	simple human figure	Students will be able to draw simple human figure

**SUBJECT: MARATHI**

WEEK	TOPIC	SUB TOPICS	EXPECTED LEARNING OUTCOMES
SEPTEMBER WEEK 5	११. आभाळातल्या पाऊल वाटा	पाठ	*विद्यार्थी चर्चा करतील. *विद्यार्थी स्वतःचे अनुभव कथन करतील .
OCT.WEEK 1			
OCTOBER WEEK 2 & 3	निबंध	उपयोजित लेखन	*विद्यार्थी निबंध कसा लिहायचा हे समजावून घेतील. *विद्यार्थी चर्चा करतील. *विद्यार्थी निबंध लिहितील.
OCTOBER WEEK 4&5	* व्हेनिस	स्थूलवाचन	*विद्यार्थी प्रकटवाचन करतील. *विद्यार्थी चर्चा करतील. *विद्यार्थी स्वतःचा अनुभव कथन करतील .

**SUBJECT: CHEM/BIO**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
SEPTEMBER WEEK 5	Ch 6 Tissues	*Animal tissue.* Epithelial ,Connective ,Muscular and nervous tissues.	List the animal tissues , location and functions. Compare cardiac, striated and un striated muscles. Draw nerve cell and label parts. Solve <b>WORKSHEET 4</b>
OCTOBER WEEK 1	Ch 3 Atoms And Molecule	*Laws of Conservation of mass * Law of constant proportion	State laws of Conservation of mass. Explain laws of Conservation of mass using examples. Identify the reactants and products of given chemical reactions
OCTOBER WEEK 2 & 3	Ch 3 Atoms And Molecule	*What is an atom.*Atomic Mass * What is molecule *Molecules and elements. <b>INNOVATIVE TEACHING - MODEL MAKING</b> of atoms	Define Atom and atomic mass. Learn the atomic mass of 20 elements. Identify the elements from its symbol. Differentiate molecule and elements.
OCTOBER WEEK 4&5	Ch 3 Atoms And Molecule	*What is an Ion *writing chemical formulae of different compounds. * Finding molecular mass,	Define Ion. Explain the formation of ion. Recall valence electron and valency. Write symbols of different ions. Find molecular mass for the given compounds. Solve <b>WORKSHEET 5</b>

**SUBJECT: DANCE**

Weeks	TOPIC	Project/Activity related to Topic	Expected Learning Outcomes
<b>Week 5 (September)</b>	Dance Practice to be started on the song of Durga Vandana 'Jai Ambe Maa' for girls and 'Dholi Taro Dhol Baje' for boys.	Some students will write the Sanskrit Stotra of Devi Durga and the translation also.	They will be known the fact behind the story of Devi killed the Demons and learn lessons like 'Evils will never win'.
<b>Week 1-3 (October)</b>			

**SUBJECT: PHYSICS**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
SEPTEMBER. WEEK 5	Gravitation	*Gravitational force. *Universal law of gravitation *Gravitational Constant	Students will be able to: State the Law of Gravitation. Understand why this law is called Universal Law.
OCTOBER WEEK 1	Gravitation	* Importance of universal law of Gravitation. * Free fall. * Motion of objects under the influence of Gravitational force of the earth	Understand the importance of the Law of Gravitation. Know about free fall. Understand the relation between gravitational constant and acceleration due to gravity.
OCTOBER WEEK 2	Gravitation	* Mass and Weight * Weight of an object on the moon. *Thrust and pressure *Bouyancy.  *Why objects float or sink when placed on the surface of water.	Define mass and weight. Differentiate between mass and weight. Calculate the weight of an object on moon. Define thrust and pressure. Justify the relation between thrust and pressure. Solve numericals based on pressure and thrust. Explain the pressure exerted by fluid. Define Buoyancy. Relate the concept of buoyancy in terms of floating and sinking
OCTOBER WEEK 3	Gravitation	*Archimedes Principle, *Exercise discussion * Worksheet	Explain Archimedes' Principle. List the applications of Archimedes' principle.
OCTOBER WEEK 4&5	Work and energy	*Scientific concept of Work. *Work done by a constant force. *Energy. * Forms of energy (Kinetic energy and potential energy)	Define work in terms of science. Explain scientific conception of work. Derive the formula of work done by constant force. Solve numericals based on work, force and displacement. ,Describe energy. Tell the relation between work and energy. List different forms of energy. Describe Kinetic Energy. Derive the formula of Kinetic energy. Describe Potential Energy. Derive the formula of Potential Energy.

