



# SARALA BIRLA PUBLIC SCHOOL



Mahilong, Ranchi-Purulia Road Highway,  
Ranchi – 835103, Jharkhand

## SYLLABUS (2019-20)

STD – XI (Science)

Name : \_\_\_\_\_

UID No. : \_\_\_\_\_

Class and Section : \_\_\_\_\_

**ENGLISH**

Prescribed Books:	1)	ENGLISH TEXT BOOK (HORNBILL)- NCERT
	2)	SNAPSHOTS (SUPPLEMENTARY READER)- NCERT
<b>Month</b>	<b>Total No. of periods</b>	<b>Lesson/Chapter</b>
May	8	
June	15	HORNBILL : The Portrait of a Lady; A Photograph (poem) SNAPSHOTS: The Summer of a Beautiful White Horse; NOTICE WRITING
July	22	HORNBILL: Discovering Tut; We are not Afraid to Die; The Laburnum Top (poem) SNAPSHOT: The Address ADVERTISEMENT; ARTICLE; OFFICIAL LETTERS; DETERMINERS
August	20	HORNBILL: Childhood (poem), Landscape of the Soul, The Adventure SNAPSHOTS: Ranga’s Marriage. MODALS; REPORT WRITING; NOTE MAKING & SUMMARY WRITING.
September	19	<b>REVISION</b> HALF YEARLY EXAMS; PORTION TAUGHT FROM JUNE TO AUGUST
October	12	HORNBILL: Voice of the Rain(poem); The Ailing Planet TENSES
November	18	HORNBILL: Father to Son (poem); SNAPSHOTS: Mother’s Day; Albert Einstein at School POSTER;
December	19	HORNBILL: The Browning Version; Silk Road SNAPSHOTS: The Ghat of the Only World SPEECH; DEBATE
January	18	SNAPSHOTS: Birth; The Tale of Melon City(poem)
February	19	<b>REVISION</b> HALF YEARLY EXAMS; PORTION TAUGHT FROM JUNE TO JANUARY

**Syllabus for Term Exams and Periodic Test****TERM-1**

PeriodicTest	PT 1 - Unseen Passage; Notice; The Portrait of a Lady; The Photograph, editing/omission
	PT-2 Unseen Passage; Modals; Determiners; Ranga’s Marriage; The Laburnum Top.

**Half yearly exam- portion taught from June to August**

DISTRIBUTION OF MARKS  
 READING- 20 MARKS  
 WRITING SKILLS AND GRAMMAR- 30 MARKS  
 LITERATURE- 30 MARKS  
 ASL- 20 MARKS

**TERM-2 (Annual)**

PeriodicTest	
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	PT 3- Unseen Passage (Note Making& summary writing), Tenses(Integrated Grammar), Mother’s Day. PT4- Unseen passage; Silk Road, Integrated Grammar, Voice of the Rain(poem)
Annual Exam	Complete syllabus  DISTRIBUTION OF MARKS READING- 20 MARKS WRITING SKILLS AND GRAMMAR- 30 MARKS LITERATURE- 30 MARKS ASL- 20 MARKS

## Physics

Prescribed Books:	1)	NCERT Textbook (Part 1 & Part 2)
	2)	NCERT Exemplar
	3)	Physics Practical Book – Laxmi Publication
<b>Month</b>	<b>Total No. of periods</b>	<b>Unit/Chapter</b>
June	14	Unit I : Physical world and measurement Ch 1 : Physical world Ch 2 : Units and measurements Unit II: Kinematics Ch 3 : Motion in a straight line
July	21	Ch 4 : Motion in a plane Unit III: Laws of Motion Ch 5 : Laws Of motion
August	21	Ch 5 : Laws of Motion (Contid.) Unit IV: Work, Energy and Power Ch 6 : Work, Energy and Power
September	18	Revision + Half Yearly Exam
October	16	Unit V : Motion of system of particles and Rigid body Ch 7 : System of particles and Rotational Motion
November	18	Unit VI : Gravitation Chapter 8 :- Gravitation Unit VII : Properties of Bulk Matter Chapter 9 :- Mechanical Properties of Solids Chapter 10 :- Mechanical Properties of Fluids
December	20	Unit VII: Properties of Bulk Matter ( Contd.) Chapter 10 :- Mechanical Properties of Fluids Chapter 11:- Thermal properties of Matter Unit VIII: Thermodynamics Chapter 12:- Thermodynamics Unit IX: Behaviour of Perfect Gas and Kinetic Theory of Gases Chapter 13:- Behaviour of Perfect Gas and Kinetic Theory of Gases Unit X: Oscillations and Waves Chapter 14:- Oscillation
January	19	Unit X: Oscillations and Waves Chapter 14:- Oscillation (Contd.) Chapter 15:- Waves

