

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

#### SUBJECT - ENGLISH (301) BOOKS- HORNBILL, SNAPSHOTS

Book Name/	Chapter Number, Chapter Name	Month
Торіс		
Hornbill	Chapter-1 The Portrait of a Lady	
	Poem-A Photograph	
		April-May
Snapshots	Chapter-1 The Summer of the Beautiful White Horse	Apin-way
Grammar	Tenses	
Writing	Poster Making	
Hornbill	Chapter-2 We are not Afraid to Die	
	Poem: The Laburnum Top	
		July
Snapshots	Chapter-2 The Address	July
	Note Making	
Writing	Speech	
Hornbill	Chapter 3: Discovering Tut: The Saga Continues	
	Poem-The Voice of the Rain	
Grammar	Sentence Reordering, Clauses	August
Writing	Advertisements- Situation Vacant, Situation Wanted, For Sale,	6
	TO-LET	
Hornbill	Poem-The Childhood	
Writing	Debate	September
C C	Assessment of Listening and Speaking skills	-
Hornbill	Chapter-7: The Adventure	
Snapshots	Chapter-5: Mother's Day	
Writing	Advertisements-	October
	Educational Institutions, Matrimonial, Missing, Lost/ Found,	
	Travel & Tours,	
Hornbill	Chapter 8: Silk Road	
	Poem- Father to Son	November
Grammar	Clauses	November
Writing	Speech	
Snapshots	Chapter-7-Birth	
	Poem- The Tale of Melon City	December
Writing	Debate	

### SUBJECT-PHYSICS (042) BOOK NAME - NCERT COURSE BOOK

Chapter No.	Chapter Name	Month
Chapter-1	Units and Measurement	April
Chapter-2	Motion in a Straight Line	
Chapter-3	Motion in a Plane	May-June
Chapter-4	Laws of Motion	July
Chapter-5	Work, Energy and Power	
Chapter-6	Systems of Particles and Rotational Motion	August
Chapter-7	Gravitation	October
Chapter-8	Mechanical Properties of Solids	
Chapter-9	Mechanical Properties of Fluids	November
Chapter-10	Thermal Properties of Matter	
Chapter-11	Thermodynamics	December
Chapter-12	Kinetic Theory	Lanuary
Chapter-13	Oscillations	January
Chapter-14	Waves	

## SUBJECT-PHYSICS PRACTICAL (042)

Sr. No.	Name of the Experiment	Month
1	To measure internal diameter and depth of a given	
	beaker/calorimeter using Vernier Callipers and hence find its	April-May
	volume.	
2	To measure diameter of a given wire and thickness of given sheet	July
	using screw gauge.	July
3	To find the weight of a given body using parallelogram law of	August
	vectors.	August
4	Using a simple pendulum, Plot its L-T <sup>2</sup> graph and use it to find the	September
	effective length of second's pendulum.	September
5	To find the force constant of a helical spring by plotting a graph	November
	between load and extension.	November
6	To study the relationship between the temperature of a hot body	December
	and time by plotting a cooling curve.	Determoer
7	To study the relation between frequency and length of a given wire	
	under constant tension using sonometer.	January
8	To find the speed of sound in air at room temperature using a	
	resonance tube by two resonance positions.	

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

Unit No.	Name of Unit	Month
Unit -1	Some basic Concepts of Chemistry	April
Unit -3	Classification of elements and Periodicity in Properties	May
Unit -4	Structure of Atom	June/July
Unit -2	Chemical Bonding and Molecular Structure	August

Unit -7	Redox Reactions	September
Unit -8	Organic Chemistry- Some Basic Principles and Techniques	October
Unit -9	Hydrocarbons	November/
		December
Unit -5	Thermodynamics	December
Unit -6	Equilibrium	January

