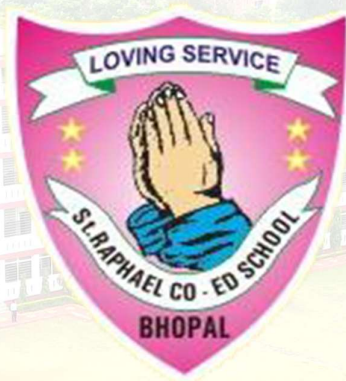


# ST. RAPHAEL CO- ED SCHOOL JATKHEDI, BHOPAL



**SYLLABUS**

**2025 – 26**

**CLASS – XI (PCM/PCB)**

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

Class: \_\_\_\_\_ Sec: \_\_\_\_\_

## ENGLISH

MONTH	TOPICS	ACTIVITY	EXAM SYLLABUS
<b>APRIL</b>	HORNBILL: 1. The Portrait.. 2. A Photograph SNAPSHOTS: i. The Summer... GRAMMAR: Tenses WRITING SKILL: Notice & Poster		
<b>JUNE</b>	HORNBILL: 3. We're Not... SNAPSHOTS: ii. The Address WRITING SKILL: Classified Ads		
<b>JULY</b>	HORNBILL: 4. Discovering Tut 5. Laburnum Top SNAPSHOTS: iii. Mother's Day GRAMMAR: Clauses WRITING SKILL: Classified Ads Letter of Inquiry	Research work on the major astronomical descriptions and legends associated with them.	PT-I 1. Portrait of a Lady 2. A Photograph 3. We're Not Afraid.. 4. The Summer... W.S. Notice and Poster Grammar: Tenses
<b>AUGUST</b>	HORNBILL: 6. The Voice... SNAPSHOTS: iv. The Ghat...		PT-II 1. Laburnum Top 2. Discovering Tut 3. The Address

	(Subject to Change) GRAMMAR: Transformation of Sentences WRITING SKILL: Letter of Order Note- Making		W.S. Classified Ad Grammar: Clauses
<b>SEPTEMBER</b>	HORNBILL: 7. The Ailing P.. GRAMMAR: Transformation of Sentences WRITING SKILL: Letter of Complaint	ASL	MID-TERM PT-I + PT-II+ 1. The Voice of the Rain 2. Mother's Day Grammar: Tenses, Clauses, Transformation of Sentences W.S.: Notice, Poster, Classified Ads, Letters: Inquiry, Order, Complaint, Note- Making
<b>OCTOBER</b>	HORNBILL: 8. The Adventure 9. Childhood SNAPSHOTS: v. Birth WRITING SKILL: Letter to the Editor		
<b>NOVEMBER</b>	HORNBILL: 10. Silk Road SNAPSHOTS: vi. The Tale of.. GRAMMAR: Prepositions & Determiners WRITING SKILL:	Drafting an Itinerary	

	Article & Speech		
<b>DECEMBER</b>	HORNBILL: 11. Father to Son GRAMMAR: Integrated Grammar WRITING SKILL: Debate		PT-III 1. The Adventure 2. Childhood 3. Birth WS: Speech & Article Grammar: Integrated
<b>JANUARY</b>	HORNBILL: Revision SNAPSHOTS: Revision GRAMMAR: Revision WRITING SKILL: Revision	ASL	
<b>FEBRUARY</b>			FINAL EXAM- Complete Syllabus

PHYSICS			
MONTH	TOPICS	ACTIVITY/PRACTICAL	EXAM SYLLABUS
<b>APRIL</b>	<b>Chapter-1:</b> Units and Measurements <b>Chapter-2:</b> Motion in a Straight Line <b>Chapter-3:</b> Motion in a Plane	<b>1.</b> To measure diameter of a small spherical/cylindrical body and to measure internal diameter and depth of a given beaker/calorimeter using Vernier Calipers and hence find its volume. <b>2.</b> To measure diameter of a given wire and thickness of a given sheet using screw gauge.	
<b>JUNE</b>	<b>Chapter-4:</b> Laws of Motion		
<b>JULY</b>	<b>Chapter-5:</b> Work, Energy and Power <b>Chapter-6:</b> System of Particles and Rotational Motion	<b>3.</b> To determine radius of curvature of a given spherical surface by a spherometer. <b>4.</b> To find the weight of a given body using parallelogram law of vectors.	<b>PT-01</b> <b>(5TH July to 11th July)</b>  <b>CHAPTER -01</b>

