



# AGNIVEER AIRFORCE

# Syllabus 2022

Name of the Group	Subject & No. of Questions	Total Marks	Exam Duration
<b>Airmen Science</b>	English:20 Questions Mathematics:25 Questions Physics: 25 Questions	70 marks	60 minutes
<b>Airmen Other than Science</b>	Reasoning & General Awareness:30 Questions English: 20 Questions	50 marks	45 minutes
<b>Airmen Science &amp; Other than Science</b>	Mathematics: 25 Questions English:20 marks Reasoning & General Awareness:30 Questions Physics: 25 Questions	100 marks	85 minutes

**There will be negative marking. For each correct answer, a candidate will be given 1 mark while for each wrong answer 0.25 mark will be deducted.**

## Comprehension Section of English

It will include a passage which is followed by some questions from Grammar Section of English. It will include the following sub-topics:

- Word Formation (nouns from verbs, adjectives, etc.)
- Proposition
- Determiners
- Noun & Pronoun
- Conjunction
- Adverb
- Modals
- Clauses (noun, adverb & relative clauses)
- Subject-verb concord
- Verb formation and error in their use
- Sentence transformation (simple, negative, compound, complex, etc.)

## **Vocabulary Section of English**

**This section will include the following topics:**

- **One-word substitution**
- **Synonyms**
- **Antonyms**
- **Spelling errors**
- **Idioms and phrases**



- 3-Dimensional geometry
- Application of derivatives
- Application of integrals
- Binomial Theorem
- Cartesian system of rectangular coordinates
- Circles and family of circles
- Complex numbers
- Conic sections
- Definite and Indefinite integrals
- Differential equations
- Differentiation
- Limit and continuity
- Linear Equations
- Linear programming
- Mathematical induction
- Mathematical reasoning
- Matrices and Determinants
- Permutation and Combination
- Probability
- Quadratic equations
- Sequence and series
- Sets, relations, and functions
- Statistics
- Straight lines and family of lines
- Trigonometric & Inverse Trigonometric functions
- Vector

- Laws of motion
- Communication System
- Trigonometric & Inverse Trigonometric functions
- Sets, relations, and functions
- Electronic devices
- Optics
- Sequence and series
- Kinematics
- Waves and Oscillations
- Physical-world and measurement
- The behaviour of perfect gases and the kinetic theory of gases & Atoms and Nuclei
- Bulk matter properties
- Magnetism and Magnetic effects of current
- Radiation and Dual nature of matter
- Electromagnetic Waves
- Straight lines and family of lines
- Vector
- Work, Power, and Energy
- Electromagnetic induction and Alternating current
- Electrostatics & Current Electricity
- The motion of a system of particles and rigid body
- Thermodynamics
- Gravitation & Statistics

- Distance and Direction
- Number Simplification
- Area of triangle, square and rectangle
- Coding and Decoding
- Analogy & Odd one out
- Blood relations
- Number Puzzle and coding
- Non-verbal reasoning
- Percentage
- Inserting correct mathematical sign
- Fractions & Probability
- Assigning artificial values to mathematical digit sphere
- Average
- Ratio & Proportion
- Simple Trigonometry
- Time, Speed and Distance
- Dictionary words
- Profit and loss
- Number Series
- Mathematical Operations & Mutual relation problem
- Youngest, tallest relation-based questions
- Time sequence, Number and Ranking
- Volume & Surface area of cone, cylinder, cuboid, and



- Current Affairs
- General Science
- Geography
- History
- Basic Computer Operations
- Civics

**THANKS FOR  
WATCHING**