| **Day** | **AFCAT Core (Priority)** | **CDS OTA Support (Light)** |
| --- | --- | --- |
| 1 | ✅ AFCAT Orientation + Syllabus Walkthrough ✅ Analyze 1 past AFCAT paper (untimed) | ✔️ Read about CDS structure & OTA role |
| 2 | ✅ English: Tenses, Error Detection, RC ✅ Vocab: 10 Words (Word Power Made Easy) | ✔️ Read Hindu editorial + note 5 words |
| 3 | ✅ Quant: Percentages, Ratios, SI/CI ✅ Practice 10 MCQs | ✔️ Revise same topics (deeper focus optional) |
| 4 | ✅ GK: IAF Ranks, Commands, Aircrafts ✅ Current Affairs (last 1 month) | ✔️ Read Polity: Parts of Constitution |
| 5 | ✅ Reasoning: Series, Odd One Out, Analogy ✅ 15 questions practice | ❌ (not required in CDS OTA) |
| 6 | ✅ Mixed Practice: 10 English + 10 Math + 5 GK | ✔️ Attempt 10 English MCQs (CDS-level) |
| 7 | ✅ Revision Day: Notes + Mistakes Log ✅ 1 Mini Mock (25 questions) | ✔️ Read 1 India Yearbook page / Lucent page |

1🡪Syllabus & Paper Structure

2🡪Weekly Study Plan (6 Weeks)

3🡪day 1

4🡪day2

AFCAT\*\*\*\*\*\*\*\*\*AFCAT\*\*\*\*\*\*\*\*\*AFCAT\*\*\*\*\*\*\*\*\*\*AFCAT\*\*\*\*\*\*\*\*\*\*AFCAT\*\*\*\*\*\*\*\*\*AFCAT

**✅ 1. Understand the Exam Pattern**

The AFCAT exam consists of **two sections**:

**✈️ AFCAT Exam (All Candidates):**

* **Total Questions**: 100
* **Total Marks**: 300
* **Time**: 2 hours
* **Negative Marking**: -1 for each wrong answer

| **Section** | **Questions** | **Marks** |
| --- | --- | --- |
| General Awareness | ~25 | ~75 |
| Verbal Ability (English) | ~25 | ~75 |
| Numerical Ability | ~18 | ~54 |
| Reasoning and Military Aptitude | ~32 | ~96 |

**✅ 2. Know the Syllabus Thoroughly**

**📘 General Awareness:**

* History (Freedom struggle, modern Indian history)
* Geography (Indian and world)
* Indian Polity & Constitution
* Science & Technology
* Current Affairs (6 months prior)
* Defence-related news

**📘 Verbal Ability in English:**

* Comprehension
* Error detection
* Sentence completion
* Synonyms/Antonyms
* Idioms and phrases

**📘 Numerical Ability:**

* Number system
* Ratio and proportion
* Simple and compound interest
* Profit and loss
* Time and distance, speed
* Average
* Percentage

**📘 Reasoning and Military Aptitude:**

* Odd one out
* Spatial ability
* Pattern completion
* Coding-decoding
* Analogy

**✅ 3. Use the Right Study Material**

**Recommended Books:**

* **AFCAT by Arihant Experts**
* **Lucent’s General Knowledge** (for GA)
* **Word Power Made Easy by Norman Lewis** (for vocab)
* **RS Aggarwal’s Quantitative Aptitude**
* **Previous Year Papers (AFCAT)** – Practice is key!

