ST. XAVIER'S SR. SEC. CO-ED SCHOOL			
CLASS - XI SYLLABUS			
SUBJECT - MATHEMATICS (041)			
S.NO	**MONTH**	**LESSON-TOPIC AND SUBTOPICS**	**EXAM DATES AND SYLLABUS**
1	JUNE	SET THEORY , COMPLEX NUMBERS	
2	JULY	PERMUTATIONS COMBINATIONS, TRIGNOMETRIC FUNCTIONS	
3	AUGUST	LIMITS OF A FUNCTION, LINEAR INEQUALITIES	**PT -1 (7th AUG. to 14th AUG.)** SET THEORY, COMPLEX NUMBERS, PERMUTATIONS'TRIGNOMETRIC FUNCTIONS
4	SEPTEMBER	LIMITS OF TRIGNOMETRIC FUNCTIONS, SEQUENCE AND SERIES	**PT-2 (18th SEP. To 30th SEP.)** PT1 SYLLABUS + LIMITS OF ALGEBRIC FUNCTIONS, COMBINATIONS, LINEAR INEQUALITIES
5	OCTOBER	PROBABILITY , STRAIGHT LINES	
6	NOVEMBER	DIFFERENTIATION, CONIC SECTION	
7	DECEMBER	DIFFERENTIATION BY CHAIN RULE, INTRODUCTION TO 3D GEOMETRY	**PT-3 (11th DEC. to 22nd DEC.)** LIMITS OF TRIGNOMETRIC FUNCTIONS, PROBABILITY ,SEQUENCE AND SERIES, STRAIGHT LINES,
8	JANUARY	STATISTICS, RELATIONS AND FUNCTIONS	
9	FEBRUARY	REVISION	**FINAL EXAM (2nd FEB. to 10th FEB.)** FULL COURSE

SUB - APPLIED MATHS (241)			
S. NO	**MONTH**	**LESSON TOPICS AND SUB-TOPICS**	**EXAM DATES AND SYLLABUS**
1	JUNE	PERMUTATIONS, NUMBERS, INDICES AND LOGARITHMS	
2	JULY	COMBINATIONS, SET THEORY, QUANTITATIVE APTITUDE, MENSURATION	
3	AUGUST	FUNCTIONS, LIMITS OF A FUNCTION, SEQUENCE AND SERIES	**PT- 1 (7th AUG. to 14th AUG.)** PERMUTATIONS COMBINATIONS, SET THEORY, NO'S, INDICES AND LOGARITHMS
4	SEPTEMBER	LIMITS, (EXISTENCE OF LIMITS), LOGICAL REASONING	**PT -2 (18th SEP. to 30th SEP.)** PT1 SYLLABUS+ FNS & LIMITS OF FUNCTIONS, QUANTATIVE APTITUDE, MENSURATION, SEQUENCE AND SERIES.
5	OCTOBER	DIFFERENTIATION, PROBABILITY	
6	NOVEMBER	COMPOUND INTEREST, ANNUITY, STRAIGHT LINES	
7	DECEMBER	TAXATION, CIRCLE	**PT-3 (11th DEC. to 22nd DEC.)** CONDITION OF LIMITS, DIFFERENTIATION, LOGICAL REASONING, PROBABILITY
8	JANUARY	UTILITY BILLS, STATISTICS, CONIC SECTIONS	
9	FERUARY	REVISION	**FINAL EXAM (2nd FEB. to 10th FEB.)** TERM 1 + PT2 + COMPOUND INTEREST ANNUITY, TAXATION, UTILITY BILLS, STRAIGHT LINE, CIRCLE, CONIC SECTION

SUBJECT - BIOLOGY

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	JUNE	BIOLOGICAL CLASSIFICATION- kingdom Monera, protista, fungi	
		CELL THE UNIT OF LIFE- Prokaryotic and eukaryotic cell , organelles, cell envelope, nucleus	
			BIOMOLECULES-carbohydrates, proteins, lipids
2	JULY	BIIOLOGICAL CLASSIFICATION - kingdom plantae , Animalia, viruses, viriods and lichens	BIOLGICAL CLASSIFICATION
		PLANT KINGDOM - Algae, Bryophytes,Pteridophytes,Gymnosperms	PLANT KINGDOM (TILL BRYOPHYTES)
		BIOMOLECULES - Structure and function of proteins, carbohydrates,lipids and nucleic acids, enzymes	
		CELL DIVISION- Mitosis and meiosis, significance	
3	AUGUST	ANIMAL KINGDOM- basis of classification, classification of animals,porifera, cnidaria, ctenophora, platyhelminthes,ashelminthes, annelida, mollusca,echinodermata, hemichordata, chordata	PT1 (7 AUG - 14 AUG)

