MANTHAN

APRIL 2025 : WEEK-3

Contents

1. ICJ hears Sudan case accusing UAE of 'complicity in genocide'

- The International Court of Justice (ICJ) in The Hague is currently deliberating on a case brought by Sudan against the United Arab Emirates (UAE), accusing the Gulf nation of being complicit in acts of genocide during Sudan's ongoing civil war.

- Sudan alleges that the UAE's provision of arms to the Rapid Support Forces (RSF), a powerful paramilitary group involved in the conflict, has enabled widespread atrocities, particularly against the Masalit ethnic group in Darfur.

- The court is expected to rule within weeks on whether the UAE can be plausibly found complicit in these crimes.

- Sudan's acting justice minister, Muawia Osman, contends that the genocide being committed by the RSF would not be possible without the UAE's support, specifically its alleged shipment of weapons to the militia.

- Sudan has asked the ICJ to order the UAE to cease its support for the RSF and to provide full reparations, including compensation for victims.

- The UAE has strongly denied all allegations. Reem Ketait, a senior official from the UAE's foreign ministry, dismissed the accusations as baseless and politically motivated, accusing Sudan of misusing international legal institutions to attack the UAE.

- The UAE also argues that the ICJ has no jurisdiction in the matter due to a reservation it made when acceding to the Genocide Convention in 2005, which excludes ICJ dispute resolution in such cases. This jurisdictional issue could determine whether the case proceeds further.

- Legal experts representing Sudan presented multiple pieces of evidence, including findings from a UN panel of experts and the Yale Humanitarian Research Lab.

- The UN panel reportedly found credible claims that cargo flights from the UAE to eastern Chad transported arms to the RSF.

- Sudanese intelligence suggested that a UAE-built field hospital near the airport was serving as a logistics hub for the RSF.

- Additionally, Sudan cited U.S. sanctions imposed in January on seven RSF-linked companies allegedly operating in the UAE, though the UAE claims these entities are not active within its jurisdiction.

- The Yale research team also identified Chinese-made 155 mm howitzers—linked to a bombardment of Zamzam camp in December 2024—as weapons only known to be purchased by the UAE, further strengthening Sudan's claims.

- However, UAE officials, including its ambassador to the Netherlands, Ameirah AlHefeiti, insisted that no arms were provided to any Sudanese faction.

- The UAE maintains that it has instead supported mediation efforts, which Sudan allegedly ignored.

- Alison Macdonald KC, representing the UAE, dismissed the presented evidence as insufficient, outdated, or biased. She argued that the upcoming UN panel report would refute Sudan's claims unless it could confirm the actual contents of the cargo flights in question.

- The conflict in Sudan erupted in April 2023, stemming from a power struggle between the regular military and the RSF.

- While both sides have faced accusations of war crimes, Sudan's ICJ case zeroes in on the RSF's treatment of the Masalit people, asserting it constitutes an ongoing genocide.
- Regardless of the legal outcome, the case has heightened scrutiny of external actors in the Sudan conflict and could pressure regional powers like the UAE and Egypt to reconsider their roles.

International Court of Justice (ICJ)

- The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN), established in 1945 by the UN Charter and began functioning in 1946. Located at the Peace Palace in The Hague, Netherlands, it is the only principal UN body not located in New York.
- The ICJ settles legal disputes between states and gives advisory opinions on legal questions referred to it by the UN General Assembly, Security Council, or other authorized international agencies.
- It does not have jurisdiction over individuals or private entities; only sovereign states may be parties in contentious cases.
- The Court consists of 15 judges, elected for nine-year terms by the UN General Assembly and the Security Council, voting independently.
- Judges must represent the world's main legal systems and geographic regions. No two judges can be from the same country.
- The President and Vice-President are elected by the judges every three years.

ICJ proceedings can be initiated in two ways:

- **Contentious Cases**: Legal disputes submitted by mutual consent of states. Judgments are binding, final, and without appeal.
- **Advisory Opinions**: Non-binding legal opinions given at the request of UN bodies or specialized agencies.

Prominent cases include:

- The Nicaragua v. United States (1986) case on military and paramilitary activities.
- The Kulbhushan Jadhav case (India v. Pakistan, 2019), where ICJ ruled Pakistan must review the death sentence of the Indian national.
  - The ICJ plays a critical role in upholding international law, maintaining peaceful relations among nations, and providing a neutral forum for legal resolution of international disputes.
  - However, enforcement of its rulings depends on the UN Security Council, which may be influenced by geopolitical interests.
  - As of today, the ICJ continues to address contemporary issues such as territorial disputes, genocide allegations, and environmental matters under international law, contributing to the development and interpretation of global legal norms.

Difference between International Court of Justice and International Criminal Court

- The ICJ, established in 1945 under the UN Charter, is the principal judicial organ of the United Nations.
- It settles legal disputes between states and gives advisory opinions on international legal questions referred by UN organs and specialized agencies.
- The ICJ deals with cases such as border disputes, diplomatic relations, and treaty interpretations.
- Only states can be parties to a case before the ICJ, and its jurisdiction is based on the consent of the states involved.
- In contrast, the ICC, established by the Rome Statute in 2002, is an independent, permanent international criminal court that prosecutes individuals for the most serious crimes: genocide, crimes against humanity, war crimes, and the crime of aggression.

- Unlike the ICJ, the ICC is not a UN body, though it cooperates with the UN. Its jurisdiction is limited to crimes committed on the territory of, or by nationals of, States Parties to the Rome Statute, unless referred by the UN Security Council.
- Structurally, the ICJ has 15 judges elected by the UN General Assembly and Security Council, while the ICC has 18 judges elected by the Assembly of States Parties.
- In summary, the ICJ deals with inter-state legal disputes, while the ICC prosecutes individuals for international crimes, reflecting their complementary but separate roles in upholding international law.

Major Civil War Suffering Countries in 2025

- As of 2025, several countries are experiencing major civil wars or internal armed conflicts, resulting in severe humanitarian crises. These conflicts are often fueled by ethnic tensions, political instability, economic disparities, and foreign interventions.

1. Sudan:

- Sudan is currently grappling with a devastating civil conflict between the Sudanese Armed Forces (SAF) and the paramilitary Rapid Support Forces (RSF). This war, which began in April 2023, has caused widespread destruction, especially in the capital Khartoum and the Darfur region. Millions have been displaced, and thousands have lost their lives. The war has severely hampered humanitarian access, leading to famine-like conditions in many parts of the country.

2. Syria:

- Although the Syrian civil war, which began in 2011, has largely reduced in scale, fighting continues in the northwestern province of Idlib and the Kurdish-controlled northeast. The government, opposition forces, jihadist groups, and foreign powers like Russia, the U.S., and Turkey are involved in different capacities. The prolonged war has led to over half a million deaths and displaced millions, both internally and as refugees.

3. Yemen:

- Yemen remains mired in a brutal conflict between the Iran-backed Houthi rebels and the Saudi-led coalition supporting the internationally recognized government. While there have been recent peace talks, clashes and drone attacks continue. The war has triggered one of the world's worst humanitarian crises, with widespread famine, cholera outbreaks, and economic collapse.

4. Myanmar:

- Since the military coup in 2021, Myanmar has descended into civil war, with the military junta fighting against ethnic armed groups and the pro-democracy People's Defense Forces (PDFs). The conflict has intensified in several regions, including Chin, Kayah, and Sagaing, leading to mass displacement and atrocities against civilians.