February		Revision + Final Exam ( Theory and Practical Exam)
March		Final Exam
<b>Syllabus for Term Exams and Periodic Test</b>		
<b>TERM-1</b>		
Periodic Test	1) Unit I – Physical World and Measurement Chapter 1 –Physical World Chapter 2- Units and Measurements Unit II- Kinematics Chapter 3- Motion in a Straight Line	
	2) Unit II – Kinematics Chapter 3 – Motion in a Straight Line Chapter 4- Motion in a Plane Unit III – Laws of Motion Chapter 5- Laws of Motion	
<b>TERM-2 (Annual)</b>		
Periodic Test	3) Unit IV – Work, Energy and Power Chapter 6- Work, Energy and Power Unit V – Motion of System of Particles and Rigid Body Chapter 7 – System of Particles and Rotational Motion Unit VI – Gravitation Chapter 8 - Gravitation	
	4) Unit VII – Properties of Bulk Matter Chapter 9- Mechanical Properties of Solids Chapter 10 – Mechanical properties of Fluid Chapter 11 – Thermal Properties of Matter. Unit VIII – Thermodynamics. Chapter 12 – Thermodynamics.	
Term 1	Unit I - Physical World and Measurements Chapter 1 - Physical world Chapter 2 - Units and Measurements	
	Unit II - Kinematics Chapter 3 - Motion in a Straight Line Chapter 4 - Motion in a Plane	
	Unit III - Laws of Motion Chapter 5 - Laws of Motion	
	Unit IV: Work, Energy and Power Ch 6 : Work, Energy and Power	
Annual Exam	Whole syllabus	

### CHEMISTRY(043)

Prescribed Books:	1)	1. NCERT Text Book (Part 1 + Part 2)
	2)	Chemistry Practicals – Dinesh Publication(Lab Book)
<b>Month</b>	<b>Total No. of periods</b>	<b>Lesson/Chapter</b>
May		
June	19	Ch:1- SOME BASIC CONCEPTS OF CHEMISTRY
July	22	Ch:2- STRUCTURE OF ATOM Ch:3-CLASSIFICATION OF ELEMENTS & PERIODICITY IN PROPERTIES.

August	21	Ch:4- CHEMICAL BONDING & MOLECULAR STRUCTURE. Ch:5- STATES OF MATTER – GASES & LIQUIDS.
September	19	Half Yearly Exam
October	17	Ch:6- THERMODYNAMICS. Ch:7- EQUILIBRIUM
November	15	Ch:8- Redox Reactions.Ch:9- Hydrogen
		Ch:10- The S – Block Elements Ch:11- The P – Block Elements Ch:12 - Organic Chemistry- Some Basic Principles And Techniques.
December	20	Ch:12 - ORGANIC CHEMISTRY- SOME BASIC PRINCIPLES AND TECHNIQUES Ch:13- HYDROCARBONS Ch:14- ENVIRONMENTAL CHEMISTRY
January	18	REVISION
February	20	REVISION / PRE – BOARD EXAM
March	19	BOARD EXAM
<b>Syllabus For Term Exams And Periodic Test</b>		
<b>Term-1</b>		
Periodic Test	1) Ch:1- Some Basic Concepts Of Chemistry Ch:2- Structure Of Atom	
	2) Ch:4- Chemical Bonding & Molecular Structure. Ch:5- States Of Matter – Gases & Liquids	
<b>Term-2 (Annual)</b>		
Periodic Test	3) Ch:6- Thermodynamics. Ch:7- Equilibrium	
	4) Ch:8- Redox Reactions. Ch:12 - Organic Chemistry- Some Basic Principles And Techniques	
Term 1	Ch:1- Some Basic Concepts Of Chemistry	
	Ch:2- Structure Of Atom	
	Ch:3-CLASSIFICATION OF ELEMENTS & PERIODICITY IN PROPERTIES.	
	Ch:4- CHEMICAL BONDING & MOLECULAR STRUCTURE.	
	Ch:5- STATES OF MATTER – GASES & LIQUIDS	
Annual Exam	<b>Complete Syllabus</b>	