		CELL DIVISION- continued	CELL UNIT OF LIFE, BIOMOLECULES-carbohydrates, proteins, lipids
		PHOTOSYNTHESIS-Site, pigments, photochemical and biosynthetic phase	BIOLGICAL CLASSIFICATION
			PLANT KINGDOM (TILL BRYOPHYTES)
4	SEPTEMBER	MORPHOLOGY OF FLOWERING PLANTS - regions of root , stem, leaf,inflorescence,flower, fruit, seed floral diagram of family solanaceae REVISION for PT2	PT2 18-30 SEPTEMBER
		PHOTOSYNTHESIS-photorespiration, factors affecting photosynthesis	CELL UNIT OF LIFE, BIOMOLECULES, CELL DIVISION
		Revision for PT 2	BIOLGICAL CLASSIFICATION
			PLANT/ ANIMAL KINGDOM (
5	OCTOBER	ANATOMY OF FLOWERING PLANTS- permanent tissues, anatomy of dicot and monocot stem , dicot and monocot root, dicot and monocot leaf,	
		morphology, anatomy of frog	
		RESPIRATION IN PLANTS-exchange of gases, glycolysis, krebs cycle ETC, RQ	

6	NOVEMBER	EXCRETORY PRODUCTS AND THEIR ELIMINATION- human excretory system, urine formation,function of tubules, mechanism of concentration of the filtrate, regulation of kidney function, role of other organs in excretion, disorders of excretory systems.	
		PLANT GROWTH AND DEVELOPMENT- growth, rate, differentiation, dedifferentiation	
		EXCHANGE OF GASES- respiratory system in human, mechanism, transport of gases, volumes, disorders	
7	DECEMBER	LOCOMOTION AND MOVEMENT - muscles fibres, structure of contractiole proteins,mechanism of muscle contraction, skeletal system, disorders of muscular and skeletal system	PT3 (11 DEC - 16 DEC)
		Exchange - continued	MORHOLOGY / ANATOMY OF FLOWERING PLANTS
			PHOTOSYNTHESIS , RESPIRATION - TILL GLYCOLYSIS)

8	JANUARY	NEURAL CONTROL AND COORDINATION- neural system, generation and conduction of nerve impulse,transmission of impulse,central nervous system,	
		CHEMICAL COORDINATION AND INTEGRATION - endocrine glands, mechanism of hormone action	
		BODY FLUIDS- Blood coagulation, ABO blood group, circulation, cardiac cycle, disorders	
9	FEBRUARY	REVISION FOR ANNUAL EXAMINATION	ANNUAL EXAMINATION 2-10 FEB-FULL SYLLABUS

SUBJECT Physical Education

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	**June-2023**	**Unit I Changing Trends & Career in Physical Education** ●Concept, Aims & Objectives of Physical Education ●Changing Trends in Sports- playing surface, wearable gears and sports equipment, technological advancements ●Career Options in Physical Education ●Khelo-India and Fit-India Program ***Development of Physical Education- Post Independence**	

2	**July-2023**	**Unit II Olympism value education** ● Ancient and Modern Olympics ● Olympism – Concept and Olympics Values (Excellence, Friendship & Respect) ● Olympics - Symbols, Motto, Flag, Oath, and Anthem ● Olympic Movement Structure - IOC, NOC, IFS, Other members ***Olympic Value Education- Joy of Effort, Fair Play, Respect for others, Pursuit of Excellence, Balance Among Body, Will & Mind**	
		Unit III Yoga ● Meaning & Importance of Yoga ● Introduction to Ashtanga Yoga ● Introduction to Yogic Kriyas (Shat Karma) ***Pranayama and its types** ***Active Lifestyle and stress management through Yoga**	
3	**Aug-2023**	**Unit IV Physical Education & Sports for CWSN (Children with Special Needs - Divyang)** ● Concept of Disability and Disorder ● Types of Disability, its causes & nature (Intellectual disability, Physical disability) ● Aim & Objective of Adaptive Physical Education ● Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist & Special Educator) ***Disability Etiquette**	**PT-1 AUG.2023 Syllabus Unit 1, 2, & 3**

		Unit V Physical Fitness, Health and Wellness ● Meaning and Importance of Wellness, Health and Physical Fitness ● Components/Dimensions of Wellness, Health and Physical Fitness ● Traditional Sports & Regional Games for promoting wellness **Leadership through Physical Activity and Sports Introduction to First Aid-PRICE**	
4	**Sep-23**	**Unit VI Test,measurement & evaluation:** Define Test, Measurement & Evaluation ● Importnce of Test, Measurement & Evaluation in sports.* **Calculation of BMI, Waist-Hip Ratio, Skin fold measurement(3-Site)** **Somato Types (Endomorphy, Mesomorphy & Ectomorphy) Measurements of health-related tness** **Unit VII Fundamentals of Anatomy, Physiology in Sports** :● Definition and Importance of Anatomy and Physiology in exercise and sports ● Functions of Skeletal system, classification of bone and types of joints. ● Function and Structure of Circulatory system and heart. ● Function and Structure of Respiratory system *** Properties and Functions of Mucles**	**PT-2 Sept. 2023 Syllabus Unit 4, 5 6 & 7**

