



## AIR FORCE GROUP X & Y

- **ENGLISH**
- **PHYSICS**
- **MATHEMATICS**
- **REASONING & GENERAL AWARENESS (RAGA)**

### ENGLISH

- Grammar
- Direct Indirect speech
- Comprehension
- Fill in the blanks
- Synonyms and antonyms
- Basic Grammar such as Preposition, Conjunctions, etc
- Para jumbles
- Active and Passive Voice
- Multiple Meaning/Error Spotting
- Vocabulary
- Idioms and Phrases
- Part of speech

### PHYSICS

- Physical World and Measurement
- Kinematics
- Behaviour of Perfect Gases and Kinetic Theory of Gases.
- Electromagnetic Induction and Alternating Current
- Magnetic Effects of Current and Magnetism
- Gravitation
- Optics
- Motion of System of Particles and Rigid Body
- Thermodynamics
- Communication System
- Work, Power and Energy



## **MATHEMATICS**

- Sets, Relations, and functions
- Permutation, Combination, Binomial Theorem
- Linear Programming and Vector
- Cartesian system of rectangular co-ordinates
- Differentiation
- Mensuration–Cylinder, cone, Sphere
- Mathematical Induction
- Matrices and determinants
- Trigonometric Functions
- Definite & Indefinite Integrals
- Probability & Statistics
- Data Interpretation
- Arithmetic problems

## **REASONING & GENERAL AWARENESS (RAGA)**

- Mathematical Operations
- Numerical series
- Number Puzzle
- Dictionary words
- Number, Ranking & Time Sequence Test
- Coding & Decoding
- Odd One Out
- Mutual relation problems
- Distance and Direction sense Test
- Number coding
- Non-Verbal Reasoning
- Assign Artificial Values to Mathematical Digit
- Inserting Correct Mathematical sign
- Tallest, Youngest relation, Blood Relations
- Analogy