#### SUBJECT-CHEMISTRY PRACTICAL

S. No.	Practical	Month
1	Determination of melting point of an organic compound.	April
2	Salt Analysis Determination of one anion and one cation in a given	May/July
	salt	
	Cations-zero and first group	
	Anion-Carbonate, Sulphate, chloride	
3	Determination of strength of a given solution of HCl by titrating it	August
	against standard solution of Sodium Carbonate	
4	Salt Analysis Determination of one anion and one cation in a given	
	salt	October
	Cation-2 <sup>nd</sup> and 3 <sup>rd</sup> Group	
	Anion- Acetate, Nitrate, Sulphate	
5	Salt Analysis Determination of one anion and one cation in a given	November
	salt	
	Cation-4 <sup>th</sup> and 5 <sup>th</sup> Group	
	Anion-Acetate, Sulphate ,Chloride	
6	Detection of -N, S, N and S, Cl, Br, I in organic compounds	December
7	Determination of strength of NaOH by titrating it against given	January
	solution of Oxalic acid	

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

Chapter No.	Chapter Name	Month
Chapter-1	The Living World	A muil
Chapter-2	Biological Classification	April
Chapter-3	Plant Kingdom	
Chapter-4	Animal Kingdom	
Chapter-5	Morphology of Flowering Plants	May
Chapter-6	Anatomy of Flowering Plants	
Chapter-7	Structural Organisation in Animals	June-July
Chapter-8	Cell: The Unit of Life	
Chapter-9	Biomolecules	July
Chapter-10	Cell Cycle and Cell Division	
Chapter-11	Photosynthesis in Higher Plants	August
Chapter-12	Respiration in Plants	

Chapter-13	Plant Growth and Development	September
Chapter-14	Breathing and Exchange of Gases	
Chapter-15	Body Fluids and Circulation	October
Chapter-16	Excretory Products and Their Elimination	November
Chapter-17	Locomotion and Movement	Nov-Dec
Chapter-18	Neural Control and Coordination	December
Chapter-19	Chemical Coordination and Integration	January

# **SUBJECT-BIOLOGY PRACTICAL (044)**

Sr. No	PRACTICAL	Month
1	Study of the parts of a compound microscope.	April
2	Plant Kingdom Study of the specimens /slides /models and identification with reasons - Bacteria, Oscillatoria, Spirogyra, Rhizopus, mushroom, yeast, liverwort, moss, fern, pine, one monocotyledonous plant, one dicot plant and one lichen.	April
3	Study of virtual specimens/slides/models and identification with reasons - Amoeba, Hydra, liverfluke, Ascaris, leech, earthworm, prawn, silkworm, honeybee, snail, starfish, shark, rohu, frog, lizard, pigeon and rabbit.	
4	Study and description of three locally available common flowering plants, one from each of the families Solanaceae, Fabacceae and Liliaceae including dissection and display of floral whorls, anther and ovary to show number of chambers (floral formulae and floral diagrams). Types of root (Tap and adventitious); stem (herbaceous and woody); leaf (arrangement, shape, venation, simple and compound).	May
5	Study and identification of different types of inflorescence (cymose and racemose).	
6	Preparation and study of T.S. of dicot and monocot roots and stems (primary).	July
7	Test for the presence of sugar, starch, proteins and fats. Detection in suitable plant and animal materials.	
8	Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slides.	August
9	Study of osmosis by potato osmometer.	
10	Study of plasmolysis in epidermal peels (e.g. Rhoeo leaves).	September
11	Study of distribution of stomata in the upper and lower surface of leaves.	October

12	Comparative study of the rates of transpiration in the upper and lower surface of leaves.	
13	Separation of plant pigments through paper chromatography.	
14	Study of the rate of respiration in flower buds/leaf tissue and germinating seeds.	November
15	Test for presence of urea, sugar, albumin and bile salts in urine.	December
16	Study of human skeleton and different types of joints.	December

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

Chapter No.	Chapter Name	Month
Chapter-1	Sets	
Chapter-2	Relations and Functions	April/May
Chapter-4	Complex Numbers and Quadratic Equations	
Chapter-4	Complex Numbers and Quadratic Equations	
Chapter-3	Trigonometric Functions	July
Chapter-9	Straight Lines	
Chapter-12	Limits and Derivatives	August
Chapter-8	Sequence and Series	August
Chapter-5	Linear Inequalities	October
Chapter-6	Permutations and Combinations	October
Chapter-10	Conic Sections	November
Chapter-11	Introduction to Three-Dimensional Geometry	INOVEIIIDEI
Chapter-13	Statistics	
Chapter-7	Binomial Theorem	December/January
Chapter-14	Probability	
	Revision	February

