



PRELIMS EDGE 2025

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COMMISSION FOR AIR QUALITY MANAGEMENT (CAQM)

Context: The SC recently gave a free hand to the CAQM to take any proactive measure to curb air pollution in Delhi.



- The CAQM is a **statutory body** established under the **Commission for Air Quality Management in National Capital Region (NCR) and Adjoining Areas, Act 2021**.
- **Mandate:** Better coordination, research, identification, and resolution of problems surrounding the air quality index and for matters connected therewith or incidental thereto.
- It undertakes action for the prevention and control of Air pollution in Delhi-NCR & Adjoining Areas which impacts the air quality of the National Capital Territory (NCT) of Delhi.
- The Commission is required to coordinate its actions on monitoring of air quality with the government of **Delhi and the adjoining states**, which includes **Punjab, Haryana, Rajasthan, and Uttar Pradesh**.

Powers:

- **Restricting activities** influencing air quality.
- **Investigating and conducting research** related to environmental pollution impacting air quality, preparing codes and guidelines to prevent and control air pollution,
- Issuing **directions** on matters including inspections, or regulations, which will be binding on the concerned person or authority.
- All the directions and orders by the Commission are of **binding nature**, and any person, officer, or authority shall be bound to comply with the same.
- The commission is **directly accountable to the Parliament**.

Composition:

- **Chairperson:** a government official of the rank of **Secretary or Chief Secretary**.
 - He will hold the post for three years or until s/he attains the age of 70 years.
- It will also have **five ex officio members** who are either Chief Secretaries or Secretaries in charge of the department dealing with environment protection in the States of Delhi, Punjab, Haryana, Rajasthan, and Uttar Pradesh.
- Three full time technical members.
- Three members from non-government organisations.
- Technical members from Central Pollution Control Board (CPCB), Indian Space Research Organisation, and NITI Aayog.

Source: SC allows CAQM to take 'proactive' measures to curb Delhi air pollution (The Hindu)

NORTH ATLANTIC TREATY ORGANISATION (NATO)

Context: US President Donald Trump has designated Riyadh as a major non-NATO ally.



About NATO:

- The **North Atlantic Treaty Organization (NATO)** is an **intergovernmental military alliance** formed in 1949.
- It was established with the primary goal of providing **collective defense** against potential aggression, particularly from the Soviet Union during the Cold War era.
- **Headquarters:** Brussels, Belgium
- The alliance currently consists of **32 member countries**.

- **Founding members (12):** Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, the United Kingdom and the United States.
- **Sweden** is the latest country to join the alliance in 2024.
- **EU members** that are **not a part of NATO** are: Austria, Cyprus, Ireland and Malta (**all except Cyprus** are part of **Partnership for Peace (PfP)**).
- NATO's primary mission is collective defense, as outlined in **Article 5** of the **Washington Treaty**.
 - This article stipulates that **an attack on one member country will be considered an attack on all**, and the members will respond collectively.
 - So far, Article 5 has been **invoked only once** – in response to the **9/11 terrorist attacks**.
 - **Funding:** Every NATO country contributes to the costs of running the Alliance, based on a **cost-share formula derived from Gross National Income**.
 - **NATO Partnerships:** NATO maintains relations with more than **40 non-member countries** and international organizations, called NATO partners, through following structures:
 - **Partnership for Peace (PfP):** A programme of bilateral cooperation with countries in **Euro-Atlantic area**.
 - It includes 18 partner countries, including Russia (partnerships with Belarus and Russia are currently suspended).
 - **Mediterranean Dialogue (MD)**, for countries in the Mediterranean region.

- **Istanbul Cooperation Initiative (ICI)** for countries in the Middle East region.
- International organizations: NATO cooperates with **UN, EU and Organization for Security and Co-operation in Europe (OSCE)**.

Source: Trump defends MBS, designates Riyadh as a major non-NATO ally (The Hindu)

TRIBUNAL REFORMS ACT 2021

Context: The Supreme Court has struck down provisions of the Tribunal Reforms Act 2021.



About Tribunal Reforms Act 2021:

- The Tribunal Reforms Act, 2021 sought to **restructure the functioning of tribunals, alter appointment procedures**, and allow the government a greater say in fixing tenure, salary, service conditions, and administrative control over tribunal members.

Key provisions:

- **Minimum age of 50 years** for appointment of tribunal members,
- A **four-year tenure**, which could be renewed,
- A **search-cum-selection committee** that included **two central government**

secretaries, whose ministries often appear as litigants before tribunals,

- Powers given to the Centre to frame rules regarding appointments and service conditions.

These provisions were previously challenged and struck down in a 2021 judgment, yet were reintroduced with minor tweaks in the new legislation.

Provisions struck down by the Supreme Court:

- The Supreme Court invalidated provisions that:
 - Allowed the Centre to control tenure and age limits of tribunal members,
 - Included government secretaries on the selection committee,
 - Limited tenure to four years, undermining institutional stability,
 - Granted excessive rule-making powers to the executive over tribunals.

These provisions collectively **weakened tribunal independence** by giving the government disproportionate control over adjudicatory bodies.

- The Court reiterated its earlier order to create a **National Tribunal Commission (NTC)**, an independent body envisioned to:
 - Oversee the appointments of tribunal members,
 - Regulate service conditions,
 - Ensure institutional autonomy,
 - Oversee administration and infrastructure,
 - Standardise functioning of tribunals across India.

- The Court stressed that the NTC is an “essential structural safeguard”, especially given the government’s repeated attempts to influence tribunal design.

