



RUKMANI BIRLA MODERN HIGH SCHOOL
ANNUAL SYLLABUS FOR CLASS XII
SESSION: 2024-25

SUBJECT-ENGLISH (301)
BOOKS- FLAMINGO, VISTAS

Book Name/ Topic	Chapter Number, Chapter Name	Month
Flamingo Vistas Writing Skills	Chapter-1 The Last Lesson Poem- My Mother at Sixty- Six Chapter-2 The Tiger King Notice, Formal Letter -Job Application	April
Flamingo Writing Skills	Chapter-2 Lost Spring Poem- A Roadside Stand Report Writing	May
Flamingo Vistas Writing Skills	Chapter-4 The Rattrap Poem-Keeping Quiet Poem -A Thing of Beauty Chapter-6 On The Face of It Invitation & Replies (Formal & Informal)	July
Flamingo Vistas Writing Skills	Chapter -5 Indigo Chapter -3 Journey to the End of the Earth Chapter -4 The Enemy Article Writing Letter to the Editor	August
	Assessment of Listening and Speaking skills, Project	September
Flamingo Vistas	Chapter-6 Poets and Pancakes Chapter-7 The Interview Chapter-8 Going Places Chapter-1 The Third Level	October
Flamingo Vistas	Chapter 3 Deep Water Poem- Aunt Jennifer's Tigers Chapter-8- Memories of Childhood	November
	Assessment of Listening and Speaking skills, Project	December

SUBJECT-PHYSICS (042)
BOOK NAME- NCERT VOL. I & VOL.2

Chapter No.	Chapter Name	Month
Chapter-1	Electric Charges and Fields	April
Chapter-2	Electrostatic Potential and Capacitance	April
Chapter-3	Current Electricity	May
Chapter-4	Moving Charges and Magnetism.	June & July
Chapter-5	Magnetism and Matter	July
Chapter-6	Electromagnetic Induction	July
Chapter-7	Alternating Current	August
Chapter-8	Electromagnetic Waves	August
Chapter-9	Ray Optics and Optical Instruments.	September
Chapter-10	Wave Optics	October
Chapter-11	Dual Nature of Radiation and Matter.	November
Chapter-12	Atoms	November
Chapter-13	Nuclei	November
Chapter-14	Semiconductor Electronics Materials Devices and Simple Circuit	November

PHYSICS PRACTICAL (042)

Sr. No.	Name of the Experiment	Month
1	To find resistance of a given wire/standard resistor by using metre bridge.	April
2	To verify the laws of combination of resistances in series using a metre bridge (slide wire bridge) OR To verify the laws of combination of resistances in parallel using a metre bridge (slide wire bridge).	April
3	To determine resistance of a galvanometer by half deflection method and to find its figure of merit.	July
4	To convert the given galvanometer of known resistance and figure of merit into a voltmeter of desired range and verify the same.	July
5	To find the value of v for different values of u in case of a concave mirror and to find the focal length.	August
6	To find the focal length of a convex lens by plotting graphs between u and v or between $1/u$ and $1/v$.	October

7	To determine angle of minimum deviation for a given prism by plotting a graph between angle of incidence and the angle of deviation.	November
8	To draw the I-V characteristic curve of a p-n junction in forward-bias and reverse-bias.	November

SUBJECT-CHEMISTRY (043)
BOOK NAME – NCERT COURSE BOOK

Chapter No.	Chapter Name	Month
Chapter-1	Solution	April
Chapter-6	Haloalkane and Haloarenes	April/ May
Chapter-7	Alcohol, Phenol and Ether	June/July
Chapter-2	Electrochemistry	July
Chapter-3	Chemical Kinetics	August
Chapter-4	d and f block	August/ September
Chapter-8	Aldehyde, Ketones and Acids	October
Chapter-9	Nitrogen containing compounds	November
Chapter-5	Coordination Compounds	November
Chapter-10	Biomolecules	

SUBJECT -CHEMISTRY PRACTICAL(043)

Sr. No.	Practical	Month
1	To prepare Mohr salt of given strength and find out Molarity and Strength of given KMnO_4 solution. To prepare Oxalic acid of given strength and find out Molarity and Strength of given KMnO_4 solution.	April
2	Salt Analysis Cation (zero, first group) Anion-Carbonate, Sulphite, Chloride, Nitrate, Acetate, Sulphate, Phosphate, oxalate)	May
3	Chromatography	July
4	Salt Analysis Cation-2 and 3group Anion-Carbonate, Sulphite, Chloride, Nitrate, Acetate, Sulphate, Phosphate, oxalate	July

