

# AFCAT Test

## General Awareness

### AFCAT Memory Based Paper - 11 Aug 2024

- Q1** Which of the following is the primary objective of the Montreal Protocol and Vienna Convention?  
 (A) To protect marine biodiversity  
 (B) To protect the ozone layer by reducing ozone-depleting substances  
 (C) To promote international trade agreements  
 (D) To regulate global warming
- Q2** The motto of the Indian Air Force, "Touch the Sky with Glory," is inspired from which ancient text?  
 (A) Bhagavad Gita (B) Ramayana  
 (C) Rigveda (D) Arthashastra
- Q3** Where is the Air Force Administrative College (AFAC) located?  
 (A) Bengaluru, Karnataka  
 (B) Coimbatore, Tamil Nadu  
 (C) Pune, Maharashtra  
 (D) New Delhi, Delhi
- Q4** Which of the following does the START Treaty stand for?  
 (A) Strategic Arms Regulation Treaty  
 (B) Strategic Arms Reduction Treaty  
 (C) Strategic Arms Rearmament Treaty  
 (D) Strategic Alliance Reduction Treaty
- Q5** Which aircraft was widely used by the Indian Air Force during the 1971 Indo-Pakistani War?  
 (A) An-12 aircraft (B) F-16  
 (C) Tejas (D) Su-30MKI
- Q6** Which of the following is the theme for International Yoga Day 2024?  
 (A) Yoga for Inner Peace  
 (B) Yoga for Self and Society  
 (C) Yoga for Health and Harmony  
 (D) Yoga for Mind and Body
- Q7** In which of the following states was the Uniform Civil Code (UCC) first implemented in India?  
 (A) Jammu and Kashmir  
 (B) Goa  
 (C) Kerala  
 (D) Delhi
- Q8** For how long are non-permanent (temporary) members of the United Nations Security Council elected?  
 (A) 2 years (B) 3 years  
 (C) 4 years (D) 1 year
- Q9** In 2024, the Bharat Ratna was awarded posthumously to which of the following individuals?  
 (A) Lal Krishna Advani  
 (B) Ravi Shankar  
 (C) S. P. Balasubrahmanyam  
 (D) Karpoori Thakur
- Q10** Which of the following individuals was **not** a part of the 1857 revolt?  
 (A) Bahadur Shah II  
 (B) Birsa Munda  
 (C) Rani Lakshmibai  
 (D) Mangal Pandey
- Q11** What is the name of the first indigenous aircraft developed by Hindustan Aeronautics Limited (HAL)?  
 (A) Apache (B) Tejas  
 (C) HAL HPT-32 (D) Dhruv



- Q12** Which of the following statements correctly describes the Konark Sun Temple?
- (A) The Konark Sun Temple is built from white marble.
- (B) It was constructed by King Ashoka in the 3rd century BCE and is known for its Buddhist architecture.
- (C) The temple is also called the "Black Pagoda" due to its dark colour and is dedicated to the Hindu god Surya.
- (D) The Konark Sun Temple was given World Heritage Site status by UNESCO in 1990.

- Q13** The subject of Cooperative societies is mentioned in which list of the seventh schedule of the Indian Constitution?
- (A) Union List
- (B) Concurrent List
- (C) State List
- (D) Residuary subject

- Q14** What is the age limit for athletes to participate in the Olympic Games?
- (A) Athletes must be at least 18 years old.
- (B) There is no specific age limit for participating in the Olympics.
- (C) Athletes must be under 30 years old.
- (D) Athletes must be at least 16 years old.

- Q15** With reference to NATO plus five, Consider the following statements:

1. While North Atlantic Treaty Organisation is a military alliance, NATO plus five is an Asia Pacific trade alliance
2. India is a founding member of NATO plus five along with USA and Israel
3. Unlike NATO, the NATO Plus Five initiative has simple inclusion process for other countries to join as members

**How many of the statements given above are *not* correct?**

- (A) Only one                      (B) Only two
- (C) All three                      (D) None

- Q16** Who was the first Indian cricketer to take a hat-trick in test cricket?
- (A) Harbhajan Singh
- (B) Anil Kumble
- (C) Chetan Sharma
- (D) Kapil Dev

- Q17** Which of the following instruments is used to measure humidity?
- (A) Thermometer                      (B) Anemometer
- (C) Hygrometer                      (D) Barometer

- Q18** What does the abbreviation CIWS stand for in military terminology?
- (A) Combat Integrated Weapon System
- (B) Close-In Weapon System
- (C) Combat Intelligence and Warning System
- (D) Close-In Warfare System

- Q19** Why do humans have two eyes?
- (A) To see in color
- (B) To enhance depth perception and provide a wider field of view
- (C) To see in the dark
- (D) To protect against eye infections

- Q20** In which state of India, the one-horn rhinos are mostly found?
- (A) Madhya Pradesh                      (B) Assam
- (C) Karnataka                      (D) Kerala

- Q21** Which of the following pairs is/are correctly matched?

