



# SHRI MAHAPRABHU PUBLIC SCHOOL

Shivkuti Prayagraj (U.P.)

## YEARLY SYLLABUS

SESSION: 2021-2022

CLASS: XI (PATINOLRU)

SECTIONS: (NEELAM, PUKHRAJ, PANNA, RUBY)

SUBJECT: ENGLISH CORE (301)

MONTH	CHAPTER NAME
APRIL	No Classes
MAY	<p><u>Reader:</u></p> <ul style="list-style-type: none"><li>• Chapter 1: The Portrait of a Lady</li><li>• Poem 1: Photograph</li></ul> <p><u>Supplementary:</u></p> <ul style="list-style-type: none"><li>• Chapter 1: The Summer of the beautiful White Horse</li></ul> <p><u>Writing:</u> Notice &amp; Poster making</p>
JULY	<p><u>Reader:</u></p> <ul style="list-style-type: none"><li>• Chapter 2: We are not afraid to Die, if we all together</li></ul> <p><u>Supplementary:</u></p> <ul style="list-style-type: none"><li>• Chapter 2: The Address</li></ul> <p><u>Writing:</u> Note Making and summarization</p>
AUGUST	<p><u>Reader:</u></p> <ul style="list-style-type: none"><li>• Chapter 3: Discovering Tut: The saga Continues</li><li>• Poem 2: Laburnum Top</li></ul> <p><u>Supplementary:</u></p> <ul style="list-style-type: none"><li>• Chapter 3: Ranga's Marriage</li></ul> <p><u>Grammar:</u> Determiners (gap fillings)</p>
SEPTEMBER	<p><u>Reader:</u></p> <ul style="list-style-type: none"><li>• Chapter 4: Landscape of the soul</li><li>• Poem-3: The Voice of the Rain</li></ul> <p><u>Writing:</u> Business / official letter, Speech writing</p>
OCTOBER	<p><u>Supplementary:</u></p> <ul style="list-style-type: none"><li>• Chapter 4: Albert Einstein at School</li></ul> <p><u>Writing:</u> Article and Report Writing</p> <p><u>Grammar:</u> Sentence Reordering, Transformation</p>
NOVEMBER	<p><u>Reader:</u></p> <ul style="list-style-type: none"><li>• Chapter 5: Ailing planet: The Green Movement's Role</li><li>• Chapter 6: The Browning Version</li></ul> <p><u>Supplementary:</u></p> <ul style="list-style-type: none"><li>• Chapter 5: Mother's Day</li><li>• Chapter 6: The Ghat of the only World</li></ul> <p><u>Grammar:</u> Tenses</p>

<b>DECEMBER</b>	<b>Reader:</b> <ul style="list-style-type: none"><li>• <b>Chapter 7:</b> The Adventure</li><li>• <b>Poem 4:</b> Childhood</li></ul> <b>Supplementary:</b> <ul style="list-style-type: none"><li>• <b>Chapter 7:</b> Birth</li><li>• <b>Chapter 8:</b> The Tale of Melon City</li></ul> <b>Writing:</b> Letter to the school or college authorities and Job Application
<b>JANUARY</b>	<b>Reader:</b> <ul style="list-style-type: none"><li>• <b>Chapter 8:</b> Silk Road</li><li>• <b>Poem 5:</b> Father to Son</li></ul> <b>Writing:</b> Debate
<b>FEBRUARY</b>	<b>Revision + Annual Exam</b>

**SUBJECT: PHYSICS (042)**

<b>MONTH</b>	<b>Chapter Name</b>
<b>APRIL</b>	<b>No Classes</b>
<b>MAY</b>	<b>Chapter 1: Physical world Chapter 2: Unit and measurement</b>
<b>JULY</b>	<b>Chapter 3: Motion in straight line Chapter 4: Motion in a plane</b>
<b>AUGUST</b>	<b>Chapter 5: Laws of motion Chapter 6: Work, Energy, Power</b>
<b>SEPTEMBER</b>	<b>Chapter 7: System of particle and rotational motion Chapter 8: Gravitation</b>
<b>OCTOBER</b>	<b>Chapter 9: Mechanical properties of solid Chapter 10: Mechanical properties of fluids</b>
<b>NOVEMBER</b>	<b>Chapter 11: Thermal Properties of Matter Chapter 12: Thermodynamics</b>
<b>DECEMBER</b>	<b>Chapter 13: Kinetic theory of gasses Chapter 14: Oscillation</b>
<b>JANUARY</b>	<b>Chapter 15: Waves</b>
<b>FEBRUARY</b>	<b>Revision</b>