## BIOLOGY

<b>Prescribed Books:</b>	1)	<i>NCERT Textbook for Class XI</i>
	2)	<i>NCERT Exemplar</i>
	3)	<i>Biology Practical Book</i>
<b><u>Month</u></b>	<b><u>Total No. of periods</u></b>	<b><u>Unit/Chapter</u></b>
<b>June</b>	12	<b>Unit I : Diversity in The Living World</b> Ch 1 : The Living World Ch 2 : Biological Classification
<b>July</b>	24	Ch 3 : Plant Kingdom Ch 4 : Animal Kingdom <b>Unit II : Structural Organisation in Plants and Animals</b> Ch 5 : Morphology Of Flowering Plants Ch 6 : Anatomy of Flowering Plants
<b>August</b>	20	Ch 7 : Structural Organisation in Animals <b>Unit III : Structure and Functions</b> Ch 8 : Cell: The Unit Of Life Ch 9 : Biomolecules Ch 10 : Cell Cycle and Cell Division
<b>September</b>	12	<b>Revision + Half Yearly Exam</b>
<b>October</b>	18	<b>Unit IV : Plant Physiology</b> Ch 11 : Transport in Plants Ch 12 : Mineral Nutrition Ch 13 : Photosynthesis in Higher Plants Ch 14 : Respiration in Plants
<b>November</b>	18	Ch 15 : Plant Growth and Development <b>Unit V : Human Physiology</b> Ch 16 : Digestion and Absorption Ch 17 : Breathing and Exchange of Gases Ch 18 : Body Fluids and Circulation
<b>December</b>	18	Ch 19 : Excretory Products and Their Elimination Ch 20 : Locomotion and Movement
<b>January</b>	18	Ch 21 : Neural Control and Coordination Ch 22 : Chemical Coordination and Integration
<b>February</b>		<b>Revision + Final Exam ( Theory and Practical Exam)</b>
<b>March</b>		<b>Final Exam</b>
<b><u>Syllabus for Periodic Test and Term Exams</u></b>		
<b>TERM-1</b>		
<b><u>Periodic Test</u></b>	<b>I</b>	<b>Unit I : Diversity in The Living World</b> Ch 1 : The Living World Ch 2 : Biological Classification

	II	Ch 3 : Plant Kingdom Ch 4 : Animal Kingdom  <b>Unit II : Structural Organisation in Plants and Animals</b> Ch 5 : Morphology Of Flowering Plants
<b>TERM-2 (Annual)</b>		
<b><u>Periodic Test</u></b>	III	<b>Unit IV : Plant Physiology</b> Ch 11 : Transport in Plants Ch 12 : Mineral Nutrition Ch 13 : Photosynthesis in Higher Plants
	IV	Ch 14 : Respiration in Plants Ch 15 : Plant Growth and Development  <b>Unit V : Human Physiology</b> Ch 16 : Digestion and Absorption Ch 17 : Breathing and Exchange of Gases
<b><u>Term 1</u></b>		<b>Unit I : Diversity in The Living World</b> Ch 1 : The Living World Ch 2 : Biological Classification Ch 3 : Plant Kingdom Ch 4 : Animal Kingdom
		<b>Unit II : Structural Organisation in Plants and Animals</b> Ch 5 : Morphology Of Flowering Plants Ch 6 : Anatomy of Flowering Plants Ch 7 : Structural Organisation in Animals
		<b>Unit III : Structure and Functions</b> Ch 8 : Cell: The Unit Of Life Ch 9 : Biomolecules Ch 10 : Cell Cycle and Cell Division
<b><u>Annual Exam</u></b>		<b>Whole syllabus</b>