Missiles	Features
1. Pinaka	Multi Barrel Rocket Launcher System
2. Nag	Anti Tank Missile System
3. Lakshya	Unmanned Aerial Vehicle

Select the correct answer using the code given below:

- (A) 1 only                      (B) 2 and 3 only
- (C) 1 and 3 only                      (D) 1, 2 and 3



**Q22** Which of the following features best describes the Nirbhay missile?

- (A) Ballistic missile
- (B) Cruise missile
- (C) Anti-tank missile
- (D) Surface-to-air missile

**Q23** What is the theme for World Environment Day 2024?

- (A) Beat Plastic Pollution
- (B) Ecosystem Restoration
- (C) Solutions to Plastic Pollution
- (D) Land Restoration, Desertification, and Drought Resilience

**Q24** Which national park is famous for its population of the Indian one-horned rhinoceros?

- (A) Bandipur National Park
- (B) Jim Corbett National Park
- (C) Kaziranga National Park
- (D) Ranthambore National Park

**Q25** Who won the gold medal in the World Athletics Championships 2023?

- (A) Arshad Nadeem
- (B) Neeraj Chopra
- (C) Jakub Vadlejch
- (D) Anderson Peters



# Answer Key

Q1 B  
Q2 A  
Q3 B  
Q4 B  
Q5 A  
Q6 B  
Q7 B  
Q8 A  
Q9 D  
Q10 B  
Q11 B  
Q12 C  
Q13 C

Q14 B  
Q15 C  
Q16 A  
Q17 C  
Q18 B  
Q19 B  
Q20 B  
Q21 D  
Q22 B  
Q23 D  
Q24 C  
Q25 B



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# Hints & Solutions

Note: scan the QR code to watch video solution

## Q1 Text Solution:

### Explanation:

The **Vienna Convention and the Montreal Protocol** are **international treaties that work together to protect the ozone layer**:

- **Vienna Convention**

The Vienna Convention was created in 1985 to protect the ozone layer and human health from the harmful effects of ozone depletion. It aims to achieve this by encouraging cooperation between parties through research, information exchange, and legislative measures.

- **Montreal Protocol**

The Montreal Protocol was created in 1987 to repair the ozone layer by reducing and eliminating the production and consumption of ozone-depleting substances. The Kigali Amendment, which was added in 2016, also regulates hydrofluorocarbons, which are greenhouse gases that are used as a substitute for ozone-depleting substances.

Hence the correct answer is **option B**.

## Q2 Text Solution:

### Explanation:

The Motto of the Indian Air Force (Touch the sky with Glory) has been taken from the eleventh chapter of the Gita, the Discourse given by Lord Krishna to Arjuna on the battlefield of Kurukshetra during the Great War of Mahabharata.

Hence the correct answer is **option A**.

## Q3 Text Solution:

### Explanation:

The **Air Force Administrative College (AFAC)** is located in **Coimbatore, Tamil Nadu**.

- **Aim of the College:**

- Imparts advanced training to IAF officers in various branches.
- Enhances officers' knowledge and skills for handling duties independently in their respective branches.

- **Inception of Initial Training Wing (ITW):**

- One of the oldest training institutions for IAF officers, older than Independent India.
- Established in 1943 as Initial Training Wing at Pune.
- Provided General Service Training to Cadets of the Flying Branch.

- **Relocation to Coimbatore:**

- ITW relocated to Coimbatore on 11 July 1946.
- Continued to impart ground training to Flight Cadets of the General Duties (Pilots) branch.
- After completing ground training, cadets moved to Jodhpur and Ambala for flying training

Hence the correct answer is **option B**.

## Q4 Text Solution:

### Explanation:

START stands for **Strategic Arms Reduction Treaty**. It was a series of bilateral treaties between the United States and the Soviet Union/Russia aimed at reducing the number of nuclear weapons, specifically long-range nuclear missiles and warheads, held by both countries. The goal was to enhance global security by decreasing the risk of nuclear conflict.

- **START I** was signed on July 31, 1991, by the United States and the Soviet Union.