			UNIT AND MEASUREMENT <b>CHAPTER-02</b> MOTION IN STRAIGHT LINE
<b>AUGUST</b>	<b>Chapter-6:</b> System of Particles and Rotational Motion <b>Chapter-7:</b> Gravitation	<b>5.</b> Using a simple pendulum, plot its $L-T^2$ graph and use it to find the effective length of second's pendulum.	<b>PT-02</b> <b>(2<sup>nd</sup> Aug to 08<sup>th</sup>Aug)</b> <b>Chapter -03</b> Motion in plane <b>Chapter-04</b> Laws of motion (half chapter)
<b>SEPTEMBER</b>	<b>REVISION &amp;</b> <b>Chapter-8:</b> Mechanical Properties of Solids		<b>MID TERM</b> <b>(15<sup>th</sup> Sept. to 26<sup>th</sup> Sept.)</b> <b>PART -I</b> <b>CHAPTER (01 TO 07)</b>
<b>OCTOBER</b>	<b>Chapter-09:</b> Mechanical properties of fluids	<b>6.</b> To study variation of time period of a simple pendulum of a given length by taking bobs of same size but different masses and interpret the result.	
<b>NOVEMBER</b>	<b>Chapter-10:</b> Thermal Properties of Matter <b>Chapter-11:</b> Thermodynamics	<b>7.</b> To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.	
<b>DECEMBER</b>	<b>Chapter-12:</b> Kinetic Theory of gases	<b>8.</b> To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination $\theta$ by plotting graph between force and $\sin\theta$ .	<b>PT-03</b> <b>(4<sup>TH</sup> DEC. to 10<sup>th</sup> Dec.)</b> <b>Ch-8,9</b>
<b>JANUARY</b>	<b>Chapter-13:</b> Oscillations <b>Chapter-14:</b> Waves		
<b>FEBRUARY</b>	<b>Revision</b>		<b>FINAL EXAM</b> <b>COMPLETE Syllabus</b> <b>Part-I (30%)</b> <b>Part-II(70%)</b>

## CHEMISTRY

MONTH	TOPICS	ACTIVITY/PRACTICAL	EXAM SYLLABUS
<b>APRIL</b>	CH 1: Some Basic Concepts of Chemistry CH 2: Structure of Atom	To tabulate the periodic elements from atomic number 1-50 under heads atomic number, atomic mass, symbol and electronic configuration.	
<b>JUNE</b>	CH 2: Structure of Atom (Cont.)	Crystallization of impure sample of any one of the following: Alum, Copper Sulphate, Benzoic Acid.	
<b>JULY</b>	CH 3: Classification of Elements and Periodicity in Properties CH 4: Chemical Bonding and Molecular Structure	Introduction of qualitative and quantitative analysis	PT 1: CH 1 AND 2
<b>AUGUST</b>	CH 4: Chemical Bonding and Molecular Structure (CONT.) CH 8: Organic Chemistry: Some basic Principles and Techniques	Quantitative Estimation : 1. Preparation of standard solution of Oxalic acid. 2. Determination of strength of a given solution of Sodium hydroxide by titrating it against standard solution of Oxalic acid.	PT 2: CH 3 AND 4
<b>SEPTEMBER</b>	CH 8: Organic Chemistry: Some basic Principles and Techniques (CONT.) *REVISION FOR MID TERM	Quantitative Estimation 3. Preparation of standard solution of Sodium carbonate. 4. Determination of strength of a given solution of hydrochloric acid by titrating it against standard Sodium Carbonate solution.	MID TERM: CH 1,2,3,4 and 8

<b>OCTOBER</b>	CH 9: Hydrocarbons	Qualitative analysis: Determination of one anion and one cation in a given salt.	
<b>NOVEMBER</b>	CH 7: Redox reactions CH 5: Chemical Thermodynamics	Qualitative analysis: Determination of one anion and one cation in a given salt	
<b>DECEMBER</b>	CH 6: Equilibrium	Qualitative analysis: Determination of one anion and one cation in a given salt	PT 3: CH 7 AND 9
<b>JANUARY</b>	Revision		
<b>FEBRUARY</b>			FINAL EXAM FULL SYLLABUS

<b>MATHS</b>			
<b>Months</b>	<b>Chapter</b>	<b>Practical/ activity</b>	<b>Exam Syllabus</b>
<b>APRIL</b>	1.Sets 2. Relations and Functions	*To find the number of subsets of a given set and verify that if a set has n number of elements, then the total number of subsets is $2^n$ *To verify that for two sets A and B, $n(A \times B) = pq$ and the total number of relations from A to B is $2^{pq}$ , where $n(A) = p$ and $n(B) = q$ . *To represent set theoretic operations using Venn diagrams.	
<b>JUNE</b>	4. Complex Numbers 5. Linear Inequalities	*To identify a relation and a function. *To distinguish between a Relation and a Function.	