**SUBJECT: CHEMISTRY (043)**

MONTH	CHAPTER NAME
MAY	<ul style="list-style-type: none"><li>• <b>Chapter 1:</b> Some Basic Concepts of Chemistry</li></ul>
JUNE	<ul style="list-style-type: none"><li>• <b>Chapter 2:</b> Atomic Structure</li></ul>
JULY	<ul style="list-style-type: none"><li>• <b>Chapter 3:</b> Periodic table and its properties</li><li>• <b>Chapter 4:</b> Chemical Bonding</li></ul>
AUGUST	<ul style="list-style-type: none"><li>• <b>Chapter 5:</b> States of Matter</li><li>• <b>Chapter 6:</b> Thermodynamics</li></ul>
SEPTEMBER	<ul style="list-style-type: none"><li>• <b>Chapter 7:</b> Equilibrium</li><li>• <b>Chapter 8:</b> Redox Reaction</li></ul>
OCTOBER	<ul style="list-style-type: none"><li>• <b>Chapter 9:</b> Hydrogen</li><li>• <b>Chapter 10:</b> S block</li></ul>
NOVEMBER	<ul style="list-style-type: none"><li>• <b>Chapter 11:</b> P Block elements</li><li>• <b>Chapter 12:</b> General Organic Chemistry</li></ul>
DECEMBER	<ul style="list-style-type: none"><li>• <b>Chapter 13:</b> Hydrocarbon</li></ul>
JANUARY	<ul style="list-style-type: none"><li>• <b>Chapter 14:</b> Environmental chemistry</li></ul>
FEBRUARY	<b>Revision</b>

**SUBJECT: MATHEMATICS (041)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>APRIL</b>	<b>No classes</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 1:</b> Sets</li><li>• <b>Chapter 2:</b> Relations and Functions</li></ul>
<b>JULY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 3:</b> Trigonometric Function</li><li>• <b>Chapter 4:</b> Principal of Mathematical Induction</li></ul>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• <b>Chapter 5:</b> Complex Number and Quadratic Equation</li><li>• <b>Chapter 6:</b> Linear Equations and Inequality</li><li>• <b>Chapter 7:</b> Permutations and Combinations</li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 8:</b> Binomial Theorem</li><li>• <b>Chapter 9:</b> Sequence and Series</li></ul>
<b>OCTOBER</b>	Revision <ul style="list-style-type: none"><li>• <b>Chapter 10:</b> Straight Line</li></ul>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 11:</b> Conic Sections</li><li>• <b>Chapter 12:</b> Three-Dimensional Geometry</li><li>• <b>Chapter 13:</b> Limit and Derivatives</li></ul>
<b>DECEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 14:</b> Mathematical Reasoning</li><li>• <b>Chapter 15:</b> Statistics</li></ul>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 16:</b> Probability</li></ul>
<b>FEBRUARY</b>	Revision