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- **New START**, which succeeded START I, was signed on April 8, 2010, between the United States and Russia to further reduce and limit strategic nuclear arsenals.

Hence the correct answer is **option B**.

#### Q5 Text Solution:

##### Explanation:

- An-12 aircraft were effectively utilized for bombing missions during the 1971 Indo-Pak war.
- **First Mission:**
  - Target: Changa Manga forest ammunition depot.
  - Date: First day of the war.
  - Formation: Six aircraft carried out the mission.
  - Payload: Each formation dropped 20×500 lbs bombs.

#### Transport Fleet in Air Operations

- The transport fleet primarily provided **transport support** during the war.
- Composition of the fleet:
  - **Three squadrons** of C-47 Dakotas.
  - **Two squadrons** of Antonov An-12 aircraft.
  - **One squadron** of C-119 Packet aircraft.
  - **One squadron** of Caribou aircraft.
  - **One squadron** of Otter aircraft.

Hence the correct answer is **option A**.

#### Q6 Text Solution:

##### Explanation:

- The theme for International Day of Yoga 2024 is **"Yoga for Self and Society"**. The day is celebrated to promote the benefits of yoga and its role in global health and peace.

- Yoga is a holistic practice that integrates the **body, mind, spirit, and soul**. It's known for its ability to promote health, prevent disease, and treat lifestyle-related disorders.
- The **first International Day of Yoga** was celebrated **on June 21, 2015**, and was initiated by the Indian Prime Minister.

Hence the correct answer is **option B**.

#### Q7 Text Solution:

##### Explanation:

**Goa is the only state in India where the Uniform Civil Code has been fully implemented.**

The UCC in Goa was introduced with the Goa, Daman and Diu Civil Code, 1961, which was enacted shortly after Goa's liberation from Portuguese rule.

This civil code aimed to provide a uniform set of laws governing personal matters such as **marriage, divorce, inheritance, and adoption, regardless of the individual's religion.**

**The Uttarakhand Assembly passed the State's Uniform Civil Code in Feb 2024.**

Hence the correct answer is **option B**.

#### Q8 Text Solution:

##### Explanation:

Non-permanent (temporary) members of the United Nations Security Council are elected for a term of **2 years**.

The Security Council has 15 members in total, with 5 permanent members (the United States, the United Kingdom, France, Russia, and China) and 10 non-permanent members elected for 2-year terms.

Hence the correct answer is **option A**.

#### Q9 Text Solution:

##### Explanation:

1. **Karpoori Thakur:**





- Former Chief Minister of Bihar and prominent socialist leader.
- Known as "Jan Nayak" or "People's Leader."
- 17th individual to receive the Bharat Ratna posthumously.

## 2. **M. S. Swaminathan:**

- Revered as the "Father of India's Green Revolution."
- Played a key role in modernizing Indian agriculture and achieving self-reliance in food production.
- Served as the Director General of the Indian Council of Agricultural Research (ICAR).

## 3. **P. V. Narasimha Rao:**

- Former Prime Minister of India (1991–1996).
- Led economic reforms and liberalization, transforming India's economy.
- Recognized for his pivotal role in ushering India into a new era of economic policies.

## 4. **Chaudhary Charan Singh:**

- 5th Prime Minister of India and a freedom fighter.
- Served as Chief Minister of Uttar Pradesh.
- Implemented policies to improve the welfare of peasants and rural communities.

Hence the correct answer is **option D**.

### **Q10 Text Solution:**

#### **Explanation:**

- **Bahadur Shah II:** He was the last Mughal Emperor and a significant figure in the 1857 revolt. He was declared the symbolic leader of the revolt by the rebels and was later captured and exiled by the British.

- **Birsa Munda:** Birsa Munda was a leader of the Munda Rebellion (Ulgulan) against British rule, which took place in the late 19th century (1899-1900). This revolt was separate from the 1857 revolt and was primarily focused on issues affecting tribal communities in the Chotanagpur plateau region.
- **Rani Lakshmibai:** She was the Queen of Jhansi and a prominent leader in the 1857 revolt. She led a fierce resistance against British forces and became a symbol of resistance and patriotism.
- **Mangal Pandey:** Mangal Pandey was an Indian soldier who is often considered one of the first martyrs of the 1857 revolt. His actions and subsequent execution played a significant role in igniting the rebellion.

Hence the correct answer is **option B**.

