## Class - XII

## Sub: MATHEMATICS

## Weekly Syllabus

Academic Session 2023-24

| Month | Week | Dates |  | Days | No of Periods | Chapter | Contents | Syllabus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|} \hline \text { Mar - } \\ 23 \end{array}$ |  | 9-27 |  |  | Block Teaching | $\frac{\text { Chapter - } 3}{\text { Matrices }}$ | Concept, notation,equality, <br> types of matrices, Zero matrix. <br> Transpose of a <br> symmetric, matrix, <br> symmetric matrices, <br> multiplication, <br> multiplication of matrix, simplen <br> properties of <br> multiplication, <br> multiplicative. <br> Non-commutativity of matrix <br> multiplication. Scalar, |  |
| Apr-23 | I | 01 | 01-Working Saturday (Student) | 01 | 1 | $\frac{\text { Chapter - } 3}{\text { Matrices }}$ | Existence of non-zero matrixes whose product is Zero restricted to square matrix? Matrix of order 2. |  |
|  | II | 03-07 | 04 - Mahavir Jayanti 07 - Good Friday | 03 | 5 | $\frac{\text { Chapter - } 3}{\text { Matrices }}$ | . Invertible matrices and proof the uniqueness of inverse if it exists. |  |
|  | III | 10-14 | 14 - Ambedakar Jayanti | 04 | 08 | $\frac{\text { Chapter - } 3}{\text { Matrices }}$ | Determinants of square matrix up to $3 \times 3$ matrix. |  |



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|  |  |  |  |  |  | Chapter - 5 Continuity and Differentiability | exponential logarithmic functions and parametric functions ,derivatives of $\mathrm{e}^{\mathrm{x}}$, second order derivatives, | Chapter - 4 <br> Determinants |
|  | II | 08-12 | $\begin{aligned} & 08 \text { : ES-1 (XII)/ CT-1 (X) } \\ & \text { 11,12 - The Quest } \end{aligned}$ | 05 | 8 | Chapter - 5 <br> Continuity and Differentiability <br> Chapter - 6 <br> Applications of Derivatives | Misc. questions <br> Rate of change as an application of Derivatives in the real life situations. |  |
|  | III | 15-20 | 20- Working Saturday (Open House X \& XII) | 06 | 8 | Chapter - 6 <br> Applications of Derivatives | Increasing and Decreasing functions as an application of Derivatives. |  |
| ***** SUMMER BREAK 22 MAY -30 JUN 2023 ****** |  |  |  |  |  |  |  |  |
| Jul-23 | I | 01- | 01-School reopens for staff | 01 | - | - | - | PT-I <br> Class VI-X Date: 07 Jul 19Jul |
|  | II | 03-07 |  | 05 | 8 | Chapter - 6 <br> Applications of Derivatives | Concepts of Maxima and minima $1^{\text {st }}$ derivative test. <br> $2^{\text {nd }}$ derivatives test Simple problem, Related to real life situations). | ES-2 (XII): 07 Jul - 19Jul <br> Chapter - 1 <br> Relations and <br> Functions <br> Chapter - 2 <br> Inverse Trigonometric functions |
|  | III | 10-14 |  | 05 | 8 | Chapter - 6 | Miscellaneous problems on | Chapter - 3 |


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|  |  |  |  |  |  | Applications of Derivatives <br> Chapter - 7 <br> Integrals | chapter 6 <br> Integration as inverse process of Differentiation. <br> Integration of variety of function by substitution | Matrices <br> Chapter - 4 <br> Determinants <br> Chapter - 5 <br> Continuity and <br> Differentiability <br> Chapter - 6 |
|  | IV | 17-22 | 22 - Working Saturday (Students) | 06 | 8 | $\frac{\text { Chapter - } 7}{\text { Integrals }}$ | Integration by partial fraction, by parts and Integration based on formulas. <br> Fundamental theorem of integral calculus. <br> Basic properties and integration based on properties of definite integrals | Application of Derivatives Only Rate of Change |
|  | V | 24-28 | 29-Muharram | 05 | 8 | $\begin{aligned} & \hline \frac{\text { Chapter - 7 }}{\text { Integrals }} \\ & \text { Chapter - 8 } \\ & \begin{array}{l} \text { Applications of } \\ \text { the Integrals } \end{array} \\ & \hline \end{aligned}$ | $\left.\begin{array}{lr}\text { properties of } & \text { definite } \\ \text { integrals(contd.). Finding the }\end{array}\right\}$area under simple curves <br> especially <br> circles/parabolas/ellipses (ines, <br> standard form only). |  |
|  | VI | 31 |  | 01 | 1 | Chapter - 8 <br> Applications of the Integrals | Miscellaneous problems on chapter 8 |  |
| Aug-23 | I | 01-05 | 05 - Working Saturday (Open House (VIX), XII) | 05 | 8 | Chapter - 8 <br> Applications of the Integrals | Miscellaneous problems on chapter 8 |  |



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$\left.\begin{array}{|l|l|l|l|c|c|c|c|c|}\hline \text { Month } & \text { Week } & \text { Dates } & & \text { Chapter } & \text { Contents } \\ \hline & & & & & \text { No of } \\ \text { Periods }\end{array}\right)$

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|  | IV | 29-31 |  | 03 |  |  |  |  |
| Feb-24 | I | 01-03 | 01,02- Class Test <br> 03-Working Saturday, Citation Ceremony, Open House (X\& XII) | 03 |  |  |  |  |
|  | II | 05-09 | 05-08- Class Test | 05 |  |  |  | Annual Exam Class IX \& XI - 07 Feb-21 Feb 2023 |
|  | III | 12-16 |  | 05 |  |  |  |  |
|  | IV | 19-23 |  | 05 |  |  |  |  |
|  | V | 26-29 |  | 04 |  |  |  |  |
| Mar-24 | Annual Exam Classes VI-VIII - 26 Feb-11 Mar 2024 |  |  |  |  |  |  |  |

Note: The examination syllabus as mentioned above is to be considered Tentative. The final syllabus for each exam will be uploaded on the website along with the Date Sheet at the time of the examination.

