RAINBOW PUBLIC SCHOOL

AFFILIATED TO C.B.S.E (+2)

Month-Wise Syllabus for Std:-'XII' (Arts) (Session: 2025-26)

Subject: ENGLISH

Month	WD	Chapters to be covered	Period	Half Yearly	Annual
Apr	19	Flamingo – The Last Lesson, Poetry - My Mother at Sixty six Writing – Notice, Article Reading – Factual Passage			
May	12	Vistas – The Tiger King			
Jun	14	Flamingo – Lost Spring Poetry- Keeping Quiet Vistas – Journey to the End of the Earth Writing – Invitations & Replies			
July	25	Flamingo – Deep water Poetry- A Thing of Beauty Vistas – The Enemy Writing – Official Letter, Letter to the Editor, Job Application			
Aug	20	Flamingo – Indigo Poetry - A Roadside stand Vistas – On the face of it. Writing – Business Letter, Report Reading –Case Based Passage			
Sep	09	Flamingo – Poets & Pancakes Revision for Half Yearly Examination			
Oct	16	Flamingo – The Interview & Going Places Writing – Revision Reading – Revision			
Nov	19	Poetry – Aunt Jennifer's Tigers Vistas – Memories of Childhood Writing – Revision Reading – Revision			
Dec	22				
Jan	19	Revision for Annual Examination			
Feb.	17				

SUBJECT :- History

Months	No. of W.D	Chapters to be covered	Contents	Activity
April	19	Part 1 Ch-1. Bricks, Beads and Bones Ch-2. Kings, Farmers and Towns	*Uarly Urban centres – Harappa and Mohenjodaro as economic and social Institution. *Archaeological Report on a major Rite *Seals, Script, Weight *Ancient authority *The earliest states *The sixteen Mahajanpadas *Finding out about the Mouryas *New notions of kingship *A changing countryside *Town and Trade *Historical evidence from inscription.	On the given political map of India locate the following sites (i) Harappa (ii) Lothal (iii) Mohenjodaro (iv) Nageshwar (v) Barnuali (vi) Rakhigarhi (vii) Kalibangan (viii) On Political Map of India locate 16 Mahajanpadas.
May	12	Ch -3: Kingship, Caste and Class Ch - 4. Thinkers, Beliefs and Buildings	*The critical edition of the Mahabharata *Kingship and Marriage *Social differences within and beyond the framework of caste *Language and content *A glimpse of Sanchi *The Backgrounds- Sacrifices and debates *Beyond Worldly	*Discuss the different stages through which Mahabharata was compiled in the 20th century. *The message of Mahavira *The teachings of Buddha *On the outline world map, mark the areas to which Buddhism spread.
June	14	Part – II Ch 5. Through the Eyes of Travellers	*Al-Biruni and The Kitab-ul-Hind *Ibn Batuta's Rihla *Francois Bernier: A Doctor with a difference *Making sense of an Alien World *Women-Slaves, Sati and Labourers	
July	25	Ch - 6. Bhakti-Sufi Traditions Ch - 7. An Imperial Capital : Vijayanagara	*A mosaic of Religious Beliefs and practices *Poems and Prayer: Early traditions of Bhakti *The virashaiva Tradition in Karnataka *Religious ferment in North India. *New strands in the Fabric *The growth of Sufism *New devotional paths in Northern India *The discovery of Hampi *The Rayas, Nayakas and Sultans *Vijayanagara-The Capital and its Environs *The Royal Centre *The sacred centre	*On the outline map of India, plot three major Sufi shrines and three places associated with temples (one each of a form of Vishnu, Shiva and the goddess).

Aug	20	Ch - 8. Peasants, Zamindars And the State	*Peasants and agricultural Production *The village community *Women in agrarian society *Forest and tribes *The Zamindars *Land revenue system	
Sep	09		Revision & Half Yearly Examina	ation
Oct	16	Part – III Ch - 10. Colonialism and the Countryside: Exploring Official Archives Ch 11 Rebels and the Raj	*Bengal and the Zamindars *The Hoe and the Plough *A Revolt in the Countryside the Bombay Deccan *The Deccan Riots Commission *Pattern of the Rebellion *Awadh in Reolt *What the Rbels wanted? *Repression *Images of the Revolt	On outline map of India mark out the areas described in this chapter. Where the Permanent Settlement and the Ryotwari System. *On outline political map of India. *Mark the extent of British Empire in 1856-57 *The centres of Revolt of 1857.
Nov	19	Ch 13 Mahatma Gandhi and the Nationalist Movement Ch 15 Framing the Constitution	*A leader announces himself *The making and unmaking of Non- cooperation *The Salt Satyagraha-A Case Study *Quit India *The last Heroic days *Knowing Gandhi *A tumultuous time *The making of the Constituent Assembly *The vision of the Constitution *Defining Rights *The powers of the State	*On outline political map of India- *Mark and label the sessions of the I.N.C. *Important centres of the National Movement(1885-1947).
Dec	22	Ch 15 Framing the Constitution Continued	*The language of the Nation *A plea for Hindi *The fear of Domination	
Jan.	19		Revision & Annual Examination	on
Feb.	17		Kevision & Annuai Ezammati	OII

SUBJECT: GEOGRAPHY

MONTH	WD	BOOK -1	BOOK -2	Practical Part
APR	19	UNIT-1 CH-1 Human Geography Nature and Scope UNIT- 2 PEOPLE CH-2 The World Population Distribution, Density and Growth	UNIT-1 CH-1 POPULATION: Distribution, Density and Growth, and Composition	
MAY	12	UNIT- 2 CH-3 Human Development	UNIT-2 CH-2-Human Settlements	Data its source and compilation
JUN	14	CH- 4 Primary Activities	CH- 2 Human Settlement (Cont.)	
JULY	25	UNIT- 3 PEOPLE CH-5 Secondary Activities	UNIT-3 CH-3 Land Resources and Agriculture CH-4 Water Resources CH-5 Minerals and Energy Resources	Data Processing
AUG.	20	UNIT- 3 CH-6: Tertiary and Quarternary Activities	UNIT-3 CH-6 Planning and Sustainble Development in Indian Context	
SEPT.	09	REVISION MAPS AND DIAGRAMS PRACTICALS	TA 1	
ост.	16	UNIT- 3 CH-7 Transport and Communication	UNIT-4 CH-7 Transport and, Communication CH-8 International Trade UNIT-5 CH-9 Geographycal Perspective on selected issues and problems	Graphical Representation of Data.
NOV.	19	CH-8 International Trade	Map & Diagram based on a Political Map of India	Spatial Information technology
DEC.	22			
JAN.	19	Revision for Annual Examination		
FEB.	17			

SUBJECT: POLITICAL SCIENCE

Month	No. of W.D	Chapters to be covered	Contents	Activity/Project
April	19	Part -A CONTEMPORARY WORLD POLITICS Ch-1 The end of Bipolarity	*The Soviet System *Gorbachev and Disintegration *Consequences of the Disintegration *Shock Therapy in Post-Communist Regimes *Consequences of Shock Therapy and Conflict. *India and Post Communist Countries	*Write an essay for or against the following "With the disintegration of the Second World, India should change its foreign policy and focus more on friendship with US rather with Russia"
		Ch - 2. Contemporary Centres of Power	*European Union(EU) *Association of South East Asian Nation (ASEAN) *The Rise of Chinese Economy *India China Relation	*Assess the role of ASEAN as an Economic Association
May	12	Ch - 3. Contemporary South Asia	* Bangladesh Monarchy & Democracy in Nepal *India- Pakistan Conflicts *India and its other neighbours *Peace and cooperation *Why International Organisation?	*Prepare a timeline on Pakistan – 20 years of Turmoil
June	14	Ch - 4. International Organisations	*Evolution of the UN *Reform of the UN after the Cold War *Reform of Structures and Processes *Jurisdiction of the UN *India and the UN Reforms *UN's significant Agencies *What is Security?	*Prepare a list of UN's significant Agencies. *Prepare a Time Line on UN Secretaries General *Present a comparative analysis of Indian expenditure on Traditional and Non-Traditional Security.
		Ch - 5. Security in the Contemporary World	*Traditional Notions *External& Internal	Security.