<b>JULY</b>	3. Trigonometric Functions	*To find the values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant.	PT-I CH-1,2,4,5
<b>AUGUST</b>	6. Permutations and Combinations 7. Binomial Theorem		PT-II CH-3
<b>SEPTEMBER</b>	8.Sequence and Series		MIDTERM CH- 1,2,3,4,5,6,7
<b>OCTOBER</b>	12. Limits and derivatives		
<b>NOVEMBER</b>	9.Straight lines 10.Conic Section 11. Introduction to Three-Dimensional Geometry	*To construct different types of conic sections.	
<b>DECEMBER</b>	13.Statistics 14. Probability	*To write the sample space, when a die is rolled once, twice -----	PT-III CH-12,9,10
<b>JANUARY</b>			
<b>FEBRUARY</b>			Full Syllabus

<b>BIOLOGY</b>			
<b>MONTH</b>	<b>TOPICS</b>	<b>ACTIVITY/PRACTICAL</b>	<b>EXAMSYLLABUS</b>
<b>APRIL</b>	1. THE LIVING WORLD 2.BIOLOGICAL CLASSIFICATION	SPECIMENS / SLIDES / MODELS AND IDENTIFICATION FEATURES OF- BACTERIA, OSCILLATORIA, LIVERWORT, RHIZOPUS, MUSHROOM, YEAST, MOSS, FERN, PINE, ONE MONO COTYLEDONOUS PLANT,ONE DICTOTYLEDONOUS PLANT AND ONE LICHEN	
<b>JUNE</b>	3.PLANT KINGDOM	PREPARATION AND STUDY OF T.S OF DICOT AND MONOCOT ROOT AND STEMS.	



	6. ANATOMY OF FLOWERING PLANTS	STUDY OF PLASMOLYSIS IN EPIDERMAL PEELS.	
<b>JULY</b>	4.ANIMALS KINGDOM	VIRTUALSPECIMENS/SLIDES/MODELS AND IDENTIFYING FEATURES OF AMEOPA, HYDRA, LIVER FLUKE, ASCARIS, LEECH, EARTHWORM, SILK WORM, HONEYBEE, SNAIL, STARFISH, SHARK, ROHU, FROG, LIZARD, PIGEON, ANDRABBIT.	PT-I CH-1,2
<b>AUGUST</b>	5.MORPHOLOGYOF FLOWERING PLANTS 7.STURUCTURAL ORGANISATION IN ANIMALS 8.CELL:THE UNIT OF LIFE	STUDY AND DESCRIBE LOCALLY AVAILABLE COMMON FLOWERING PLANTS FROM FAMILY SOLANACE INCLUDING,DISSECTION AND DISPLAY OF FLORAL WHORLS ANTHER AND OVARY TO SHOW NUMBER OF CHAMBERS. STUDY OF OSMOSIS BY POTATO, OSMOMETER.  STUDY AND DISTRIBUTION OF STOMATA ON LOWER AND ON THE UPPER SURFACES OF LEAF.MITOSIS IN ONION ROOT TIP CELLS AND ANIMAL CELLS (GRASSHOPER) FROM PERMANENT SLIDES	PT-2 Ch-3
<b>SEPTEMBER</b>	10.CELL CYCLES AND CELL DIVISION 9.BIOMOLECULES	TEST THE PRESENCE OF SUGAR, STARCH, PROTEINS AND FATS IN SUITABLE PLANT AND ANIMAL MATERIAL	MIDTERM CH- 1,2,3,4,5,6,7,8,9,10
<b>OCTOBER</b>	13. PHOTOSYNTHESIS IN HIGHER PLANTS 14. RESPIRATION IN PLANTS 15. PLANT GROWTH AND DEVELOPMENT	CHROMATOGRAPHY SEPARATION OF PLANT PIGMENTS STUDY RATE OF RESPIRATION IN GERMINATING SEEDS	
<b>NOVEMBER</b>	19.EXCRETORY PRODUCTS AND THEIR ELIMINATION	URINE TEST- TEST THE PRESENCE OF SUGAR, ALBUMIN AND BILE SALTS IN URINE.	
<b>DECEMBER</b>	17. BREATHING AND EXCHANGE OF GASES 18.BODY FLUID SAND		PT-3 Ch-13,15

	CIRCULATION		
<b>JANUARY</b>	LOCOMOTION AND MOVEMENT	STUDY DIFFERENT TYPES OF JOINTS WITH THE HELP OF VIRTUAL IMAGES / MODELS	
<b>FEBRUARY</b>	ANNUAL EXAM		FULL SYLLABUS