**SUBJECT: BIOLOGY (044)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>APRIL</b>	<b>No Classes</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 1:</b> The Living World</li><li>• <b>Chapter 2:</b> Biological Classification</li><li>• <b>Chapter 3:</b> Plant Kingdom</li></ul>
<b>JULY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 3:</b> Plant Kingdom</li><li>• <b>Chapter 4:</b> Animal Kingdom</li></ul> <p><b>(Unit Test 01)</b></p>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• <b>Chapter 5:</b> Morphology of Flowering Plants</li><li>• <b>Chapter 6:</b> Anatomy of Flowering Plants</li><li>• <b>Chapter 7:</b> Structural Organization in Animals</li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 8:</b> Cell: The Unit of Life</li><li>• <b>Chapter 09:</b> Biomolecules</li><li>• <b>Chapter 10:</b> Cell Cycle and Cell Division</li></ul>
<b>OCTOBER</b>	<p><b>(Unit Test 02)</b></p> <ul style="list-style-type: none"><li>• <b>Chapter 11:</b> Transport in Plants</li><li>• <b>Chapter 12:</b> Mineral Nutrition</li></ul>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 13:</b> Photosynthesis in Higher Plants</li><li>• <b>Chapter 14:</b> Respiration in Plants</li><li>• <b>Chapter 15:</b> Plant Growth and Development</li></ul>
<b>DECEMBER</b>	<ul style="list-style-type: none"><li>• <b>Chapter 16:</b> Digestion and Absorption</li><li>• <b>Chapter 17:</b> Breathing and Exchange of Gases</li><li>• <b>Chapter 18:</b> Body Fluids and Circulation</li><li>• <b>Chapter 19:</b> Excretory Products and Their Elimination</li></ul>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• <b>Chapter 20:</b> Locomotion and Movement</li><li>• <b>Chapter-21:</b> Neural Control and Coordination</li><li>• <b>Chapter 22:</b> Chemical Control and Integration</li></ul>
<b>FEBRUARY</b>	<b>Revision</b>

**SUBJECT: ACCOUNTANCY (055)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>May</b>	<ul style="list-style-type: none"><li>• Introduction to Accounting, Basic terms of Accounting and process of Accounting</li></ul>
<b>June</b>	<ul style="list-style-type: none"><li>• Theory base of Accounting: Principles and Standards</li></ul>
<b>JULY</b>	<ul style="list-style-type: none"><li>• Bases of Accounting, Accounting procedure, source documents, preparation of vouchers and Accounting Equations</li></ul>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• Journal and ledger</li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• Subdivision of Journal and Bank Reconciliation Statement</li></ul>
<b>OCTOBER</b>	<ul style="list-style-type: none"><li>• Trial Balance, Depreciation and Provisions &amp; Reserves</li></ul>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• Accounting for Bills of Exchange and Rectification of Errors</li></ul>
<b>DECEMBER</b>	<ul style="list-style-type: none"><li>• Financial statements and Financial statements with adjustments</li></ul>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• Accounting from incomplete Records</li></ul>
<b>FEBRUARY</b>	<ul style="list-style-type: none"><li>• Computers in accounting and Accounting Software</li></ul>

**SUBJECT: ECONOMICS (030)**

MONTH	CHAPTER NAME
MAY	<p><b><u>Part-B: Introductory Microeconomics</u></b></p> <p><b><u>Unit 4</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 1:</b> Introduction: Meaning of Microeconomics and Macroeconomics, Positive and Normative Economics What is an economy?</li> <li>• <b>Chapter 2:</b> Central Problem of an economy: What, How and for Whom to Produce, concepts of production possibility frontier and opportunity cost.</li> <li>• <b>Chapter 3:</b> Consumer's Equilibrium (Utility Analysis)</li> </ul>
JULY	<p><b><u>Part-A: (Statistics for Economic)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 1:</b> Concept of Economics and Significance of Statistics Features, stages and tools of statistics Nature, Subject matter, limitations of statistics Function and importance of statistics</li> <li>• <b>Chapter 2:</b> Collection of Data</li> </ul>
AUGUST	<p><b><u>Part-B: Introductory Microeconomics</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 4:</b> indifference curve</li> </ul> <p><b><u>Part-A: (Statistics for Economic)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 3:</b> Census and sample method of collection of Data</li> <li>• <b>Chapter 4:</b> Organization of Data</li> </ul>
SEPTEMBER	<p><b><u>Part-A: (Statistics for Economic)</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 5:</b> Presentation of Data (Textual and Tabular Presentation)</li> <li>• <b>Chapter 6:</b> Diagrammatic Presentation of Data (Bar and Pie)</li> <li>• <b>Chapter 7:</b> Frequency Diagram (Histogram, Polygon and ogive)</li> </ul> <p><b><u>Part-B: Introductory Microeconomics</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 5:</b> Theory of Demand</li> </ul>
OCTOBER	<p><b><u>Part-B: Introductory Microeconomics</u></b></p> <ul style="list-style-type: none"> <li>• <b>Chapter 6:</b> Price Elasticity of Demand</li> <li>• <b>Chapter 7:</b> Production function: Returns to a factor and Returns to scale</li> <li>• <b>Chapter 8:</b> Concepts of Cost</li> </ul> <p><b>Note: Revision and Practice for Half yearly Examination</b></p> <p><b>Half Yearly Examination</b></p>



