

■ NIMCET Topic-Wise Notes Summary (High Yield)

1■■■ MATHEMATICS (Highest Weightage)

✓ Algebra

Quadratic equations → roots, discriminant, relation b/w roots

Polynomials → division, remainder theorem

Logarithms → laws, base change, exponential forms

Matrices → types, inverse, adjoint, rank

Determinants → properties, Cramer's rule

✓ Trigonometry

Standard identities

Inverse trigonometric functions

Heights & distances

Trigonometric equations

✓ Coordinate Geometry

Straight Line → slope, intercepts, angle, distance

Circle → equation, tangent, normal, central angle

Conic Sections → parabola, ellipse, hyperbola (standard forms + parameters)

✓ Calculus

Limits, continuity

Differentiation → rules, maxima-minima, tangents

Integration → standard forms, substitution, definite integrals

Area under the curve

✓ Vector & 3D Geometry

Dot & cross product

Scalar triple product

Equation of line & plane

Angle between lines/planes

2■■ ANALYTICAL ABILITY & LOGICAL REASONING

✓ High-Scoring Topics

Number series

Coding–decoding

Direction sense

Blood relations

Analogy (word/number)

Odd one out

Logical puzzles

Syllogisms

3■■ COMPUTER AWARENESS

✓ Fundamentals

Characteristics of computer

Input-output devices

Types of memory → primary, secondary, cache

Number systems → binary, octal, hex conversions

✓ Operating System

Types: batch, real-time, time-sharing

File management

Process management basics

✓ Programming Basics (C Focused)

Data types, variables

Conditional & looping statements

Functions (user-defined & predefined)

Arrays, pointers basics

Flowcharts & algorithms

4■■■ GENERAL ENGLISH

✓ Vocabulary

Synonyms & antonyms

One-word substitution

Idioms & phrases

✓ Grammar

Error detection

Verb tenses

Active & passive voice

Direct & indirect speech

✓ Comprehension

Reading passages (speed + inference)

■ Most Important Topics to Prepare First

✓ Coordinate Geometry

✓ Calculus (Limits, Derivatives, Integrals)

✓ Matrices & Determinants

✓ Probability & Permutation-Combination

✓ Number System (Computer Awareness)

✓ Coding-Decoding & Logical Series

✓ Grammar + Vocabulary in English