### **Q11 Text Solution:**

#### **Explanation:**

The first indigenous aircraft developed by Hindustan Aeronautics Limited (HAL) is the **Light Combat Aircraft (LCA) Tejas**. The Tejas is a single-engine, multi-role, supersonic fighter aircraft. The Aeronautical Development Agency (ADA) designed the **Tejas**, and HAL manufactured it for the **Indian Air Force (IAF) and the Indian Navy**.

Here are some facts about the Tejas:

- The Tejas is the smallest and lightest supersonic combat aircraft in its class.
- The name "Tejas" means "radiance" in Sanskrit. Former prime minister Atal Bihari Vajpayee named the aircraft.
- The Tejas Mark 1 entered service with the IAF in July 2016.
- The Tejas is the second supersonic combat aircraft developed by HAL, after the HF-24 Marut.



Hence the correct answer is **option B**.

### Q12 Text Solution:

#### Explanation:

- Situated on the coastline of Odisha in Puri district.
  - Built by King **Narasimha Deva I of the Eastern Ganga Dynasty** in 1244.
  - Designated as a World Heritage Site by UNESCO in 1984.
  - Also known as **Surya Devalaya**, dedicated to the Hindu god Surya.
  - A classic example of the **Odisha style of Architecture** or **Kalinga Architecture**.
  - The **Temple complex resembles a 100-foot-high solar chariot with 24 wheels and six horses**, all carved from stone.
  - Oriented towards the east to capture the first rays of sunrise at the main entrance.
  - The wheels of the temple function as **sundials**, providing accurate time measurements.
  - Base of the temple features carvings of **animals, foliage, warriors on horses**, and other intricate structures.
  - Walls and roof are adorned with **beautiful sensual figures**.
  - Constructed from **Khondalite rocks** and referred to as the '**Black Pagoda**' due to its dark color.

#### • Contemporary Relevance:

- Continues to be a site of **contemporary worship** during the **Chandrabhaga Festival** held around February.

Hence the correct answer is **option C**.

### Q13 Text Solution:

#### Key concept : Cooperative societies

#### Explanation:

- The Cooperative Societies got constitutional status by the **97th constitutional amendment**
- It added a new fundamental right in **Article 19 (1)**
- It added a new directive Principle in **43 B**
- It added a new **part IX B**
- It is in the **state list of the seventh schedule**

Hence the correct answer is **Option C i.e. State list**

### Q14 Text Solution:

#### Explanation:

The International Olympic Committee (IOC) does not set a universal age limit for athletes participating in the Olympic Games. This means that athletes of various ages can compete in the Olympics.

While there is no overarching age restriction imposed by the IOC, specific sports or events within the Olympics may have their own age-related rules. For example, certain youth-focused sports or events may set minimum age requirements to ensure fair competition.

**Hence the correct answer is option B.**

### Q15 Text Solution:

**Ans: C**

**Exp:**

**NATO Plus Five':**

- NATO Plus Five: **It refers to a security arrangement** of NATO and the five treaty allies of the U.S. — Australia, New





Zealand, Japan, Israel, and South Korea as members. **It is aimed at boosting global defense cooperation. Hence, statement 1 is incorrect**

- **India is not a member or associate of the grouping.** In May 2023, the U.S. House Select Committee on the Strategic Competition between the United States and the Chinese Communist Party (CCP), recommended strengthening the 'NATO-Plus Five' framework by including India in the grouping. **Hence, statement 2 is incorrect**
- Aim: To enhance "global defense cooperation" and win the "strategic competition with the Chinese Communist Party".
- Not Officially Recognized: The term 'NATO Plus Five' is not an officially recognised or established concept within NATO itself, but has been used in discussions and debates regarding the potential expansion of the alliance.
- **Complex Inclusion Process:** The inclusion of these countries as members would require a complex process of negotiation and assessment of their compatibility with NATO's principles, obligations, and defense commitments. **Hence, statement 3 is incorrect**

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#### About NATO:

- Established during the Cold War, NATO is a transatlantic security alliance composed of thirty-one member countries, including the United States.

#### Underlying Principle:

- NATO is committed to the principle that an attack against one or several of its members is considered as an attack against all.

- This is the principle of collective defence, which is enshrined in Article 5 of the Washington Treaty.
- Membership criteria: NATO membership is open to "any other European state in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area."

#### Q16 Text Solution:

##### Explanation:

- **Harbhajan Singh** is the first Indian bowler to take a **hat-trick in a test match on 11 March 20 in Kolkata.**
- He got wickets of **Ricky Ponting, Adam Gilchrist and Shane Warne.**
- It was the 29th hat trick in test Cricket.
- **Irfan Pathan is the second Indian bowler** to take a hat-trick in test matches.