			*Traditional Security and Cooperation *Non-Traditional Notions *New sources of threats *Cooperative Security *India's Security strategy	
July	25	Ch - 6. Environment and the Natural Resources	*Environmental Concerns in Global Politics *The Protection of Global Commons *Common but differentiated Responsibilities *Common Property Resources *India's Stand on Environmental Issues *Environmental Movements: One or many? *Resource Geopolitics *The Indigenous peoples and their Rights.	*Prepare a report on major environmental concerns in global politics and India's stand on environmental issues discussed at the International level.
		Ch 7. Globalisation	*The concept of Globalisation *Causes of Globalisation *Political, Economic and Cultural consequences. *India and globalisation *Resistance to Globalisation.	
		Part – B Politics in India Since Independence Ch - 1. Challenges of Nation Building	*Challenges for the New Nations *Partition: Displacement and Rehabilitation *Integration of Princely States *Reorganisation of States	*Prepare a chart on creation of New States in India with Time-Line
Aug	20	Ch - 2. Era of One Party Dominance		
		Ch 3 Politics of Planned Development	*Ideas of Delelopment *The Early Initiatives *People vs Private Sector *The Green Revolution *Later Developments	*Evaluate the benefits of Green Revolution
Sep	09	Rev	vision for Half Yearly Examinat	ion

		Ch - 4. India's External Relations	*International context *The policy of Non-Alignment *Peace and conflict with China *War and peace with Pakistan *Bangladesh war, 1971 *India's Nuclear Policy	*Why did India declare the policy of Non-Alignment? *Describe the policy the principle and policy of Non-Alignment
Oct	16	Ch - 5. Challenges to and Restoration of the Congress system Ch - 6. The Crisis of Democratic Order	*Background to Emergency *Declaration of Emergency *Controversies regarding Emergency *Politics after Emergency	*Examine the consequences of Emergency imposed in 1995 and prepare a report about the withdrawal of rights during Emergency
		Ch 7 Regional Aspirations	*Region and the Nation *Jammu and Kashmir *Punjab *The North-East *Accommodation and National Integration	* On an outline map of India, mark seven states referred to as 'Seven Sisters'
Nov	19	Ch 8 Recent Developments in Indian Politics	*Context of the 1990s *Era of Coalitions *Political Rise of Other Backward Classes(OBCs) *Communalism, Secularism, Democracy *Emergence of a New Consensus *Coalition Government	*On an outline map of India mark the States where NDA is in rule and the States where UPA is in rule.
Dec	22			
Jan.	19	Re	evision for Annual Examination	o n
Feb.	17			

SUBJECT :- PSYCHOLOGY

Month & WD		Chapters to be covered and Contents			
		Variations in Psychological Attributes			
April (19) + May (12)	Unit I	 The topics in this unit are: Introduction Individual Differences in Human Functioning Assessment of Psychological Attributes Intelligence Psychometric Theories of Intelligence, Information Processing Theory: Planning, Attention-arousal and Simultaneous successive Model of Intelligence, Triarchic Theory of Intelligence; Theory of MultipleIntelligences. Individual Differences in Intelligence Culture and Intelligence Emotional Intelligence Special Abilities: Aptitude: Nature and Measurement Creativity 			
June (14)	Unit II	Self and Personality The topics in this unit are: 1. Introduction 2. Self and Personality 3. Concept of Self 4. Cognitive and Behavioural aspects of Self 5. Culture and Self 6. Concept of Personality 7. Major Approaches to the Study of Personality • Type Approaches • Trait Approaches • Psychodynamic Approach and Post FreudianApproaches • Behavioural Approach • Cultural Approach • Humanistic Approach • Humanistic Approach 8. Assessment of Personality • Self-report Measures • Projective Techniques 9. Behavioural Analysis			

		Meeting Life Challenges
		The topics in this unit are:
		1. Introduction
		2. Nature, Types and Sources of Stress
		3. Effects of Stress on Psychological Functioning and Health
		Stress and Health
July (25)	Unit III	General Adaptation Syndrome
ouly (20)		Stress and Immune System
		• Lifestyle
		4. Coping with Stress
		Stress Management Techniques
		5. Promoting Positive Health and Well-being
		• Life Skills
		Positive Health
		Psychological Disorders
		The topics in this unit are:
		1. Introduction
		Concepts of Abnormality and Psychological Disorders
		Historical Background
		3. Classification of Psychological Disorders
		4. Factors Underlying Abnormal Behaviour
		5. Major Psychological Disorders
		Anxiety Disorders
		 Obsessive-Compulsive and Related Disorders
Aug (20)	Unit IV	 Trauma-and Stressor-Related Disorders
11 ug (20)		 Somatic Symptom and Related Disorders
		Dissociative Disorders
		Depressive Disorder
		Bipolar and Related Disorders
		 Schizophrenia Spectrum and Other PsychoticDisorders
		 Neurodevelopmental Disorders
		 Disruptive, Impulse-Control and Conduct Disorders
		 Feeding and Eating Disorders
		 Substance Related and Addictive Disorders
Sept. (09)		Revision for Half Yearly Examination

		Therapeutic Approaches
		The topics in this unit are:
		1. Nature and Process of psychotherapy
		Therapeutic relationship
		2. Types of Therapies
Oct. (16)	Unit V	Behaviour Therapy
(20)	C 1110 Y	Cognitive Therapy
		Humanistic-Existential Therapy
		Alternative Therapies
		Factors contributing to healing in Psychotherapy
		Ethics in Psychotherapy
		3. Rehabilitation of the Mentally Ill
		Attitude and Social Cognition
		The topics in this unit are:
		1. Introduction
	Unit VI	2. Explaining Social Behaviour
		3. Nature and Components of Attitudes
Nov. (19)		4. Attitude Formation and Change
		Attitude Formation
		Attitude Change
		Attitude-Behaviour Relationship
		5. Prejudice and Discrimination
		6. Strategies for Handling Prejudice
		Social Influence and Group Processes
		The topics in this unit are:
		1. Introduction
Dec. (22)	Unit VII	2. Nature and Formation of Groups
, ,		3. Type of Groups
		4. Influence of Group on Individual Behaviour
		Social Loafing
		Group Polarisation
Jan. (19) + Feb. (17)		Revision for Annual Examination

Subject: Computer Science

Month	W.D	Chapters/Topic to be covered	Activity/Practical
Apr	19	Revision of Python topics covered in class XI i)Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)	Program related to function, Passing string, list, dictionary to function. Program to find factorial using recursion
May	12	Patabase concepts: introduction to database concepts and its need Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) Structured Query Language (SQL): introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause	To create table with primary key constraints. SQL query using create, select, update, where, like, order by, group by commands.
Jun	14	joins: Cartesian product on two tables, equi-join and natural join	Various SQL Queries using two tables.
July	25	Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications Data File Handling: Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of datain a text file	Program to connect MySQL with datafile Write a program to Create Text file, Appending a data to Text file, updating data into Text file, Accessing data from Text file
Aug	20	Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read from a csv file using csv.reader() Python libraries: creating python libraries	Write a program to Create Binary file, Appending a data to Binary file, updating data into Binary file, Accessing data from Binary file Program to Importing data from csv file

Sep	09	Idea of efficiency: number of comparisons in Best, Worst and Average case for linear search	
Oct	16	Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.	Program to perform operations on stack and queue
Nov	19	Computer Network Evolution of networking: introduction to computer networks, evolution of networking (ARPANET,NSFNET, INTERNET) Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuits witching, Packet switching) Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves) Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP, wireless/mobile communication protocol such as GSM, GPRS and WLL Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting	Project work
Dec	22	Revision & Project Work (Contd)	

Subject: PHYSICAL EDUCATION

Month	WD	Name of the Chapter	Period	Half Yearly	Annual
April	19	* Functions of Sports Events, Management (Planning, Organising, Staffing) * Various Committees & Responsibilities (Pre, During & post) * Fixtures – (Knock-Out, League and combination) * Intramural & Extramural – Meaning and its significance. * Community sports.			
May	12	* Exercise guidelines of WHO for different age groups. * Common postural deformities. * Women participation in sports. * Special consideration (menarche and menstrual dysfunction)			
June	14	* Female Athlete Triad CH – 3: Yoga and Lifestyle * Asanas as preventive Measures. Procedure, Benefits & contraindications for :-			

		T	1	
		*Obesity: Tadasana, Pavanmuktasana, Matyasna etc. *Diabetes: Bhujangasana, Dhanurasana etc. * Asthma: Tadasana, Kapalbhati, Gomukhasana etc. * Hypertension: Tadasana, Ardha-Halasana etc. * Back pain: Ardh-Chakrasana, Gomukhasana etc. CH – 4: Physical Education for CWSN (Divyang)		
July	25	* Organizations promoting Disability (Special Olympics, Paralympics, Deflympic) * Concept of classification and Divisioning in sports. * Concept of inclulsion in sports, need and implementation * Advantage of physical activities for CWSN. * Strategies to make Physical Activities assessable for children with special needs.		
		* Concept of balanced diet and nutrition. * Macro and Micro Nutrient. * Nutritive and Non-nutritive component of diet. * Eating for weight control (Dieting, food intolerance, food myths). * Importance of diet in sports (pre, during and post req)		
August	20	* Fitness Test – SAI Khelo India Age 5-8 yrs: BMI, Flamingo Balance Test, Plate Tapping Test Age 9-8 yrs 50 mt speed test 600 mt Run/Walk etc. * Measurement of cardio – vascular Fitness – Harvard step test * Computing BMR * Rikli and Jones – Senior citizen Fitness Test. * Johnson – Methney Test of Motor Educability.		
		* Physiological factors determining component of physical fitness. * Effect of exercise of Muscular and Cardio – Respiratory system. * Physiological change due to aging. * Sport Injuries classification soft tissue, Bone and joint, dislocation, fractures.		
Sept.	09	* Newton's Law of motion & its application in sports. * Types of levers and their application in sports. * Equilibrium – Dynamic & Static centre of Gravity and its application in sports. * Friction in sports. * Projectile in sports.		
Oct.	16	* Personality and its types (Jung's classification & Big 5 theory) * Motivation, its type and technique * Exercise Adherence : Reasons, Benefits & strategies for enhancing its. * Meaning, Concept & Types of Aggressions in sports.		