**SUBJECT: SOCIAL SCIENCE**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
SEPTEMBER WEEK 5	4: Working of Institutions:	How is the major policy decision taken?, Parliament, Political Executive, Judiciary	An overview of central governmental structures. □ Identify the role of Parliament and its procedures. □ Distinguish between political and permanent executive authorities and functions. □ Understand the parliamentary system of executive's accountability to the legislature. □ Understand the working of Indian Judiciary
WEEK 2	5 Natural Vegetation and Wildlife	Factors affecting Vegetation Relief(land, soil), Climate (Temperature, sunlight, precipitation), Ecosystem, Types of Vegetation, Wild Life, Conservation.	Explain the nature of diverse flora and fauna as well as their distribution. □ Develop concern about the need to protect the biodiversity of our country.
WEEK 3	6.Population	Population Size and Distribution – India's Population Size and Distribution by Numbers, India's Population Distribution by Density	Students can Analyse the uneven nature of population distribution and show concern about the large size of our population.
WEEK 4	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	Understand poverty as a challenge. □ Identify vulnerable group and interstate disparities □ Appreciate the initiatives of the government to alleviate poverty.
WEEK 5	REVISION FOR PT-2/PT-3		

**SUBJECT: VALUE EDUCATION**

Weeks	TOPIC	PROJECT/ACTIVITY RELATED TO TOPIC	EXPECTED LEARNING OUTCOMES
Week 5 (September)	Recognizing the sacred (Developing shraddha)	PPT and Real life examples on how to show take charge of their own life.	Students discover what it means to unfold the possibility of recognizing the sacred (developing shraddha) in two areas – developing shraddha in our cultural heritage and traditions & developing shraddha in our nationhood and democratic traditions of India.
Week 1-3 (October)			

**SUBJECT: ENGLISH**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
Sept :WEEK 5	The Last Leaf	Theme and Symbolism of unconditional relationship	To realize the impact of will power and positive attitude.
Oct WEEK 1	Packing	Jerome's packing skills	To help students focus on elements of humour, irony and farce.
Oct WEEK 2	Reach for the Top	Santosh Yadav and Maria Sharapova's achiev	To assess the spirit of a true sportsman
Oct WEEK 3	No Men are Foreign	Poet's plea to unite humanity	To be able to identify unity as the biggest strength
Oct WEEK 4	Integrated Grammar Exercises	MCQ practice sets, cloze passages, dialogues, reported speech	To enable students solve integrated grammar exercises accurately
Oct WEEK 5	Writing Skills - Paragraph Writing and Diary Entry	Format and Presentation of paragraph and diary	To help students use appropriate sentences for creative writing .

**SUBJECT: PHYSICAL EDUCATION**

WEEK	Topic	Activities related to Topic	EXPECTED LEARNING OUTCOMES
SEP-5 OCT- WEEK 1- 5	Warm-Up Yoga Chess Table Tennis Volleyball Physical Fitness test	Warm-up- General & Specific warm-up. Yoga Asanas:- Standing Asnas, Sitting Asnas & Lying Asnas Chess - Individual match Practice. Table Tennis- Counter, chop, top spin & match practice. Volleyball- Match Practice Physical Fitness test: -Strength, Cardiovascular Endurance .	Discipline through games. Better hand-eye coordination. Understanding of health-related fitness components.  Improve personal fitness through exercise.

**SUBJECT: COMPUTER SCIENCE**

WEEK	TOPIC	SUB TOPICS	EXPECTED LEARNING OUTCOMES
SEPT. WEEK 5	Python Programming	Programs in Python using condition statements	Students will be able to create coding using conditions in python
OCT. WEEK 1	Python Programming	Programming in Python using loops	This enhance the knowledge of python and students will learn about using loops in python.
WEEK 2	Python Programming	Programming in python to perform basic mathematical calculations.	Students will be able to create coding in python to solve the problems with basic mathematical operations.

WEEK 3	Python Programming	Python program to check prime number	students will be able to check problems using different condition in python.
WEEK 4	Python Programming	Python program to find largest among 3 numbers	students will be able to find the largest and smallest number by using the different functions of python.
WEEK 5	Python Programming	Python program to check whether the given number is odd or even	students will be able to find whether the given number is odd or even using the conditional statements in python.

## **SUBJECT: IT**

WEEK	LESSON	TOPICS	LEARNING OUTCOMES
SEPT. WEEK 5	Employability skills- Communication Skills	Writing skills- Parts of speech & activity	After completing this session, students will be able to • use capitalisation and punctuation rules for writing sentences. • identify the basic parts of speech, such as nouns, pronouns, adjectives, verbs and adverbs. • explain the usage of the parts of speech. • identify the supporting parts of speech, such as articles, conjunctions, prepositions and interjections.
OCT. WEEK 1	Employability skills- Communication Skills	Writing skills- Parts of sentences & Activity	After completing this session, students will be able to • identify the different parts of a sentence. • differentiate between active and passive voice. • identify and compose different types of sentences.
WEEK 2	Employability skills- Communication Skills	Greetings, Types of Greetings, Talking about yourself	After completing this session, students will be able to • greet people formally and informally. • introduce to other people. • introduce other people to their friends
WEEK 3	Employability skills- Communication Skills	Asking Questions, Activity & Revision	After completing this session, students will be able to • ask questions to get correct information from other people. • ask the questions according to a situation
WEEK 4	IT Skills - Introduction to IT- ITeS Industry	IT, ITeS, BPO Services, Structure of IT BPM Industry, IT Applications	Students will learn and understand about Information Technology enabled Services, BPO services and about the IT applications in various fields.
WEEK 5	IT Skills - Introduction to IT- ITeS Industry	IT in Science & Engineering, IT in the government & Public Service	Students will learn and understand about IT in science & Engineering and the application of IT in government and public services.

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