5	**Oct-23**	**Unit VIII Fundamentals of Kinesiology and Biomechanics in Sports** ● Definition and Importance of Kinesiology and Biomechanics in sports ● Principles of Biomechanics ● Types of Body Movements - Flexion, Extension, Abduction, Adduction, Rotation, Circumduction, Supination & Pronation ● Axis and Planes – Concept and its application in body movements *** Kinetics and Kinematics in Sports**		
6	**Nov-23**	**Unit IX Psychology & Sports** ● Definition & Importance of Psychology in Physical Education & Sports ● Adolescent Problems & Their Management ● Team Cohesion and Sports *** Developmental Characteristics at Different Stages of Development *** **Introduction to Psycholigical Attributes: Attention, Resilience, Mental Toughness**		
7	**Dec.-2023**	**Unit X Training and Doping in Sports** ● Concept and Principles of Sports Training ● Training Load: Over Load, Adaptation, and Recovery ● Concept of Doping and its disadvantages *** Warming-up & Limbering Down- Types, Method & Importance *** **Concept of Skill, Technique, Tactics & Strategies**	**PT-3 Dec. 2023** **Unit 8, 9 & 10**	**Syllabus**
8	**Jan-24**	**REVISION**		
9	**Feb-24**	**FINAL EXAMINATION**	**FULL COURSE Feb .2024**	

SUBJECT : COMPUTER SCIENCE			
S.NO	**MONTH**	**LESSON-TOPIC AND SUBTOPICS**	**EXAM DATES AND SYLLABUS**
1	**JUNE**	**Computer Systems and Organisation** ● Basic computer organisation: Introduction to Computer System, hardware, software, memory (primary, cache and secondary), units of memory ● Types of software: System software, application software ● Operating System(OS):	
2	**JULY**	**Boolean Algebra:** NOT, AND, OR, NAND, NOR, XOR, NOT, truth tables and De Morgan's laws, Logic circuits ● Number System: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems ● Encoding Schemes: ASCII, ISCII, and Unicode (UTF8, UTF32)	
3	**AUGUST**		**PT1**
		Computational Thinking and Programming	**7TH AUG**
		Introduction to Python:	
		Features of Python, Python programming modes	Computer Systems and Organisation
		Python programming fundamentals	Boolean Algebra
		operators,user defined functions	Computational Thinking

			and Programming
4	SEPTEMBER	**Conditional and Looping Constructs**	
		Types of Statements in Python	**PT2**
		Program Control Flow	**18TH SEP**
		Decision Making	
		If Statement	Introduction to Python:
		If- else Statement	Python programming fundamentals
		If-elif-else Statement	Conditional and Looping Constructs
		Nested If-else Statement	Types of Statements in Python
		Iteration	Program Control Flow
		for loop	Decision Making
		while loop	Iteration
		jump statements	jump statements
		break	
		continue	
		pass	
5	OCTOBER	**Strings in Python**	
		What are Strings	
		Creating Strings	
		Special String Operators	
		String Methods and Built-in Functions	
		Lists in Python	

6	**NOVEMBER**	Declaring / Creating List	
		Accessing List Elements	
		Traversing a List	
		Operations on Lists	
		Nested Lists	
		Built-in Functions	
		Sorting	
		Tuples and Dictionary	
		Tuple Creation	
		Common Tuple Operations	
		Dictionary in Python	
		Accessing Elements in a Dictionary	
		Updating Elements in a Dictionary	
		Common Dictionary Functions and Methods	
		Database Management System (DBMS)	**PT3**
		DBMS Models	**11TH DEC**
		Relational Database	
		Structured Query Language (SQL)	Strings in Python
		Features of SQL	Lists in Python
		Advantages of SQL	Tuples and Dictionary
		SQL commands	Introduction to DBMS

7	**DECEMBER**	SQL Query Processing	
		SQL SELECT Statement	
		SQL Special Operators	
		Conditions Based on a Range- BETWEEN…AND	
		Conditions Based on Pattern - LIKE	
		Sorting in SQL - Order By clause	
		Aggregate functions in SQL	
8	**JANUARY**	**Error and Exception handling**	
		Compile time errors	
		Run time errors	
		Handling exceptions in Python	
		Debugging	
		Cyber safety	
		Identity protection while using Internet	
		Cyber forensics	
		Network security threats	
9	**FEBRUARY**		**ANNUAL EXAM**
		REVISION	Complete syllabus