Source: SC strikes down provisions of Tribunal Reforms Act, tells govt. to set up panel (The Hindu)

TERMS IN NEWS

CE20 Cryogenic Engine



- It is the **indigenous engine** developed by the **Liquid Propulsion Systems Centre** of ISRO.
- It is powering the **upper stage of the LVM3 launch vehicle** and has been qualified to operate at a thrust level of 19 tonnes.
- This engine has successfully powered the upper stage of six LVM3 missions so far.
- Recently, the engine **was qualified for the Gaganyaan mission** with a thrust level of 20 tonnes and also to an uprated thrust level of 22 tonnes for the future C32 stage, towards **enhancing the payload capability of LVM3 launch vehicle**.
- It features an innovative **Nozzle Protection System** that overcomes previous complexities in engine testing.
- **Key achievements** of the test include:

- successful testing of an engine with a nozzle area ratio of 100,
- evaluation of a multi-element igniter by activating only the first element, and
- confirmation of normal engine and facility performance.

- **Significance:** This test marks a significant step in ISRO’s indigenous engine development, showcasing its ability to overcome complex rocket propulsion challenges.

How does a cryogenic engine work?

- **The working principle:** The thrust is produced by an **internal combustion/pressure difference**.
- This follows Newton's Third law of motion- "Every action has an equal and an opposite reaction".
- **Uses:** Cryogenic engines are used in **space launch vehicles, in the last stage (or upper stage)** of a rocket.
- A Cryogenic engine uses both **cryogenic fuel and oxidizer**, liquefied at a very low temperature.
- **Fuel:** The fuel and oxidizer used in a cryogenic engine are **liquefied gases**, stored at extremely low temperatures.
- Generally **liquid hydrogen liquefied at -253° Celsius** is used as **fuel** and **liquid oxygen liquefied at -183° Celsius** is used as **oxidizer**.

Article 143

- **Article 143** (Advisory jurisdiction) empowers the **President of India to seek the Supreme Court’s advisory opinion** on any **question of law or fact** that is of public importance and is **likely to arise or has already arisen**.

- This provision establishes the SC's **advisory jurisdiction**, which is exclusive to the President.

Types of Questions Referred:

- **Article 143 (1):** The President may refer any question of law or fact of public importance which has arisen or which is likely to arise.
- Here, the Supreme Court **may tender or may refuse to tender its opinion** to the president.
- For instance, the Supreme court has declined to provide its opinion in 1993 with respect to the Ram Janmabhoomi case.
- **Article 143(2):** It allows the President to refer disputes arising from out of any **pre-constitution treaty, agreement, covenant, sanad or other similar instruments**.
- The SC must tender its opinion to the President.
- **Nature of the Advise:** In both the cases, the opinion expressed by the SC is **only advisory and not a judicial pronouncement**.
- Hence, it is **not binding on the president**; she may follow or may not follow the opinion.
- However, it facilitates the government to have an authoritative legal opinion on a matter to be decided by it.

PLACES IN NEWS

Curacao



- Curacao is an **island country** situated in the **south Caribbean Sea**, about 60 km north of the coast of Venezuela.
- It is also a **territorial country of the Netherlands**.
- Although physiographically part of the South American continental shelf, Curaçao and neighboring islands off the northern coast of South America are usually considered to constitute the **southwestern arc of the Lesser Antilles**.
- Until the Netherlands Antilles was dissolved in October 2010, the country was one of its island territories and was governed as the "Island Territory of Curacao."
- Currently, Curacao is **administered by an independent government established by the people of Curacao** and is fully autonomous in most matters, except those

outlined in the Charter for the Kingdom of the Netherlands.

- **Government:** Constitutional Monarchy (multi-party system)
- The head of state is the Dutch monarch, represented by a governor, and the head of government is the prime minister.
- Once colonised by the Dutch for decades, Curacao has transformed into a thriving tourist destination and an important oil-refining hub.
- The capital is **Willemstad**.
 - The **center of the city**, due to its unique architecture, has been designated as a **UNESCO World Heritage Site**.
- **Languages:** Papiamentu, Dutch, English
- Curacao has qualified for the **2026 FIFA World Cup**, becoming the **smallest country in history to reach the tournament**.

PRACTICE QUESTIONS

Q1. Consider the following statements regarding the Commission for Air Quality Management (CAQM):

1. CAQM is headed by the Union Minister for Environment, Forests and Climate Change.
2. The commission is directly accountable to the Parliament.
3. All the directions and orders by the Commission are of binding nature.

How many of the afore mentioned statements are correct?

- (a) Only one
- (b) Only two
- (c) All three

(d) None

Q2. How many of the countries mentioned below are members of NATO?

1. Latvia
2. Belarus
3. Sweden
4. Turkey

Choose the correct answer:

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

Q3. Consider the following statements with respect to cryogenic engines:

1. It uses extremely low temperatures for propulsion.
2. It usually constitutes the first stage of launch vehicles.
3. It uses mixes of liquified gases (usually hydrogen and oxygen), which deliver greater thrust to weight.

How many of the above statements is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

Q4. Consider the following statements:

The Supreme Court of India tenders advice to the President of India on matters of law or fact:

1. On its own initiative
2. If he/she seeks such advice
3. Only if the matter relates to the Fundamental Rights of the citizens

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 3 only

Q5. Which among the following recently became the smallest country in history to reach the FIFA World Cup?

- (a) Liechtenstein
- (b) Tuvalu
- (c) Curacao
- (d) Monaco

Answers:

- 1. B
- 2. C
- 3. B
- 4. B
- 5. C