<p><b>NOVEMBER</b></p>	<p><u>Part A:(Statistics for Economic)</u></p> <ul style="list-style-type: none"> <li>• <b>Chapter 8:</b> Arithmetic time graph or time series graph</li> <li>• <b>Chapter 10:</b> Measures of central Tendency-Arithmetic mean</li> </ul>
<p><b>DECEMBER</b></p>	<p><u>Part B: Introductory Microeconomics</u></p> <ul style="list-style-type: none"> <li>• <b>Chapter 11:</b> Measures of Central Tendency-Median Mode</li> </ul> <p><u>Part A:(Statistics for Economic)</u></p> <ul style="list-style-type: none"> <li>• <b>Chapter 9:</b> Concepts of Revenue</li> <li>• <b>Chapter-10:</b> Producer's Equilibrium</li> </ul>
<p><b>JANUARY</b></p>	<p><u>Part A: (Statistics for Economic)</u></p> <ul style="list-style-type: none"> <li>• <b>Chapter 11:</b> Theory of Supply</li> <li>• <b>Chapter 12:</b> Forms of Market</li> <li>• <b>Chapter 13:</b> Market Equilibrium under Perfect competition and effect of shifts in Demand and Supply</li> </ul>
<p><b>FEBRUARY</b></p>	<ul style="list-style-type: none"> <li>• <b>Chapter 12:</b> Correlation</li> <li>• <b>Chapter 13:</b> Index Number</li> </ul> <p><b>Note-Revision and Final Examination</b></p>

**SUBJECT: BUSINESS STUDIES (054)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>APRIL</b>	<b>No classes</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• <b>Unit 1: Evolution and Fundamental of Business</b></li></ul> <b>Project Work</b>
<b>JULY</b>	<ul style="list-style-type: none"><li>• <b>Unit 2: Forms of Business Organizations</b></li></ul> <b>Project Work</b>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• <b>Unit 3: Public, Private and Global Enterprises</b></li><li>• <b>Unit 4: Business Services</b></li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 5: Emerging Modes of Business</b></li></ul> <b>Project Work</b>
<b>OCTOBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 6: Social Responsibility of Business and Business Ethics</b></li></ul> <b>Project Work</b>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 7: Source of Business Finance</b></li><li>• <b>Unit 8: Small Business and Enterprises</b></li></ul>
<b>DECEMBER</b>	<b>Revision</b>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• <b>Unit 9: Internal Trade</b></li></ul> <b>Project Work</b>
<b>FEBRUARY</b>	<ul style="list-style-type: none"><li>• <b>Unit 10: International Trade</b></li></ul> <b>Project Work</b>

**SUBJECT: INFORMATION PRACTICES (065)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>APRIL</b>	<b>No Classes</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• <b>Unit 1:</b> Introduction to Computer System</li></ul>
<b>JULY</b>	<ul style="list-style-type: none"><li>• <b>Unit 2:</b> Introduction to Python</li></ul>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• <b>Unit 2:</b> Introduction to Python</li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 3:</b> Data Handling using NumPy</li></ul>
<b>OCTOBER</b>	<b>Unit Test 2 (1 to 12 October)</b> <ul style="list-style-type: none"><li>• <b>Unit 3:</b> Data Handling using NumPy</li></ul>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 4:</b> Database concepts and the Structured Query Language</li></ul>
<b>DECEMBER</b>	<b>Unit Test 3 (6 to 15 December) (Practical)</b> <ul style="list-style-type: none"><li>• <b>Unit 4:</b> Database concepts and the Structured Query Language</li></ul>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• <b>Unit 5:</b> Introduction to Emerging Trends</li></ul> <b>Revision</b>
<b>FEBRUARY</b>	<b>Revision</b>