5. Democratic Republic of the Congo (DRC):

- In the eastern DRC, particularly in North Kivu and Ituri provinces, the Congolese army is battling armed groups like the M23, ADF, and various militias. These groups have committed mass killings, sexual violence, and looting, displacing millions and causing immense suffering.

India and Sudan

- India and Sudan share historical and cordial relations that date back to ancient times, rooted in shared values, anti-colonial struggles, and the Non-Aligned Movement. Diplomatic relations between the two countries were formally established in 1955, even before Sudan gained independence in 1956.
- India was one of the first countries to recognize Sudan and has consistently supported its sovereignty and development.
- Bilateral ties between India and Sudan span political, economic, defense, cultural, and educational domains.

- India has contributed significantly to Sudan's capacity-building through initiatives like the Indian Technical and Economic Cooperation (ITEC) Programme and scholarships under the Indian Council for Cultural Relations (ICCR). Many Sudanese students have studied in Indian universities, fostering people-to-people ties.
- Economically, India has been one of Sudan's largest trading partners, especially in the energy sector. Indian companies like ONGC Videsh Ltd. (OVL) have invested in Sudan's oil industry, though operations were affected by political instability and the division of Sudan and South Sudan in 2011.
- India has also provided developmental assistance in areas such as agriculture, power, and healthcare.
- India has actively participated in peacekeeping in Sudan through United Nations missions like UNMIS and UNAMID, highlighting its commitment to regional stability and humanitarian support.
- During crises, such as the civil conflicts and the 2023 conflict in Sudan, India launched Operation Kaveri to evacuate its nationals and extended support to Sudanese citizens.
- Culturally, there is mutual respect and admiration, with Indian cinema, yoga, and cuisine being popular in Sudan. India continues to advocate for a peaceful, inclusive resolution to Sudan's internal challenges and supports the aspirations of its people.

QUESTIONS

Solve the multiple choice questions:

1. Sudan is bordered by which of the following countries?
   1. Central African Republic
   2. Chad
   3. Kenya
   4. Egypt
   5. Libya
   6. Ethiopia

   Select the correct answer using codes given below:

   A. 1, 2, 3, 5 and 6 only

   B. 1, 2, 5 and 6 only

   C. 1, 2, 4, 5 and 6 only

   D. 1, 2, 3, 4, 5 and 6

2. Which of the following statements are True regarding the International Court of Justice (ICJ)?
   1. It is the principal judicial organ of the United Nations (UN).
   2. It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
   3. Of the six principal organs of the United Nations, it is the only one not located in New York.
   4. The Court is composed of 15 judges, who are elected for terms of office of nine years by the United Nations General Assembly and the Security Council.

   Select the correct answer using codes given below:

   A. Only one statement is correct

   B. Only two statements are correct

   C. Only three statements are correct

   D. All statements are correct

3. Consider the following pairs:

Region often mentioned, in the news		Country
1. Anatolia	:	Turkey
2. Amhara	:	Ethiopia
3. Cabo Delgado	:	Spain
4. Catalonia	:	Italy

How many pairs given above are correctly matched?

A. Only one pair

B. Only two pairs

C. Only three pairs

D. All four pairs

4. Match the conflict zones with the countries they are associated with:

Conflict Zone	Country
1. Darfur	A. Somalia
2. Tigray	B. Nigeria
3. Boko Haram Insurgency	C. Ethiopia
4. Al Shabaab Insurgency	D. Sudan

Choose the correct matching:

A. 1–D, 2–C, 3–B, 4–A

B. 1–A, 2–D, 3–B, 4–C

C. 1–D, 2–B, 3–C, 4–A

D. 1–C, 2–D, 3–A, 4–B

2. Jallianwala Bagh massacre

- The Jallianwala (also spelled Jallianwalla) Bagh massacre, also known as the Amritsar massacre, took place on 13 April 1919.

- A large, peaceful crowd had gathered at the Jallianwala Bagh in Amritsar, Punjab, British India, during annual Baishakhi fair, to protest against the Rowlatt Act and the arrest of pro-independence activists Saifuddin Kitchlew and Satyapal.

- In response to the public gathering, the temporary brigadier general Dyer, surrounded the people with his Gurkha and Sikh infantry regiments of the British Indian Army.

- The Jallianwala Bagh could only be exited on one side, as its other three sides were enclosed by buildings. After blocking the exit with his troops, he ordered them to shoot at the crowd, continuing to fire even as the protestors tried to flee.

- The troops kept on firing until their ammunition was exhausted.

- Estimates of those killed vary from 379 to 1,500 or more people and over 1,200 other people were injured of whom 192 were seriously injured.

- Britain has never formally apologised for the massacre but expressed "deep regret" in 2019.
- The massacre caused a re-evaluation by the British Army of its military role against civilians to "minimal force whenever possible", although later British actions during the Mau Mau rebellion in the Kenya Colony have led historian Huw Bennett to comment that the new policy could sometimes be put aside.
- The army was retrained and developed less violent tactics for crowd control.
- The level of casual brutality, and lack of any accountability, stunned the entire nation, resulting in a wrenching loss of faith of the general Indian public in the intentions of the United Kingdom.
- The attack was condemned by the Secretary of State for War, Winston Churchill, as "unutterably monstrous", and in the UK House of Commons debate on 8 July 1920 Members of Parliament voted 247 to 37 against Dyer.
- The ineffective inquiry, together with the initial accolades for Dyer, fuelled great widespread anger against the British among the Indian populace, leading to the non-cooperation movement of 1920–22.
- Some historians consider the episode a decisive step towards the end of British rule in India.

Defence of India Act

- During World War I, British India contributed to the British war effort by providing men and resources.
- Millions of Indian soldiers and labourers served in Europe, Africa, and the Middle East, while both the Indian administration and the princes sent large supplies of food, money, and ammunition.
- Bengal and Punjab remained sources of anti-colonial activities.
- Revolutionary attacks in Bengal, associated increasingly with disturbances in Punjab, were enough to nearly paralyse the regional administration.
- Of these, a pan-Indian mutiny in the British Indian Army planned for February 1915 was the most prominent amongst a number of plots formulated between 1914 and 1917 by Indian nationalists in India, the United States and Germany.
- The planned February mutiny was ultimately thwarted when British intelligence infiltrated the Ghadar Movement, arresting key figures.
- Mutinies in smaller units and garrisons within India were also crushed. In the context of the British war effort and the threat from the separatist movement in India, the Defence of India Act 1915 was passed, limiting civil and political liberties. Michael O'Dwyer, then the Lieutenant Governor of Punjab, was one of the strongest proponents of the act, in no small part due to the Ghadarite threat in the province.

The Rowlatt Act

- The costs of the protracted war in money and manpower were great.
- High casualty rates in the war, increasing inflation after the end, compounded by heavy taxation, the deadly 1918 flu pandemic, and the disruption of trade during the war escalated human suffering in India.
- The pre-war Indian nationalist sentiment was revived as moderate and extremist groups of the Indian National Congress ended their differences to unify.
- In 1916, the Congress was successful in establishing the Lucknow Pact, a temporary alliance with the All-India Muslim League.
- British political concessions and Whitehall's India Policy after World War I began to change, with the passage of Montagu–Chelmsford Reforms, which initiated the first round of political reform in the Indian subcontinent in 1917.
- However, this was deemed insufficient in reforms by the Indian political movement. Mahatma Gandhi, recently returned to India, began emerging as an increasingly charismatic leader under whose leadership civil disobedience movements grew rapidly as an expression of political unrest.