## COMPUTER SCIENCE

Month	Topic	Practicals	Syllabus
<b>April</b>	<b>CH-1</b> Basic organization of computer system <b>CH-2</b> Operating system <b>CH- 5</b> Introduction of Problem Scoping	PPT ON THE TOPIC OF OPERATING SYSTEM	
<b>June</b>	<b>CH-6</b> Getting started with python <b>CH-7</b> Python Fundamentals	PRACTICALS ON THE BASIS OF DATA STRUCTURES	
<b>July</b>	<b>CH-3</b> Boolean Logic <b>CH-8</b> Data Handling <b>CH-9</b> Flow of Control	PRACTICALS ON THE BASIS OF OPERATORS USED IN PROGRAMMING	PT-1 CH 1 & 5
<b>August</b>	<b>CH-4</b> Emerging Trends <b>CH-10</b> String Manipulation <b>CH-15</b> Cyber Safety	PRACTICALS ON THE BASIS OF ALL THE CONDITION USED IN PYTHON	PT-2 CH 2,6 & 7
<b>September</b>	<b>CH-11</b> List Manipulation	PRACTICAL OF LIST	MID TERM CH-1,2,5 TO 9 & 15
<b>October</b>	<b>CH-12</b> Tuples <b>CH-13</b> Dictionaries	PRACTICAL OF TUPLES & DICTIONARIES	
<b>November</b>	<b>CH-14</b> Understanding Sorting	PYTHON CODING ON THE BASIS OF SORTING	

<b>December</b>	<b>CH-16</b> Computer Security <b>CH-17</b> Society, Law and Ethics	DRAW THE FLOW CHART ON THE TOPIC OF PROPERTY RIGHT & E-WASTE MANAGEMENT	PT-3 CH 11 & 12
<b>January</b>	<b>REVISION FOR FINAL EXAMINATION</b>	REVISION FOR FINAL EXAMINATION	FINAL TERM

<b>PSYCHOLOGY</b>			
<b>MONTH</b>	<b>TOPICS</b>	<b>ACTIVITY/PRACTICAL</b>	<b>SYLLABUS</b>
<b>APRIL</b>	CHAPTER 1- WHAT IS PSYCHOLOGY?	PREPARE A COLLAGE ON WHAT IS PSYCHOLOGY, ITS SCOPE AND VARIOUS BRANCHES.	
<b>JUNE</b>	CHAPTER 2- METHODS OF ENQUIRY IN PSYCHOLOGY PRACTICAL 1	IN GROUPS, DESIGN AN OBSERVATION SCHEDULE TO STUDY A PARTICULAR BEHAVIOUR FOR THIRTY MINUTES IN A SAMPLE OF STUDENTS AT SCHOOL AFTER CONDUCTING THIS OBSERVATION, CREATE YOUR REPORT.	
<b>JULY</b>	CHAPTER 4- HUMAN DEVELOPMENT PRACTICAL 2	CREATE A PRESENTATION ON DIFFERENT LIFE STYLE DEVELOPMENT BY USING ANY MEDIUM OF ART.	PT 1 CH-1
<b>AUGUST</b>	CHAPTER 5 - SENSORY, ATTENTIONAL AND PERCEPTUAL PROCESSES PRACTICAL 3	DRAW/PAINT AN IMAGE BASED ON FIGURE AND GROUND CONCEPT.	PT 2 CH-2
<b>SEPTEMBER</b>	PRACTICAL 4	SELF AWARENESS AND REGULATION ACTIVITY (JOURNALING/ MEDITATION).	MID TERM CH-1,2,4,5

<b>OCTOBER</b>	CHAPTER 6- LEARNING  PRACTICAL 5	TAKE SOME WORDS AND WRITE THEM ON SEPARATE CARDS, AND READ THEM ALOUD. AFTER COMPLETION OF TWO READINGS, WRITE DOWN THE WORDS IN ANY ORDER LIKE RICE, CURD, SHOES, SOCIAL, SWEET, POND, POTATO, ICE-CREAM, ROSE.THEN, ANALYSE YOUR DATA TO SEE WHETHER RECALLED WORDS SHOW ANY ORGANISATION.	
<b>NOVEMBER</b>	CHAPTER 7- HUMAN MEMORY	WRITE TWO SEPARATE EVENTS THAT YOU LIKE ABOUT YOUR CHILDHOOD DAYS WHICH YOU REMEMBER. USE SEPARATE SHEETS FOR WRITING ABOUT EACH EVENT. COMPARE THESE IN TERMS OF LENGTH, FELT EMOTIONS, AND CO-RELATION.	
<b>DECEMBER</b>	CHAPTER 8- THINKING	STUDENTS LOOK AT AN IMAGE WITH A NUMBER OF PEOPLE. EACH STUDENT PICKS ONE PERSON FROM THE PICTURE AND WRITES WHAT THEY THINK THE PERSON IS THINKING.	PT 3 CH- 6,7
<b>JANUARY</b>	CHAPTER 9- MOTIVATION AND EMOTION	STUDENTS CAN CHOOSE A SPECIFIC MOTIVATIONAL OR EMOTIONAL EXPERIENCE ABOUT THEM AND EXPRESS IT CREATIVELY THROUGH ANY MEDIUM.	
<b>FEBRUARY</b>	FINAL EXAM		FULL SYLLABUS

