

SYLLABUS BREAKUP (2026-27)**SUBJECT: MATHEMATICS****CLASS XI****FIRST CYCLE WRITTEN TEST: JULY 20, 2026****HALF-YEARLY EXAM: 15 SEPTEMBER, 2026 ONWARDS****SECOND WRITTEN TEST: DECEMBER 23, 2026****ANNUAL EXAM.: FEBRUARY 15, 2027 ONWARDS****APRIL & MAY**

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| TOTAL NUMBER OF WORKING DAYS: | 36 Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 40 periods (app.) |
| CHAPTER | NO. OF PERIODS |
| 1. SETS | [10] |
| [a] Sets and their Representations | 1 |
| [b] Empty Set, Finite and Infinite Sets, Equal Sets | 1 |
| [c] Subsets, Power Sets, Universal Set | 2 |
| [d] Venn Diagram, Operation on Sets Complements of a set | 2 |
| [e] Practical problems on Union and Intersection of Two Sets | 4 |
| 2. RELATIONS AND FUNCTIONS | [12] |
| [a] Cartesian product of Sets | 1 |
| [b] Relations | 2 |
| [c] Functions | 2 |
| [d] Domain & Range | 2 |
| [e] Types of functions | 2 |
| [f] Composition of Functions | 3 |
| 3. TRIGONOMETRIC FUNCTIONS | [18] |
| [a] Measuring Angles in Radians and Degrees | 2 |
| [b] Signs of Trigonometric Functions | 2 |
| [c] Addition and Subtraction Formulae | 2 |
| [d] Conversion of sum & difference into product | 3 |
| [e] Conversion of product into sum and difference | 3 |
| [f] Identities related to multiple and Sub-multiple angles. | 3 |
| [g] General solution of trigonometric equations of the type $\sin y = \sin a$, $\cos y = \cos a$ and $\tan y = \tan a$. | 3 |

JULY

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| TOTAL NUMBER OF WORKING DAYS: | 22Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 27 periods (app.) |
| 4. COMPLEX NUMBERS AND QUADRATIC EQUATIONS | [9] |
| [a] Definition of Complex Numbers | 1 |
| [b] Algebra of Complex Numbers and Problems | 2 |
| [c] Geometrical Representation of Complex Numbers | 2 |
| [d] Argand plane and Problems, Polar representation of complex numbers. | 2 |
| [e] Solution of quadratic equations (with real coefficients) in the complex number system. | 2 |
| 5. LINEAR INEQUALITIES | [7] |
| [a] Algebraic Solutions of Linear Inequalities in one variable and their representation on number line. | 4 |
| [b] Graphical solution of linear inequalities and system in two variables. | 3 |
| 6. PERMUTATION AND COMBINATION | [11] |
| [a] Fundamental Principle of Counting and Factorial Notation | 2 |

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| [b] Permutations and Restricted Permutations | 3 |
| [c] Combination | 3 |
| [d] Problems involving Permutation & Combination both | 3 |

AUGUST&SEPTEMBER

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| TOTAL NUMBER OF WORKING DAYS: | 29Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 35periods (app.) |
| 7. BINOMIAL THEOREM | [7] |
| [a] Binomial Theorem for Positive Integral Indices | 2 |
| [b] General and Middle Term | 2 |
| [c] Problem Discussions | 3 |
| 8. SEQUENCES AND SERIES | [10] |
| [a] Arithmetic Progression | 1 |
| [b] Geometric Progression | 4 |
| [c] Relationship between A.M. and G.M. | 2 |
| [d] Sum of infinite G.P. | 1 |
| [e] Formulae for the special sums $\sum n, \sum n^2, \sum n^3$ | 2 |
| 9. STRAIGHT LINE | [12] |
| [a] Introduction | 1 |
| [b] Slope of Line | 2 |
| [c] Various forms of equation of a line parallel to axis, point -slope form, Normal Slope-intercept form, two-point form, intercept form, Distance of a point from a line. | 3 |
| [d] General Equation of a line and angle between two lines | 2 |
| [e] Distance of a point from a line and Distance between parallel lines | 2 |
| [f] Problems | 2 |
| REVISION | [6] |

OCTOBER

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| TOTAL NUMBER OF WORKING DAYS: | 19 Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 23periods (app.) |
| 10. CONIC SECTION | [10] |
| [a] Section of a Cone | 1 |
| [b] Circle | 3 |
| [c] Parabola | 2 |
| [d] Ellipse | 2 |
| [e] Hyperbola & Problems | 2 |
| 11. LIMITS & DERIVATIVES | [13] |
| [a] Introduction | 1 |
| [b] Limits | 2 |
| [c] Limits of Trigonometric Functions | 2 |
| [d] Problems | 3 |
| [e] Derivatives, Chain Rule | 3 |
| [f] Problems | 2 |

NOVEMBER AND DECEMBER

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| TOTAL NUMBER OF WORKING DAYS: | 30Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 35 periods (app.) |
| 12. STATISTICS | [12] |
| [a] Measures of Dispersion | 2 |
| [b] Range Mean Deviation | 3 |
| [c] Variance and Standard Deviation | 7 |
| 13. PROBABILITY | [16] |
| [a] Random Experiments | 2 |
| [b] Events and Types of Events | 3 |
| [c] Axiomatic Approach to Probability | 3 |
| [d] Problem Discussion | 8 |
| 14. INTRODUCTION TO THREE-DIMENSIONAL GEOMETRY | [7] |
| [a] Co-ordinate Geometry and Planes in 3-D Space | 1 |
| [b] Co-ordinate of a point in Space | 1 |
| [c] Distance Formula | 1 |
| [d] Section Formula & Problems | 4 |

JANUARY AND FEBRUARY

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| TOTAL NUMBER OF WORKING DAYS: | 24Days (app.) |
| TOTAL NUMBER OF PERIODS INVOLVED IN TEACHING: | 30 periods (app.) |
| 15. PRINCIPLE OF MATHEMATICAL INDUCTION | [6] |
| REVISION | [24] |