

CDS Syllabus 2020: Combined defence services examination is conducted for the admission in [Indian Military Academy](#) (IMA), [Air Force Academy](#) (AFA), [Indian Naval Academy](#) (INA) and Officers' Training Academy (OTA).

CDS Exam is conducted twice a year. The recruitment process of CDS Exam is not that easy and a proper and dedicated preparation is required to crack UPSC CDS Exam 2020.

Candidates should have proper idea about **CDS Syllabus 2020** exam to start the preparation in right direction.

All candidates can check CDS Exam syllabus 2020 on this page and make their preparation strategy according to **CDS Syllabus 2020**.

There will be three parts in CDS Syllabus 2020.

- English
- General Knowledge
- Elementary Mathematics

Syllabus of Elementary Mathematics will be similar to matriculation level Mathematics exam. Syllabus for all other subjects will be similar to any Indian University Graduation level exam.

Please find below CDS Exam Syllabus 2020:

CDS Syllabus 2020 ENGLISH Subject

The question paper will be designed to test the candidates' understanding of English and workman like use of words.

CDS Syllabus 2020 GENERAL KNOWLEDGE

General Knowledge including knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person who has not made a special study of any scientific subject. The paper will also include questions on History of India and Geography of nature which candidate should be able to answer without special study.

ELEMENTARY MATHEMATICS

ARITHMETIC

Number System—

- Natural numbers, Integers, Rational and Real numbers.
- Fundamental operations, addition, subtraction, multiplication, division, Square roots, Decimal fractions.
- Unitary method, time and distance, time and work, percentages,

- Applications to simple and compound interest,
- Profit and loss, ratio and proportion, variation.

Elementary Number Theory—

- Division algorithm.
- Prime and composite numbers.
- Tests of divisibility by 2, 3, 4, 5, 9 and 11.
- Multiples and factors.
- Factorization Theorem.
- H.C.F. and L.C.M.
- Euclidean algorithm.
- Logarithms to base 10, laws of logarithms, use of logarithmic tables.

ALGEBRA

- Basic Operations
- Simple factors
- Remainder Theorem
- H.C.F., L.C.M.
- Theory of polynomials
- Solutions of quadratic equations
- The relation between its roots and coefficients (Only real roots to be considered).
- Simultaneous linear equations in two unknowns—analytical and graphical solutions.
- Simultaneous linear in-equations in two variables and their solutions.
- Practical problems leading to two simultaneous linear equations or in-equations in two variables or quadratic equations in one variable & their solutions.
- Set language and set notation, Rational expressions, and conditional identities, Laws of indices.

TRIGONOMETRY

Sine \times , cosine \times , Tangent \times when $0^\circ < \times < 90^\circ$ Values of sin \times ,
cos \times and tan \times , for $\times = 0^\circ, 30^\circ, 45^\circ, 60^\circ$ and 90°

Simple trigonometric identities

Use of trigonometric tables

Simple cases of heights and distances

GEOMETRY

Lines and angles, Plane and plane figures, Theorems on

- (i) Properties of angles at a point,
- (ii) Parallel lines,
- (iii) Sides and angles of a triangle,
- (iv) Congruency of triangles,
- (v) Similar triangles,
- (vi) The concurrence of medians and altitudes,
- (vii) Properties of angles, sides, and diagonals of a parallelogram, rectangle, and square,

- (viii) Circles and its properties including tangents and normals, (ix) Loci.

MENSURATION

Areas of squares

parallelograms

Areas of figures which can be split up into these figures
(Field Book)

lateral surface, and volume of right circular cones and
cylinders

rectangles

triangle and circle

Surface area and volume of
cuboids

surface area and volume of
spheres

STATISTICS

- Collection and tabulation of statistical data
- Graphical representation frequency polygons
- Histograms
- Bar charts
- Pie charts, etc.
- Measures of central tendency.

Source: <https://www.upsc.gov.in>