

**SAINIK SCHOOL AMBIKAPUR**  
**CHHATTISGARH**  
**SUMMER VACATION HOMEWORK (2024-25)**  
**Class- XI**  
**Subject - English**

Class – XI	Subject - English	Teachers - BK Pandey
S.No.	Items	Details
1.	Syllabus for PT-1	<p><b><u>Snapshots</u></b> :</p> <p>Summer of the Beautiful White Horse  The Address</p> <p><b><u>Hornbill</u></b></p> <p>The Portrait of a Lady  We re not Afraid to Die if are all Together</p> <p><b><u>Writing</u></b></p> <p>Speech Writing</p> <p><b><u>Grammar</u></b></p> <p>Verb Tenses</p>
2.	Revision Homework / Assignment	Ensure that all the Exercises with respect to the above chapters are completed.
3.	General Capacity Building	<p>Watch as many of the following movies as you can:</p> <p>Good Will Hunting  12th Fail  Finding Forrester  Kramer Versus Kramer  Jerry McGuire  Coach Carter  A Few Good Men  Men of Honour  Good Will Hunting  The Imitation Game  Shashwank Redemption  The Terminal  The Last Castle  Hachi - A Dog's Tale</p> <p>Read the following Titles —</p> <p>'Malgudi Days' by R. K. Narayan  'Wise and Otherwise: A salute to Life' by Sudha Murty  To Kill a Mockingbird  Animal Farm  1984  Great Expectations  The Old Man and the Sea  The Importance of Being Earnest</p>

		Catch-22 Dr. Jekyll and Mr. Hyde The Gift of the Magi For Whom the Bell Tolls A Study in Scarlet (Sherlock Holmes), Arthur Conan Doyle The Last Leaf, O Henry
4.	Preparatory Work for Units/ Chapters covered	

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**Class- XI**  
**Subject - Maths**

Class – XI	Subject- Maths	Teachers - MSN Raju, Raj Kumar
S.No.	Items	Details
1.	Syllabus for PT-1	<ol style="list-style-type: none"> <li>1 Sets</li> <li>2 Relations and Functions</li> <li>3 Trigonometric Functions</li> <li>4 Complex numbers and Quadratic equations.</li> </ol>
2.	Revision Homework / Assignment	Revision of 1 to 4 chapters for PA 1
3.	Subject Capacity Building Assignment	<p>Activities:</p> <ol style="list-style-type: none"> <li>1. To find the number of subsets of a given set and verify that if a set has <math>n</math> number of elements, then the total number of subsets is <math>2^n</math>.</li> <li>2. To verify that for two sets <math>A</math> and <math>B</math>, <math>n(A \times B) = pq</math> and the total number of relations from <math>A</math> to <math>B</math> is <math>2^{pq}</math>, where <math>n(A) = p</math> and <math>n(B) = q</math>.</li> <li>3. To verify distributive law for three given non-empty sets <math>A</math>, <math>B</math> and <math>C</math>, that is, <math>A \cup (B \cap C) = (A \cup B) \cap (A \cup C)</math></li> <li>4. To find the values of sine and cosine functions in second, third and fourth quadrants using their given values in first quadrant.</li> <li>5. To plot the graphs of <math>\sin x</math>, <math>\sin 2x</math>, <math>2\sin x</math> and <math>\sin x/2</math>, using same coordinate axes.</li> </ol>
4.	Preparatory Work for Units/ Chapters covered	<p>MCQs of RD Sharma from the following chapters :</p> <ol style="list-style-type: none"> <li>1. Sets</li> <li>2. Relations and Functions</li> <li>3. Trigonometric Functions</li> <li>4. Complex numbers and Quadratic equations.</li> </ol>

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**SUMMER VACATION HOMEWORK (2024-25)**  
**Class- XI**  
**Subject - Physics**

Class – XI	Subject - Physics	Teachers - R Madanlal, Shasi Kant
S.No.	Items	Details
1.	Syllabus for PT-1	Chapter1,2,3
2.	Revision Homework / Assignment	1. Write the summary points of chapter1,2,3 from NCERT text book 2. Prepare notes for chapters 2 and 3.
3.	Subject Capacity Building Assignment	Write the conducted experiments in the practical record.
4.	Preparatory Work for Units/ Chapters covered	Solve the exercise questions of chapters 1.2 and 3.

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**Class- XI**  
**Subject - Chemistry**

Class – XI	Subject - Chemistry	Teachers- Dipankar Tiwari, Deepshikha Kujur
S.No.	Items	Details
1.	Syllabus for PT-1	Chapter -1 and 2.
2.	Revision Homework / Assignment	Complete questions answers of chapter 1 and 2.
3.	Subject Capacity Building Assignment	Collect atleast 15 MCQ questions from each chapter 1 and 2 as a part of NDA syllabus
4.	Preparatory Work for Units/ Chapters covered	Working models based on chemistry class 11th.

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**SUMMER VACATION HOMEWORK (2024-25)**  
**Class- XI**  
**Subject - Computer Science**

Class – XI	Subject - Computer Sc.	Teachers- Pradeep Kumar Dangre
S.No.	Items	Details
1.	Syllabus for PT-1	<p><b>Unit I: Computer Systems and Organisation -</b></p> <ol style="list-style-type: none"> <li>1. Basic computer organization: Introduction to Computer System, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory</li> <li>2. Number System: Binary, Octal, Decimal and Hexadecimal number system</li> <li>3. ASCII</li> </ol> <p><b>Unit II: Computational Thinking and Programming – 1</b></p> <p>Topics:</p> <ol style="list-style-type: none"> <li>1. Introduction to Python Programming</li> <li>2. Python character set &amp; Python tokens</li> <li>3. Operators &amp; Expression</li> <li>4. Conditional statements</li> <li>5. Iterative Statements (only while)</li> </ol>
2.	Revision Homework / Assignment	(Do as directed – Make a stick file for Python Programs) * List of Programs is discussed in Class.
3.	Subject Capacity Building Assignment	<p>Q.1: Perform the following:-</p> <p>Write a Menu Based program for integers:</p> <ol style="list-style-type: none"> <li>1. Print ASCII Code</li> <li>2. Check Even / Odd</li> <li>3. Check Prime</li> <li>4. Check Perfect</li> <li>5. Check Composite</li> <li>6. Check Palindrome</li> <li>7. Print Factorial</li> <li>8. Exit</li> </ol>
4.	Preparatory Work for Units/ Chapters covered	Learn Boolean Algebra, Truth Table and Fundamentals of Computer, Prepare 20 MCQs on Python & write in your Computer Notebook.

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**SUMMER VACATION HOMEWORK (2024-25)**  
**Class- XI**  
**Subject - Biology**

Class – XI	Subject - Biology	Teachers- Manoj Kumar Tripathi
S.No.	Items	Details
1.	Syllabus for PT-1	L1- Diversity in living organisms L2- Biological Classification L3- Plant Kingdom L4- Animal kingdom
2.	Revision Homework / Assignment	Prepare 50 MCQ questions each from L1 to L4 for your PA 1 examination.
3.	Subject Capacity Building Assignment	Make a herbarium file of 20 leaves. Write basic classification of these plants with common hindi and english names.
4.	Preparatory Work for Units/ Chapters covered	Read lessons 5- Morphology of flowering plants and Lesson 6 Anatomy of flowering plants for ease of understanding later.