**✅ 4. Practice Previous Year Papers**

* Solve **at least 5-10 previous year papers**
* Understand **the type of questions** and **repeated topics**
* Helps improve **speed, accuracy, and time management**

**✅ 5. Mock Tests & Time Management**

* Practice **full-length mock tests weekly**
* Use platforms like **Gradeup, Oliveboard, Testbook, Adda247** for quality mocks
* **Analyze each test**: where did you go wrong, what took time

**✅ 6. Current Affairs Preparation**

* Read **daily news** (The Hindu / Indian Express)
* Follow monthly **current affairs PDFs** from websites like:
  + AffairsCloud
  + GKToday
  + Gradeup
* Focus on **defence news, appointments, sports, books & authors**

**✅ 7. Strategic Revision Plan**

* Keep **short notes or flashcards**
* Revise **vocabulary, formulas, and GK** topics daily
* Last **15 days**: Focus only on **mock tests + revision**

**✅ 8. Physical & Mental Fitness (For SSB Stage)**

If you clear AFCAT written, you’ll face **SSB (Services Selection Board)**:

* Practice **basic physical exercises**
* Develop **communication and group discussion skills**
* Be aware of **current events and your background**

**📅 Daily Breakdown**

**📘 Day 1 (Today): AFCAT Orientation**

🕐 Time: 60–90 min

* ✅ Read full AFCAT syllabus (focus: Flying Branch)
* ✅ Download & review **1 past AFCAT paper** (no time pressure — just get familiar)
* ✅ Read about the **Indian Air Force** (ranks, commands, aircraft)

**📘 Day 2: Verbal Ability Basics**

🕐 Time: 60–90 min

* Grammar: Subject-Verb Agreement, Tenses (20 min)
* Vocab: 10 Words (synonyms/antonyms) from **Word Power Made Easy** (15 min)
* Reading Comprehension practice (15–20 min)
* Defence news article reading (15 min)

**📘 Day 3: Quantitative Aptitude Basics**

🕐 Time: 60–90 min

* Concepts: Percentages, Ratios, Averages
* Practice: 10–15 MCQs
* Note shortcuts & formulas

**📘 Day 4: General Awareness (Static + Current)**

🕐 Time: 60–90 min

* Read Indian History (Freedom struggle) – Lucent GK
* Note important events/dates (1919–1947)
* 10 current affairs MCQs (defence, awards, sports)

**📘 Day 5: Reasoning & Military Aptitude**

🕐 Time: 60–90 min

* Practice 10–15 questions:
  + Odd one out
  + Analogy
  + Pattern completion
* Tip: Practice with pen & paper — visual reasoning is key

**📘 Day 6: Mixed Practice**

🕐 Time: 90–120 min

* 1 mini mock test (25 questions from all sections)
* Review answers (track mistakes in a notebook)
* Revise 5 vocab words & 5 GK facts

**📘 Day 7: Revision & Strategy**

🕐 Time: 60–90 min

* Review all notes (vocab, math formulas, current affairs)
* Read about:
  + Aircraft in IAF: Sukhoi, Tejas, Rafale, etc.
  + IAF Commands (Eastern, Western, etc.)
* Take 1 full sectional test (English or Reasoning)

**📅 Day 1 Study Plan – AFCAT (Flying Branch) + CDS OTA (Light)**

| **Time** | **Activity** | **Purpose & Notes** |
| --- | --- | --- |
| 20 mins | **AFCAT Orientation** | Understand structure, marking scheme, syllabus |
| 40 mins | **Analyse 1 AFCAT Previous Paper** | Get familiar with question pattern & difficulty |
| 15 mins | **CDS OTA Role & Overview** | Read about OTA, short service, life at OTA |
| 15 mins | **Indian Air Force GK Boost** | Learn about ranks, aircraft, Air Commands |
| Optional | **YouTube: Life at OTA Chennai** (5 mins) | Motivational & helps visualize training life |

-->orientation

**📊 AFCAT Section-wise Topic Weightage Analysis (Based on 5 Previous Papers)**

**1️⃣ English – 25 Questions**

| **Topic** | **Avg. Qs** | **Notes** |
| --- | --- | --- |
| **Reading Comprehension** | 5–6 | 1 passage (5 Qs) – Easy/moderate level |
| **Error Spotting** | 3–4 | Grammar-focused – tenses, verbs, articles |
| **Fill in the Blanks** | 3–4 | Based on context + grammar knowledge |
| **Synonyms/Antonyms** | 3–4 | Word-based – from past papers/vocab books |
| **Idioms and Phrases** | 2–3 | Repeated idioms often seen in AFCAT |
| **Cloze Test** | 2–3 | One short paragraph with missing words |
| **Sentence Rearrangement** | 1–2 | Moderate – practice needed |