		* Psychological Attributes in sports – Self Esteem, Mental imagery, Self Talk, Goal setting.		
		CH – 10 : Training in Sports		
Nov.	19	* Concept of Talent Identification and Talent Development in Sports * Introduction to Sports Training Cycle- Micro, Macro, Meso. * Types & Method to Develop Strength, Endurance and Speed. * Types & Method to Develop Flexibility and Coordinative Ability * Circuit Training – Introduction and its importance.		
Dec.	22	Davisian for Average E	ation	
Jan.	19	Revision for Annual Examin	เลนเดก	

SUBJECT: - HINDUSTANI MUSIC VOCAL

Month	WD	Торіс	Period	Half Yearly	Annual
		निम्नलिखित की परिभाषाएँ - अलंकार, वर्ण, कण, मीड,		•	
,	10	खटका, मुर्की, गमक, ग्राम, मूर्च्छना, आलाप, तान			
April	19	(क) राग - वर्गीकरण			
		(ख) रागों का समय - सिद्धांत			
		निम्नलिखित ग्रंथों का सविस्तार अध्ययन -			
May	12	(क) संगीत रत्नाकर			
		(ख) संगीत पारिजात			
		कक्षा 12 के पाठ्यक्रम में निर्धारित रागों का सविस्तार			
T	14	परिचय।			
June		विभिन्न स्वर-समूहों में से रागों को पहचानने की योग्यता			
		समझना।			
		निम्नलिखित संगीतकारों का जीवन चरित्र -			
		(क) उस्ताद अब्दुल करीम खाँ			
July	25	(ख) उस्ताद फैय्याज खाँ			
		(ग) पं० कुष्ण राव शंकर पण्डित			
		(घ) उस्ताद बड़े गुलाम अली खाँ			
		पाट्यक्रम की तालों को ठाह व दुगुन सहित लिपिबद्ध			
Aug	20	करना।			
		पाठ्यक्रम के रागों की बंदिश की स्वरलिपि।			
		द्रुत ख्याल निम्नलिखित रागों में आलाप व तान सहित -			
Sont	09	(क) भैरव, बागेश्री, मालकौस और शुद्र सारंग			
Sept	09	(ख) एक विलम्बित ख्याल आलाप व तान सहित			
		(ग) एक स्वरमालिका और एक लक्षणगीत			

		Revision for half yearly examination		
	1.5	(क) एक तराना और एक घमार		
Oct	16	(ख) सादरा या दादरा गायन शैली		
	19	निम्नलिखित तालों का ठाह दुगुन, तिगुन व चौगुन सहित		
Nov		हाथ पर ताली द्वारा अभ्यास - एकताल, झपताल, रूपक		
		ताल, तिलवाड़ा ताल, धमार ताल।		
-	22	(क) परीक्षक द्वारा गाए गए स्वर - समूह से राग पहचान।		
Dec	22	(ख) तानपुरा का चित्र एवं उसे मिलाने की विधि।		
Jan & Feb	19 + 17	Revision for Annual Examination		

Principal Sign.

Incharge Sign. C. Teacher Sign.

Director Sign.

RAINBOW PUBLIC SCHOOL

AFFILIATED TO C.B.S.E (+2)

Month-Wise Syllabus for <u>Std:-'XII'</u> (Comm.) (Session: 2025-26)

Subject : ENGLISH

Month	WD	Chapters to be covered	Period	Half Yearly	Annual
Apr	19	Flamingo – The Last Lesson, Poetry - My Mother at Sixty six Writing – Notice, Article Reading – Factual Passage			
May	12	Vistas – The Tiger King			
Jun	14	Flamingo – Lost Spring Poetry- Keeping Quiet Vistas – Journey to the End of the Earth Writing – Invitations & Replies			
July	25	Flamingo – Deep water Poetry- A Thing of Beauty Vistas – The Enemy Writing – Official Letter, Letter to the Editor, Job Application			
Aug	20	Flamingo – Indigo Poetry - A Roadside stand Vistas – On the face of it. Writing – Business Letter, Report Reading –Case Based Passage			
Sep	09	Flamingo – Poets & Pancakes Revision for Half Yearly Examination			
Oct	16	Flamingo – The Interview & Going Places Writing – Revision Reading – Revision			
Nov	19	Poetry – Aunt Jennifer's Tigers Vistas – Memories of Childhood Writing – Revision Reading – Revision			
Dec	22				
Jan	19	Revision for Annual Examination			
Feb.	17				

SUBJECT: - ACCOUNTANCY

Months	No. of W.D	UNITS / TOPICS	Period	Half Yearly	Annual
		PART-A: Accounting for Partnership Firms and Companies			
April	19	Unit-1. Accounting for Partnership Firms Chapter 1: Accounting for partnership firm: Fundamental Topics: Partnership features, partnership deed; Provisions of the Indian Partnership Act 1932 in the absence of partnership deed; Fixed v/s fluctuating capital accounts, transfer to general reserve, calculation of interest on capital and interest on drawing, Preparation of Profit and Loss Appropriation account – division of profit among partners, guarantee of profits; Past adjustments (relating to interest on capital, Interest on drawing, Salary and profit sharing ratio).			
		Chapter 2: Valuation for Goodwill Topics: Goodwill Meaning, nature, factors affecting, classification of goodwill, Methods of valuation – average profit (simple average profit and weighted average profit), super profit and capitalization method (capitalisation of average profit and capitalisation of super profit)			
		Chapter 3: Change in profit sharing ratio among the existing			
May	12	Topics: Sacrificing ratio, gaining ratio; accounting of goodwill, Accounting for revaluation of assets and reassessment of liabilities; Treatment of reserves, accumulated profits and losses; Preparation of			
		Revaluation account and balance sheet. Adjustment of capital.			
June	14	Chapter 4: Admission of a partner Topics: Effects of admission of a partner on change in the profit sharing ratio; calculation of new P/L ratio and sacrifice ratio, Treatment of Goodwill (As per AS-26); Treatment for revaluation of assets and reassessment of liabilities; preparation of revaluation account, Treatment of reserves, accumulated profit and losses; adjustment of deferred revenue expenditure, Adjustment of capital accounts and preparation of capital, Current account and balance sheet.			
		Chapter 5: Retirement of a partner. Topics: Meaning of retirement of partner, Effects of retirement of a partner on change in profit sharing ratio (new ratio and gaining ratio); Treatment of goodwill (As per AS-26); Treatment of revaluation of assets and reassessment of liabilities; Adjustment of accumulated profit, losses and reserves; Adjustment of capital accounts; determination of amount due to retiring partner, Preparation of Loan account of the retiring partner; method of payment of amount due to retiring partner, Preparation of retire partner's capital account. Preparation of capital, Current account and Balance Sheet;			
July	25	Chapter 6: Death of a partner. Topic: calculation of new ratio and gaining ratio of remaining partner after death of a partner, accounting of goodwill on death of partner, revaluation of assets and reassessment of liabilities, adjustment of reserves and accumulated profit and losses, Calculation of deceased partner's share of profit till date of death; preparation of deceased partner capital account and executor's account and preparation of capital, current account and balance sheet. Chapter 7: Dissolution of a partnership firm Topics: Meaning of dissolution of partnership and partnership firm; difference between dissolution of firm and dissolution of partnership, Types of dissolution of firm; Settlement of accounts; journal entries related to realization, Preparation of realization account and other related accounts – Partners capital account and Cash/Bank/A/C.			