## **MATHEMATICS**

Prescribed Books:	1)	NCERT
	2)	NCERT Exemplar
<b>Month</b>	<b>Total No. of periods</b>	<b>Lesson/Chapter</b>
May		
June	10	Ch.-1 Sets Ch.-2 Relations and Functions
July	26	Ch.-3 Trigonometric Functions  Ch.-4 Principle of Mathematical Induction  Ch.-5 Complex Numbers and Quadratic Equations

August	23	Ch.-6 Linear Inequalities Ch.-7 Permutations and Combinations Ch.-8 Binomial Theorem
September		Revision + Half Yearly Exam
October	16	Ch.-9 Sequences and Series Ch.-10 Straight Lines
November	22	Ch.-11 Conic Sections Ch.-12 Introduction to Three Dimensional Geometry Ch.-13 Limits and Derivatives
December	21	Ch.-14 Mathematical Reasoning Ch.-15 Statistics
January	18	Ch.-16 Probability
February		Revision + Annual Exam
March		
<b>Syllabus for Term Exams and Periodic Test</b>		
<b>TERM-1</b>		
Periodic Test	1)Ch.-1 Sets and Ch.-2 Relations and Functions	
	2) Ch.-3 Trigonometric Functions	
Half Yearly Exam	Ch.-1 to Ch.-8	
<b>TERM-2 (Annual)</b>		
Periodic Test	3) Ch.-9 Sequences and Series	
	4) Ch.-13 Limits and Derivatives	
Annual Exam	Complete Syllabus (ch.-1 to ch.-16)	

### **INFORMATICS PRACTICES (065)**

Prescribed Books:	<b>Informatics Practices by Sumita Arora</b>
<b>Month</b>	<b>Lesson/Chapter</b>
May	
June	Basic Computer organisation
July	The basics of Python Programming variables, Data types, Operators and Conditional Statements



August	Control Flow, Iterative computation, Lists and Dictionary, Text Handling
September	<b>Half Yearly Examination</b>
October	Introduction to Python Pandas (Data Structure)
November	Data Management (SQL)
December	Cyber Safety
January	Revision
February	<b>Annual Examination</b>
<b>Syllabus for Term Exams and Periodic Test</b>	
<b>TERM-1</b>	
Periodic Test	PT-1: Basic Computer Organisation <b>(29-07-2019)</b>
	PT-2: Operators, Conditional Statements, Control Flow <b>(21-10-2019)</b>
Half Yearly	Basic Computer organisation
	Familiarization with the basics of Python Programming variables, Data types, Operators and Conditional Statements
	Control Flow, Iterative computation, Lists and Dictionary, Text Handling
<b>TERM-2</b>	
Periodic Test	PT-3: Python Pandas <b>(09-12-2019)</b>
	PT-4: Data Management (SQL) <b>(27-01-2020)</b>
Annual Exam	Complete Syllabus

### Computer Science

Prescribed Books:	<b>Computer Science using Python by Sumita Arora</b>
<b>Month</b>	<b>Lesson/Chapter</b>
May	
June	<p>Basic computer organization, Description of computer system and mobile system, Types of software –APPLICATION, OS, UTILITY, LIBRARIES  Language of Bits, bit, BYTE,KB,MB,GB etc.  Language processors.  Concept of cloud computing.  Information representations. –NUMBER SYSTEM  → CONVERTING ONE FORM TO ANOTHER, ADDITION AND SUBTRACTION OF BINARY NUMBERS.</p>

July	Number system continued.. The basics of Python Programming variables, Data types, Operators and Conditional Statements Input statement in PYTHON
August	Conditional statements {if-else, if-elif-else looping : Exit controlled loop and entry controlled loop.
September	<b>Half Yearly Examination</b>
October	Boolean algebra –Logic gates, truth table, De-morgan’s theorem.
November	Data Management Society, Law and Ethics
December	Society, Law and Ethics continued. Revision of PYTHON (Programing)
January	Revison
February	<b>Annual Examination</b>
<b>Syllabus for Term Exams and Periodic Test</b>	
<b>TERM-1</b>	
Periodic Test	PT-1: Basic Computer Organisation ( <b>29-07-2019</b> )
	PT-2: Operators, Conditional Statements, Control Flow (looping)( <b>21-10-2019</b> )
Half Yearly	Topics covered till August
<b>TERM-2</b>	
Periodic Test	PT-3 Python programming , Boolean algebra,Data management
	PT-4 : Python programming, Cyber law,Data Mangement.
Annual Exam	Complete Syllabus