✅ **Most Asked**: RC, Error Spotting, Vocab (Synonyms, Idioms), Cloze

**2️⃣ General Awareness (GK) – 25 Questions**

| **Topic** | **Avg. Qs** | **Notes** |
| --- | --- | --- |
| **Current Affairs (Defence)** | 5–7 | Chief appointments, exercises, awards |
| **Static GK (History/Geography)** | 5–6 | Modern history, physical geography |
| **Indian Polity** | 3–4 | Articles, Constitution basics, schedules |
| **Science & Tech** | 3–4 | Space missions, physics basics |
| **Sports, Books & Authors** | 2–3 | Especially recent ones |
| **Economy** | 1–2 | Budget, RBI, GDP definitions |
| **Miscellaneous** | 2–3 | Days, awards, firsts in India, slogans |

✅ **Most Asked**: Defence current affairs, Polity, Modern History, Geography

**3️⃣ Numerical Ability (Math) – 18 Questions**

| **Topic** | **Avg. Qs** | **Notes** |
| --- | --- | --- |
| **Percentage, Profit & Loss** | 4–5 | Concept-based, easy to moderate |
| **Time, Speed, Distance** | 3–4 | Trains, boats, relative speed |
| **Ratio & Proportion / Mixture** | 2–3 | Found in every paper |
| **Simple & Compound Interest** | 2–3 | Direct formula questions |
| **Averages / Age Problems** | 1–2 | Common and easy if practiced |
| **Number System** | 1–2 | Divisibility, odd/even, HCF-LCM |
| **Algebra (basic)** | 1–2 | Simple equations or identities |

✅ **Most Asked**: Percentages, TSD, SI/CI, Ratio

**4️⃣ Reasoning and Military Aptitude – 32 Questions**

| **Topic** | **Avg. Qs** | **Notes** |
| --- | --- | --- |
| **Figure Series / Pattern** | 5–6 | Non-verbal reasoning – visual patterns |
| **Odd One Out (Figures)** | 3–4 | Visual or symbolic |
| **Analogy (Figures & Words)** | 3–4 | One figure-based, one word-based usually |
| **Dot/Symbol Placement** | 2–3 | Spatial questions (map-based logic) |
| **Venn Diagram** | 2–3 | Syllogisms and logic |
| **Classification** | 2–3 | Similar items grouping |
| **Coding-Decoding** | 2–3 | Letter shifting, number-letter codes |
| **Verbal Series / Number Series** | 3–4 | Practice improves speed here |

✅ **Most Asked**: Figure-based reasoning, Series, Odd-One-Out, Coding-Decoding

🡪analysis

**🏅 1. English (Total ~25 MCQs)**

| **Topic** | **No. of Qs** | **Sample Question** |
| --- | --- | --- |
| Reading Comprehension | 4–5 | **Passage-based Q:** “The passage outlines challenges faced by pilots due to fatigue. What is the primary cause?” |
| Error Detection | 4–5 | *Identify the error:* “The team have reached a conclusion about the mission.” |
| Synonyms/Antonyms | 4–5 | *Choose synonym of “melancholy”:* (a) ecstatic (b) somber (c) agile (d) robust |
| Idioms & Phrases | 2–3 | *Complete the idiom:* “He passed the test \_\_\_\_\_\_ the skin of his teeth.” |
| Cloze Test | 2–3 | *Fill the blanks:* “IAF pilots must be \_\_\_\_\_\_ trained and \_\_\_\_\_\_ disciplined.” |
| Sentence Rearrangement | 2–3 | *Rearrange:* “AFCAT / well-prepared / do / candidates / benefit.” |
| Analogy | 1–2 | *Book : Read :: Aircraft : \_\_\_\_* (options: fly, land, repair, design) |