Aug	20	Unit-2. Accounting for Companies Chapter 8: Accounting for share capital Topics: Features and types of companies; Meaning of Share capital and Share – nature and Types; Accounting for share capital, difference between equity share and preference share, issue and allotment of equity and preferences shares, Public subscription of shares – over subscription and under subscription; Issue at par and issue at premium; Calls in advance and arrears (excluding Interest); treatment of share issued for consideration other than cash, Concept of private placement and Employee stock option plan (ESOP), Sweat Equity; Accounting treatment of forfeiture and reissue of shares; prorate allotment, Disclosure of share capital in the Balance of a Company.		
Sep	09	Chapter 9: Company Account: Issue of Debentures Topics: Meaning, Types, issue of Debentures at par, at a premium and at a discount; Issue of Debentures for consideration other than cash; Issue of debenture with terms of redemption; Debentures as collateral security; Interest on debentures; Writing off discount/Loss on issue of Debentures. Revision for Half Yearly Examination		
Oct	16	PART – B: Unit – 3 Financial Statement Analysis Chapter 1: Financial statement of a company Topics: Meaning, Nature, Uses and Importance of financial statement; Statement of Profit and Loss; Balance Sheet in prescribed form with major headings and subheading (as per schedule III to the companies Act 2013) Chapter 2: Financial Statement Analysis Topics: Meaning, Significance, Objectives; Importance and Limitations. Chapter 5: Tools of financial statement analysis Topic: Comparative Statement of Statement of profit and loss and Balance Sheet (Financial Statement), Common Size statement including statement of profit and loss and common size Balance Sheet		
Nov	19	Chapter 3: Ratio Analysis Topics: Meaning, Objectives, Advantages; Liquidity Ratio – Current Ratio and Quick Ratio; Solvency Ratio – Debt to Equity Ratio, Total Assets to Debt Ratio, Proprietary Ratio, Interest coverage ratio, Debt to capital employed ratio; Activity Ratios – Inventory Turnover Ratio, Trade Receivable Turnover ratio, Trade payable Turnover ratio, Fixed Assets Turnover ratio, net Assets Turnover ratio and working capital Turnover ratio; Profitability Ratios – Gross profit ratio, Operating ratio, Operating profit ratio, Net Profit ratio and Return on Investment. Chapter: Cash Flow Statement Topics: Meaning, Objectives, Benefits, Cash and Cash Equivalents, Classification of Activities; Preparation of Cash flow statement (As per AS-3 (Revised) (Indirect method only)		
Dec	22	PART C – Project Work and Revision & Pre- Board Examination		
Jan Feb	19 17	Revision & Annual Examination		

<u>Subject : Business Studies</u>

Months	No. of W.D	UNITS / TOPICS	Period	Half Yearly	Annual
		PART-A: Principles and function o management			
April	19	Chapter-1: Nature and significance of management Topics: Management – Concepts, objectives & importance; Nature of management – Science, Art & profession; Level of Management – top, middle & lower; Management function – planning, organising, staffing, directing & controlling; Co-ordination – Nature & importance Chapter-2: Principles of Management Topics: Meaning – Nature and significance, Fayol's principles of management, Taylor's scientific management – principles & techniques, Compare the contribution of Fayol and Taylor. Chapter-3: Business Environment Topics: Meaning, Concept & Importance; Dimension – Economic,			
		Social, legal, political and technological; Demonetization – Concept and features.			
June	14	Chapter-4: Planning Topics: Meaning, features, importance, limitation planning process; Types of plan – Single use and standing use, objectives, goal, strategy, policy, procedure, Method, rule, budget & programme.			
July	25	Chapter-5: Organizing Topics: Meaning, importance, steps in organizing structure of organization — Functional & divisional structures; Advantage, limitation & suitability types — Formal & Informal organization, Advantages & limitation, Delegation — Meaning, elements & Importance; Decentralisation — Meaning & Importance Difference between delegation & decentralization. Chapter-6: Staffing Topics: Meaning needs, importance, staffing as part of HRM steps in staffing process; Selection — Meaning & process; Recruitment — meaning & sources; Training & Development — Meaning, needs & method.			
Aug.	20	Chapter-7: Directing Topics: Meaning, Concept & Importance, Element of direction; Supervision – Meaning; Motivation – Meaning, importance, Maslow's theory of motivation, Financial and non-financial incentives; Leadership – Meaning, importance, Style – Authoritative, democratic & laissez faire; Communication – Meaning, importance, element, formal & informal communication, barriers to communication, How to occurcome these barriers.			
Sep.	09	Chapter-8: Controlling Topics: Meaning, nature & importance, relationship between planning & controlling; Steps in the process of controlling. Revision for Half Yearly Exam.			
Oct.	16	PART – B : Business Finance & Marketing Chapter-9 : Financial Management			

		Topics: Meaning, role, objective of financial management, Financial, Investment, & Dividend decision – Meaning & Factor affecting these decision; Financial planning – Meaning & Importance capital structure – Meaning, factor affecting capital structure; Fixed & working capital – Meaning & factors affecting their requirement. Chapter-10: Financial market Topics: Concept of financial market; Money market – nature & Instrument capital market – nature & Types primary market &		
Nov.	19	Secondary market difference between capital market & money market; Stock Exchange – Meaning, function, trading procedure, Meaning of depositary services & demate accounts. SEBI – objective & Function. Chapter-11: Marketing Topics: Meaning, Role, function, marketing philosophies, features, Distinction between marketing & selling. Marketing Mix – Concept & elements product mix branding, labeling, packaging physical distribution – Meaning, role, channels – Types & factor, Choice; Promotion – meaning, role, mix, role of advertising, personal selling, sales, promotion, & objective to advertising; Price more – Factor affecting perice public relation concept.		
Dec.	22	Chapter-12: Consumer Protection Topics: Concept of consumer, Meaning of consumer protection according to consumer protection act, 2019, Explain the consumer rights, understanding the responsibility of consumer who can file a complaints, legal redressal machinery remedies aucilable to consumer role of NGO in spreading consumer awareness.		
Jan.	19	Revision & Annual Examination	<u> </u>	
Feb.	17	ACTISION & Amitual Daumination		

SUBJECT : ECONOMICS

Months	No. of W.D	UNITS / TOPICS	Period	Half Yearly	Annual
April	19	 ➤ Macro Economics Unit 1: - National income and related aggregates Chapter 1: - Circular Flow of Income Topic: - meaning of macro economics, circular flow of income, stock and flow, type of circular flow, two sector economy. Chapter 2: - Basic concept of macro economics Topic: - domestic territory, normal resident, factor income and transfer income, final goods and intermediate goods, consumption goods and capital goods, gross investment net investment t and depreciation, net indirect taxes, net factor income from abroad. 			
May	12	➤ Macro Economics Chapter 3: - National income and related aggregates Topic: - Basic aggregates of national income like GDP _{MP} , GDP _{FC} , NDP _{MP} , NDP _{FC} , GNP _{MP} , GNP _{FC} , NNP _{MP} , NNP _{FC}			

		Chapter 4: - Measurement of national income		
		Topic: - introduction of national income, value added method,		
		income method, expenditure method, reconciliation of three		
		method, treatment of different items in national income, national		
		income at current price and constant price, nominal GDP and real		
		GDP.		
		Macro Economics		
		Unit 1I: - Money and Banking		
		Chapter 5: - Money		
		Topic: - what is money introduction, barter system, function of		
June	14	money, definition of money, money supply.		
June	17			
		Chapter 6: - Banking: commercial bank and the central bank		
		Topic: - commercial bank, function of commercial bank, money		
		creation or credit creation, central bank, function of central bank,		
		central bank vs commercial bank.		
		➤ Indian economic development		
		Unit 6: Development experience (1947-90) and economic		
		reforms since 1991		
		Chapter 1: - Indian economy on the eve of independence		
		Topic: - introduction of Indian economy, low level of economic		
Tl.	25	development under colonial rule, agricultural sector, industrial		
July	25	sector, foreign trade, demographic condition, occupational structure,		
		infrastructure, positive contribution of British rule, state of Indian		
		economy on the eve of independence.		
		Chapter 2: - Indian economy (1950-1990)		
		Topic: - economic planning, goals of five year plans. Agriculture,		
		industrial development, foreign trade, critical appraisal of industrial		
		development (1950-1990).		
		> Indian economic development		
		Unit 6: Development experience (1947-90) and economic		
		reforms since 1991		
		Teroring Since 1991		
		Chapter 3: - Liberalization, privatization and globalization: an		
		appraisal		
		Topic: - introduction of LPG, reasons for economic reforms, the		
		new economic policy, liberalization, privatization, globalization, an		
		appraisal of LPG policies, demonetization, goods and service tax.		
		appraisar of Li G policies, demolicization, goods and service tax.		
Aug.	20	> Indian economic development		
		Unit 7: Current challenges facing Indian economy		
		Ont 7. Current chancinges facing indian economy		
		Chapter 4: - Human capital formation		
		Topic: - meaning of human capital formation, sources of human		
		capital formation, human capital and economic growth, importance		
		or role of human capital formation, problems of human capital		
		formation, human capital and human development, educational		
		sector in India, educational achievements in India, future prospects in educational sector.		
		Macro Economics Unit 2: Determination of income and amplement		
Sep.	09	Unit 3: - Determination of income and employment		
		Chapter 7: - Aggregate demand and related concepts.		
		Topic: - meaning and components of aggregate demand, aggregate		