**SUBJECT: LEGAL STUDIES (074)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>APRIL</b>	<b>No Classes</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• Basics of Legal Understanding</li><li>• Basics of Indian Polity</li></ul>
<b>JULY</b>	<b><u>Unit 1: Theory and Nature of Political Institutions</u></b> <ul style="list-style-type: none"><li>• Concept of State and Nation</li><li>• Organs of Government</li><li>• Separation of Powers</li><li>• Basic features of the Constitution of India</li></ul>
<b>AUGUST</b>	<b><u>Unit 2: Nature and Sources of Law</u></b> <ul style="list-style-type: none"><li>• Nature and meaning of law</li><li>• Classification of Law</li><li>• Sources of Law</li><li>• Law Reform</li></ul>
<b>SEPTEMBER</b>	<b><u>Unit 3: Historical Evolution of the Indian Legal System</u></b> <ul style="list-style-type: none"><li>• Ancient Indian Law</li><li>• Administration of Justice in British India</li><li>• Making of the Indian Constitution</li></ul>
<b>OCTOBER</b>	<b><u>Unit 4: Judiciary: Constitutional, Civil and Criminal Courts and Processes</u></b> <ul style="list-style-type: none"><li>• Constitution: Roles and Impartiality</li><li>• Hierarchy of Courts</li></ul> <b>Revision</b>
<b>NOVEMBER</b>	<b><u>Unit 4: Judiciary: Constitutional, Civil and Criminal Courts and Processes</u></b> <ul style="list-style-type: none"><li>• Structure and functioning of Criminal Courts in India</li><li>• Other Courts in India</li><li>• The Civil Court Structure</li></ul>
<b>DECEMBER</b>	<b><u>Unit 5: Family Justice System</u></b> <ul style="list-style-type: none"><li>• Introduction</li><li>• Institutional Framework</li><li>• Marriage and Divorce</li></ul>
<b>JANUARY</b>	<ul style="list-style-type: none"><li>• Children</li><li>• Domestic Violence</li><li>• Property, Succession &amp; Inheritance</li></ul>
<b>FEBRUARY</b>	<b>Revision + Project work</b>

**SUBJECT: NATIONAL CADET CORPS (076)**

<b>MONTH</b>	<b>CHAPTER NAME</b>
<b>MAY</b>	<ul style="list-style-type: none"><li>• <b>Unit 1:</b> The NCC</li><li>• Special subject</li><li>• <b>Unit 1:</b> Armed Forces</li></ul>
<b>JULY</b>	<ul style="list-style-type: none"><li>• <b>Unit 1:</b> Armed Forces (Special subject)</li><li>• <b>Unit 3:</b> Drill</li><li>• <b>Unit 2:</b> National Integration</li></ul>
<b>AUGUST</b>	<ul style="list-style-type: none"><li>• <b>Unit 3:</b> Drill</li><li>• <b>Unit 6:</b> Disaster Management and Civil Affairs</li><li>• Special subject</li><li>• <b>Unit 3:</b> Field Craft and Battle Craft</li></ul>
<b>SEPTEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 4:</b> Weapon Training</li><li>• Special Subject</li><li>• <b>Unit 5:</b> Military History</li></ul>
<b>OCTOBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 3:</b> Drill</li><li>• <b>Unit 6:</b> Health and Hygiene</li></ul>
<b>NOVEMBER</b>	<ul style="list-style-type: none"><li>• <b>Unit 8:</b> Health and Hygiene</li></ul>
<b>December</b>	<ul style="list-style-type: none"><li>• <b>Unit 3:</b> Drill</li><li>• <b>Unit 4:</b> Weapon Training</li><li>• <b>Unit 2:</b> Introduction to Maps and conventional Signs</li></ul>
<b>JANUARY</b>	<b>Revision Work</b>
<b>FEBRUARY</b>	<b>Revision Work</b>