**🌍 2. General Awareness (~25 MCQs)**

| **Topic** | **No. of Qs** | **Sample Question** |
| --- | --- | --- |
| Current Affairs – Defence | 5–7 | Which country hosts the “Garuda Exercise”? |
| Current Affairs – Misc | 5–7 | Who became the first Indian to win an Oscar? |
| Polity | 2–3 | Which schedule deals with tribal areas? (6th/5th/10th/8th) |
| Modern History | 1–3 | Who presided over the 1905 Congress session? |
| Geography | 2–3 | Gandhi Sagar Sanctuary is located in which state? |
| Science & Tech | 3–4 | Which gas is responsible for greenhouse effect? (CO₂/N₂/O₂/Ar) |
| Economy | 1–2 | GST comes under which type of tax – Indirect or Direct? |
| Sports, Books & Authors | 2–3 | “Ignited Minds” was written by whom? |
| Miscellaneous | 1–2 | How many players are there in Kho Kho team? |

**➗ 3. Numerical Ability (~18 MCQs)**

| **Topic** | **No. of Qs** | **Sample Question** |
| --- | --- | --- |
| Percentages | 4–5 | If 20% tax is added on ₹1000, total becomes? |
| Profit & Loss | 4–5 | If CP ₹800, SP ₹1000, profit % = ? |
| Time, Speed & Distance | 3–4 | Train travels 120 km in 2 hrs, speed = ? |
| Simple & Compound Interest | 2–3 | ₹1000 invested @ 5% CI annually, amount after 2 years? |
| Ratio & Proportion | 2–3 | Ratio of 5:12 equals 25:X → X = ? |
| Time & Work | 1–2 | If A does job in 10 days, B in 20 days, together? |
| Number System | 2–3 | LCM of 12 and 18 is? |

**🧩 4. Reasoning & Military Aptitude (~32 MCQs)**

| **Topic** | **No. of Qs** | **Sample Question** |
| --- | --- | --- |
| Figure Series | 5–6 | Identify the next figure in the sequence. |
| Odd One Out (Figures) | 3–4 | Pick the figure that doesn’t belong. |
| Number/Letter Series | 3–4 | 2, 6, 12, 20, \_\_? |
| Coding-Decoding | 2–3 | If JRM = 10+18+13 = 41 → ABC = ? |
| Analogy (Words/Figures) | 3–4 | CAT : FOG :: HOT : \_\_? |
| Dot/Symbol Placement | 2–3 | Based on grid, identify correct dots pattern. |
| Venn Diagram/Syllogism | 2–3 | All pilots are trained. Some pilots are commanders. ─? |
| Classification | 2–3 | Which glove is different? (diagram) |
| Seating Arrangement/Puzzle | 2–3 | Six officers seated around a table; who sits opposite to the pilot? |
| Mirror Image | 1–2 | Pick the mirror image of the shown diagram. |
| Blood Relation | 1–2 | A's mother is B; B's son is C. What’s C to A? |

🡪ranks, commands, jets, motto

**✈️ Indian Air Force (IAF) – Basics for AFCAT & CDS**

**🧑‍✈️ 1. Chief of the Air Staff**

| **Post** | **Officer** |
| --- | --- |
| **Chief (CAS)** | **Air Chief Marshal V. R. Chaudhari** *(as of July 2025)* |
| **Vice Chief (VCAS)** | Air Marshal A. P. Singh *(subject to change based on date)* |

**🛡️ 2. Motto of the IAF**

| **Language** | **Motto** |
| --- | --- |
| **Sanskrit** | **“Nabhaḥ Spr̥śaṁ Dīptam”** *(नभः स्पृशं दीप्तम्)* |
| **Meaning** | “Touch the Sky with Glory” |
| **Source** | Quoted from **Bhagavad Gita** (Chapter 11, Verse 24) |