	I			
		supply, consumption function, types of propensities to consume,		
		saving function, type of propensities' to save, investment function,		
		determination of investment, ex-ante and ex-post saving and		
		investment, full employment and involuntary unemployment.		
		Revision for half yearly examination		
		Macro Economics		
		Unit 3: - Determination of income and employment		
		Chapter 8: - Income determination and multiplier		
		Topic: - determination of equilibrium level, equilibrium level,		
		concept of investment multiplier.		
	1.5	The second secon		
Oct.	16	Chapter 9: - Excess demand and deficient demand		
		Topic: - introduction of AD and AS, excess demand, deficient		
		demand and their differences, measures to control excess and		
		deficient demand, measures to correct excess demand, measures to		
		correct deficient demand, excess and deficient demand in three		
		sector economy.		
		> . Macro Economics		
		Unit 4: - Government budget and economy		
		Chapter 10: - government budget and economy		
		Topic: - meaning of government budget, objective of government		
		budget, components of budget, budget receipt, capital receipt,		
		budget expenditure, balanced, surplus and deficit budget, measures		
		of government deficit.		
		> . Macro Economics		
		Unit 5: - Balance of payment		
		Chapter 11: - foreign exchange rate		
		Topic: - meaning of foreign exchange rate, currency depreciation		
		vs. currency appreciation, type of foreign exchange rate systems,		
Nov.	19	demand for foreign exchange, supply of foreign exchange,		
		Determination of exchange rate, changes in exchange rate, foreign		
		exchange market.		
		Indian economic development		
		Unit 7: Current challenges facing Indian economy		
		Chapter 5: - Rural development		
		Topic: - meaning of rural development, process of rural		
		development, rural credit, sources of rural credit, critical appraisal		
		of rural banking, agricultural market system, diversification of		
		agricultural activities, non-farm areas of employment, sustainable		
		development and organic farming, evaluation of rural development.		
		> . Macro Economics		
		Unit 5: - Balance of payment		
		Chapter 12: - Balance of payments		
		Topic: - meaning of balance of payments, meaning of balance of		
Dec.	22	trade, components of balance of payments, autonomous and		
	_	accommodating items, deficit or surplus in the balance of payments.		
		> Indian economic development		
		Unit 7: Current challenges facing Indian economy		

	Chapter 6: - Employment: Growth informalisation and other issues Topic: - Basic concept of employment, participation of people in employment, meaning of employment, distribution of employment, growth and changing structure of employment, informalisation of Indian workforce, type of unemployment in India, causes of unemployment, remedial measures for unemployment, government policies and employment generation. Chapter 7: - Environment and sustainable development Topic: - meaning of environment, state of India's environment, challenges to India's environment, sustainable development. Indian economic development Unit 8: Development experience of India: a comparison with neighbors Chapter 8: - Comparative development experience of India and its neighbors. Topic: - Comparative study- India, China and Pakistan, appraisals of development strategies.
Jan. 19 Feb. 17	Revision & Annual Examination

Subject: PHYSICAL EDUCATION

.

Month	WD	Name of the Chapter	Period	Half Yearly	Annual
April	19	* Functions of Sports Events, Management (Planning, Organising, Staffing) * Various Committees & Responsibilities (Pre, During & post) * Fixtures – (Knock-Out, League and combination) * Intramural & Extramural – Meaning and its significance. * Community sports.			
		CH – 2 : Children and Women in sports.			
May	12	 * Exercise guidelines of WHO for different age groups. * Common postural deformities. * Women participation in sports. * Special consideration (menarche and menstrual dysfunction) * Female Athlete Triad 			

June	14	* Asanas as preventive Measures. Procedure, Benefits & contraindications for :- *Obesity: Tadasana, Pavanmuktasana, Matyasna etc. *Diabetes: Bhujangasana, Dhanurasana etc. * Asthma: Tadasana, Kapalbhati, Gomukhasana etc. * Hypertension: Tadasana, Ardha-Halasana etc. * Back pain: Ardh-Chakrasana, Gomukhasana etc.		
July	25	**CH – 4 : Physical Education for CWSN (Divyang) **Organizations promoting Disability (Special Olympics, Paralympics, Deflympic) **Concept of classification and Divisioning in sports. **Concept of inclulsion in sports, need and implementation **Advantage of physical activities for CWSN. **Strategies to make Physical Activities assessable for children with special needs. **CH – 5 : Sports and Nutrition* **Concept of balanced diet and nutrition. **Macro and Micro Nutrient. **Nutritive and Non-nutritive component of diet. **Eating for weight control (Dieting, food intolerance, food myths). **Importance of diet in sports (pre, during and post req)		
August	20	* Fitness Test – SAI Khelo India Age 5-8 yrs: BMI, Flamingo Balance Test, Plate Tapping Test Age 9-8 yrs 50 mt speed test 600 mt Run/Walk etc. * Measurement of cardio – vascular Fitness – Harvard step test * Computing BMR * Rikli and Jones – Senior citizen Fitness Test. * Johnson – Methney Test of Motor Educability. * CH – 7: Physiology and Tnjuries in sports * Physiological factors determining component of physical fitness. * Effect of exercise of Muscular and Cardio – Respiratory system. * Physiological change due to aging. * Sport Injuries classification soft tissue, Bone and joint, dislocation, fractures.		
Sept.	09	* Newton's Law of motion & its application in sports. * Types of levers and their application in sports. * Equilibrium – Dynamic & Static centre of Gravity and its application in sports. * Friction in sports. * Projectile in sports.		

		CH – 9 : Psychology and Sports		
Oct.	16	* Personality and its types (Jung's classification & Big 5 theory) * Motivation, its type and technique * Exercise Adherence : Reasons, Benefits & strategies for enhancing its. * Meaning, Concept & Types of Aggressions in sports. * Psychological Attributes in sports – Self Esteem, Mental imagery, Self Talk, Goal setting.		
		CH – 10 : Training in Sports		
Nov.	19	* Concept of Talent Identification and Talent Development in Sports * Introduction to Sports Training Cycle- Micro, Macro, Meso. * Types & Method to Develop Strength, Endurance and Speed. * Types & Method to Develop Flexibility and Coordinative Ability * Circuit Training – Introduction and its importance.		
Dec.	22	Revision for Annual Examination	_	
Jan.	19	Revision for Annual Examination		

Subject: Computer Science

Month	W.D	Chapters/Topic to be covered	Activity/Practical
Apr	19	Revision of Python topics covered in class XI i)Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)	Program related to function, Passing string, list, dictionary to function. Program to find factorial using recursion
May	12	Patabase concepts: introduction to database concepts and its need Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) Structured Query Language (SQL): introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause	To create table with primary key constraints. SQL query using create, select, update, where, like, order by, group by commands.

Jun	14	joins: Cartesian product on two tables, equi-join and natural join	Various SQL Queries
		Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications	using two tables. Program to connect MySQL with datafile
July	25	Data File Handling: Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of datain a text file	Write a program to Create Text file, Appending a data to Text file, updating data into Text file, Accessing data from Text file
Aug	20	Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read from a csv file using csv.reader() Python libraries: creating python libraries	Write a program to Create Binary file, Appending a data to Binary file, updating data into Binary file, Accessing data from Binary file Program to Importing data from csv file
Sep	09	Idea of efficiency: number of comparisons in Best, Worst and	
Oct	16	Average case for linear search Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.	Program to perform operations on stack and queue
Nov	19	Computer Network Evolution of networking: introduction to computer networks, evolution of networking (ARPANET,NSFNET, INTERNET) Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuits witching, Packet switching) Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves) Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP, wireless/mobile communication protocol such as GSM, GPRS and WLL Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting	Project work
Dec	22	Revision & Project Work (Contd)	

SUBJECT: - HINDUSTANI MUSIC VOCAL

Month	WD	Topic	Period	Half Yearly	Annual
		निम्नलिखित की परिभाषाएँ - अलंकार, वर्ण, कण, मीड, खटका,		-	
1 : م	19	मुर्की, गमक, ग्राम, मूर्च्छना, आलाप, तान			
April	19	(क) राग – वर्गीकरण			
		(ख) रागों का समय - सिद्धांत			
		निम्नलिखित ग्रंथों का सविस्तार अध्ययन -			
May	12	(क) संगीत रत्नाकर			
		(ख) संगीत पारिजात			
		कक्षा 12 के पाठ्यक्रम में निर्धारित रागों का सविस्तार परिचय।			
June	14	विभिन्न स्वर-समूहों में से रागों को पहचानने की योग्यता			
		समझना ।			
		निम्नलिखित संगीतकारों का जीवन चरित्र -			
		(क) उस्ताद अब्दुल करीम खाँ			
July	25	(ख) उस्ताद फैय्याज खाँ			
		(ग) पं० कुष्ण राव शंकर पण्डित			
		(घ) उस्ताद बड़े गुलाम अली खाँ			
		पाठ्यक्रम की तालों को ठाह व दुगुन सहित लिपिबद्ध करना।			
Aug	20	पाठ्यक्रम के रागों की बंदिश की स्वरलिपि।			
		द्रुत ख्याल निम्नलिखित रागों में आलाप व तान सहित -			
		(क) भैरव, बागेश्री, मालकौस और शुद्र सारंग			
Sept	09	(ख) एक विलम्बित ख्याल आलाप व तान सहित			
1		(ग) एक स्वरमालिका और एक लक्षणगीत			
		Revision for half yearly examination			
	1.0	(क) एक तराना और एक घमार			
Oct	16	(ख) सादरा या दादरा गायन शैली			
		निम्नलिखित तालों का ठाह दुगुन, तिगुन व चौगुन सहित हाथ			
Nov	19	पर ताली द्वारा अभ्यास - एकताल, झपताल, रूपक ताल,			
		तिलवाड़ा ताल, धमार ताल।			
ъ	22	(क) परीक्षक द्वारा गाए गए स्वर - समूह से राग पहचान।			
Dec	22	(ख) तानपुरा का चित्र एवं उसे मिलाने की विधि।			
Jan & Feb	19+17	Revision for Annual Examination			

Principal Sign.