**SUBJECT: HINDI CORE (302)**

MONTH	CHAPTER NAME
APRIL	No classes
MAY	<ul style="list-style-type: none"><li>• अपठित गद्यांश एवं अपठित काव्यांश</li><li>• पत्र लेखन</li><li>• रचनात्मक लेखन</li></ul>
JULY	<ul style="list-style-type: none"><li>• पाठ- नमक का दारोगा (गद्य खंड)</li><li>• दृश्य लेखन</li><li>• प्रति वेदन</li></ul>
AUGUST	<ul style="list-style-type: none"><li>• पाठ- मियाँ नसीरुद्दीन (गद्य खंड)</li><li>• पाठ- हम तो एक-एक करि जाना (काव्य खंड)</li><li>• औपचारिक एवं अनौपचारिक पत्र लेखन</li><li>• परिपत्र</li><li>• कार्य सूची एवं कार्यवृत्त</li></ul>
SEPTEMBER	<ul style="list-style-type: none"><li>• पाठ- भारतीय गायिकाओं में बेजोड़ लता मंगेशकर (पूरक पुस्तक)</li><li>• जनसंचार माध्यम एवं पत्रकारिता के विविध आयाम</li></ul>
OCTOBER	शब्दकोश
NOVEMBER	<ul style="list-style-type: none"><li>• पाठ- गलता लोहा (गद्य खंड)</li><li>• पाठ- मेरे तो गिरधर गोपाल (काव्य खंड)</li><li>• पाठ- वे आँखें (काव्य खंड)</li><li>• पाठ- राजस्थान की रजत बूंदें (पूरक पुस्तक)</li></ul>
DECEMBER	<ul style="list-style-type: none"><li>• पाठ- स्पीति में बारिश (गद्य खंड)</li><li>• पाठ- जामुन का पेड़ (गद्य खंड)</li><li>• पाठ- घर की याद (काव्य खंड)</li></ul>
JANUARY	<ul style="list-style-type: none"><li>• पाठ- भारत माता (गद्य खंड)</li><li>• पाठ- गज़ल (काव्य खंड)</li><li>• पाठ- आओ मिलकर बचाएँ (काव्य खंड)</li></ul>
FEBRUARY	<ul style="list-style-type: none"><li>• पाठ- आलो आँधारि (पूरक पुस्तक)</li></ul>

**SUBJECT: COMPUTER SCIENCE (083)**

MONTH	CHAPTER NAME
MAY	<p><b><u>Unit 1: Computer Systems and Organization</u></b></p> <ul style="list-style-type: none"><li>• Basic Computer Organization: Introduction to computer system, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (Bit, Byte, KB, MB, GB, TB, PB)</li><li>• Types of software: system software (operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler &amp; interpreter), application software</li><li>• Operating system (OS): functions of operating system, OS user interface</li><li>• Boolean logic: NOT, AND, OR, NAND, NOR, XOR, truth table, De Morgan's laws and logic circuits</li></ul>
JULY	<p><b><u>Unit 1: Computer Systems and Organization (Continued)</u></b></p> <ul style="list-style-type: none"><li>• Number system: Binary, Octal, Decimal and Hexadecimal number system; conversion between number systems.</li><li>• Encoding schemes: ASCII, ISCII and UNICODE (UTF8, UTF32)</li><li>• Emerging trends: Cloud computing, cloud services (SaaS, IaaS, PaaS), blockchains, Artificial Intelligence (AI), Machine Learning (ML), Internet of Things (IoT).</li></ul> <p><b><u>Unit 2: Computational Thinking and Programming – 1</u></b></p> <ul style="list-style-type: none"><li>• Introduction to problem solving: Steps for problem solving (analysing the problem, developing an algorithm, coding, testing and debugging). representation of algorithms using flow chart and pseudo code, decomposition</li><li>• Familiarization with the basics of Python programming: Introduction to Python, features of Python, executing a simple "hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens (keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments</li><li>• <b>NOTE- SYLLABUS OF UNIT TEST-1 WILL CONTAIN UNIT-1 (COMPLETE)</b></li></ul>
AUGUST	<p><b><u>Unit 2: Computational Thinking and Programming – 1 (Continued)</u></b></p> <ul style="list-style-type: none"><li>• Knowledge of data types: number (integer, floating point, complex), boolean, sequence (string, list, tuple), none, mapping (dictionary), mutable and immutable data types.</li><li>• Operators: arithmetic operators, relational operators, logical operators, assignment operator, augmented assignment operators, identity operators (is, is not), membership operators (in, not in)</li><li>• Expressions, statement, type conversion &amp; input/output: precedence of operators, expression, evaluation of expression, python statement, type conversion (explicit &amp; implicit conversion), accepting data as input from the console and displaying output</li><li>• Errors: syntax errors, logical errors, runtime errors</li><li>• Flow of control: introduction, use of indentation, sequential flow, conditional and iterative flow control</li><li>• Conditional statements: if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number</li><li>• Iterative statements: for loop, range function, while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number etc.</li></ul>

