

AFCAT Syllabus and Study Plan

Indian Air Force officer entry | Syllabus, timetable, 6-month and 3-month plans

1. About AFCAT

The Air Force Common Admission Test (AFCAT) is held twice a year by the Indian Air Force for Flying Branch, Ground Duty (Technical) and Ground Duty (Non-Technical) officers. Candidates are usually graduates (final-year students can apply too). Always confirm age limits, qualifications and dates in the latest official notification.

2. Exam Pattern

Item	Details
Paper	AFCAT: 100 questions, 300 marks, 2 hours, online
Marking	+3 for each correct answer, -1 for each wrong answer
EKT (technical branches)	Engineering Knowledge Test: 50 questions, 150 marks, 45 minutes (Mechanical, Electrical and Electronics, Computer Science)
Next stage	AFSB (Air Force Selection Board) at 5 days, then medical

Section	Questions	Topics
General Awareness	about 25	History, geography, polity, economy, science, defence, sports, awards, current affairs
Verbal Ability in English	about 30	Comprehension, error spotting, sentence completion, synonyms and antonyms, idioms, ordering of sentences, fill in the blanks
Numerical Ability	about 18	Percentage, ratio and proportion, average, profit and loss, simple and compound interest, time and work, time-speed-distance, number system, HCF/LCM, mensuration, data interpretation
Reasoning and Military Aptitude	about 27	Verbal and non-verbal reasoning, analogies, series, coding-decoding, venn diagrams, blood relations, direction sense, spatial orientation, visualisation

Question counts per section can vary slightly from year to year.

3. Detailed Syllabus

General Awareness

- **History:** Ancient, medieval and modern India, freedom movement, world history basics.
- **Geography:** Earth, atmosphere, India's physical features, rivers, climate, resources, world geography.
- **Polity and economy:** Constitution, fundamental rights, Parliament, basic economic terms, budget.
- **Science:** Everyday physics, chemistry and biology, space and technology.
- **Defence and current affairs:** Air Force aircraft, exercises, ranks, awards, last 12 months of news.

English

- Reading comprehension (2 to 3 passages), cloze test, error detection, sentence rearrangement.
- Vocabulary: synonyms, antonyms, one-word substitution, idioms and phrases, analogies.

Numerical Ability

- Arithmetic from Class 8 to 10 level, with speed. Learn tables, squares, cubes, fractions and percentage equivalents.
- Data interpretation (tables, bar and pie charts).

Reasoning and Military Aptitude

- Verbal reasoning, non-verbal reasoning, spatial ability, mirror and water images, embedded figures, paper folding.

4. Daily Timetable

For a graduate or working candidate: 5 to 6 hours a day.

Time	Activity
5:30-6:30 AM	Running, exercise (AFSB fitness)
7:00-8:00 AM	Numerical Ability: concept and practice
6:30-7:30 PM	Reasoning and Military Aptitude practice
7:30-8:30 PM	English: vocabulary, grammar, one passage
8:30-9:15 PM	General Awareness (static subject of the day)
9:15-9:45 PM	Newspaper and current affairs
9:45-10:00 PM	Revise and fill the mistake notebook

Saturday: Sectional test and weak topics.

Sunday: Full 2-hour mock (online), then 2 hours of analysis.

5. 6-Month Plan

Months	Plan
1	Numerical Ability basics, English grammar, history and geography. Start newspaper reading.
2	Reasoning and military aptitude (spatial and non-verbal), polity, economy and science. Start fitness routine.
3	Complete all sections once. Take a sectional test every week. Learn 15 words a day.
4	Solve previous AFCAT papers. Start one full mock a week. Begin OIR and PPDT practice for AFSB.
5	Two mocks a week. Work on speed: reach 80+ attempts with 85% accuracy.
6	Revision, current affairs of the last 12 months, AFSB mock sessions. No new topics in the last 2 weeks.

6. 3-Month Crash Plan

Period	Plan
Weeks 1-4	Cover all four sections once, using short notes. 6 to 7 hours a day.
Weeks 5-8	Previous year papers and sectional tests. Two mocks a week.
Weeks 9-12	Three mocks a week, analysis, revision, current affairs, and basic AFSB preparation.

7. Technical Branch (EKT) Add-on

- Add 1 to 1.5 hours daily for your engineering subjects.
- **Mechanical:** thermodynamics, fluid mechanics, strength of materials, machine design.
- **Electrical and Electronics:** circuits, machines, power systems, control systems, digital electronics.
- **Computer Science:** data structures, algorithms, DBMS, operating systems, networks, programming.

8. AFSB Preparation

Stage	What happens	How to prepare
Stage 1	OIR test and PPDT (picture perception and group discussion)	Practice OIR sets and story writing; clear speaking in group discussions
Stage 2	Psychology tests (TAT, WAT, SRT, SDT), group tasks, personal interview	Positive, action-based responses; know yourself and current affairs
PABT	Pilot Aptitude Battery Test for flying branch candidates (once only)	Practice instrument-reading and psychomotor skills with simulators

Fitness: 1.6 km run in about 7 to 8 minutes is a good target, plus push-ups, sit-ups and good stamina.

9. Key Tips

- The paper is short on time, so speed matters as much as accuracy.

- Attempt questions you are sure about first. The negative mark (-1) is smaller than the gain (+3), so educated guesses help.
- Read the Hindu or Indian Express daily, with focus on defence news.
- Take at least 20 full mocks before the exam.