- The recently crushed Ghadar conspiracy, the presence of Raja Mahendra Pratap's Kabul mission in Afghanistan (with possible links to Bolshevik Russia), and a still-active revolutionary movement especially in Punjab and Bengal (as well as worsening civil unrest throughout India) led to the appointment of a sedition committee in 1918 chaired by Sidney Rowlatt, an Anglo-Egyptian judge.
- It was tasked to evaluate German and Bolshevik links to the militant movement in India, especially in Punjab and Bengal.
- On the recommendations of the committee, the Rowlatt Act, an extension of the Defence of India Act 1915 to limit civil liberties, was enacted.
- The passage of the Rowlatt Act in 1919 precipitated large-scale political unrest throughout India.
- Ominously, in 1919, the Third Anglo-Afghan War began in the wake of Amir Habibullah's assassination and institution of Amanullah in a system strongly influenced by the political figures courted by the Kabul mission during the world war.
- As a reaction to the Rowlatt Act, Muhammad Ali Jinnah resigned from his Bombay seat, writing in a letter to the Viceroy, "I, therefore, as a protest against the passing of the Bill and the manner in which it was passed tender my resignation ... a Government that passes or sanctions such a law in times of peace forfeits its claim to be called a civilised government".
- Gandhi's call for protest against the Rowlatt Act achieved an unprecedented response of furious unrest and protests.

Effect of Jallianwala Bagh Massacre in Indian History

- The immediate aftermath of the massacre was one of shock, grief, and outrage across India.
- The brutality of the British forces galvanized Indian nationalists, turning public sentiment strongly against British rule.
- The massacre exposed the extent of British colonial cruelty and led to widespread protests and civil disobedience.
- In the long term, the Jallianwala Bagh massacre served as a catalyst for the Indian independence movement.
- It led to the rise of more radical factions within the Congress Party, who called for an end to British rule. Leaders like Mahatma Gandhi, who had initially advocated for nonviolent resistance, became more determined to unite the nation against colonial oppression.
- The massacre also fueled the demand for complete independence, as the brutality of the British was laid bare.
- Additionally, the incident marked a significant shift in India's political landscape.
- The massacre was a key moment in the decline of British legitimacy in India, leading to a reevaluation of colonial policies.
- It also played a role in the growing international sympathy for India's cause, with global attention drawn to British repression in the colony.

Sir Sankaran Nair and the story of the Jallianwala Bagh case

- Prime Minister Narendra Modi recently paid tribute to Sir Chettur Sankaran Nair, a distinguished nationalist and jurist, on the 106th anniversary of the Jallianwala Bagh massacre.
- Highlighting Nair's unwavering spirit and commitment to justice, Modi recalled how Nair fearlessly stood up against British colonial rule by challenging its brutalities in court.
- Nair had held a senior British official accountable for the 1919 massacre and was subsequently sued for defamation. Undeterred, he fought a historic legal battle, becoming a powerful voice for truth and justice during one of the darkest chapters of colonial oppression.

- Modi emphasized that Nair's courage symbolized a deep sense of solidarity with the nation and humanity.

- Though the massacre occurred in Punjab and Nair hailed from Kerala, his response reflected a pan-Indian spirit of resistance and justice. The Prime Minister described Nair's stand as one of immense moral strength and conviction, calling it a testament to the spirit of standing up for the nation.

- Nair's remarkable legacy is being brought to the screen in the upcoming film Kesari Chapter 2, which is based on the 2019 book The Case That Shook the Empire: One Man's Fight for the Truth about the Jallianwala Bagh Massacre. The book was authored by Nair's great-grandson Raghu Palat and his wife Pushpa Palat, shedding light on his courageous efforts to challenge British atrocities. Through this cinematic adaptation, a new generation will learn about Nair's pivotal role in India's freedom struggle and his fearless pursuit of justice.

The rebellious lawyer

- Sir C. Sankaran Nair, born in 1857 in an aristocratic family from Mankara village in Malabar's Palakkad district, was a distinguished lawyer, judge, and social reformer.

- After graduating from Presidency College, Madras, and earning a law degree, he began his legal career under Sir Horatio Shepherd, who would later become Chief Justice of the Madras High Court.

- Nair was known for his unwavering commitment to his principles, often taking bold stances regardless of opposition.

- His fierce independence and outspoken nature led to friction with British authorities, alienation from many colleagues, and hostility from conservative Brahmins. British Secretary of State for India, Edwin Montague, labeled him an "impossible person" for his refusal to compromise.

- Despite criticism, Nair's legal acumen and dedication to justice earned him respect.

- In 1897, he became the youngest president of the Indian National Congress, reflecting his prominence in public life.

- In 1908, he was appointed a permanent judge of the Madras High Court.

- His landmark rulings — such as affirming the rights of converts to Hinduism and supporting inter-caste and inter-religious marriages — demonstrated his deep commitment to social reform and equality, setting progressive legal precedents in colonial India.

The great nationalist

- C. Sankaran Nair was a staunch advocate of India's right to self-governance.

- In 1919, he played a key role in expanding the provisions of the Montagu-Chelmsford Reforms, which introduced dyarchy in the provinces and increased Indian participation in administration.

- In response to the Jallianwala Bagh massacre, Nair resigned from the Viceroy's Council in protest, demonstrating his commitment to justice and civil rights.

- In 1922, Nair published Gandhi and Anarchy, a book where he critiqued Mahatma Gandhi's methods of non-violence, civil disobedience, and non-cooperation.

- He also held Michael O'Dwyer, the then Lieutenant Governor of Punjab, responsible for the policies that led to the Jallianwala Bagh tragedy. O'Dwyer filed a defamation lawsuit against Nair in an English court, anticipating a favorable verdict.

- The trial at London's King's Bench lasted five and a half weeks, becoming the longest-running civil case of the time.

- The presiding judge, Justice Henry McCardie, showed clear bias in favor of O'Dwyer.

- The jury, consisting entirely of Englishmen, ruled 11–1 in O'Dwyer's favor, with only Harold Laski dissenting. Nair was fined £500 and ordered to pay trial costs. Despite O'Dwyer's offer to waive the penalty in exchange for an apology, Nair stood firm and refused.

Solve the multiple choice questions:

5. Which among the following statements is/are correct about the Jallianwala Bagh massacre?

   1. In Jallianwala bagh troops opened fire upon an unarmed crowd.
   2. The troops were under the command of General Dyer.
   3. The troops did not issue any warning to the people before opening fire.

   Select the correct answer using the code given below:

   A. 1 Only
   B. 1 and 2 Only
   C. 1, 2, and 3
   D. 2 and 3 Only

6. During the Indian Freedom Struggle, why did Rowlatt Act arouse popular indignation?

   A. It curtailed the freedom of religion
   B. It suppressed the Indian traditional education
   C. It authorized the government to imprison people without trial
   D. It curbed the trade union activities

3. Bhutan turns to 'green' cryptocurrency to fuel economy

- Bhutan is exploring the potential of green cryptocurrencies to boost its economy and address the challenges of brain drain by leveraging its abundant hydropower resources.

- Green cryptocurrencies are mined using clean energy, such as hydropower, wind, or solar power, which contrasts with traditional mining that relies on fossil fuels.

