NIMCET 2026 – COMPLETE DETAILED GROUPWISE MASTER PLAN

GROUP A – MUST MASTER (Core Rank Maker)

MATHEMATICS – Algebra (7–10 Q | 84–120 Marks)

- Topic: Matrices
- Subtopics: Addition, Multiplication, Transpose, Identity Matrix, Matrix Power (A^2).
- Example: If A=[[1,2],[3,4]], find A^2.
- Practice Target: 80–100 problems.
- Topic: Determinants
- Subtopics: 2×2, 3×3, Row/Column Operations, Determinant = 0 condition.
- Example: Solve system using Cramer's Rule.
- Practice Target: 120 problems.
- Topic: Inverse of Matrix
- Subtopics: Adjoint Method, Inverse Formula.
- Example: Find inverse of [[2,1],[1,3]].
- Practice Target: 40–60 problems.
- Topic: Quadratic Equations
- Subtopics: Discriminant, Nature of Roots, $\alpha+\beta$, $\alpha\beta$, Symmetric Functions.
- Example: If roots are α and β, find $\alpha^2 + \beta^2$.
- Practice Target: 100 problems.

MATHEMATICS – Calculus (9–13 Q | 108–156 Marks)

- Topic: Limits
- Subtopics: Standard Limits, Rationalisation, Limits at Infinity.
- Example: lim $x \to 0$ $(\sqrt{(1+x)} - 1)/x$.
- Practice Target: 150 problems.
- Topic: Differentiation
- Subtopics: Power Rule, Product Rule, Chain Rule, Tangent & Normal, Maxima/Minima.
- Example: Find maximum of $x^2 - 4x + 3$.
- Practice Target: 200 problems.

MATHEMATICS – Probability (3–4 Q | 36–48 Marks)

- Subtopics: Conditional Probability, Independent Events, Bayes Theorem.
- Example: If P(A)=0.4 and P(B|A)=0.5, find $P(A \cap B)$.
- Practice Target: 100 problems.

LOGICAL REASONING – Core (20–25 Q | 120–150 Marks)

- Number Series – Pattern recognition. Practice: 300 questions.
- Coding-Decoding – Letter/Number mapping. Practice: 150 questions.

- Blood Relations – Family tree logic. Practice: 100 questions.
- Syllogism – Venn diagram method. Practice: 150 questions.
- Direction Test – Movement tracking. Practice: 80 questions.

GROUP B – STRONG SUPPORT (Rank Booster)

MATHEMATICS – Set Theory & Logic (2–4 Q)

- Subtopics: Union, Intersection, Venn Diagram, Functions & Relations, Truth Tables, Tautology.
- Example: Check whether a statement is tautology.
- Practice Target: 80 problems.

MATHEMATICS – Coordinate Geometry (4–6 Q)

- Straight Line – Slope form, Two-point form.
- Example: Equation through (2,3) & (4,7).
- Circle – Standard & General Equation, Tangent.
- Example: Tangent to $x^2 + y^2 = 25$ at (3,4).
- Practice Target: 140 problems.

MATHEMATICS – AP/GP & Statistics (4–6 Q)

- AP – nth term & sum formula.
- GP – nth term & sum formula.
- Statistics – Mean, Variance, Standard Deviation.
- Practice Target: 120 problems.

LOGICAL REASONING – Advanced (10–15 Q)

- Seating Arrangement – Linear & Circular. Practice: 200 sets.
- Data Interpretation – Table/Pie/Bar Graph. Practice: 150 sets.
- Data Sufficiency – Statement evaluation. Practice: 120 sets.

GROUP C – LOW PRIORITY (Formula Familiarity Level)

MATHEMATICS – Remaining Topics (5–8 Q Unpredictable)

- Integration – Substitution, Parts, Definite Integrals.
- Trigonometry – Identities, Trig Equations, Heights & Distances.
- Conics – Parabola, Ellipse, Hyperbola.
- Binomial Theorem – Expansion & Coefficients.
- Permutations & Combinations – Basic Counting.
- Practice: Selective PYQs + Formula Revision.

LOGICAL REASONING – Complex (3–5 Q)

- Hard Puzzles.
- Input-Output.
- Mixed Reasoning Sets.
- Practice: Selective timed sets only.