## SUBJECT-APPLIED MATHEMATICS (241) BOOK- M L AGGRAWAL

Unit No.	Chapter Name	Month
Unit-2	Algebra	April/May
Unit-2	Algebra (to be continued)	July
Unit-1	Numbers, Quantification and Numerical Applications	July
Unit-3	Mathematical Reasoning	August
Unit-4	Calculus	August
Unit-4	Calculus	September
	(to be continued)	September
Unit-8	Coordinate Geometry	October
Unit-5	Probability	October
Unit-5	Probability (to be continued)	November
Unit-6	Descriptive Statistics	December
Unit-7	Financial Mathematics	January/February

## SUBJECT-ECONOMICS (030) BOOK –T.R. JAIN AND V.K. OHRI

Chapter No.	Chapter Name	Month
Unit- 4	Introduction to Microeconomics	April
Unit -5	Consumer's Equilibrium	Артт
Unit –5	Theory of Demand	May
Unit –6	Theory of Supply	May
Unit-1	Introduction to Statistics	June
Unit –2	Collection, Organization and Presentation of Data	July
Unit-2	Presentation of Data (contd)	August
Unit-3	Statistical tools and interpretation-Measures of Central Tendency	August
	Revision	September
Unit-3	Measures of Central Tendency(Contd)	October
Unit –6	Producers Behaviour	Octobel
Unit-6	Producers Behaviour(Contd)	November
Unit-3	Correlation	november
Unit-3	Index Numbers	December
Unit-7	Forms of Market	Ionuory
	Price determination under Perfect Competition	January

# SUBJECT-ACCOUNTANCY (055)

## BOOK – D.K. GOEL

Chapter No.	Chapter Name	Month
Chapter-2	Basic Accounting Terms	April
Chapter-1	Meaning and Objectives of Accounting	
Chapter-7	Double Entry System	
Chapter- 6	Accounting Equation	May
Chapter-8	Origin of Transactions: Source Documents of Accountancy	Iviay
Chapter-9	Books of Original Entry- Journal	May & June
Chapter-10	Accounting for Goods & Service Tax (GST)	
Chapter-13	Ledger	July
Chapter-14	Trial Balance And Errors	
Chapter-11	Books of Original Entry- Cash Book	August
Chapter-12	Books of Original Entry- Special Purpose Subsidiary Books	
Chapter-3	Accounting Principles	
Chapter-4	Process and Bases of Accounting	Constant on the second
Chapter-5	Accounting Standards	September
	Revision	
Chapter-15	Bank Reconciliation Statement	0.41
Chapter-17	Provisions and Reserves	– October
Chapter-16	Depreciation	October &
_		November
Chapter-19	Rectification of Errors	November
Chapter-20	Capital and Revenue	November
Chapter-21	Financial Statements- Without Adjustments	December
Chapter-22	Financial Statements- With Adjustments	December &
*		January
Chapter-23	Incomplete Records	January

#### SUBJECT-BUSINESS STUDIES (054) BOOK – BUSINESS STUDIES (NCERT)

Chapter No.	Chapter Name	Month
Chapter-1	Business, Trade and Commerce	April
Chapter-2+7	Forms of Business Organization + Formation of a company	May & June
Chapter-3	Private, Public and Global Enterprises	Inter
Chapter-4	Business Services	July
Chapter-5	Emerging Modes of Business	August
Chapter-6	Social Responsibilities of Business and Business Ethics	August
	Revision	September
Chapter-8	Sources of Business Finance	October
Chapter-9	Small Business	November
Chapter-10	Internal Trade	December
Chapter-11	International Business	January

## SUBJECT-HISTORY (027) BOOK –THEMES IN WORLD HISTORY

Chapter No.	Chapter Name	Month
	Introduction of World History	April
Theme 1	Writing and City Life	May
Theme 2	An Empire Across Three Continents	July
Theme 3	Nomadic Empires	August
Theme 4	The Three Orders	October
Theme 5	Changing Cultural Traditions	November
Theme 6	Displacing Indigenous Peoples	December
Theme 7	Paths to Modernisation	January