SUBJECT : Accountancy

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	June	Ch. 1. Accounting an Introduction	
2		Ch. 2 & 3. Accounting Terms, Principles , Bases & IFRS	
3	July	Ch. 5. Double Entry System	
4		Ch. 6. Origin of Trasnsactions	
5		Ch.7. GST	
6		Ch. 8. Journal	
7		Ch.11. Ledger	
8	Aug	Ch.12. Trial Balance	PT 1 Exam 7th Aug - 12th Aug
9		Ch.9. Cash Book	PT 1 Syllabus Ch.1, Ch.2 ,Ch.3 Ch.5,Ch.6, Ch.7, Ch.8
10		Ch. 10. Special Purpose Subdidiary Books	Ch.11 & Ch.12
11	Sep	Ch.13. Bank Reconciliation Statement	PT 2 Exam 18th Sep - 30th Sep
12		Ch.14. Depreciation	PT 2 Syllabus Ch.1, Ch.2 ,Ch.3 Ch.5,Ch.6, Ch.7, Ch.8
			Ch.11 ,Ch.12, Ch.9, Ch.10, Ch.13
13	Oct	Ch. 15. Provisions & Reserves	
14		Ch. 17. Financial Statements of Sole Proprietorship	
15		Ch. 18. Financial Statements of Sole Proprietorship with Adjustments	
16	Nov	Ch. 4. Accounting Equation	
17	Dec	Ch. 16. Rectification of Errors	PT 3 EXAM 11th Dec - 16th Dec
			PT 3 Syllabus Ch.9, Ch.10, Ch.13,Ch.14, Ch.4 & Ch.17

18	Jan	Ch. 19. Accounts from Incomplete Records + Revision	
19	Feb		ANNUAL EXAM From 2nd February
			ANNUAL EXAM : Full syllabus

SUBJECT : Business Studies

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	June	Ch. 1. Evolution & Fundamentals of Business	
2		Ch. 2. Forms of Business Organisations	
3	July	Ch. 2. Forms of Business Organisations Contd…	
4		Ch. 3. Public, Private & Global Enterprises	
5	Aug	Ch.4. Business Services	PT 1 Exam 7th Aug - 12th Aug
6		Ch. 5. Emerging Modes of Business	PT 1 Syllabus Ch.1, Ch.2 &Ch.3
7	Sep	Ch. 6. Social Responsibilities of Business & Business Ethics	PT 2 Exam 18th Sep - 30th Sep
			PT 2 Syllabus Ch.1, Ch.2, Ch.3, Ch.4 & Ch.5
8	Oct	Ch. 7. Sources of Business Finance	
9	Nov	Ch. 8. Small Business	
10	Dec	Ch. 9. Internal Trade	PT 3 EXAM 11th Dec - 16th Dec
			Ch.6, Ch.7 & Ch.8
11	Jan	Ch. 10. International Business + Revision	
12	Feb		ANNUAL EXAM From 2nd February
			ANNUAL EXAM : Full syllabus

SUBJECT- CHEMISTRY

S.NO	MONTH		EXAM DATES AND SYLLABUS
1	JUNE (PART 1)	SOME BASIC CONCEPTS IN CHEMISTRY,LAWS OF CHEMICAL COMBINATION,MOLE CONCEPT ,	
		,PERCENTAGE COMPOSITION.	
	JUNE (PART 2)	REDOX REACTIONS ,CLASSICAL CONCEPT ,ELECTRON TRANSFER CONCEPT.	
2	JULY (PART 1)	MOLECULAR AND EMPERICAL FORMULA AND ITS DETERMINATION,STOICHIOMETRY,LIMITING REAGENT.	PT 1 (7 JULY TO 14 JULY)
		STRUCTURE OF ATOM-ISOTOPES ,ISOBARS, ISOTONES,ELECTROMAGNETIC RADIATIONS AND WAVE THEORY,	SYLLABUS- SOME BASIC CONCEPTS IN CHEMISTRY
	JULY (PART 2)	OXIDATION NUMBER, HALF REACTION METHOD AND OXIDATION NUMBER METHOD TO BALANCE .	REDOX REACTIONS.
		REDOX REACTIONS AND ELECTRODE PROCESS,COMPITETIVE ELECTRON TRANSFER ,STOCK NOTATION.	

3	AUGUST (PART1)	STRUCTURE OF ATOM -DUAL NATURE OF MATTER AND LIGHT,PRINCIPLES AND RELATIONS ,QUANTUM NUM.	
		CLASSIFICATION OF ELEMENTS ,PERIODICITY,MODERN PERIODIC TRENDS.	
	AUGUST (PART2)	BASIC CONCEPTS OF ORGANIC CHEMISTRY - SHAPE AND STRUCTURAL REPRESENTATION OF ORGANIC	
		CLASSIFICATION AND NOMENCLATURE OF ORGANIC COMPOUNDS,	
4	SEPTEMBER(PART1)	CLASSIFICATION OF ELEMENTS-DIAONAL RELATIONSHIP,NOMENCLATURE.	PT 2(18 SEPTEMBER TO 30 SEPTEMBER)
		CHEMICAL BONDINGAND MOLECULAR STRUCTURE-LEWIS SYMBOL,IONIC BOND,OCTET RULE LIMITATIONS	SOME BASIC CONCEPTS IN CHEMISTRY
	SEPTEMBER(PART2)	IUPAC NOMENCLATURE OF ORGANIC COMPOUNDS	STRUCTURE OF ATOM, REDOX REACTIONS.