- Bhutan's sovereign wealth fund, Druk Holding and Investments Ltd, began investing in cryptocurrencies in 2019, recognizing the strategic benefits of digital currencies.

- Ujjwal Deep Dahal, CEO of the fund, highlighted that Bhutan's 100% hydropower-based energy system allows it to mine digital coins in an environmentally sustainable manner, offsetting the carbon footprint of coins mined with fossil fuels.

- The country has already earned millions from cryptocurrency investments, using some of the profits to fund government salaries for two years.

- Bhutan is considering ways for large corporations to purchase its green coins to meet environmental, social, and governance (ESG) targets.

- The mining of cryptocurrencies also boosts the value of Bhutan's hydropower and increases access to foreign currency liquidity.

- Additionally, the country is focusing on training its young population in blockchain and AI skills, aiming to create jobs and reduce the high unemployment rate among youth, which stands at 16.5% in 2024.

- Despite its small population of about 800,000, Bhutan's ambitious goal to become a hub for green digital currency depends on significantly expanding its hydropower capacity from 3.5 gigawatts to 33 gigawatts.
- Bhutan's initiative aligns with its Gross National Happiness (GNH) index, which prioritizes sustainability, well-being, and economic development over traditional GDP metrics.

Green Cryptocurrency

- Green cryptocurrency refers to a type of digital currency designed with a focus on sustainability and minimizing environmental impact.
- Traditional cryptocurrencies like Bitcoin and Ethereum use a process called Proof of Work (PoW), which involves complex mathematical calculations that require vast amounts of energy and contribute to high carbon footprints.
- In contrast, green cryptocurrencies aim to reduce these environmental costs through alternative consensus mechanisms and environmentally conscious designs.
- One of the most popular green cryptocurrencies is Chia, which uses a Proof of Space and Time (PoST) consensus algorithm.
- Instead of relying on energy-intensive mining, Chia involves "farming" where users allocate unused hard drive space to store cryptographic data.
- This significantly reduces energy consumption, making Chia far more energy-efficient than traditional PoW-based cryptocurrencies.
- Another example is SolarCoin, a digital currency that rewards users for producing solar energy.
- It is designed to incentivize solar power generation and to promote renewable energy adoption worldwide.
- For every megawatt-hour of solar energy produced, users can earn SolarCoins, which can be traded or held as a store of value.
- Cardano and Polkadot are also considered more eco-friendly compared to Bitcoin.
- These cryptocurrencies utilize Proof of Stake (PoS) instead of PoW. PoS systems involve validators who stake their coins to verify transactions rather than using computational power.
- This leads to a significant reduction in energy consumption.
- In addition to these, many green crypto projects are dedicated to offsetting carbon emissions through initiatives like tree planting or partnering with renewable energy sources to power blockchain networks.
- As concerns about environmental sustainability rise, green cryptocurrencies offer a more energy-efficient and environmentally conscious alternative, contributing to both financial and ecological benefits.

Gross National Happiness (GNH) index

- The Gross National Happiness (GNH) index is a unique measurement introduced by Bhutan in 1972 to assess the well-being and happiness of its citizens, as opposed to focusing solely on economic factors like Gross Domestic Product (GDP).
- The concept was introduced by King Jigme Singye Wangchuck of Bhutan, who emphasized that economic development alone does not guarantee happiness, and thus a more holistic approach was necessary for evaluating the quality of life.

The GNH framework is based on four broad pillars:

- **Sustainable and equitable socio-economic development** – Focuses on improving the quality of life through equitable economic growth.
- **Conservation of the environment** – Emphasizes the importance of preserving Bhutan's natural resources and ensuring sustainable environmental practices.

- **Preservation and promotion of culture** – Encourages the protection of Bhutanese culture and heritage while promoting social harmony and spiritual well-being.
- **Good governance** – Involves transparency, accountability, and responsiveness in governance to ensure that the government acts in the best interests of its citizens.

These pillars are further broken down into nine domains that directly measure specific aspects of happiness:

- Psychological well-being
- Health
- Education
- Time use
- Cultural diversity and resilience
- Good governance
- Community vitality
- Ecological diversity and resilience
- Living standards
- The GNH index uses a combination of qualitative and quantitative indicators to evaluate these domains, with surveys and data collection being key components.
- The index is intended to guide policymaking by ensuring that development strategies promote the holistic well-being of the population, rather than simply economic growth.
- Bhutan has often been cited as a model in discussions about alternatives to GDP as a measure of progress, and its GNH index has influenced other countries to explore similar frameworks for measuring national well-being and happiness.

Bhutan's Hydropower Abundance

- Bhutan is a standout example of how a country can leverage natural resources sustainably — especially when it comes to hydropower.

Geographic and Natural Advantage:

- Bhutan is a mountainous country with fast-flowing rivers, making it ideal for hydroelectric power generation.
- The country receives heavy rainfall during monsoons, which fuels its river systems.

Renewable Energy Powerhouse:

- Hydropower is Bhutan's main source of electricity, accounting for nearly 100% of its electricity generation.
- It is clean, renewable, and crucial for the country's low carbon footprint — Bhutan is carbon negative, absorbing more CO_2 than it emits.

Economic Impact:

- Hydropower is Bhutan's largest export, mainly to India, and a major revenue earner for the government.
  - Tala Hydroelectric Project
  - Chhukha
  - Kurichhu
  - Mangdechhu (recently completed with India's assistance)

India-Bhutan Energy Partnership:

- India has been Bhutan's key partner in developing its hydropower infrastructure.
- Bhutan exports surplus electricity to India, helping both countries meet energy and climate goals.

Sustainability and Challenges:

- While hydropower helps Bhutan maintain green growth, it faces some challenges:
  - **Seasonal variability:** Dry winters reduce generation capacity.
  - **Environmental and social impacts:** Displacement and ecological disruption from dam projects.
  - **Climate change:** Melting glaciers and unpredictable monsoons threaten long-term viability.

Mangdechhu Hydropower Project

- The Mangdechhu Hydropower Project is a significant 720 MW run-of-river hydroelectric facility located in central Bhutan, near the town of Trongsa. Commissioned in 2019, it exemplifies the robust energy cooperation between Bhutan and India.

Key Features

- **Location:** Situated on the Mangde Chhu River, which originates from the Gangkhar Puensum glacier and flows through districts like Wangdue Phodrang, Bumthang, Trongsa, and Zhemgang before merging with the Drangme Chhu to form the Manas River.
- **Design:** The project features a 101.5-meter-high dam that diverts water through a 13.5 km headrace tunnel to an underground powerhouse equipped with four Pelton turbines, each generating 180 MW.
- **Operation:** It's a run-of-river plant, meaning it utilizes the river's natural flow without large reservoirs, minimizing environmental impact.

India-Bhutan Collaboration

- **Development**: The project was designed by India's NHPC Ltd., with major construction executed by Indian contractors. Bharat Heavy Electricals Limited (BHEL) supplied and commissioned the electro-mechanical equipment.
- **Financing**: India funded the project entirely, with 40% as a grant and 60% as a loan to Bhutan.
- **Inauguration**: The plant was officially inaugurated on August 17, 2019, by the Prime Ministers of Bhutan and India, highlighting the enduring partnership between the two nations.