#### SUBJECT-POLITICAL SCIENCE (028) BOOK – I. INDIAN CONSTITUTION AT WORK BOOK – II – POLITICAL THEORY

Chapter No.	Chapter Name	Month
BOOK – I	Constitution: Why and how?	
Chapter – 1, 10	The Philosophy of the Constitution	April / May
& 9	Constitution as a Living Document	
Chapter - 2	Rights in the Indian Constitution	July
Chapter - 3	Election and Representation	July
Chapter - 4	Executive	August
Chapter - 5	Legislature	October
Chapter - 6	Judiciary	November
Chapter - 7	Federalism	December
Chapter - 8	Local Governments	January
BOOK – II	Political Theory: An Introduction	Max
Chapter - 1		May
Chapter - 2	Freedom	July
Chapter - 3	Equality	August

Chapter - 4	Social Justice	
Chapter - 5	Rights	October
Chapter - 6	Citizenship	November
Chapter - 7	Nationalism	December
Chapter - 8	Secularism	January

#### SUBJECT-PSYCHOLOGY (037) BOOK – NCERT COURSE BOOK

Chapter No.	Chapter Name	Month
Chapter-1	Introduction to Psychology	April
Chapter-2	Methods of Enquiry in Psychology	May
Chapter-4	Human Development	July
Chapter-5	Sensory, Attention and Perceptual Process	August
Chapter-6	Learning	October
Chapter-7	Human Memory	November
Chapter-8	Thinking	December
Chapter-9	Motivation and Emotion	January

### SUBJECT-PSYCHOLOGY PRACTICAL (037) BOOK - NCERT COURSE BOOK

Practical No.	Торіс	Month
Practical 1	Divided Attention	August
Practical 2	Perceptual Motor learning	December

### SUBJECT-ENTREPRENEURSHIP (066) BOOK – ENTREPRENEURSHIP XI (NCERT)

Chapter No.	Chapter Name	Month
Chapter-1	Entrepreneurship: Concept and Functions	April
Chapter-2	An Entrepreneur	May/June
Chapter-3	Entrepreneurial Journey	July
Chapter-4	Entrepreneurship as Innovation and Problem Solving	August
	Revision	September
Chapter-5	Concept of Market	October &
		November
Chapter-6	Business Finance and Arithmetic	November &
		December
Chapter-7	Resource Mobilization	January

#### SUBJECT-GEOGRAPHY (029) BOOK 1: FUNDAMENTALS OF PHYSICAL GEOGRAPHY BOOK 2: INDIA: PHYSICAL ENVIRONMENT BOOK3: PRACTICAL

Chapter No.	Chapter Name	Month
	<b>Book 1: Fundamentals of Physical Geography</b>	
Chapter-1	Geography as a discipline	April

Chapter-2	The Origin and evolution of the earth	
Chapter-3	Interior of the earth	May
Chapter-4	Distribution of oceans and continents	July
Chapter-5	Geomorphic processes	
Chapter-6	Landforms and their evaluation	August
Chapter-7	Composition and structure of the atmosphere	September
Chapter-8	Solar radiation, heat balance, and temp.	October
Chapter-9	Atmosphere circulation and weather sys.	-
Chapter-10	Water in the atmosphere	November
Chapter-11	World climate and climate change	november
Chapter-12	Water (oceans)	Describer
Chapter-13	Movements of ocean water	December
Chapter-14	Biodiversity and Conservation (for internal assessment only)	February
	Book 2: India: Physical Environment	
Chapter-1	India: Location	April
Chapter-2	Structure & Physiography	May
Chapter-3	Drainage system	July
Chapter-4	Climate	August
Chapter-5	Natural vegetation	October
Chapter-6	Natural hazards and disaster (for internal assessment only)	December
	Book3: Practical	
Chapter-1	Introduction to Maps	T1
Chapter-2	Map Scale	July
Chapter-3	Latitude, Longitude and Time.	<b>A</b>
Chapter-4	Map projections	August
Chapter-5	Topographical maps	Ţ
Chapter-6	Introduction to Remote Sensing	January