5	Salt Analysis Cation-4 and 5 group Anion-Carbonate,Sulphite, Chloride,Nitrate, Acetate, Sulphate, Phosphate, oxalate	August
6	Salt Analysis Cation-6th group Sulphate Functional group- Alcohol,Phenol	September
7	Functional group- Carboxylic acid,Amines, Aldehyde, Ketones	October

SUBJECT-BIOLOGY (044)
BOOK NAME- NCERT COURSE BOOK

Chapter No.	Chapter Name	Month
Chapter-1	Sexual Reproduction in Flowering Plants	April
Chapter-2	Human Reproduction	
Chapter-3	Reproductive Health	May
Chapter-4	Principles of Inheritance and Variation	
Chapter-5	Molecular Basis of Inheritance	June-July
Chapter-6	Evolution	July -August
Chapter-7	Human Health and Diseases	August
Chapter-8	Microbes in Human Welfare	Aug-Sep
Chapter-9	Biotechnology Principles and Processes	October
Chapter-10	Biotechnology and its Application	
Chapter-11	Organisms and Populations	November
Chapter-12	Ecosystem	
Chapter-13	Biodiversity and Conservation	

SUBJECT-BIOLOGY PRACTICAL

Sr. No.	Practical	Month
1	Prepare a temporary mount of onion root tip to study mitosis. Study pollen germination on a slide. Flowers adapted to pollination by different agencies (wind, insects, birds). Pollen germination on stigma through a permanent slide or scanning electron microscope. Controlled pollination - emasculation, tagging and bagging.	April
2	Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice). Meiosis in onion bud cell or grasshopper testis through permanent slides. T.S. of blastula through permanent slides (Mammalian).	May
3	Mendelian inheritance using seeds of different colour/sizes of any plant.	July

	Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.	
4	Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides or specimens. Comment on symptoms of diseases that they cause. Study of homologous and analogous organs.	August
5	Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.	October
6	Study the plant population density by quadrat method. Study the plant population frequency by quadrant method. Study of symbiotic association in root nodules of leguminous plants, Cuscuta on host, lichens.	November

**SUBJECT-MATHEMATICS (041)
BOOK- NCERT**

Chapter No.	Chapter Name	Month
Chapter-3	Matrices	April/May
Chapter-4	Determinants	
Chapter-1	Relations and Functions	
Chapter-2	Inverse Trigonometric Functions	
Chapter-5	Continuity and Differentiability	July
Chapter-6	Applications of Derivatives	
Chapter-6	Applications of Derivatives continued	August
Chapter-12	Linear Programming	
Chapter-7	Integrals	September/October
Chapter-7	Integrals continued	October
Chapter-8	Applications of Integrals	
Chapter-9	Differential Equations	
Chapter-9	Differential Equations continued	November
Chapter-10	Vector Algebra	
Chapter-11	Three-Dimensional Geometry	
Chapter-13	Probability	
Chapter-13	Probability continued	December

**SUBJECT-APPLIED MATHEMATICS (241)
BOOK- M L AGGARWAL**

Unit No.	Chapter Name	Month
Unit-2	Algebra	April
Unit-1	Numbers, Quantification and Numerical Applications.	May/July
Unit-3	Calculus	July/August
Unit-8	Linear Programming	August
Unit-4	Probability Distribution	August/September
Unit-4	Probability Distribution(to be continued)	October
Unit-5	Inferential Statistics	
Unit-6	Index Numbers and Time-based data	November

Unit-7	Financial Mathematics	November/ December
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SUBJECT-ECONOMICS(030)
BOOK – T.R.JAIN &V.K.OHRI

Unit No.	Chapter Name	Month
Unit-4	Government Budget and the economy	April
Unit-5	Balance of Payments	May
Unit-2	Money and Banking	June
Unit-1	National Income and Related Aggregates	July
Unit-6	Development Experiences (1947-1990) and Economic Reforms since 1991	August
Unit-7	Current Challenges facing Indian Economy	August
	Revision	September
Unit-3	Determination of Income and Employment	October
Unit-8	Development Experience of India-A comparison with Neighbours	November

SUBJECT-ACCOUNTANCY (055)
BOOK - NCERT COURSE BOOK
T S GREWAL & D. K GOEL (REFERENCE BOOKS)

Chapter No.	Chapter Name	Month
	PART –A Accounting for Partnership Firms and Companies	
Chapter-2	Accounting for Partnership Firms – Fundamentals	April
Chapter-3	Goodwill: Nature and Valuation	May
Chapter-5	Admission of a Partner	
Chapter-4	Change in Profit –Sharing Ratio Among the Existing Partners	June / July
Chapter-6	Retirement or Death of a Partner	July
Chapter-7	Dissolution Of a Partnership Firm	
Chapter-8	Issue of Shares	August
Chapter-9	Issue of Debentures	
	Revision	September
	PART – B Financial Statement Analysis	
Chapter-1	Financial Statement of Companies	
Chapter-2	Financial Statement Analysis	October
Chapter-3	Comparative and Common Size Statements	
Chapter-4	Accounting Ratios	November
Chapter-5	Cash Flow Statement	