Incharge Sign. C. Teacher Sign.

Director Sign.

RAINBOW PUBLIC SCHOOL

AFFILIATED TO C.B.S.E (+2)

Month-Wise Syllabus for <u>Std:-'XII'</u> (Science) (Session: 2025-26)

Subject: ENGLISH

Month	WD	Chapters to be covered	Period	Half Yearly	Annual
Apr	19	Flamingo – The Last Lesson, Poetry - My Mother at Sixty six Writing – Notice, Article Reading – Factual Passage			
May	12	Vistas – The Tiger King			
Jun	14	Flamingo – Lost Spring Poetry- Keeping Quiet Vistas – Journey to the End of the Earth Writing – Invitations & Replies			
July	25	Flamingo – Deep water Poetry- A Thing of Beauty Vistas – The Enemy Writing – Official Letter, Letter to the Editor, Job Application			
Aug	20	Flamingo – Indigo Poetry - A Roadside stand Vistas – On the face of it. Writing – Business Letter, Report Reading –Case Based Passage			
Sep	09	Flamingo – Poets & Pancakes Revision for Half Yearly Examination			
Oct	16	Flamingo – The Interview & Going Places Writing – Revision Reading – Revision			
Nov	19	Poetry – Aunt Jennifer's Tigers Vistas – Memories of Childhood Writing – Revision Reading – Revision			
Dec	22				
Jan	19	Revision for Annual Examination			
Feb.	17				

Subject: Mathematics

Months/ W.D.	Topic to be taught	Period	Half Yearly	Annual
April (19)	 Unit II: Algebra 1. Matrices Concept, notation, order, equality, types of matrices, zero and identity matrix, transpose of a matrix, symmetric and skew symmetric matrices. Operation on matrices: Addition and multiplication with a scalar. Simple properties of addition, multiplication and scalar multiplication. Non commutativity of multiplication of matrices and existence of nonzero matrices whose product is the zero matrix (restrict to square matrices of order 2). Invertible matrices and proof of the uniqueness of inverse, if it exists. (Here all matrices will have real entries). 2. Determinants Determinant of a square matrix (up to 3 x 3 matrices), Minors, cofactors and Applications of determinants in finding the area of a triangle. Adjoint and inverse of a square matrix. Consistency and inconsistency and number of solution of system of linear equations by examples. Solving system of linear equations in two or three variables (having unique solution) using inverse of a matrix. 			
	Unit I: Relation and function: 1. Relations and Functions Types of relations: reflexive, symmetric, transitive and equivalence relations. One to one and onto functions.			
MAY (12)	Unit I: Relation and function: 2. Inverse Trigonometric Functions Definition, range, domain, principal value branch, Graph of inverse trigonometric function. Unit III: Calculus 1. Continuity and Differentiability Continuity and differentiability, Chain rule, derivatives of inverse trigonometric functions, derivative of implicit functions. Concept of			
JUNE (14)	Unit III: Calculus 1. Continuity and Differentiability Derivatives of logarithmic and exponential functions. Logarithmic differentiation, derivative of functions expressed in parametric forms. Second order derivatives. 2. Applications of Derivatives: Rate of change of bodies, increasing/decreasing functions, maxima and minima (first derivative test motivated geometrically and second derivative test given as a provable tool). Simple problems (that			

	illustrate basic principles and understanding of the subject as well as real life situations		
	The above topic is half yearly portion		
JULY	3. Integrals Integration as inverse process of differentiation. Integration of a variety of functions by substitution, by partial fractions and by parts, Evaluation of simple integrals of the following types and problems based on them. (i) $\int \frac{dx}{x^2 \pm a^2}$ (ii) $\int \frac{dx}{\sqrt{x^2 \pm a^2}}$ (iii) $\int \frac{dx}{\sqrt{a^2 - x^2}}$ (iv) $\int \frac{dx}{ax^2 + bx + c}$		
(25)	(v) $\int \frac{dx}{\sqrt{ax^2+bx+c}}$ (vi) $\int \frac{px+q}{ax^2+bx+c} dx$ (vii) $\int \frac{(px+q)}{\sqrt{ax^2+bx+c}} dx$ (viii) $\int \sqrt{a^2 \pm x^2} dx$		
	(ix) $\int \sqrt{x^2 - a^2} dx$ (x) $\int \sqrt{ax^2 + bx + c} dx$		
	Fundamental theorem of calculus (without proof). Basic properties of definite integrals and evaluation of definite integrals. 4. Applications of the Integrals Applications in finding the area under simple curves, especially lines, circles/ parabolas /ellipses (in standard form only).		
AUGUST (20)	5. Differential Equations Definition, order and degree, general and particular solutions of a differential equation. Solution of differential equations by method of separation of variables solutions of homogeneous differential equations of first order and first degree. Solutions of linear differential equation of the type: $\frac{dy}{dx} + py = q$; where p and q are functions of x or constants. $\frac{dx}{dy} + px = q$; where p and q are functions of y or constants.		
SEP (09)	Revision for Half Yearly Examination.		
OCT (16)	Unit IV: Vectors and 3-D Geometry 1. Vectors: Vectors and scalars, magnitude and direction of a vector. Direction cosines and direction ratios of a vector. Types of vectors (equal, unit, zero, parallel and collinear vectors) Position vector of a point, negative of a vector, components of a vector, addition of vectors, multiplication of a vector by a scalar, position vector of a point dividing a line segment in a given ratio. Definition, Geometrical Interpretation, properties and application of scalar (dot) product of vectors, vector (cross) product of vectors.		

	2. 3-D Geometry Direction cosines and direction ratios of a line joining two points. Cartesian equation and vector equation of a line, skew lines, shortest distance between two lines. Angle between two lines.		
NOV (19)	Unit V: Linear Programming Introduction, related terminology such as constraints, objective function, optimization, graphical method of solution for problems in two variables, feasible and infeasible regions (bounded and unbounded), feasible and infeasible solutions, optimal feasible solutions (up to three non-trivial constraints). Unit VI: Probability Conditional probability, multiplication theorem on probability, independent events, total probability, Baye's theorem, Random variable and its probability distribution, mean of random variable.		
DEC (22), JAN (19) & FEB (17)	Revision for Annual Examination		

Subject : Biology

Months/ W.D.	Chapter	Topics	Period	Half Yearly	Annual
April (19)	Sexual Reproduction in Flowering plant.	Structure of a typical flower (i) Pre fertilization events * Gametogenesis * Dev. Of male & female gametophyte * Pollination (ii) Fertilization (iii) Post Fertilization * Embryogeny * Seed			
May (12)	Human Reproduction	 (i) Male Reproductive system, Spermatogenesis, Str. of sperm (ii) Female Reproductive system * Oogenesis * Follicnlogenesis * Mammary Gland * Menstrual cycle * Implantation * Parturition 			
	Reproductive Health	(i) Need for Reproductive Health* STDs* Birth Control Methods* Natural Contraception			

		* Physical Contraception * Chemical Contraception * IUCDs Medical Termination of pregnancy assisted reproductive technology IVF, GIFT, ZIFT, ICSI.		
June (14)	Principle of Inheritance & Variation Molecular basis of Inheritance	* Mentation Inheritance * Monohybrid & * Dihybrid cross * Incomplete dominance * Co-Dominance * Pleiotropy & Polygenic Inheritance * Sex determination invarious organisms * Mendelian disorders * Chromosomal Disorders Search for genetic materials Str. of DNA & RNA * DNA Packaging		
		* Replication * Transcription * Translation * Lac operon * DNA Fingerprinting * Human Genome project		
July (25)	Revision for Evolution	* Origin of Life * Biological evidences * Molecular evidences * Divergent & Convergent evolution * Natural Selection * Types of natural Selection * Human Evolution		
	Human Health & Diseases	* Bacterial Diseases * Protozoan Diseases * Viral Diseases * Worm Diseases * Active & Passive immunity * Auto immune Disorders * AIDS, Cancer * Drugs & Alcohol Abuse.		
August (20)	Microbes in Human Welfare	Use of Microbes in Household processing Industrial production sewage treatment Biocontrol agents, Biofertilizers, Antibiotics		
	Principle of Biotechnology	* Genetic Tools of engineering * Vectors (Plasmid) * Polymerase chain reaction * Competent Hosts		