## SUBJECT-SOCIOLOGY (039) BOOK –I-INTRODUCING SOCIOLOGY BOOK-II- UNDERSTANDING SOCIETY

Chapter No.	Chapter Name	Month
	BOOK –I-Introducing Sociology	
Chapter-1	Sociology and Society	April
Chapter-2	Terms, Concept and Their Use in Sociology	May
Chapter-3	Understanding Social Institution	July
Chapter-4	Culture and Socialisation	August
	BOOK-II- Understanding Society	
Chapter-2	Social Change and Social Order in Rural and Urban Society	October/November
Chapter-4	Introducing Western Sociologists	December
Chapter-5	Indian Sociologists	January

#### SUBJECT-COMMERCIAL ARTS (052) BOOK – HISTORY OF INDIAN ART (FULL MARKS)

Chapter No.	Chapter Name	Month
Unit 1 Chapter 1(a)	Six Limbs of Indian Painting and Fundamentals of Visual Art (Elements and Principles)	
(b)	Pre- historic Rock paintings	April
(0)	Practical- Drawing from Still life	
	Practical- Drawing from Still life	May
Unit 1		
Chapter 1(a)	The Art of Indus Valley Civilization	
	Practical- Layout -Basic Design	July
	Layout- Creative Drawing	
Unit 2		
Chapter 3	Buddhist, Jain and Hindu Art-Art During Mauryan Shunga	August
	and Kushana period	August
	Practical –Roman Script	
	Practical –Folk Art	September
Unit 2		
Chapter 4	Buddhist, Jain and Hindu Art- Art of Ajanta Caves	October
	Practical -Drawing from nature	
Unit 3		
Chapter 5-7	Temple Sculptures, Bronzes and Artistic aspect of Indo –	November
	Islamic Architecture	
Unit 3		
Chapter 5-7	Temple Sculptures, Bronzes and Artistic aspect of Indo –	November
	Islamic Architecture	
	Practical –Folk Art	January

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

Chapter No.	Chapter Name	Month
Chapter-1	Computer System Overview	A mri 1
Chapter-2	Data Presentation	— April
Chapter-3	Boolean Logic	May
Chapter-4	Emerging Trends	Inder
Chapter-5	Introduction to Problem Solving	July
Chapter-6	Getting Starting with Python	July
Chapter-7	Python Fundamental	
Chapter-8	Data Handling	August
Chapter-9	Flow of Control	September
Chapter-10	String Manipulation	October
Chapter-11	List Manipulation	November
Chapter-12	Tuples	November
Chapter-13	Dictionaries	December
Chapter-15	Cyber Safety	December
Chapter-16	Online Access and Computer Security	Ionuory
Chapter-17	Society, Law and Ethics	January

## SUBJECT-INFORMATICS PRACTICES (065) BOOK NAME: INFORMATICS PRACTICES – SUMITA ARORA

Chapter No.	Chapter Name	Month
Chapter-2	Getting started with Python	April
Chapter-3	Python Fundamentals	April- May
Chapter-4	Data Handling	July
Chapter-5	Flow Control	August
Chapter-6	List Manipulation	October
Chapter-7	Dictionaries	October
Chapter-1	Computer System	November
Chapter-10	Database Concepts	November- December
Chapter-11	Structured Query Language	november- December
Chapter-12	Emerging Trends	January

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

Chapter No.	Chapter Name	Month
Unit - 1	Changing Trends & Career in Physical Education	April
Unit -2	Olympism Value Education	April
Unit -3	Physical Fitness, Wellness and Lifestyle	May
Unit -4	Physical Education and sports for CWSN	July
Unit -5	Yoga	August
Unit -6	Test, Measurement and Evaluation	September
Unit -7	Fundamentals of Anatomy, Physiology in Sports	October
Unit -8	Fundamentals of Kinesiology and Biomechanics in Sports	November
Unit -9	Psychology and Sports	December
Unit -10	Training and Doping in Sports	January