5	OCTOBER (PART 1)	CHEMICAL BONDINGAND MOLECULAR STRUCTURE-VBT ,VESEPR THEORY , RESONANCE EFFECT,FAJANS	CLASSIFICATION OF ELEMENT, BASIC CONCEPTS OF ORGANIC CHEM
	OCTOBER (PART 2)	HYDROCARBON - ALKANES PREPRATIONS AND PROPERTIES	
6	NOVEMBER PART 1	CHEMICAL BONDING-MOT,HYDROGEN BOND AND ITS USES.	
		CHEMICAL EQUILIBRIUM-TYPE, CONSTANT OF EQUILIBRIUM,CHARACTERISTIC OF EQULIBRIUM,LAWS OF	
		MASS ACTION, KP AND KC RELATIONSHIP.	
	NOVEMBER PART2	HYDROCARBON - ALKENES PREPRATIONS AND PROPERTIES	
7	DECEMBER PART 1	IONIC EQUILIBRIUM-STRONG AND WEEK ELECTROLYTE,DEGREE OF IONISATION,Ph,	PT 3 (11 DECEMBER TO 23 DECEMBER)
		CHEMICAL THERMODYNAMICS-IMPORTANT TERMS AND VARIOUS LAWS.	SYLLABUS- CHEMICAL BONDING AND EQUILIBRIUM.
	DECEMBER PART 2	HYDROCARBONS -ALKYNES - PREPARATIONS AND PROPERTIES.	HYDROCARBONS - ALKANES AND ALKENES

8	JANUARY PART 1	CHEMICAL THERMODYNAMICS- ENTHALPY OF REACTION,HESS LAW,ENTROPY,GIBBS FREE ENERGY,	
		SPONTANEOUS AND NON SPONTANEOUS REACTION.	
	JANUARY PART 2	HYDROCARBONS -BENZENE - PREPARATIONS AND PROPERTIES.	
9	FEBRUARY		FINAL EXAM (2 FEBRUARY TO 10 FEBRUARY)

SUBJECT-PHYSICS

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS

1	JUNE & JULY	**CHAPTER 8** **GRAVITATION** Kepler's laws of planetary motion, universal law of gravitation. Acceleration due to gravity and its variation with altitude and depth. Gravitational potential energy and gravitational potential, escape speed, orbital velocity of a satellite. **CHAPTER 2** **UNITS AND MEASUREMENT** Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. significant figures. Dimensions of physical quantities, dimensional analysis and its applications.	**PT1** 17th JULY to 22nd JULY CHAPTER 8 (part2) CHAPTER2 (part1)

2	AUGUST	**CHAPTER 9** MECHANICAL PROPERTIES OF SOLIDS Elasticity, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear modulus of rigidity (qualitative idea only), Poisson's ratio; elastic energy. **CHAPTER 10** **MECHANICAL PROPERTIES OF FLUIDS** Pressure due to a fluid column; Pascal's law and its applications (hydraulic lift and hydraulic brakes), effect of gravity on fluid pressure. Viscosity, Stokes' law, terminal velocity, streamline and turbulent flow, critical velocity, Bernoulli's theorem and its simple applications. Surface energy and surface tension, angle of contact, excess of pressure across a curved surface, application of surface tension ideas to drops, bubbles and capillary rise. **CHAPTER 3**	

3	SEPTEMBER	**CHAPTER 12** **THERMAL PROPERTIES OF MATTER** Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion of water; specific heat capacity; Cp, Cv - calorimetry; change of state - latent heat capacity. Heat transfer-conduction, convection and radiation, thermal conductivity, qualitative ideas of Blackbody radiation, Wein's displacement Law, Stefan's law **CHAPTER 4** **MOTION IN A PLANE** Scalar and vector quantities; position and displacement vectors, general vectors and their notations; equality of vectors, multiplication of vectors by a real number; addition and subtraction of vectors, Unit vector; resolution of a vector in a plane, rectangular components,	**PT2** 18th SEPTEMBER TO 30th SEPTEMBER CHAPTER 2,3 (PART1) CHAPTER 8,9,10 (PART 2)

4	OCTOBER	**CHAPTER 12** **THERMODYNAMICS** Thermal equilibrium and definition of temperature, zeroth law of thermodynamics, heat, work and internal energy. First law of thermodynamics, **CHAPTER 5** **NEWTON'S LAW OF MOTION & FRICTION** Intuitive concept of force, Inertia, Newton's first law of motion; momentum and Newton's second law of motion; impulse; Newton's third law of motion. Law of conservation of linear momentum and its applications. Equilibrium of concurrent forces, Static and kinetic friction, laws of friction, rolling friction, lubrication. Dynamics of uniform circular motion: Centripetal force, examples of circular	