**🗺️ 3. Air Commands of the Indian Air Force**

| **Command Name** | **Headquarters** | **Region Covered** |
| --- | --- | --- |
| **Western Air Command** | New Delhi | J&K, Punjab, Himachal, West India |
| **Eastern Air Command** | Shillong (Meghalaya) | Northeast India |
| **Central Air Command** | Prayagraj (Allahabad) | Central India |
| **Southern Air Command** | Thiruvananthapuram | Southern India, Coastal areas |
| **South Western Command** | Gandhinagar | Rajasthan, Gujarat |
| **Training Command** | Bengaluru | Training Institutes |
| **Maintenance Command** | Nagpur | Maintenance of aircraft & equipment |

✅ **Most Operationally Active**: **Western Air Command**

**🛩️ 4. Major Aircrafts in Indian Air Force**

| **Aircraft Type** | **Name** | **Role/Details** |
| --- | --- | --- |
| **Fighter Jets** | **Sukhoi Su-30MKI** | Multirole, backbone of IAF |
|  | **Rafale** | French-origin, highly advanced |
|  | **Mirage 2000** | Used in Balakot Strike (2019) |
|  | **Tejas (LCA)** | Indigenous Light Combat Aircraft |
|  | **MiG-29** | Twin-engine air superiority fighter |
|  | **Jaguar** | Ground attack aircraft |
| **Transport Aircraft** | **C-17 Globemaster III** | Heavy-lift transport |
|  | **C-130J Super Hercules** | Tactical transport |
|  | **Antonov AN-32** | Medium transport |
| **Helicopters** | **Apache AH-64E** | Attack helicopter |
|  | **Chinook CH-47F** | Heavy-lift helicopter |
|  | **Mi-17 V5** | Utility & troop transport |
| **Trainer** | **HAL HAWK, Kiran** | Training jets |
| **UAVs/Drones** | **Heron, Harop (Israeli)** | Surveillance and loitering munitions |

**🔁 Quick Facts You Should Memorize:**

* **IAF Day**: **8th October**
* **Founded**: **1932**
* **First Indian Chief**: **Air Marshal Subroto Mukerjee**
* **Current Motto Source**: *Bhagavad Gita*

**✈️📅 Day 2 Plan – AFCAT Focus + CDS OTA Support**

🕐 **Time Required**: 1 to 2 hours

**🔤 1. English Core (Grammar + RC)**

| **Task** | **Time** | **Notes** |
| --- | --- | --- |
| ✅ **Topic**: **Error Spotting (Grammar)** | 20 min | Focus on **Subject-Verb Agreement**, **Articles**, and **Tense Errors** |
| ✅ **Practice**: 10 Error Spotting MCQs | 15 min | Use AFCAT practice book or online quizzes |
| ✅ **RC Practice**: 1 Passage (5 Qs) | 20 min | Focus on finding the tone & inference |

👉 *Tip*: Use AFCAT English PYQs or Arihant AFCAT book.

**📘 2. Vocab Builder – Word Power Made Easy**

| **Task** | **Time** | **Notes** |
| --- | --- | --- |
| ✅ Learn 10 new words + usage examples | 10–15 min | From **Session 1 & 2** of Word Power |
| ✅ Revise yesterday’s 10 words | 5 min | Build repetition for long-term memory |

📌 **Word Challenge**:

* Words: *Lucid*, *Sporadic*, *Procrastinate*, *Alleviate*, *Candid*, *Ambiguous*, *Feasible*, *Meticulous*, *Eloquent*, *Obsolete*

**➗ 3. Maths – Percentages & Profit/Loss**

| **Task** | **Time** | **Notes** |
| --- | --- | --- |
| ✅ Revise formulas for % & P/L | 10 min | Mark in your formula notebook |
| ✅ Solve 10 MCQs from past AFCAT | 20–25 min | Moderate difficulty, time yourself |
| ✅ Challenge Q: “If CP is ₹800 and profit is 25%, what is SP?” | → ₹1000 |  |