Strategic Importance

- **Energy Export**: Approximately 70% of Bhutan's hydroelectric power is exported to India, contributing to Bhutan's economy and supporting India's renewable energy goals.
- **Carbon Offset**: Bhutan's clean energy exports, including from Mangdechhu, help offset millions of tons of CO_2 annually, reinforcing its status as a carbon-negative country.

Management

- Post-commissioning, the Mangdechhu project is managed by Bhutan's Druk Green Power Corporation (DGPC), ensuring local oversight and integration into the national grid.
- The Mangdechhu Hydropower Project stands as a testament to successful international collaboration in sustainable energy development, benefiting both Bhutan and India economically and environmentally.

Solve the multiple choice questions:

7. With reference to "Blockchain Technology", consider the following statements:

    1. It is a public ledger that everyone can inspect, but which no single user controls.
    2. The structure and design of blockchain is such that all the data in it are about cryptocurrency only.
    3. Applications that depend on basic features of blockchain can be developed without anybody's permission.

    Which of the statements given above is/are correct?

    A. 1 only
    B. 1 and 2 only
    C. 2 only
    D. 1 and 3 only

8. With reference to 'Bitcoins', sometimes seen in the news, which of the following statement(s) is/are correct?

    1. Bitcoins are tracked by the Central Banks of the countries.
    2. Anyone with a Bitcoin address can send and receive Bitcoins from anyone else with a Bitcoin address.
    3. Online payments can be sent without either side knowing the identity of the other.

    Select the correct answer using the codes given below.

    A. 1 and 2 only
    B. 2 and 3 only
    C. 3 only
    D. 1, 2 and 3

4. NITI Aayog launches Report on 'Unlocking $25+ Billion Export Potential - India's Hand & Power Tools Sector'

- NITI Aayog launched a report on Hand and Power tools sectors – 'Unlocking $25+ Billion Export Potential - India's Hand & Power Tools Sector'.

- The report underscores the transformative potential of hand and power tools industry for India's economic growth, delving into the challenges, policy headwinds, and necessary interventions vital for strengthening the Indian hand and power tool ecosystem.

- It outlines a strategic path for the sector to enhance its global competitiveness and capture a significantly larger share of the international market.

- The report was launched by Shri Suman Bery, Vice Chairman, NITI Aayog in the presence of Dr. V.K. Saraswat, Member, Dr. Arvind Virmani, Member, and Shri BVR Subrahmanyam, CEO, NITI Aayog.

- The report suggests that the global trade market for power and hand tools, currently valued at approximately $ 100 billion, is projected to grow significantly, reaching around $ 190 billion by 2035.

- Within this market, hand tools account for $ 34 billion and are expected to expand to $ 60 billion by 2035, while power tools, including tool accessories, represent $ 63 billion and are anticipated to surge to $ 134 billion, with electrical tools comprising the majority.

- China dominates global exports, holding about 50% of the hand tools market with $ 13 billion and 40% of the power tools market with $ 22 billion, whereas India has a smaller presence, exporting $ 600 million in hand tools (1.8% market share) and $ 470 million in power tools (0.7% market share).

- One important finding of the report is that India has the potential to capture a larger share of the global market, targeting $ 25 billion in exports over the next decade, which could create approximately 35 lakh jobs by achieving a 10% market share in power tools and 25% in hand tools.

- Through fostering innovation, empowering our MSMEs, strengthening India's industrial ecosystem, we can solidify the nation's position as a reliable, high-quality global manufacturing hub.

- The potential rewards for Indian economy and its people are immense.

- The report also analyses the challenges which India may face, including a 14-17% cost disadvantage compared to China, driven by higher structural costs and smaller operational scale.

- This disadvantage stems from elevated raw material costs, such as steel, plastic, and motors, as well as lower labour productivity due to higher overtime wages and restrictions on overtime hours.

- Furthermore, higher interest rates and logistics costs for transporting goods from inland states to ports further hinder India's competitiveness in the global market.

- To achieve India's potential of $ 25 billion in power and hand tool exports over the next decade; the report delves into the issues impacting hand and power tools sectors and recommends three key categories of interventions which are essential. These include:

- Developing world-class hand tool clusters with advanced infrastructure is critical, requiring 3-4 clusters aggregating around 4,000 acres.

- These clusters operating under a public-private partnership (PPP) model would feature plug-and-play infrastructure, worker housing, and facilities like connectivity and convention centers to streamline operations.

- Addressing structural cost disadvantages through market reforms is necessary, including rationalizing Quality Control Order (QCO) restrictions and import duties on essential raw materials like steel and machinery, simplifying the Export Promotion Capital Goods (EPCG) scheme by easing Authorized Economic Operator (AEO) requirements, and reducing penal provisions like interest on defaults.

- Additionally, reforms to building regulations and labour laws are needed to enhance competitiveness.

- Providing bridge cost support to offset cost disadvantages is crucial, though no additional support beyond existing schemes like Remission of Duties and Taxes on Exported Products (RoDTEP) and duty drawbacks is required if factor market interventions are effectively implemented.

- However, the report estimates that in the absence of these reforms, an additional RS. 8,000 crores in bridge support will be necessary, which should be viewed as an investment rather than a subsidy, as it is expected to generate 2-3 times its value in tax revenue over the next five years.

- The report observes that the tools industry serves as a foundational pillar of the global manufacturing ecosystem.

- The Hand and Power Tools sector represents a significant opportunity to realise India's ambition of becoming a 'global manufacturing hub'.

- The report underlines that India stands at the cusp of becoming a developed nation i.e Viksit Bharat @ 2047, where the industrial eco-system will play a pivotal role.
- The Hand and Power Tools sector will help enhance our domestic manufacturing and expand our global footprint by $ 25 billion in the next 10 years, with the growth in the construction and DIY markets, augmenting the "Make in India" initiative and accelerating nation's economic growth.

NITI Aayog

- NITI Aayog, short for the National Institution for Transforming India, is the premier policy think tank of the Government of India.
- Established on January 1, 2015, it replaced the Planning Commission to better align with India's evolving economic landscape and to promote cooperative federalism through a bottom-up approach involving state governments in policy-making.

Objectives and Role

NITI Aayog aims to:

- Foster cooperative federalism by involving states in the economic policy-making process.
- Develop long-term strategic and policy frameworks for India's development.
- Serve as a platform for the resolution of inter-sectoral and inter-departmental issues.
- Monitor and evaluate the implementation of programs and initiatives.

Organizational Structure

The structure of NITI Aayog includes:

- **Chairperson:** Prime Minister Narendra Modi.
- **Vice Chairperson:** Suman Bery.
- **Chief Executive Officer (CEO):** B. V. R. Subrahmanyam.
- **Full-time Members:** Experts like V. K. Saraswat (former DRDO Chief), Ramesh Chand (Agriculture Expert), V. K. Paul (Public Health Expert), Arvind Virmani (Economist), and Rajiv Gauba (former Cabinet Secretary).
- **Governing Council:** Comprises all Chief Ministers of States and Union Territories with Legislatures, and Lieutenant Governors of other Union Territories.
- **Regional Councils:** Formed to address specific regional issues.
- **Ex-Officio Members:** Union Ministers including Amit Shah, Rajnath Singh, Nirmala Sitharaman, and Shivraj Singh Chouhan.
- **Special Invitees:** Ministers like Nitin Gadkari, Piyush Goyal, Virendra Kumar, Ashwini Vaishnaw, and Rao Inderjit Singh.