5	NOVEMBER	**CHAPTER 12** **THERMODYNAMICS(continued)** Second law of thermodynamics: gaseous state of matter, change of condition of gaseous state -isothermal, adiabatic, reversible, irreversible, and cyclic processes **CHAPTER 6** **WORK POWER AND ENERGY** Work done by a constant force and a variable force; kinetic energy, work energy theorem, power. Notion of potential energy, potential energy of a spring, conservative forces: non-conservative forces, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions	

6	DECEMBER	**CHAPTER 13** **KINETIC THEORY OF GASES** Equation of state of a perfect gas, work done in compressing a gas. Kinetic theory of gases - assumptions, concept of pressure. Kinetic interpretation of temperature; rms speed of gas molecules; degrees of freedom, law of equi-partition of energy (statement only) and application to specific heat capacities of gases; concept of mean free path, Avogadro's number. **CHAPTER 7** **SYSTEM OF PARTICLES (CENTRE OF MASS)** Centre of mass of a two-particle system, momentum conservation and Centre of mass motion. Centre of mass of a rigid body; centre of mass of a uniform rod. Moment of a force, torque, angular momentum,	**PT3** 11th DEC to 22nd DEC CHAPTER2,3,4&5(PART1) CHAPTER 8,9,10,11&12

7	JANUARY	**CHAPTER 14** **OSCILLATION** Periodic motion - time period, frequency, displacement as a function of time, periodic functions and their applications. Simple harmonic motion (S.H.M) and its equations of motion; phase; oscillations of a loaded spring- restoring force and force constant; energy in S.H.M. Kinetic and potential energies; simple pendulum derivation of expression for its time period **CHAPTER 15** **WAVES** Wave motion: Transverse and longitudinal waves, speed of travelling wave, displacement relation for a progressive wave, principle of superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats REVISION **CHAPTER 7**	
8	FEBRUARY	**REVISION & FINAL EXAM**	**FINAL TERM**(2nd Feb to 10th Feb) CHAPTER 1 to 15

SUBJECT - PAINTING (049)			
S.NO	**MONTH**	**LESSON-TOPIC AND SUBTOPICS**	**EXAM DATES AND SYLLABUS**
1	JUNE	CHAPTER-1 ART - AN INTRODUCTION	
		CHAPTER - 2 ART AND THE CULTURE	
2	JULY	CHAPTER -3 ORIGIN AND DEVELOPMENT OF DIFFERENT FORMS OF FINE ARTS IN INDIA	
		STILL LIFE INTRODUCTION (BASIC)	
		STILL LIFE WITH CONE WITH PENCIL SHADING.	
3	AUG	STILL LIFE WITH POT	PT-1 DATE-07-08-23 TO 14-08-23 CHAPTER NO 1 TO 3
4	SEPT	CHAPTER NO. 4 PREHISTORIC ROCK PAINTING	
		CHAPTER NO. 5 ART OF INDUS VALLEY	PT-2 EXAM DATES - 18-09-23 TO 30-09-2023
		STILL LIFE- POT AND FLOWER PENCIL SHADING	THEORY - CHAPTER NO. 1 TO 5
		STILL LIFE USING COLOUR.	PRACTICAL -1 STILL LIFE WITH NATURE OBJECT
			PRACTICAL - 2 PAINTING COMPOSITION WITH HUMAN FIGURE
			Topic - ANY ONE OF GIVEN BELOW
			1. Any Daily Life Scene.
			2. Any Festival Scene

			3. Market Scene.
			4. Any sports activity
			5. Any Historical Event
5	OCT	CHAPTER NO. 6 THE ART DURING MAURYAN, SHUNGA, KUSHANA AND GUPTA PERIODS	
		CHAPTER NO. 7 THE ART OF AJANTA CAVES	
		HUMAN FIGURE STUDY AND PAINTING COMPOSITION WITH HUMAN FIGURE ON TOPIC.	
6	NOV	CHAPTER NO. 8 ARTISTIC ASPECTS OF INDIAN TEMPLE SCULPTURES	
		CHAPTER NO.9 INDIAN BRONZE SCULPTURE	
		PRACTICE FOR STILL LIFE AND PAINTING COMPOSITION WITH TOPIC	
7	DEC	CHAPTER NO. 10 SOME ARTISTIC ASPECTS OF INDO-ISLAMIC ARCHITECTURE	PT-3 EXAM DATE - 11-12-23 TO 22-12-23
		STILL LIFE PRACTICE	THEORY CHAPTER NO. 6, 7 & 8
8	JAN	STILL LIFE WITH FLOWER, LEAVES AND POT WITH COLOUR.	
			FINAL EXAM
			EXAM DATES - 02-02-24 TO 10-02-2024