Sept. (09)		* Recombinant DNA Technology * Down streaming processes Pavision for half woorly examination		
Oct. (16)	Application of Biotechnology Organism & Population	* Application in agriculture * Genetically modified crops * Bt – Cotton * Pest Resistant plants * Application in Medicines * Insulin * Gene Therapy * ELISA, PCR * Transgenic Animals and their uses * Environment * Habital, Niche * Population Internations		
		* Population Interactions * Adaptive features * Population Attributes		
	Ecosystem	Ecosystem patterns * Components * Productivity * Energy flow * Pyramid of number and biomass * Nutrient cycles * Ecological succession		
Nov. (19)	Biodiversity and its Conservation	* Biodiversity concept * Importance * Biodiversity conservation * Hotspots * Endangered sps * Red Data Book * Biosphere Reserves * National parks * Sancturies etc.		
Dec. (22) Jan.		Revision For Annual Examina	tion	
(19) & Feb. (17)				

Subject : Physics

Months & W.D.	Unit No.	Chapter No. & Name	Chapter Details	Period	Half Yearly	Annual
April (19)	1	1 Electric charges and fields	Electric Charges; Conservation of charge, Coulomb's law-force between two point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field. Electric flux, statement of Gauss's law and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside).			
May (12)	1	2 Electrostatic Potential and Capacitance	Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two point charges and of electric dipole in an electrostatic field.			
June	1	2 Electrostatic Potential and Capacitance	Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, Capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).			
(14)	2	3 Current Electricity	Electric current, flow of electric charges in a metallic conductor, drift velocity, mobility and their relation with electric current; Ohm's law, V-I characteristics (linear and nonlinear), electrical energy and power, electrical resistivity and conductivity, temperature dependence of resistance, internal resistance of a cell, potential difference and emf of a cell, combination of cells in series and in parallel, Kirchhoff's rules, Wheatstone bridge.			
July (25)	Uni t 3	4 Moving charges and magnetism	Concept of magnetic field, Oersted's experiment. Biot - Savart law and its application to current carrying circular loop. Ampere's law and its applications to infinitely long straight wire. Straight solenoids (only qualitative treatment), force on a moving charge in a uniform magnetic and electric fields.			

1	ı				
		Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter.			
	5 Magnetism and Matter	Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), Torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines. Magnetic properties of materials — Para-, dia-, and ferro- magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.			
Unit 4	6 Electromagnetic Induction	Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.			
Unit 4	7 Alternating Current	Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance; power in AC circuits, power factor, wattless current. AC generator and transformer.			
Unit 5	8 Electromagnetic Waves	Basic idea of displacement current, Electromagnetic waves, their characteristics, their Transverse nature (qualitative ideas only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses. Revision for Half Yearly Examination			
Unit 6	9 Ray optics and Optical instruments	Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction and dispersion of light through a prism. Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers			
	Unit 4 Unit 5	Unit 4 Electromagnetic Induction Unit 4 Alternating Current Unit 5 Electromagnetic Naves Page 19 Pa	uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter. Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), Torque on a magnetic dipole (bar magnet) in a uniform magnetic field lines. Magnetiz properties of materials – Para-, dia-, and ferro- magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties. Unit 4 Electromagnetic Induction: Alternating Current Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction. Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance; power in AC circuits, power factor, wattless current. AC generator and transformer. Basic idea of displacement current, Electromagnetic waves, their characteristics, their Transverse nature (qualitative ideas only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses. Revision for Half Yearly Examination Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction and dispersion of light through a prism. Optical instruments: Microscopes and	uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter. Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only). Torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic free dipole (bar magnet) in a uniform magnetic field lines. Magnetic properties of materials – Para-, dia-, and ferro- magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties. Linit 4 Unit 4 Linit 4 Linit 5 Belectromagnetic field intensity due to a magnetic field lines. Magnetization of materials, effect of temperature on magnetic properties. Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction. Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance; power in AC circuits, power factor, wattless current. AC generator and transformer. Basic idea of displacement current, Electromagnetic waves, their characteristics, their Transverse nature (qualitative ideas only). Electromagnetic spectrum (radio waves, microwaves, infrared, visible, ultraviolet, X-rays, gamma rays) including elementary facts about their uses. Revision for Half Yearly Examination Reflection of light, spherical mirrors, mirror formula, refraction and optical fibres, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction and dispersion of light through a prism. Optical instruments: Microscopes and astronom	uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer-its current sensitivity and conversion to ammeter and voltmeter. Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (magnet) along its axis and perpendicular to its axis (qualitative treatment only). Torque on a magnetic field (qualitative treatment only). Torque on a magnetic field (qualitative treatment only). Torque on a magnetic field ines. Magnetic properties of materials – Para-, dia-, and ferro- magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties. Unit 4 10

	Unit 6	10 Wave optics	Wave front and Huygens's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygens's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maximum (qualitative treatment only).		
	Unit 7	11 Dual Nature of Radiation and matter	Dual nature of radiation, Photoelectric effect, Hertz and Lenard's observations; Einstein's photoelectric equation-particle nature of light. Experimental study of photoelectric effect. Matter waves-wave nature of particles, de- Broglie relation.		
Nov. (19)	Unit 8	12 Atoms	Alpha-particle scattering experiment; Rutherford's model of atom; Bohr model of hydrogen atom, Expression for radius of nth possible orbit, Velocity and energy of electron in nth orbit, Hydrogen line spectra (qualitative treatment only). energy levels, hydrogen spectrum.		
	Unit 8	13 Nuclei	Composition and size of nucleus, nuclear force. Mass-energy relation, mass defect; binding energy per nucleon and its variation with mass number; nuclear fission, nuclear fusion.		
Dec. (22)	Unit 9	Semiconductor Electronics: Materials, Devices and Simple circuits	Energy bands in conductors, semiconductors and insulators (qualitative ideas only) Intrinsic and extrinsic Semiconductors p and n type, p-n junction, semiconductor diode - I-V characteristics in forward and reverse bias, application of junction diode- diode as a rectifier.		
Jan. (19) & Feb. (17)			Revision for Annual Examination		

Subject : Chemistry

Months	WD	Chapters	Contents in detail	Period	Half Yearly	Annual
April	19	Coordination Compounds	Introduction, ligands, coordination number, colour, magnetic properties and shapes, IUPAC nomenclature of mononuclear coordination compounds. Bonding, Werner's theory, VBT, and CFT; structure and stereoisomerism, the			

			importance of coordination compounds (in qualitative analysis, extraction of metals and biological system).		
May	12	d and f Block Elements	General introduction, electronic configuration, occurrence and characteristics of transition metals, general trends in properties of the first-row transition metals – metallic character, ionization enthalpy, oxidation states, ionic radii, colour, catalytic property, magnetic properties, interstitial compounds, alloy formation, preparation and properties of $K_2Cr_2O_7$ and $KMnO_4$.		
			Lanthanoids – Electronic configuration, oxidation states, chemical reactivity and lanthanoid contraction and its consequences. Actinoids - Electronic configuration, oxidation states and comparison with lanthanoids.		
June	14	Solutions	Types of solutions, expression of concentration of solutions of solids in liquids, solubility of gases in liquids, solid solutions, Raoult's law, colligative properties - relative lowering of vapour pressure, elevation of boiling point, depression of freezing point, osmotic pressure, determination of molecular masses using colligative properties, abnormal molecular mass, Van't Hoff factor.		
July	25	Electro Chemistry	Redox reactions, EMF of a cell, standard electrode potential, Nernst equation and its application to chemical cells, Relation between Gibbs energy change and EMF of a cell, conductance in electrolytic solutions, specific and molar conductivity, variations of conductivity with concentration, Kohlrausch's Law, electrolysis and law of electrolysis (elementary idea), dry cell-electrolytic cells and Galvanic cells, lead accumulator, fuel cells, corrosion.		
		Chemical Kinetics	Rate of a reaction (Average and instantaneous), factors affecting rate of reaction: concentration, temperature, catalyst; order and molecularity of a reaction, rate law and specific rate constant, integrated rate equations and half-life (only for zero and first order reactions), concept of collision theory (elementary idea, no mathematical treatment), activation energy, Arrhenius equation.		