Key Initiatives

- NITI Aayog has launched several significant initiatives:
- **Atal Innovation Mission (AIM):** Encourages innovation and entrepreneurship through programs like Atal Tinkering Labs and the Student Entrepreneurship Programme.
- **IndiaChain:** Aims to develop a nationwide blockchain network to improve governance and service delivery.
- **Digital India:** Promotes digital infrastructure and literacy.
- **AMRUT (Atal Mission for Rejuvenation and Urban Transformation):** Focuses on urban infrastructure development.

- **Agricultural Reforms:** Includes the Model Land Leasing Law and reforms in the Agricultural Produce Market Committee Act.
- **Health, Education, and Water Management Indices:** Measures and ranks states' performance to encourage competition and improvement.

Viksit Bharat @ 2047

- "Viksit Bharat @ 2047" is a long-term vision and initiative launched by the Government of India with the goal of transforming the country into a developed nation by the year 2047, marking 100 years of India's independence.
- It encompasses a comprehensive, inclusive, and sustainable development plan across all sectors — economic, social, environmental, and technological.

Key Objectives of Viksit Bharat @ 2047:

Economic Growth:

- Make India a global economic powerhouse.
- Achieve a high GDP and per capita income.
- Promote innovation, entrepreneurship, and Make in India.

Social Development:

- Ensure quality education, healthcare, and social welfare for all.
- Achieve gender equality and social justice.
- Uplift marginalized and underrepresented communities.

Technological Advancement:

- Position India as a leader in AI, quantum computing, space tech, and biotechnology.
- Foster a strong digital ecosystem and cyber-resilient infrastructure.

Sustainable Environment:

- Achieve net-zero emissions.
- Promote renewable energy and climate-resilient agriculture.
- Improve water management, waste management, and biodiversity conservation.

Governance and Institutions:

- Enhance transparency, efficiency, and accountability in governance.
- Deepen democratic institutions and citizen participation.
- Improve law and justice delivery mechanisms.

Global Leadership:

- Strengthen India's voice on global platforms (G20, BRICS, UN).
- Be a leading force in peacekeeping, trade, and development cooperation.

Recent Initiatives Under Viksit Bharat @ 2047:

- **Viksit Bharat Sankalp Yatra (2023–24):** A nationwide campaign to raise awareness about welfare schemes and gather inputs from citizens for shaping the 2047 vision.
- **District and Block-Level Consultations:** Engaging local administrations and communities in creating localized development plans.
- Integration with NEP 2020, Digital India, and Atmanirbhar Bharat missions.

Solve the multiple choice questions:

9. Which among the following is/are the objective/objectives of the NITI Aayog?
   1. Imposing policies on the States/UTs
   2. Allocation of funds at National and State levels
   3. Design strategies and long-term policies and programme frameworks

   Select the correct answer using the code given below.
   A. 1 Only
   B. 2 Only
   C. 2 and 3 only
   D. 1, 2 and 3

10. Which one of the following is not an objective of NITI Aayog?
    A. It provides a critical direction and strategic input for development process.
    B. It functions as a 'think tank providing key elements of policy.
    C. It monitors and evaluates implementation of the programmes.
    D. It offers a platform for resolution of inter-state conflicts as 'provider of first and last resort'.

11. NITI Aayog is a_____.
    A. Executive body
    B. Statutory body
    C. Constitutional body
    D. Non-Constitutional body

12. The Governing Council of NITI Aayog comprises of_____.
    A. Only Chief Ministers of all the States
    B. Only Chief Ministers of all the States and Union Territories with legislatures
    C. Chief Ministers of all the States and Union Territories with legislatures and Lt Governors of other Union Territories
    D. None of the above

5. Kerala Becomes First To Introduce Online Filing & Virtual Hearings For Permanent Lok Adalats

- Ahead of improving the technology-driven justice, Kerala has become the first state in India to roll out online filing and hearing facilities for Permanent Lok Adalats.

- The initiative, led by the Kerala State Legal Services Authority (KELSA), aims to simplify legal processes and bring justice closer to people in remote and underserved regions.
- The digital platform was officially inaugurated by Kerala High Court Chief Justice Nitin M Jamdar at an event organised by KELSA.
- This move underscores the judiciary's growing emphasis on leveraging technology to promote inclusivity and reduce barriers to legal recourse.
- Kerala currently hosts three Permanent Lok Adalats in Thiruvananthapuram, Ernakulam, and Kozhikode. Until now, litigants were required to physically visit these centres to file cases—a logistical hurdle for many, especially those residing far from urban hubs.
- With the new system in place, citizens can file their cases online from any location within the state.
- The facility, which also enables virtual hearings, is set to become fully operational in the first week of May, offering a streamlined and user-friendly experience.
- To further boost accessibility, the services will be made available at e-Sewa Kendras and through district and taluk-level legal services authorities.
- This inclusive approach ensures that the benefits of digital justice reach even the most remote corners of the state, aligning with the broader vision of affordable and equitable legal access for all.

Permanent Lok Adalats

- Permanent Lok Adalats (PLAs) are a statutory mechanism under the Legal Services Authorities Act, 1987, designed to provide an alternative dispute resolution forum in India, especially for matters related to public utility services.

Legal Basis and Purpose

- Established under Sections 22A and 22B of the Legal Services Authorities Act, 1987, PLAs aim to facilitate the amicable settlement of disputes concerning public utility services, such as transport, postal, and telegraph services.

Composition

Each Permanent Lok Adalat comprises:

- **A Chairperson:** A serving or retired District and Sessions Judge or a Judicial Officer of higher rank.
- Two other members possessing adequate experience in public utility services.

Jurisdiction and Powers

- **Scope:** PLAs handle disputes related to public utility services, including transport, postal, and telegraph services.
- **Pecuniary Jurisdiction**: They can adjudicate claims up to ₹1 crore.
- **Binding Decisions:** Awards passed by PLAs are final and binding on the parties, with no provision for appeal.
- **Procedural Flexibility**: PLAs are not bound by the Civil Procedure Code or the Indian Evidence Act, allowing them to adopt a more flexible approach to dispute resolution.

Legal Services Authorities Act, 1987

- The Legal Services Authorities Act, 1987 was enacted by the Indian Parliament to provide free and competent legal services to weaker sections of society and to ensure that opportunities for securing justice are not denied to any citizen due to economic or other disabilities.
- It also aims to promote justice on the basis of equal opportunity.

- The Act led to the creation of a nationwide network for providing legal aid and established statutory bodies like the National Legal Services Authority (NALSA), State Legal Services Authorities, District Legal Services Authorities, and Taluk Legal Services Committees.
- These bodies are responsible for implementing legal aid programs and conducting Lok Adalats to facilitate the settlement of disputes through alternative dispute resolution mechanisms.

Key provisions of the Act include:

- **Section 12:** Specifies the categories of persons entitled to free legal aid, such as Scheduled Castes/Scheduled Tribes, women, children, persons with disabilities, victims of human trafficking, and others with limited income.
- **Section 22A-22E:** Deals with Permanent Lok Adalats for public utility services (transport, postal, telegraph, etc.), allowing for pre-litigation conciliation and settlement.
- The Act ensures access to justice in both civil and criminal matters, particularly in cases involving public interest, family disputes, and petty offenses.
- The Lok Adalats, organized under this Act, play a crucial role in reducing the burden on regular courts by enabling speedy and amicable resolution of disputes without lengthy litigation.
- Decisions of Lok Adalats are final, binding, and enforceable like a civil court decree.
- In summary, the Legal Services Authorities Act, 1987, embodies the constitutional mandate under Article 39A to promote equal justice and free legal aid.
- It is a significant step towards legal empowerment and inclusive justice, helping bridge the gap between the law and the underprivileged sections of society.