SEPTEMBER	<p><b><u>Unit 2: Computational Thinking and Programming – 1 (Continued)</u></b></p> <ul style="list-style-type: none"> <li>• Strings: introduction, indexing, string operations (concatenation, repetition, membership &amp; slicing), traversing a string using loops, built-in functions: len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(), lstrip(), rstrip(), strip(), replace(), join(), partition(), split()</li> <li>• Lists: introduction, indexing, list operations (concatenation, repetition, membership &amp; slicing), traversing a list using loops, built-in functions: len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list</li> <li>• Tuples: introduction, indexing, tuple operations (concatenation, repetition, membership &amp; slicing), built-in functions: len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple, suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear search on a tuple of numbers, counting the frequency of elements in a tuple</li> </ul> <p>Dictionary: introduction, accessing items in a dictionary using keys, mutability of dictionary (adding a new item, modifying an existing item), traversing a dictionary, built-in functions: len(), dict(), keys(), values(), items(), get(), update(), del(), clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), count(), sorted(), copy(); suggested programs : count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them .</p>
OCTOBER	<p><b><u>Unit 2: Computational Thinking and Programming – 1 (Continued)</u></b></p> <ul style="list-style-type: none"> <li>• Sorting techniques: Bubble and Insertion sort</li> <li>• Introduction to Python modules: Importing module using 'import &lt;module&gt;' and using from statement, Importing math module (pi, e, sqrt, ceil, floor, pow, fabs, sin, cos, tan); random module (random, randint, randrange), statistics module (mean, median, mode).</li> </ul> <p><b>NOTE- SYLLABUS OF UNIT TEST-2 WILL CONTAIN WHATEVER WE HAVE LEARNED TILL 20<sup>th</sup> SEPTEMBER, 2021.</b></p>
NOVEMBER	<p><b><u>Unit 3: Society, Law and Ethics</u></b></p> <ul style="list-style-type: none"> <li>• Digital Footprints</li> <li>• Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes</li> <li>• Data protection: Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open-source software's and licensing (Creative Commons, GPL and Apache)</li> </ul>
DECEMBER	<p><b><u>Unit 3: Society, Law and Ethics (Continued)</u></b></p> <ul style="list-style-type: none"> <li>• Cyber-crime: definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime</li> <li>• Cyber safety: safely browsing the web, identity protection, confidentiality, cyber trolls and bullying.</li> <li>• Safely accessing web sites: malware, viruses, trojans, adware</li> </ul>



JANUARY	<b>Unit 3: Society, Law and Ethics (Continued)</b> <ul style="list-style-type: none"><li>• E-waste management: proper disposal of used electronic gadgets</li><li>• Indian Information Technology Act (IT Act)</li><li>• Technology &amp; Society: Gender and disability issues while teaching and using computers</li></ul>
FEBRUARY	<b>REVISION AND PRACTICALS</b>
MARCH	<b>REVISION AND PRACTICALS</b> <b>NOTE- FINAL EXAM SYLLABUS WILL CONTAIN WHOLE SYLLABUS.</b>

