AFCAT Syllabus

Air Force Common Admission Test — Complete Syllabus & Exam Pattern

Exam Pattern

Test	Questions	Marks	Duration	Marking
AFCAT	100	300	2 hours	+3 correct, –1 wrong
EKT (Ground Duty Technical only)	50	150	45 minutes	+3 correct, –1 wrong

Unattempted questions carry no marks. The EKT is taken only by candidates applying for the Ground Duty (Technical) branch, in addition to the AFCAT.

AFCAT Syllabus

1. General Awareness

- History, Geography and Sports
- National and International Organisations; Personalities; Art & Culture
- Environment and Ecology; Indian Polity; Economy
- Basic Science and Science & Technology
- Current Affairs (National and International); Defence

2. Verbal Ability in English

- Comprehension (unseen passages)
- Error Detection; Sentence Completion and Sentence Improvement
- Fill in the blanks with the appropriate word
- Vocabulary; Synonyms and Antonyms; Idioms and Phrases
- Tenses and Basic Grammar

3. Numerical Ability

Questions are of matriculation level.

- Decimal Fraction and Simplification
- Average, Percentage, Profit & Loss, Ratio & Proportion
- Simple Interest and Compound Interest
- Time & Work; Time & Distance (Trains, Boats & Streams); Races
- Number System and Number Series; Area & Perimeter
- Probability; Mixture & Alligation; Clocks

4. Reasoning and Military Aptitude Test

- Verbal Skills and Spatial Ability
- Verbal and Non-Verbal Reasoning — analogies, classification (odd one out), series
- Pattern completion; rotated, embedded and mirror figures

EKT Syllabus — Ground Duty (Technical)

Common to all streams

- Engineering Mathematics
- Engineering Physics
- Engineering Drawing

Mechanical Engineering

- Thermodynamics; Engineering Mechanics; Theory of Machines
- Fluid Mechanics and Hydraulic Machinery; Strength of Materials
- Manufacturing Science; Machine Drawing; Materials Science

Computer Science Engineering

- Analog and Digital Electronics; Electronic Devices
- Microwave Engineering; Antenna and Wave Propagation; Radar Theory
- Telecommunication Systems; Computer Networks
- Switching Theory and Logic Design; Information Technology

Electrical and Electronics Engineering

- Control Engineering; Network Theory; Electromagnetic Field Theory
- Electronic Devices; Analog and Digital Electronics
- Telecommunication Systems; Microwave Engineering; Antenna and Wave Propagation

Compiled by AglaSem (career.aglasem.com). This is a study reference; for the authoritative and current syllabus, refer to the official AFCAT notification on afcat.cdac.in.