## PHYSICAL EDUCATION

MONTH	NAME OF THE CHAPTER	TOPICS	ACTIVITY/ PRACTICAL	EXAM SYLLABUS
<b>APRIL</b>	CH1- Changing Trends and Careers in Physical Education	<b>CHAPTER 1 –</b> 1. Concept, Aims & Objectives of Physical Education 2. Development of Physical Education in India – Post Independence 3. Changing Trends in Sports- playing surface, wearable gear and sports equipment, technological advancements 4. Career options in Physical Education 5. Khelo-India Program and Fit – India Program	Participation in inter-house competition	
	CH 2 - Olympic Value Education	<b>CHAPTER 2-</b> 1. Olympic – Concept and Olympics Values (Excellence, Friendship & Respect) 2. Olympic Value Education – Joy of Effort, Fair Play, Respect for Others, Pursuit of Excellence, Balance Among Body, Will & Mind 3. Ancient and Modern Olympics 4. Olympics - Symbols, Motto, Flag, Oath, and Anthem 5. Olympic Movement Structure - IOC, NOC, IFS, Other members	Quiz competition on Olympics	
<b>JUNE</b>	CH 3: Yoga	<b>CHAPTER 3-</b> 1. Meaning and importance of Yoga		

		2. Introduction to Astanga Yoga 3. Yogic Kriyas (Shat Karma) 4. Pranayama and its types. Active Lifestyle and stress management through Yoga	Performing different asanas for concentration of mind	
<b>JULY</b>	CH 4: Physical Education and Sports for Children with Special Needs (CWSN)  CH 5: Physical Fitness, Wellness.	<b>CHAPTER 4-</b> <ol style="list-style-type: none"> <li>1. Concept of Disability and Disorder</li> <li>2. Types of Disability, its causes &amp; nature (Intellectual disability, Physical disability).</li> <li>3. Disability Etiquette</li> <li>4. Aim and objectives of Adaptive Physical Education.</li> <li>5. Role of various professionals for children with special needs (Counselor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist, and Special Educator)</li> </ol> <b>CHAPTER 5-</b> <ol style="list-style-type: none"> <li>1. Meaning &amp; importance of Wellness, Health, and Physical Fitness.</li> <li>2. Components/Dimensions of Wellness, Health, and Physical Fitness</li> <li>3. Traditional Sports &amp; Regional Games for promoting wellness</li> <li>4. Leadership through Physical Activity and Sports</li> </ol>	Explaining the role of different teachers for CWSN  Demonstration of traditional games and sports on ground	PT 1: CH 1,2



		Rotation, Circumduction, Supination & Pronation 4. Axis and Planes – Concept and its application in body movements		
<b>OCTOBER</b>	CH 9: Psychology and Sports	<b>CHAPTER 9-</b> 1. Definition & Importance of Psychology in Physical Education & Sports; 2. Developmental Characteristics at Different Stages of Development 3. Adolescent Problems & their Management; 4. Team Cohesion and Sports; Introduction to Psychological Attributes: Attention, Resilience, Mental Toughness	Explanation of relevant topics through a particular sport	
<b>NOVEMBER</b>	CH10 Training & Doping in Sports	<b>CHAPTER 10-</b> 1. Concept and Principles of Sports Training 2. Training Load: Over Load, Adaptation, and Recovery 3. Warming-up & Limbering Down – Types, Method & Importance 4. Concept of Skill, Technique, Tactics & Strategies 5. Concept of Doping and its disadvantages	Warming-up and Limbering-down	
<b>DECEMBER</b>	Revision	PRACTICAL		PT 3 – CH- 7,8
<b>JANUARY</b>	Revision			
<b>FEBRUARY</b>				FINAL EXAM
<b>MARCH</b>				