**SUBJECT: PHYSICAL EDUCATION (048)**

Months	Chapter Name
MAY	<p><b><u>Unit I: Changing Trends &amp; Career in Physical Education:</u></b></p> <ul style="list-style-type: none"> <li>• Meaning &amp; definition of Physical Education · Aims &amp; Objectives of Physical Education · Career Options in Physical Education · Competitions in various sports at national and international level</li> <li>• Khelo-India Program</li> </ul>
JULY	<p><b><u>Unit II: Olympic Value Education:</u></b></p> <ul style="list-style-type: none"> <li>• Olympics, Paralympics and Special Olympics · Olympic Symbols, Ideals, Objectives &amp; Values of Olympism · International Olympic Committee · Indian Olympic Association</li> </ul> <p><b><u>Unit III: Physical Fitness, Wellness &amp; Lifestyle:</u></b></p> <ul style="list-style-type: none"> <li>• Meaning &amp; Importance of Physical Fitness, Wellness &amp; Lifestyle · Components of physical fitness and Wellness · Components of Health-related fitness</li> </ul>
AUGUST	<p><b><u>Unit IV: Physical Education &amp; Sports for CWSN (Children with Special Needs-Divyang):</u></b></p> <ul style="list-style-type: none"> <li>• Aims &amp; objectives of Adaptive Physical Education · Organization promoting Adaptive Sports (Special Olympics Bharat; Paralympics; Deaflympics) · Concept of Inclusion, its need and Implementation · Role of various professionals for children with special needs (Counsellor, Occupational Therapist, Physiotherapist, Physical Education Teacher, Speech Therapist &amp; special Educator)</li> </ul>
SEPTEMBER	<p><b><u>Unit V: Yoga:</u></b></p> <ul style="list-style-type: none"> <li>• Meaning &amp; Importance of Yoga · Elements of Yoga · Introduction - Asanas, Pranayam, Meditation &amp; Yogic Kriyas · Yoga for concentration &amp; related Asanas (Sukhasana; Tadasana; Padmasana &amp; Shashankasana, Naukasana, Vrikshasana (Tree pose), Garudasana (Eagle pose) · Relaxation Techniques for improving concentration – Yog-Nidra</li> </ul>
OCTOBER	<p><b><u>Unit VI: Physical Activity &amp; Leadership Training:</u></b></p> <ul style="list-style-type: none"> <li>• Leadership Qualities &amp; Role of a Leader ·</li> <li>• Creating leaders through Physical Education ·</li> <li>• Meaning, objectives &amp; types of Adventure Sports (Rock Climbing, Tracking, River Rafting, Mountaineering, Surfing and Para Gliding) · Safety measures to prevent sports injuries</li> </ul> <p><b><u>Unit VII: Test, Measurement &amp; Evaluation:</u></b></p> <ul style="list-style-type: none"> <li>• Define Test, Measurement &amp; Evaluation. Importance of Test, Measurement &amp; Evaluation in Sports. Calculation of BMI &amp; Waist - Hip Ratio Somato Types (Endomorphy, Mesomorphy &amp; Ectomorphy) · Measurement of health-related fitness</li> </ul>

<p><b>NOVEMBER</b></p>	<p><b><u>Unit VIII: Fundamentals of Anatomy, Physiology &amp; Kinesiology in Sports:</u></b></p> <ul style="list-style-type: none"> <li>• Definition and Importance of Anatomy, Physiology &amp; Kinesiology · Function of Skeleton System, Classification of Bones &amp; Types of Joints · Properties and Functions of Muscles · Function &amp; Structure of Respiratory System and Circulatory System · Equilibrium – Dynamic &amp; Static and Centre of Gravity and its application in sports</li> </ul>
<p><b>DECEMBER</b></p>	<p><b><u>Unit IX: Psychology &amp; Sports: Definition &amp; Importance of Psychology in Physical Education &amp; Sports:</u></b></p> <ul style="list-style-type: none"> <li>• Define &amp; Differentiate Between Growth &amp; Development · Developmental Characteristics at Different Stages of Development · Adolescent Problems &amp; Their Management</li> </ul> <p><b><u>Unit X: Training and Doping in Sports · Meaning &amp; Concept of Sports Training · Principles of Sports:</u></b></p> <p>Training · Warming up &amp; limbering down · Skill, Technique &amp; Style · Concept &amp; classification of doping · Prohibited Substances &amp; their side effects · Dealing with alcohol and substance abuse</p>
<p><b>JANUARY</b></p>	<p><b><u>Unit X: Training and Doping in Sports: Meaning &amp; Concept of Sports Training:</u></b></p> <ul style="list-style-type: none"> <li>• Principles of Sports Training · Warming up &amp; limbering down · Skill, Technique &amp; Style · Concept &amp; classification of doping · Prohibited Substances &amp; their side effects · Dealing with alcohol and substance abuse</li> </ul>