## PHYSICAL EDUCATION

Prescribed Books	1)	Saraswati Publication , Health and Physical Education (Dr. V K Sharma)
	2)	B R International, Physical Education and Health (Dr A K Srivastava & Dr. N K Gaur)

Month	Total Working Days	Lesson/Chapter
June		Unit-I : Changing Trends & Career In Physical Education Unit-II : Olympic value education
July		Unit-III : Physical Fitness, Wellness & Lifestyle Unit-IV : Physical Education & Sports for CWSN(children with special need)
August		Unit-V : Yoga Unit-VI : Physical Activity & Leadership Training
September		Revision +Half Yearly Exam
October		Unit-VII : Test, Measurement & Evaluation
November		Unit-VIII : Fundamentals Of Anatomy & Physiology &kinesiology in sports.

December		Unit-IX : psychology & sports
January		Unit-X : training and Doping in sports
February		Revision +Annual Exam
March		Annual Exam

### Syllabus for Term Exams and Monthly Test

Term-1		
Periodic Test-1		Unit-I : Changing Trends & Career In Physical Education Unit-II : Olympic Movement
Periodic Test--2		Unit-III : Physical Fitness, Wellness & Lifestyle Unit-IV : Physical Education & Sports for Differently Abled
Term-2		
Periodic Test-3		Unit-VII : Test, Measurement & Evaluation Unit-VIII : Fundamentals Of Anatomy & Physiology
Periodic Test-4		Unit-IX : psychology and sports. Unit-X : training and doping in sports
Half Yearly Exam		Unit-I : Changing Trends & Career In Physical Education Unit-II : Olympic Movement Unit-III : Physical Fitness, Wellness & Lifestyle Unit-IV : Physical Education & Sports for Differently Abled Unit-V : Yoga Unit-VI : Physical Activity & Leadership Training

### Hindustan Vocal Music (HVM)

JUNE	THEORY	Definitions __dhwani nada shruti swara saptak that Jati Raga
	PRACTICAL	Rag vrindavani sarang drut khayal
JULY	THEORY	Definitions swarmalika Lakshan geet nibadh anibadh gan laya Tala
	PRACTICAL	Rag jaunpuri drut khayal Recitation of thekas of Dadra tal Keharwa tal
AUGUST	THEORY	Description of Ragas Contribution and short life sketch of Miyan Tansen
	PRACTICAL	Rag Jaunpuri vilambit khayal Recitation of thekas of Teental Chaartal
SEPTEMBER	HALF YEARLY EXAM	
OCTOBER	THEORY	Brief history of Dhrupad Khayal Tarana Brief history of Gharanas
	PRACTICAL	Rag Bihag Drut khayal...
NOVEMBER	Brief knowledge of Gharanas cont.	
	PRACTICAL	Rag Bihag wliith taan
DECEMBER	THEORY	Writing in tala notation thah and dugun of prescribed Talas
	PRACTICAL	Dhrupad ,Raag Bhairavi
JANUARY	Life sketch of Pt.V N Bhatkhande Pt.Vishnu digambar .	
	PRACTICAL	Lakshan Geet....Swarmalika
FEBRUARY	THEORY.....REVISION	
	PRACTICAL...REVISION	

### Fine Arts (Painting)

Prescribed book - history of Indian art (Ashok Gupta)

1. (June - August) Indian miniature painting
2. The Rajasthani school
3. The Pahari school
4. The Mughal school
5. The Deccan school

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September - Half yearly exam

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(October - December)

6. The Indian National Flag and the bengal school of painting.
7. The modern trends in Indian art
8. CBSC board question papers. (Revision)

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Final exam/complete syllabus

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\*practical\*

1. Nature and object study
2. Still life composition (live) with pencil shading.
3. Landscape with two human figure (watercolor)
4. Portfolio assessment:-
  - A. Six still life with pencil shading
  - B. Six landscape with human figure in watercolor.
  - C. Making decorated cover file.