👉 Use RS Aggarwal / Arihant AFCAT book

**🌍 4. GK Boost – IAF + Current Affairs**

| **Task** | **Time** | **Notes** |
| --- | --- | --- |
| ✅ Read about 3 Indian Aircrafts | 10 min | *Tejas, Sukhoi, Rafale* — note specs |
| ✅ Current Affairs (Past 1 Month) | 15 min | Focus: Defence, Appointments, Awards |

📌 Sources: *GKToday*, *Drishti IAS CA PDF*, *Gradeup App*

**📊 Summary Table: Day 2 Plan**

| **Subject** | **Task** | **Time** |
| --- | --- | --- |
| English | Grammar Error MCQs + 1 RC | 50 min |
| Vocabulary | 10 Words (new) + 10 Words (revise) | 15–20 min |
| Maths | % & Profit/Loss – 10 MCQs | 25 min |
| GK + Defence | Aircraft Facts + Current Affairs | 20–25 min |

**✅ Day 2 Goals:**

* 📘 Master 10–15 English questions
* ➗ Strengthen 1 key Quant topic
* 🌍 Learn 5+ Defence & CA facts
* 🧠 Improve vocab recall

🡪aircraft

Tejas::::::::::

| **Feature** | **Description** |
| --- | --- |
| **Name** | HAL Tejas |
| **Type** | Light Combat Aircraft (LCA) |
| **Developer** | DRDO + HAL + ADA (Aeronautical Development Agency) |
| **First Flight** | January 4, 2001 |
| **Induction in IAF** | January 2015 (No. 45 Squadron "Flying Daggers") |
| **Made In** | India 🇮🇳 |
| **Primary Users** | Indian Air Force, Indian Navy |

**🔧 TECHNICAL SPECIFICATIONS:**

| **Parameter** | **Specification** |
| --- | --- |
| **Engine** | 1 × GE F404-GE-IN20 turbofan engine |
| **Speed** | Mach 1.6 (approx. 2,000 km/h) |
| **Service Ceiling** | 52,500 ft |
| **Range** | ~1,700 km (without refueling) |
| **Combat Radius** | ~500 km |
| **Length** | ~13 meters |
| **Wingspan** | ~8.2 meters |
| **Weight (Empty)** | ~6,560 kg |
| **Maximum Takeoff Weight** | ~13,500 kg |

**🛠 FEATURES:**

✅ **Multirole Capabilities** – Air-to-air, air-to-ground, reconnaissance  
✅ **Fly-by-wire Control System** – Fully digital  
✅ **Glass Cockpit** – Multi-function displays, HUD  
✅ **Radar** – EL/M-2032 (to be replaced by Uttam AESA)  
✅ **Weapons** –

* Air-to-air missiles (R-73, Derby, Astra)
* Bombs (laser-guided & unguided)
* Internal 23mm cannon  
  ✅ **Refueling** – Aerial mid-air refueling capability

**🧪 VARIANTS:**

| **Variant** | **Description** |
| --- | --- |
| **Tejas Mk1** | Operational with IAF, initial version |
| **Tejas Mk1A** | Enhanced avionics, AESA radar, EW suite, ordered by IAF (83 units) |
| **Tejas Mk2** | Medium-weight fighter under development |
| **LCA Navy** | Naval variant with arrestor hook and stronger landing gear (for aircraft carriers) |
| **Trainer Variant** | Twin-seat version for training purposes |

**🌐 STRATEGIC IMPORTANCE:**

* Reduces India’s reliance on foreign jets
* Boosts Make in India & Atma nirbhar Bharat vision
* Competes with lightweight fighters like JF-17, F-16 (Block 70)

**📸 FACTS FOR AFCAT/CDS:**

* First squadron: **No. 45 Flying Daggers**, Sulur Air Base (Tamil Nadu)
* Tejas means "**Radiance**" in Sanskrit
* Replaced: **MiG-21 Bison** in IAF
* Designed by: **ADA (Aeronautical Development Agency)**
* LCA Mk1A has **AESA radar, BVR missiles, EW suite**