9	FEB	EXAMS	THEORY - CHAPTER NO. 1 TO 10
			PRACTICAL 1 - STILL LIFE WITH NATURE OBJECT
			PRACTICAL 2 - PAINTING COMPOSITION WITH HUMAN FIGURE
			Topic - ANY ONE OF GIVEN BELOW
			1. Any Daily Life Scene.
			2. Any Festival Scene
			3. Market Scene.
			4. Any sports activity
			5. Any Historical Event

SUBJECT ECONOMICS

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	JUNE	**STATISTICS:** CHAPTER 1: **INTRODUCTION** : MEANING , SCOPE FUNCTIONS AND IMPORTANCE	
		CHPTER2 : **COLLECTION OF DATA** : SOURCES OF DATA METHODS OF COLLECTIONS	
		MICRO: CHAPTER 1: **INTRODUCTION**	
2	JULY	**STATISTICS: METHODDS OF STATISTICAL ENQUIRY**	
		CHPATER 3: **METHODS OF SAMPLING** : CENSUS METHOD AND SAMPLE METHOD	

		CHAPTER 4: **ORGANIZATION OF DATA** : CLASSIFICATION OF DATA AND STAITSTICAL SERIES	
		MEASURES OF CENTRAL TENDENCY : CHAPTER 8: ARITHMETIC MEAN AND ITS CALCULATIONS	
		MICRO: CHAPTER 2 : CONSUMER EQUILIBRIUM	
		CHPATER 3: DEMAND	
		CHAPTER 4: ELASTICITY OF DEMAND	
3	AUG	**MEASURES OF CENTRAL TENDENCY** CHAPTER 8 CONTINUES…	AUG 07 2023 PT1
		CHAPTER 9: MEDIAN AND MODE	STATISTICS : CHAPTER 1,2,3,4, MEAN
		MICRO : CHAPTER 5: PRODUCTION FUNCTION	MICRO: INTRODUCTION,CONSUMEREQULIBRIUM
		CHAPTER 6: COST	DEMAND AND ITS ELASTICITY
4	SEP	**STATISTICS :MEASURES OF DISPERTION** : CHAPTER 10: RANGE AND ITS COEFFICIENT AND MEAN DEVIATION	
		MICRO : REVENUE	SEPTEMBER 18 2023 PT2
			STATISTICS: CHAPTER1,2,3,4, MEAN , MEDIAN
			MODE

			MICRO: CHAPTER 1,2,3,4,5,6
5	OCT	**MEASURES OF DISPERSION**: QUARTILE DEVIATION , STANDARD DEVIATION, LORENGE CURVE	
		MICRO: SUPPLY	
6	NOV	**STATISTICS**: CHAPTER 11. CORRELATION: TYPES N DEGREES , SCATTER DIAGRAM	
		KARLPEARSONS COEFFICIENT OF CORRELATION AND SPEARSMAN RANKING METHOD	
		MICRO: MAIN MARKET FORMS	
7	DEC	**STATISTICS:** INDEX NUMBER	11 DEC 2023 PT3
		MICRO: PRICE DETERMINATION	STATISTICS: MEASURES OF DISPERSION
			CORRELATION
			MICRO : REVENUE , SUPPLY , MAIN MARKET FORMS
8	JAN	**STATISTICS**: CHAPTER 4: TABULAR PRESENTATION	
		CHAPTER 5: DIAGRAMMATIC PRESENTATION:OME DIMENTIONAL AND PIE DIAGRAM	
		CHAPTER 6: GRAPHICNPRESENTATION: VARIOUS TYPES	

		MICRO: SIMPLE APPLICATION OF TOOLS OF DEMAND AND SUPPLY	
9	FEB		ANNUAL EXAM
			FULL SYLLABUS

SUBJECT -- ENGLISH CORE

SNO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATE AND SYLLABUS
1	JUNE	HORNBILL:L1 The Portrait of a Lady P1 A Photograph	
2	JULY	SNAPSHOT:L1 The Summer of the Beautiful White Horse L2 The Address HORNBILL: L2 We're not afraid to die…. P2 The Laburnum Top WRITING: 1 Poster 2 Classified Ads GRAMMAR: Tenses	
3	AUGUST	HORNBILL:L3 Discovering Tut L7 The Adventure P3 The Voice of the Rain WRITING: Speech & Debate PRACTICE OF SPEAKING SKILLS	**7 - 14 AUGUST PT1** READING:Unseen Passage WRITING: Poster GRAMMAR: Tenses HORNBILL: L1, P1 SNAPSHOT: L1

