

**ARMY PUBLIC SCHOOL, BANGALORE**  
**SPLIT UP SYLLABUS 2023-24**

**CLASS - 12**  
**SUBJECT- MATHEMATICS**

<b>SL. NO.</b>	<b>MONTH &amp; WORKING DAYS</b>	<b>CONTENT</b>
1.	<b>MARCH, 13 DAYS</b>	<b>1. Relations &amp; Functions</b> <ul style="list-style-type: none"><li>• Types of relations, Reflexive, Symmetric, Transitive and equivalence relations</li></ul>
2.	<b>APRIL, 14 DAYS</b>	<ul style="list-style-type: none"><li>• <b>Continuation of Relations and Functions</b><ul style="list-style-type: none"><li>- Bijective function</li></ul></li><li><b>2. Inverse Trigonometric Functions (ITF)</b> The values of different inverse trigonometric functions, domain and range of ITF</li></ul>
3.	<b>JUNE, 24 DAYS</b>	<b>3. Matrices</b> Types of matrices, formation of matrices, <ul style="list-style-type: none"><li>• <b>Continuation of ITF</b><ul style="list-style-type: none"><li>- Principal Value Branch (PVB)</li></ul></li><li>• <b>Continuation of Matrices</b><ul style="list-style-type: none"><li>- Operations on Matrices, Transpose of a matrix</li></ul></li><li><b>5. Continuity and Differentiability</b><ul style="list-style-type: none"><li>- Continuity, Differentiability, Exponential and Logarithmic functions, Parametric form of differentiation, successive differentiation</li></ul></li></ul>

		<p><b>6. Applications of Derivatives</b></p> <ul style="list-style-type: none"> <li>- Rate of Change of bodies,</li> </ul>
4.	<p><b>JULY, 23 DAYS</b></p>	<ul style="list-style-type: none"> <li>• <b>Continuation of Matrices</b> <ul style="list-style-type: none"> <li>- Symmetric and Skew symmetric matrices, Proof of uniqueness of inverse if it exists.</li> </ul> </li> <li>• <b>Continuation of Applications of Derivatives</b> <ul style="list-style-type: none"> <li>- Increasing and decreasing functions, maxima and minima</li> </ul> </li> </ul> <p><b>4 Determinants</b></p> <ul style="list-style-type: none"> <li>- Determinants, Area of a triangle</li> </ul> <p><b>7 Integrals</b></p> <ul style="list-style-type: none"> <li>- Methods of integrations</li> </ul>
5.	<p><b>AUG, 24 DAYS</b></p>	<ul style="list-style-type: none"> <li>• <b>Continuation of Determinants</b> <ul style="list-style-type: none"> <li>- Minors and Cofactors, inverse of a matrix</li> </ul> </li> <li>• <b>Continuation of Integrals</b> <ul style="list-style-type: none"> <li>- Integration by Partial fraction and by parts, definite integral, Properties of integrals</li> </ul> </li> </ul> <p><b>8 Applications of Integrals</b></p> <ul style="list-style-type: none"> <li>- Area under curves, Area under curves and lines</li> </ul>

6.	<b>SEPT, 22 DAYS</b>	<ul style="list-style-type: none"> <li>• <b>Continuation of Determinants</b> <ul style="list-style-type: none"> <li>- Applications of determinants and matrices</li> </ul> </li> <li>• <b>9 Differential Equations (DE)</b> <ul style="list-style-type: none"> <li>- Order &amp; degree of DE, Methods of solving first Order, First degree DE, Homogeneous DE, Linear DE</li> </ul> </li> </ul>
7.	<b>OCT, 16 DAYS</b>	<ul style="list-style-type: none"> <li>• <b>Continuation of Determinants</b> <ul style="list-style-type: none"> <li>- Applications of determinants and matrices</li> </ul> </li> <li>• <b>10 Differential Equations (DE)</b> <ul style="list-style-type: none"> <li>- Order &amp; degree of DE, Methods of solving first Order, First degree DE, Homogeneous DE, Linear DE</li> </ul> </li> </ul>
8.	<b>NOV, 21 DAYS</b>	<p><b>11 LPP</b></p> <ul style="list-style-type: none"> <li>- Objective function, subject to constraints, feasible region and Corner points.</li> </ul> <p><b>12 Probability</b></p> <ul style="list-style-type: none"> <li>- Conditional Probability, Multiplication theorem on probability, Independent events,</li> <li>- Baye's theorem, Random Variables and its probability distribution</li> </ul>
9.	<b>DEC, 18 DAYS</b>	<ul style="list-style-type: none"> <li>• Revision/ Preboard I</li> </ul>
10.	<b>JAN, 23 DAYS</b>	Revision/ Preboard II

11.	<b>FEB, 24 DAYS</b>	
12.	<b>MARCH, 21 DAYS</b>	

**BOOKS: NCERT TEXTBOOK, RD SHARMA TEXTBOOK,**