SUBJECT-BUSINESS STUDIES(054)
BOOK – NCERT (PART- I AND PART- II)

Chapter No.	Chapter Name	Month
Chapter-9	Financial Management	April
Chapter-10	Financial Market	May
Chapter-11	Marketing Management	May/June
Chapter-1	Nature and Significance of Management	July
Chapter-2	Principles of Management	
Chapter-3	Business Environment	
Chapter-4	Planning	
Chapter-5	Organising	August
Chapter-6	Staffing	
	Revision	
Chapter-8	Controlling	October
Chapter-7	Directing	
Chapter-12	Consumer Protection	November

SUBJECT-HISTORY(027)
BOOK –THEMES IN INDIAN HISTORY (PART-I, II AND III)

Chapter No.	Chapter Name	Month
Theme-1	Bricks, Beads and Bones The Harappa civilization	April
Theme-2	Kings, Farmers and Towns Early states and Economies(c.600BCE 600CE)	
Theme-3	Kingship, Caste and Class Early Societies (c. 600BCE 600CE)	May
Theme-4	Thinkers , Beliefs and Buildings Cultural Developments (c. 600 BCE 600 CE)	
Theme-5	Through the Eyes of the Travellers Perceptions of Society (c. 10 th to 17 th centuries)	July
Theme-6	Bhakti-Sufi Traditions Changes in Religious Beliefs and Devotional Texts (c. 8 th to 18 th Centuries)	
Theme-7	An Imperial Capital- Vijayanagar (c. 14 th to 16 th centuries)	
Theme-8	Peasants, Zamindars and the States Agrarian Society and the Mughal Empire (c. 16 th to 17 th centuries)	August
Theme-9	Colonialism and The Countryside Exploring Official Archives	
Theme-10	Rebels and Raj 1857 Revolt and its Representations	October
Theme-11	Mahatma Gandhi and the National Movement Civil Disobedience and Beyond	November
Theme-12	Framing of the Constitution The Beginning of a New Era	

SUBJECT-POLITICAL SCIENCE (028)
BOOK –I THE CONTEMPORARY WORLD POLITICS
BOOK- II POLITICS OF INDIA SINCE INDEPENDENCE

Chapter No.	Chapter Name	Month
BOOK – I Chapter – 1	The End of Bipolarity	July
Chapter – 2	Contemporary Centres of Power	
Chapter – 3	Contemporary South Asia	
Chapter – 4	International Organizations	August
Chapter – 5	Security in the Contemporary World	September
Chapter – 6	Environment and Natural Resources	October
Chapter –7	Globalisation	
BOOK- II Chapter – 1	Challenges of Nation-Building	April
Chapter – 2	Era of One-Party Dominance	April / May
Chapter – 3	Politics of Planned Development	May
Chapter – 4	India’s External Relations	August
Chapter – 5	Challenges to and Restoration of the Congress System	
Chapter – 6	The Crisis of Democratic Order	October
Chapter – 7	Regional Aspirations	November
Chapter – 8	Recent Developments in Indian Politics	

SUBJECT-PSYCHOLOGY (037)
BOOK – NCERT COURSE BOOK

Chapter No.	Chapter Name	Month
Chapter-1	Variations in Psychological Attributes	April
Chapter-2	Self and Personality	May
Chapter-3	Meeting Life Challenges, Practical 1	July
Chapter-4	Psychological Disorders Practical 2 and 3	August
Chapter-5	Therapeutic Approaches	September
Chapter-6	Attitude and Social Cognition	October
Chapter-7	Social Influence and Group Process Practical 4 and 5	November

SUBJECT-ENTREPRENEURSHIP (066)
BOOK - ENTREPRENEURSHIP XII (NCERT)

Chapter No.	Chapter Name	Month
Chapter-1	Entrepreneurial Opportunity	April
Chapter-2	Enterprise Planning	May& June
Chapter-3	Enterprise Marketing	July
Chapter-4	Enterprise Growth Strategies	August

	Revision	September
Chapter-5	Business Arithmetic	October
Chapter-6	Resource Mobilization	November

SUBJECT-GEOGRAPHY (029)