4	SEPTEMBER	HORNBILL: P4 Childhood WRITING: Speech & Debate GRAMMAR: Tenses READING: Note Making REVISION FOR PT2	**18-30 SEPTEMBER PT2** HORNBILL: L1 - L3; P1 & 2 SNAPSHOT: L1,L2 READING: Unseen Passage & Note Making WRITING: Poster, Classified Ads, Speech GRAMMAR: Tenses
5	OCTOBER	SNAPSHOT: L5 Mother's Day L7 Birth GRAMMAR: Clauses	
6	NOVEMBER	SNAPSHOT: L8 The Tale of Melon City HORNBILL: L8 Silk Road WRITING: 1 Poster 2 Classified Ads	
7	DECEMBER	HORNBILL: P5 Father to Son GRAMMAR: Tenses Clauses	**11-16 DECEMBER PT3** READING:Unseen Passage WRITING: Classified Ads & Debate GRAMMAR: Tenses & Clauses HORNBILL: L7; P3&4 SNAPSHOT: L5,L7
8	JANUARY	WRITING: 1 Poster	

		2 Classified Ads 3 Speech and Debate READING: Note Making and Summary ASSESSMENT OF LISTENING&SPEAKING SKILL	
9	FEBRUARY	REVISION	**2 FEBRUARY FINAL EXAM BEGINS**

SUBJECT - HISTORY

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	JUNE	INTRODUCTION TO WORLD HISTORY	
		THEME - 2 WRITING CITY LIFE	
2	JULY	THEME - 3 AN EMPIRE ACROSS THREE CONTINANCE	
3	AUGUST	THEME - 5 THE NOMADIC EMPIRE	PT1 - 7TH TO 14TH AUGUST SYLLABUS:- INTRODUCTION TO WORLD HISTORY, THEMES 2 & 3
4	SEPTEMBER	THEME - 6 THE THREE ORDERS	PT2 - 18TH SEPTEMBER TO 30TH SEPTEMBER, 2023 SYLLABUS:- INTRODUCTION TO WORLD HISTORY, THEMES 2, 3 & 5
5	OCTOBER	THEME -7 CHANGING CULTURAL TRADITIONS	
6	NOVENMBER	THEME - 10 DISPLACING INDIGENOUS PEOPLE	

7	DECEMBER	THEME - 11 PATHE TO MODERNISATION	PT3 - 11TH DECEMBER TO 16TH DECEMBER, 2023 SYLLABUS:- THEME -6 THREE ORDERS
8	JANUARY	BEGINNING OF TIME & REVISION FOR FINAL EXAMINATION	NOT FOR ASSESSMENT
9	FEBRUARY	REVISION & MAP SKILLS	FIAL EXAINATION - 26TH FEBRUARY TO JANUARY 14TH,2024 SYLLABUS:- THEMES -INTRODUCTION TO WORLD HISTORY, CHAPTERS 2, 3 & 5, 6, 7, 10 & 11

SUBJECT - POLITICAL SCIENCE

S.NO	MONTH	LESSON-TOPIC AND SUBTOPICS	EXAM DATES AND SYLLABUS
1	JUNE	CHAPTER -1CONSTITUTION WHY & HOW	
		CHAPTER -3 ELECTION AND REPRESENTATION:-	
2	JULY	CHAPTER -4 EXICUTIVE:-	
		CHAPTER -5 LEGESLATURE:-	
		CHAPTER -6 JUDICIARY	
3	AUGUST	CHAPTER - 7 FEDERALISM	PT1 - AUGUEST 7TH TO 14TH,2023 SYLLABUS:- CHAPTERS - 1, 3, 4 & 5
		CHAPTER -8 LOCAL GOVERNMENT	
4	SEPTEMBER	CHAPTER - 9 CONSTITUTION AS A LIVING DOCUMENT:-	PT2 - 18TH SEPTEMBER TO 30TH SEPTEMBER, 2023 SYLLABUS:- PART -1 CHAPTERS 1, 2, 4, 5, 6, 7 & 8

		CHAPTER -10 PHILOSOPHY OF THE CONSTITUTION	
5	OCTOBER	CHAPTER -1 INTRO POLITICAL THEORY:-	PT3 - 11TH DECEMBER TO 16TH DECEMBER,2023 SYLLABUS:- PART - 1 CHAPTERS 9 & 10 AND PART-2 CHAPTERS 1 & 2
		CHAPTER - 2 FREEDOM	
		CHAPTER -3 EQUALITY	
6	NOVEMBER	CHAPTER - 4 SOCIAL JUSTICE	
		CHAPTER -5 RIGHTS	
		CHAPTER - 6 CITIZENSHIP	
7	DECEMBER	CHAPTER -7 NATIONALISM	PT3 - FROM 11TH DECEMBER TO 16TH DECEMBER 2023. SYLLABUS:- PART-2, CHAPTERS 3, 4, 5 & 6
		CHAPTER - 8 SECULARISM	
8	JANUARY	CHAPTER - 9 PEACE	
		CHAPTER -10 DEVELOPMENT & REVISION	
9	FEBRUARY	REVISION	FINAL EXAMINATION - 26TH FEBRUARY TO 14TH MARCH 2024. SYLLABUS:- PART -1 CHAPTERS 1, 2, 4, 5, 6, 7, 8, & 10 AND PART-2 CHAPTERS 1 TO 10