QUESTIONS

Solve the multiple choice questions:

13. With reference to Lok Adalats, which of the following statements is correct? (2010)

    A. Lok Adalats have the jurisdiction to settle the matters at pre-litigative stage and not those matters pending before any court

    B. Lok Adalats can deal with matters which are civil and not criminal in nature

    C. Every Lok Adalat consists of either serving or retired judicial officers only and not any other person

    D. None of the statements given above is correct

14. With reference to the Lok Adalat, consider the following statements:

    1. There is no court fee payable when a matter is filed in a Lok Adalat.

    2. The award (decision) made by the Lok Adalats is final and binding on all parties and no appeal against such an award lies before any court of law.

    3. If the parties are not satisfied with the award of the Lok Adalat they are free to initiate litigation by approaching the court of appropriate jurisdiction.

    Which of the statements given above is/are incorrect?

    A. 1 and 3 only

    B. 1 and 2 only

    C. 3 only

    D. None

15. Under which legislation have Lok Adalats been given statutory status in India?

    A. The Arbitration and Conciliation Act, 1996

    B. The Legal Services Authorities Act, 1987

    C. The Civil Procedure Code, 1908

    D. The Indian Judiciary Reforms Act, 2002

6. India demonstrates 'Star Wars' capability to shoot down drones using laser weapon

- India conducted a successful trial of a laser-based weapon system that can disable fixed-wing and swarm drones, becoming one of the only four nations to have developed the technology.
- Apart from India, only the US, China and Russia can disable weapons using the technology.
- In the National Open Air Range (NOAR) in Kurnool, Andhra Pradesh, the first successful trial of the Mk-II(A) Laser- Directed Energy Weapon (DEW) system took place.
- The high-power Laser-DEW is equipped with the technology to shoot down drones and smaller projectiles.
- DRDO's Centre for High Energy Systems and Sciences (CHESS), Hyderabad, developed the system along with several academic institutions and Indian industries.
- DRDO chairman Samir V Kamat told "As far as I know, it is the United States, Russia and China that have demonstrated this capability. Israel is also working on similar capabilities, I would say we are the fourth or fifth country in the world to demonstrate this system."

'Star Wars' technology

- Much like the Death Star in the popular movie series 'Star Wars,' the Laser-DEW also demonstrates similar capabilities.
- According to DRDO chairman Kamat, more such technologies are being developed by the Indian military.
- He said, "This is just the beginning of the journey. The synergy that this lab has achieved with other DRDO labs, industry and academia, I am sure we will reach our destination soon."
- The chairman added, "We are also working on other high energy systems like high energy microwaves, electromagnetic pulse.

How does it work?

- The Mk-II(A) Laser- Directed Energy Weapon (DEW) is one of the most potent counter drone systems in the world due to its lightning speed of engagement, precision and lethal action within a few seconds.
- The laser system engages fixed-wing drones from a long range and can thwart multiple drone attacks at a time, destroying surveillance sensors and antennae.
- Once a target is identified by the Laser-DEW system's radar or its inbuilt Electro Optic (EO) system, it uses an intense beam of powerful light (Laser Beam) to cut through the target, causing structural failures or even more lethal damage.
- The development of this laser weapon can lower the risk of collateral damage and reduce reliance on expensive ammunition during conflict.

- The DEW will soon replace traditional kinetic weapons and missile defence systems due to its ease of operation and cost-effectiveness.
- In a world where more unmanned aerial systems (UAS) and drones are being used in warfare, DEW is a long-term and low-cost alternative to defeating the target.

Electro Optic (EO) system

- An Electro-Optic (EO) System is a technology that involves the interaction between light (optics) and electronics to detect, track, and/or image objects.
- These systems are widely used in military, aerospace, surveillance, remote sensing, and industrial applications.

Key Components of an EO System:

- **Sensors/Detectors –** Convert optical signals (light) into electrical signals.
  Example: CCD or CMOS cameras, infrared (IR) detectors.
- **Optics** – Lenses, mirrors, filters to collect, focus, and manipulate light.
- **Electronics** – Signal processing units that enhance, analyze, or transmit data.
- **Displays or Interfaces** – To view or interpret the output (e.g., screens or control systems).

Common Types of EO Systems:

- **Daylight Cameras** – Use visible light for surveillance or targeting.
- **Infrared (IR) Systems** – Detect heat signatures, useful in low light or night conditions.
- **Laser Rangefinders/Designators** – Measure distances or "paint" targets for guided munitions.
- **Multispectral and Hyperspectral Sensors** – Analyze light across various wavelengths for detailed analysis.

Applications:

- **Military & Defense**: Target acquisition, missile guidance, surveillance, night vision.
- **Space**: Earth observation satellites, astronomical imaging.
- **Medical:** Optical imaging for diagnostics.
- **Industrial**: Quality control, machine vision.

DRDO's Centre for High Energy Systems and Sciences (CHESS), Hyderabad

- The Centre for High Energy Systems and Sciences (CHESS) is a premier laboratory under the Defence Research and Development Organisation (DRDO), located in Hyderabad, Telangana.
- CHESS is dedicated to the research and development of advanced Directed Energy Weapons (DEWs), with a particular focus on high-energy laser systems.

Key Functions and Projects

Directed Energy Weapons (DEWs):

- CHESS is at the forefront of developing DEWs that utilize high-energy lasers to neutralize threats such as drones, missiles, and other hostile targets.
- These systems are capable of both "hard kill" (physical destruction) and "soft kill" (disruption or disabling) operations, providing strategic advantages in modern warfare.

Collaborations:

- In November 2022, CHESS signed a Licensing Agreement for Transfer of Technology (LAToT) with Bharat Electronics Limited (BEL) for the production of Multi-kilowatt Beam Directed Optical Channels (BDOC).
- These channels are integral components of laser DEW systems, ensuring precise delivery of laser beams to targets.

Integration with Armed Forces:

- The DEW systems developed by CHESS are currently deployed with various Indian defense units, including the Army Air Defence, National Security Guard (NSG), and Special Protection Group (SPG), enhancing the nation's defense capabilities.

Research and Development Opportunities

- CHESS offers opportunities for researchers and engineers through positions such as Research Associates (RAs) and Junior Research Fellows (JRFs).
- These roles are available in disciplines like Physics, Applied Optics, Laser Technology, Electronics, Mechanical Engineering, and Computer Science.
- The selection process typically involves online interviews, and applicants are expected to have relevant qualifications and experience.

CHESS is actively working on several advanced projects, including:

- **DURGA II (Directionally Unrestricted Ray-Gun Array):** A 100-kilowatt lightweight directed-energy system intended for integration across various platforms.
- **Project Aditya and KALI (Kilo Ampere Linear Injector):** Initiatives aimed at developing high-powered DEWs for short, medium, and long-range engagements.
- These projects underscore CHESS's commitment to advancing India's defense technology and maintaining strategic superiority.

QUESTIONS

Solve the multiple choice questions:

16. Which of the following best explains why Laser-Directed Energy Weapons (DEWs) are likely to replace traditional missile defense systems in future conflicts?