**BOOK 1- FUNDAMENTALS OF HUMAN GEOGRAPHY
BOOK 2- INDIA:PEOPLE & ECONOMY
BOOK3- PRACTICAL**

Chapter No.	Chapter Name	Month
	Book 1: Fundamentals of Human Geography	
Chapter-1	Human Geography	April
Chapter-2	The World Population (Distribution, Density & Growth)	July
Chapter-3	Human Development	
Chapter-4	Primary Activities	August
Chapter-5	Secondary Activities	
Chapter-6	Tertiary & Quaternary Activities	September
Chapter-7	Transport & Communication	May
Chapter-8	International trade	November
	Book 2: India: People & Economy	
Chapter-1	The Population: Distribution, Density, Growth & Composition	April
Chapter-2	Human Settlements	July
Chapter-3	Land Resources & Agriculture	
Chapter-4	Water Resources	August
Chapter-5	Mineral & Energy Resources	September
Chapter-6	Manufacturing Industries	October
Chapter-7	Planning & Sustainable Development in Indian Context	
Chapter-8	Transport & Communication	
Chapter-9	International Trade	November
Chapter-10	Geographical Perspective on Selected Issues & Problems	
	Book3: Practical	
Chapter-1	Data-Its Source & Composition	April
Chapter-2	Data Processing	July
Chapter-3	Graphical Representation of Data	August
Chapter-4	Spatial Information Technology	November

SUBJECT-SOCIOLOGY(039)

**BOOK –I INDIAN SOCIETY
BOOK-II CHANGE AND DEVELOPMENT IN INDIA**

Chapter No.	Chapter Name	Month
	BOOK –I Indian Society	
Chapter-2	The Demographic Structure of Indian Society	April
Chapter-3	Social Institutions Continuity and Change	May
Chapter-5	Patterns of Social Inequality and Exclusion	July
Chapter-6	Challenges of Cultural Diversity	October

	Book-II Change and Development in India	
Chapter-1	Structural Change	May
Chapter-2	Cultural Change	July
Chapter-4	Change and Development in Rural Society	August
Chapter-5	Change and Development in Industrial Society	
Chapter-8	Social Movements	November

SUBJECT-COMMERCIAL ARTS(052)
BOOK – HISTORY OF INDIAN ART
SARASWATI PUBLICATION

Chapter No.	Chapter Name	Month
Unit 1 Chapter 1 Chapter 2	The Rajasthani school of Miniature Painting The Pahari school of Miniature Painting Practical- Poster and Illustration	April
Unit 2 Chapter 3 Chapter 4	The Mughal school of Miniature Painting The Deccan school of Miniature Painting	May
Unit 3 Chapter 5	The Bengal School of Painting Practical- Poster and Illustration	July
-	Practical- Poster and Illustration	August
-	Practical- Poster and Illustration	September
Unit 3 Chapter 7 Unit 4 Chapter 8	The Indian National Flag The Modern Trends in Indian Art	October
-	Practical- Poster and Illustration	November

SUBJECT : COMPUTER SCIENCE (083)
BOOK -COMPUTER SCIENCE WITH PYTHON (SUMITA ARORA)

Chapter No.	Chapter Name	Month
Chapter-1	Python Revision Tour	April
Chapter-2	Python Revision Tour II	May-June
Chapter-3	Working with Functions	July
Chapter-4	Using Python Libraries	
Chapter-5	File Handling	August
Chapter-8	Data Structures	
Chapter-10	Communication and Network Concepts	September
Chapter-11	Relational Databases	September

Chapter-12	Simple Queries in SQL	October
Chapter-13	Table Creation and Data Manipulation Commands	November
Chapter-14	Grouping Records, Joins in SQL	
Chapter-15	Interface Python with MySQL	

SUBJECT-INFORMATICS PRACTICES (065)
BOOK -INFORMATICS PRACTICES (SUMITA ARORA)

Chapter No.	Unit Name	Month
Chapter-1	Data Handling using Pandas-I	April
Chapter-2	Data Handling using Pandas – II	May-June
Chapter-3 Chapter-4	Plotting with PyPlot Importing / Exporting Data between CSV files and Pandas	July
Chapter-6	MySQL Functions	August
Chapter-7	Querying using SQL & Equi-join	September
Chapter-9 Chapter-10	Introduction to Computer Networks Introduction to Internet & Web	October
Chapter-11 Chapter-12	Societal Impacts Data Protection	November

SUBJECT-PHYSICAL EDUCATION (048)
BOOK – FULL MARKS (DR. D S YADAV)

Chapter No.	Chapter Name	Month
Unit – 1	Management of Sporting Events	April
Unit – 2	Children & Women in Sports	
Unit – 3	Yoga as Preventive measure for Lifestyle Disease	May
Unit – 4	Physical Education and Sports for CWSN	July
Unit – 5	Sports and Nutrition	
Unit – 6	Test and Measurement in Sports	August
Unit – 7	Physiology and Injuries in Sports	
Unit – 8	Biomechanics and Sports	September
Unit – 9	Psychology	October
Unit – 10	Training in Sports	November