Hence the correct answer is **option A.**

#### Q17 Text Solution:

##### Explanation:

- **Hygrometer:** This instrument is specifically designed to measure the humidity or moisture level in the air.
- **Barometer:** Measures atmospheric pressure.
- **Anemometer:** Measures wind speed and direction.
- **Thermometer:** Measures temperature.

Hence the correct answer is **option C.**

#### Q18 Text Solution:

##### Explanation:

- **Close-In Weapon System** is a type of defensive armament used primarily on naval ships. Its primary function is to provide short-range protection against various threats, including incoming missiles, aircraft, and small boats.



- **Purpose:** The CIWS is designed to engage and destroy threats that manage to get through longer-range defenses. It operates at close ranges, typically from a few hundred meters to a few kilometers, to protect the ship from imminent dangers.
- **Components:**
  - **Radar and Sensors:** CIWS systems usually incorporate radar and other sensors to detect and track incoming threats.
  - **Automatic Guns:** The system often features rapid-fire guns that can fire thousands of rounds per minute to intercept and destroy targets.
  - **Fire Control:** The system automatically aims and fires the guns, allowing it to respond quickly to threats.

Hence the correct answer is **option B**.

#### Q19 Text Solution:

**The correct answer is option B**  
**Explanation**

- Humans have two eyes primarily to enhance depth perception and provide a wider field of view.
- Having two eyes allows the brain to process slightly different images from each eye, creating a three-dimensional view of the world, which is crucial for judging distances accurately.
- This binocular vision helps in activities that require precise depth perception, such as catching a ball or driving.
- Additionally, having two eyes increases the overall field of view, making it easier to detect motion and potential threats from a wider area.

#### Q20 Text Solution:

**Explanation:**

**The Indian state of Assam** is home to the largest population of greater-one horned rhinos, with more than 90% in Kaziranga National Park.

- **Habitat:** Found in the Indian subcontinent, primarily in Assam, West Bengal, and Uttar Pradesh.
- **Species:** The one-horned rhinoceros (Indian rhinoceros) is the largest of the rhino species.
- **Population:**
  - There are 2,640 rhinos in four protected areas of Assam:
    - **Pabitora Wildlife Reserve**
    - **Rajiv Gandhi Orang National Park**
    - **Kaziranga National Park**
    - **Manas National Park**
  - 90% of these rhinos are found in **Kaziranga National Park**.
- **Conservation Status:** Listed as **Vulnerable** on the IUCN Red List.

Hence the correct answer is option B.

#### Q21 Text Solution: Explanation:

- **Pinaka** is a **Multi-Barrel Rocket-Launcher system** which was developed by **DRDO** and named after lord Shiva's bow
- **Nag** is the **Anti Tank Missile System**, which was developed by DRDO under **integrated guided missile development programme**
- **Lakshya** is a **pilotless high speed target drone system** which was developed by DRDO.

Hence the correct answer is option (D).

#### Q22 Text Solution: Explanation:



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- **Nirbhay** is a **subsonic cruise missile**, flying at a speed of 0.7 to 0.9 Mach.
- It has sea skimming and terrain hugging capability.
- It helps the missile to stay under enemy radar to avoid detection.

Hence, the correct answer is option (B).

#### Q23 Text Solution:

Explanation:

- The **theme for World Environment Day 2024** is "**Land restoration, desertification, and drought resilience**".
- The slogan for 2024 is "Our land. Our future."
- **World Environment Day** is celebrated annually on **June 5th**, after it was established at the **Stockholm Conference on the Human Environment** in 1972.

Hence, the correct answer is option (D).

#### Q24 Text Solution:

Explanation:

- **Kaziranga National Park** is famous for its population of the **Indian one-horned rhinoceros**. Located in **Assam, India**, it is home to **approximately 2,000 of these rhinos**, representing about **two-thirds of the world's total population**.
- The park spans 430 square kilometers and is recognized as a **UNESCO World Heritage Site** due to its successful conservation efforts and rich biodiversity, which includes various other wildlife species.

Hence, the correct answer will be (C).

#### Q25 Text Solution:

Explanation:

- **Neeraj Chopra** won the **gold medal in the men's javelin throw** event at the 2023 **World Athletics Championships** with a throw of **88.17 meters**.
- He became the **first Indian athlete** to win a gold medal at the World Championships in javelin throw.

Hence, the correct answer is option (B).



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