

Syllabus: IX Physics

Units	S.No	CONTENTS Class IX Physics	T	L	Tests
UNIT I: Basic Physics I.(1-2)					
UNIT I	1	(i) Units and Measurements (a) Basic systems (b) Fundamental and derived units			
	2	(ii) Error Spotting (a) Numerical conversion (b) Instrumental error (c) Vernier caliper			
UNIT II: Motion II.(3-6)					
UNIT II	3	Types of motion			
	4	Velocity and Acceleration			
	5	Equations of motion			
	6	Graphical representations			
UNIT III: Force and Laws of motion III.(7-11)					
UNIT III	7	Definition and Units			
	8	Newton's laws of motion			
	9	Conservation of momentum			
	10	Types of force			
	11	Couple			
UNIT IV: Gravitation IV.(12-15)					
UNIT IV	12	Newton's law of gravitation			
	13	Weight and Mass -Relation			
	14	Variation of gravity with height			
	15	Kepler's laws			
UNIT V: Thrust and Pressure V.(16-20)					
UNIT V	16	Definition and Units			
	17	Fluids			
	18	Hydrometer			
	19	Pascal's law			
	20	Buoyancy and Archimedis			
UNIT VI: Work and Energy VI.(21-23)					
UNIT VI	21	Definition and Units			
	22	Types of Energy			
	23	Conservation of energy			

		UNIT VII: Sound		VII.(24-28)			
UNIT VII	24	Definition and types					
	25	Propagation of Sound waves					
	26	Velocity, Frequency and Time period					
	27	Distance determination					
	28	Applications					
		UNIT VIII: Simple Harmonic motion		VIII.(29-30)			
UNIT VIII	29	Simple Pendulum					
	30	Determination of gravitation					

Syllabus: IX Chemistry

Units	S.No	CONTENTS Class IX Chemistry	T	L	Tests
		UNIT I: Matter in Our Surroundings	I.(1-3)		
UNIT I	1	Introduction - Atoms and Molecules			
	2	Evaporation, Cooling by evaporation and Condensation			
	3	Effects of Heat and Pressure on Matter			
		UNIT II: Is Matter Around Us Pure	II.(4-7)		
UNIT II	4	Classification of Matter			
	5	Solution, Suspension and Colloidal solutions			
	6	Methods of Separation			
	7	Physical and Chemical changes			
		UNIT III: Atoms and Molecules	III.(8-12)		
UNIT III	8	Basic Units of Matter			
	9	Laws of Chemical Combination			
	10	Atomic Mass and Molecular Mass			
	11	Mole Concept			
	12	Gay Lussac's law			
		UNIT IV: Structure of Atom	IV.(13-16)		
UNIT IV	13	Models of Atom			
	14	Discovery of Nucleus			
	15	Distribution of Electrons in Orbits			
	16	Parameters of an Atom			
		UNIT V: Chemical Bonding	V.(17-20)		
UNIT V	17	Cation Formation			
	18	Anion Formation			
	19	Isotopes			
	20	Electron dot structure			
		UNIT VI: Classification of Elements & Periodicity in Properties	VI.(21-25)		
UNIT VI	21	Mosley's law			
	22	Triad method			
	23	Law of octaves			
	24	Mendeleev's table			
	25	Modern Periodic table and Properties			
		UNIT VII: Organic Chemistry - Some Basic Principles	VII.(26-29)		
UNIT VII	26	Green Chemistry			
	27	Carbon			
	28	Hydrocarbons			
	29	Alkane - ene - yne			

Syllabus: IX BIOLOGY

Units	S.No	CONTENTS Class IX Biology	T	L	Tests
UNIT I	UNIT I: Cell Structure I.(1-2)				
	1	Plant cell			
	2	Animal cell			
UNIT II	UNIT II: Cell Division II.(3-4)				
	3	Mitosis			
	4	Meiosis			
UNIT III	UNIT III: Tissues: Types and Basic Structure III.(5-6)				
	5	Plant tissues			
	6	Animal tissues			
UNIT IV	UNIT IV: Diversity of living Organisms IV.(7-12)				
	7	Five Kingdom of Classification			
	8	Kingdom Monera - Bacteria			
	9	Kingdom Protista - Single cell algae and protozoan protista			
	10	Kingdom Fungi			
	11	Kingdom Plantae			
	12	Kingdom Animalia			
UNIT V	UNIT V: Plant Morphology V.(13-16)				
	13	Leaf			
	14	Stem			
	15	Root			
	16	Flower and Fertilization			
UNIT VI	UNIT VI: Genetics VI.(17-18)				
	17	Basic principles Mendelian laws			
	18	(a) Law of dominance and recessiveness (b) Monohybrid cross (c) Dihybrid cross			
UNIT VII	UNIT VII: Why do We Fall Ill VII.(19-21)				
	19	Viral diseases			
	20	Bacterial diseases			
	21	Other Ailments and Diseases			
VIII	UNIT VIII: Natural Resources VIII.(22)				
	22	Biogeochemical Cycles (Nitrogen and Carbon di-oxide)			
UNIT IX	UNIT IX: Improvement in Food Resources IX.(23-24)				
	23	Improvement of Crop Resources			
	24	Animal Husbandary			

Syllabus: IX Mathematics

Units	S.No	CONTENTS Class IX Mathematics	T	L	Tests
		UNIT I: Complex Numbers	I.(1-3)		
UNIT I	1	Introduction to i			
	2	Representation and Properties			
	3	Modulus of A Complex Numbers			
		UNIT II: Linear Equations in Two Variables	II.(4-6)		
UNIT II	4	Algebraic Methods			
	5	Graphical Methods			
	6	Consistency and Inconsistency			
		UNIT III: Polynomials	III.(7-10)		
UNIT III	7	Quadratic Polynomials			
	8	Factorization			
	9	Factor Theorem			
	10	Remainder Theorem			
		UNIT IV: Sequences and Series	IV.(11-12)		
IV	11	Sequence, Series			
	12	Arithmetic Series			
		UNIT V: Sets and Relations	V.(13-16)		
UNIT V	13	Cardinal Number Of a Set			
	14	Cartesian Product			
	15	Ordered Pair			
	16	Relation			
		UNIT VI: Trigonometry	VI.(17-19)		
UNIT VI	17	Degree Measure Radian Measure			
	18	Trigonometric Ratios			
	19	Basic Trigonometric Values			
		Unit VII: Co-Ordinate Geometry	VII.(20-22)		
UNIT VII	20	Introduction to Cartesian Plane			
	21	Distance Formula			
	22	Section Formula			
		UNIT VIII: Geometry	VIII.(23-24)		
UNIT VIII	23	Medians, Altitudes			
	24	Ortho Centre, Circum Centre and Incentre			
		UNIT IX: Probability	X.(25-27)		
UNIT IX	25	Event, Sample Space, Random Experiment			
	26	Exclusive Mutually Exclusive etc			
	27	Probability, Properties			