Aug.	20	Halogens Derivatives	Haloalkanes: Nomenclature, nature of C–X bond, physical and chemical properties, optical rotation mechanism of substitution reactions. Haloarenes: Nature of C–X bond, substitution reactions (Directive influence of halogen in monosubstituted compounds only). Uses and environmental effects of - dichloromethane, trichloromethane, tetrachloromethane, iodoform, freons, DDT.				
Sept.	09	Alcohols, Phenols and Ethers	Alcohols: Nomenclature, methods of preparation, physical and chemical properties (of primary alcohols only), Identification of 1°, 2° and 3° alcohols, mechanism of dehydration, uses with special reference to methanol and ethanol. Phenols: Nomenclature, methods of preparation, physical and chemical properties, acidic nature of phenol, electrophilic substitution reactions, uses of phenols. Ethers: Nomenclature, methods of preparation, physical and chemical properties, uses. Revision for Half Yearly Examination				
Oct.	16	Aldehyde Ketones and Carboxylic Acids	Aldehydes and Ketones: Nomenclature, nature of carbonyl group, methods of preparation, physical and chemical properties, mechanism of nucleophilic addition, reactivity of alpha hydrogen in aldehydes, uses. Carboxylic Acids: Nomenclature, acidic nature, methods of preparation, physical and chemical properties; uses.				
				Amines	Amines: Nomenclature, classification, structure, methods of preparation, physical and chemical properties, uses, identification of 1 ⁰ , 2 ⁰ and 3 ⁰ amines. Diazonium salts: Preparation, chemical reactions and importance in synthetic organicchemistry.		
Nov.	19	Biomolecules	Carbohydrates - Carbohydrates (aldoses and ketoses), monosaccharides (glucose and fructose), D-L configuration oligosaccharides (sucrose, lactose, maltose), polysaccharides (starch, cellulose, glycogen); Importance of carbohydrates.				
				Proteins - Elementary idea of - amino acids, peptide bond, polypeptides, proteins, structure of proteins - primary, secondary, tertiary structure			

		and quaternary structures (qualitative idea only), denaturation of proteins; enzymes. Hormones - Elementary idea excluding structure. Vitamins - Classification and functions. Nucleic Acids: DNA and RNA.
Dec, Jan. & Feb.	22 + 19 + 17	Revision for Annual Examination

Subject: PHYSICAL EDUCATION

Month	WD	Name of the Chapter	Period	Half Yearly	Annual
April	19	CH – 1: Planning in sports * Functions of Sports Events, Management (Planning, Organising, Staffing) * Various Committees & Responsibilities (Pre, During & post) * Fixtures – (Knock-Out, League and combination) * Intramural & Extramural – Meaning and its significance. * Community sports.			
May	12	* Exercise guidelines of WHO for different age groups. * Common postural deformities. * Women participation in sports. * Special consideration (menarche and menstrual dysfunction) * Female Athlete Triad			
June	14	* Asanas as preventive Measures. Procedure, Benefits & contraindications for :- *Obesity: Tadasana, Pavanmuktasana, Matyasna etc. *Diabetes: Bhujangasana, Dhanurasana etc. * Asthma : Tadasana, Kapalbhati, Gomukhasana etc. * Hypertension : Tadasana, Ardha-Halasana etc. * Back pain : Ardh-Chakrasana, Gomukhasana etc.			
July	25	* Organizations promoting Disability (Special Olympics, Paralympics, Deflympic) * Concept of classification and Divisioning in sports. * Concept of inclulsion in sports, need and implementation * Advantage of physical activities for CWSN. * Strategies to make Physical Activities assessable for children with special needs.			

		CH – 5: Sports and Nutrition * Concept of balanced diet and nutrition. * Macro and Micro Nutrient. * Nutritive and Non-nutritive component of diet. * Eating for weight control (Dieting, food intolerance, food myths). * Importance of diet in sports (pre, during and post req)		
August	20	* Fitness Test – SAI Khelo India Age 5-8 yrs: BMI, Flamingo Balance Test, Plate Tapping Test Age 9-8 yrs 50 mt speed test 600 mt Run/Walk etc. * Measurement of cardio – vascular Fitness – Harvard step test * Computing BMR * Rikli and Jones – Senior citizen Fitness Test. * Johnson – Methney Test of Motor Educability. CH – 7: Physiology and Tnjuries in sports		
		* Physiological factors determining component of physical fitness. * Effect of exercise of Muscular and Cardio – Respiratory system. * Physiological change due to aging. * Sport Injuries classification soft tissue, Bone and joint, dislocation, fractures.		
Sept.	09	* Newton's Law of motion & its application in sports. * Types of levers and their application in sports. * Equilibrium – Dynamic & Static centre of Gravity and its application in sports. * Friction in sports. * Projectile in sports.		
Oct.	16	* Personality and its types (Jung's classification & Big 5 theory) * Motivation, its type and technique * Exercise Adherence : Reasons, Benefits & strategies for enhancing its. * Meaning, Concept & Types of Aggressions in sports. * Psychological Attributes in sports – Self Esteem, Mental imagery, Self Talk, Goal setting.		
		CH – 10 : Training in Sports		
Nov.	19	* Concept of Talent Identification and Talent Development in Sports * Introduction to Sports Training Cycle- Micro, Macro, Meso. * Types & Method to Develop Strength, Endurance and Speed. * Types & Method to Develop Flexibility and Coordinative Ability * Circuit Training – Introduction and its importance.		

Dec.	22	Revision for Annual Examination		
Jan.	19			

Subject: Computer Science

Month	W.D	Chapters/Topic to be covered	Activity/Practical
Apr	19	Revision of Python topics covered in class XI i)Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)	Program related to function, Passing string, list, dictionary to function. Program to find factorial using recursion
May	12	Relational data model: relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key) Structured Query Language (SQL): introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause	To create table with primary key constraints. SQL query using create, select, update, where, like, order by, group by commands.
Jun	14	joins: Cartesian product on two tables, equi-join and natural join	Various SQL Queries using two tables.
July	25	Interface of python with an SQL database: connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications Data File Handling: Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of datain a text file	Program to connect MySQL with datafile Write a program to Create Text file, Appending a data to Text file, updating data into Text file, Accessing data from Text file
Aug	20	Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file CSV file: import csv module, open / close csv file, write into a	Write a program to Create Binary file, Appending a data to Binary file, updating data into Binary file, Accessing data from Binary file

		csv file using csv.writerow() and read from a csv file using csv.reader() Python libraries: creating python libraries	Program to Importing data from csv file
Sep	09	Idea of efficiency: number of comparisons in Best, Worst and Average case for linear search	
Oct	16	Data Structure: Stack, operations on stack (push & pop), implementation of stack using list.	Program to perform operations on stack and queue
Nov	19	Computer Network Evolution of networking: introduction to computer networks, evolution of networking (ARPANET,NSFNET, INTERNET) Data communication terminologies: concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuits witching, Packet switching) Transmission media: Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves) Network devices (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card) Network topologies and Network types: types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree) Network protocol: HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP, wireless/mobile communication protocol such as GSM, GPRS and WLL Introduction to web services: WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting	Project work
Dec	22	Revision & Project Work (Contd)	

SUBJECT: - HINDUSTANI MUSIC VOCAL

Month	WD	Торіс	Period	Half Yearly	Annual
	19	निम्नलिखित की परिभाषाएँ - अलंकार, वर्ण, कण, मीड,			
		खटका, मुर्की, गमक, ग्राम, मूर्च्छना, आलाप, तान			
April		(क) राग – वर्गीकरण			
		(ख) रागों का समय - सिद्धांत			
May	12	निम्नलिखित ग्रंथों का सविस्तार अध्ययन -			
		(क) संगीत रत्नाकर			
		(ख) संगीत पारिजात			
	14	कक्षा 12 के पाठ्यक्रम में निर्धारित रागों का सविस्तार			
June		परिचय ।			
		विभिन्न स्वर-समूहों में से रागों को पहचानने की योग्यता			
		समझना।			

		निम्नलिखित संगीतकारों का जीवन चरित्र -		
July	25	(क) उस्ताद अब्दुल करीम खाँ		
		(ख) उस्ताद फैय्याज खाँ		
		(ग) पं० कुष्ण राव शंकर पण्डित		
	20	(घ) उस्ताद बड़े गुलाम अली खाँ		
		पाठ्यक्रम की तालों को ठाह व दुगुन सहित लिपिबद्ध		
Aug		करना।		
	09	पाट्यक्रम के रागों की बंदिश की स्वरलिपि।		
		द्रुत ख्याल निम्नलिखित रागों में आलाप व तान सहित -		
		(क) भैरव, बागेश्री, मालकौस और शुद्र सारंग		
Sept		(ख) एक विलम्बित ख्याल आलाप व तान सहित		
1		(ग) एक स्वरमालिका और एक लक्षणगीत		
		Revision for half yearly examination		
	16	(क) एक तराना और एक घमार		
Oct		(ख) सादरा या दादरा गायन शैली		
	19	निम्नलिखित तालों का ठाह दुगुन, तिगुन व चौगुन सहित		
Nov		हाथ पर ताली द्वारा अभ्यास - एकताल, झपताल, रूपक		
		ताल, तिलवाड़ा ताल, धमार ताल।		
-	22	(क) परीक्षक द्वारा गाए गए स्वर - समूह से राग पहचान।		
Dec		(ख) तानपुरा का चित्र एवं उसे मिलाने की विधि।		
Jan & Feb	19 + 17	Revision for Annual Examination		

Principal Sign.

Incharge Sign. C. Teacher Sign.

Director Sign.