    A. DEWs can target manned aircraft more effectively than surface-to-air missiles.

    B. DEWs can simultaneously engage multiple targets regardless of their altitude.

    C. DEWs offer high-speed, low-cost, and low-collateral solutions compared to traditional kinetic weapons.

    D. DEWs are immune to weather-based interferences unlike conventional projectile systems.

17. What is the primary technological mechanism through which the Mk-II(A) Laser-DEW system neutralizes aerial threats?

    A. Emission of electromagnetic pulses that disable electronic circuits within drones.

    B. Dispersion of high-frequency microwaves to jam incoming communication signals.

    C. Discharge of kinetic projectiles at hypervelocity to pierce drone structures.

    D. Use of a concentrated laser beam to cause structural failures in the drone body.

7. COP30

- The 2025 United Nations Climate Change Conference, or Conference of the Parties of the UNFCCC, more commonly known as COP30, is the upcoming 30th United Nations Climate Change conference, to be held in Belém, Brazil, from 10 to 21 November 2025.
- The city's candidacy was announced by Brazilian president Lula da Silva during his visit to the COP 27, held in Sharm El Sheikh, Egypt, and made official in January 2023.
- The 30th United Nations Climate Change Conference (COP30) is scheduled to take place in Belém, the capital of Pará state in Brazil, from November 10 to 21, 2025.
- This marks the first time a COP will be held in the Amazon region, underscoring the critical role of the rainforest in global climate dynamics.

Significance of Hosting COP30 in the Amazon

- Belém's selection as the host city is symbolic and strategic. President Luiz Inácio Lula da Silva advocated for the Amazon to host COP30 to provide global leaders with firsthand exposure to the region's ecological importance and challenges.
- Environment Minister Marina Silva emphasized that holding the conference in the Amazon serves as a powerful reminder of the urgent need to maintain global temperature increases within the 1.5°C target set by the Paris Agreement.

Infrastructure Developments and Environmental Concerns

- In preparation for the influx of over 60,000 attendees, significant investments are being made to upgrade Belém's infrastructure.
- Approximately BRL 1.3 billion (around USD 260 million) is allocated for projects including road modernization, sewage system expansion, and the development of urban parks.
- One notable project is the construction of Avenida Liberdade, a 13.2 km highway designed to improve traffic flow.
- While the project includes eco-friendly features like wildlife crossings and solar lighting, it has drawn criticism for deforesting parts of the Amazon, highlighting the tension between development and conservation.

Accommodation Challenges

- Belém currently faces a shortage of accommodations, with only 18,000 hotel beds available for the expected 60,000 visitors.
- To address this, the government plans to utilize alternative lodging options such as cruise ships, love motels, and even school classrooms.
- However, accommodation prices have surged, with some listings reaching exorbitant rates, prompting concerns about accessibility for non-governmental organizations and smaller delegations.

Conference Objectives and Expectations

- COP30 is a pivotal moment for global climate policy. Countries are expected to present updated Nationally Determined Contributions (NDCs) to reduce greenhouse gas emissions. The conference aims to accelerate efforts to limit global warming and strengthen international cooperation under the Paris Agreement.

Leadership and Global Engagement

- Brazilian diplomat André Aranha Corrêa do Lago has been appointed as the president-designate of COP30.

- His extensive experience in climate negotiations is anticipated to facilitate productive discussions during the conference.

- Additionally, the Earthshot Prize awards ceremony, founded by Prince William, is scheduled to be held in Rio de Janeiro around the same time, further highlighting Brazil's central role in global environmental initiatives.

COP 29

- The 29th United Nations Climate Change Conference (COP29) was held in Baku, Azerbaijan, in November 2024.

- The conference focused on climate finance, carbon markets, and support for vulnerable nations.

Key Achievements of COP29

1. New Collective Quantified Goal (NCQG) on Climate Finance

- Developed countries agreed to mobilize $300 billion annually by 2035 to assist developing nations in climate adaptation and mitigation efforts.

- This is part of a broader "Baku to Belém Roadmap" aiming for $1.3 trillion per year, combining public and private funding.

- However, many developing countries criticized the amount as insufficient, noting that actual needs are estimated at $1 trillion per year by 2030.

2. Operationalization of Article 6 of the Paris Agreement

- COP29 finalized rules for international carbon markets under Article 6.2 and 6.4, enabling countries to trade carbon credits and potentially reduce implementation costs of national climate plans by $250 billion annually.

3. Loss and Damage Fund

- The Loss and Damage Fund was made fully operational, with the World Bank and other institutions overseeing its implementation to support countries facing irreversible climate impacts.

4. Additional Initiatives

- Launch of the Baku Climate Finance, Investment, and Trade Initiative (BICFIT) to integrate finance, investment, and trade into climate agendas.

- Adoption of the COP29 Green Digital Action Declaration, supported by over 75 governments and 1,100 digital technology members, to leverage digital tools for reducing carbon emissions.

- Formation of the Climate and Health Sustainability Alliance to incorporate health considerations into climate policies.

- Introduction of the COP29 Climate Action Water Resources Declaration, with support from over 50 countries, to integrate water resource management into national climate policies.

Challenges and Criticisms

- The $300 billion annual pledge was deemed inadequate by many developing nations, who argued it falls short of the actual financial needs to address climate change impacts.

- Some countries, including India and members of the Alliance of Small Island States (AOSIS), expressed dissatisfaction with the negotiation process, feeling their concerns were not adequately addressed.

- The conference was marked by the absence of several world leaders, and there were criticisms regarding the Azerbaijani presidency's handling of the negotiations, particularly concerning its fossil fuel interests.

QUESTIONS

Solve the multiple choice questions:

18. What is the primary aim of the New Collective Quantified Goal on Climate Finance (NCQG) adopted at COP29?

    A. To provide a uniform climate finance mechanism for all countries, irrespective of development status.

    B. To reduce overall climate finance dependency on private sectors by 2035.

    C. To triple climate finance for developing countries to USD 300 billion annually by 2035.

    D. To mandate equal financial contributions from all countries under the Paris Agreement.

19. Why did the COP29 Declaration on Reducing Methane from Organic Waste gain attention, and what was India's position on it?

    A. It proposed universal methane taxation; India co-sponsored it with the UAE.

    B. It aimed to ban methane-emitting industries; India opposed the timeline.

    C. It targets methane from the waste sector; India is not a signatory to the declaration.

    D. It mandates methane reduction from agriculture; India signed with conditions.

8. Andhra SC sub-categorisation ordinance gets Cabinet nod

- The Andhra Pradesh Cabinet approved the draft ordinance proposal made by the Social Welfare Department to implement sub-categorisation among Scheduled Castes in the state.
- Basically, this means that the state government wants to give 'reservation within reservation' to communities based on their backwardness.

What is this ordinance?

- In the backdrop of the Supreme Court's verdict allowing states to sub-classify Scheduled Castes, the Telugu Desam Party-led NDA government in Andhra Pradesh on November 15, 2024 formed a commission to study SC sub-categorisation in the state.
- After gathering public feedback across 13 districts (which are now divided into 26 districts), the one-man commission, led by retired IAS officer Rajeev Ranjan Mishra, submitted a comprehensive report on March 10 this year.
- The report was adopted unanimously in the Legislative Council and Legislative Assembly and the ordinance has been drafted.

What is the purpose of SC sub-categorisation?

- Leaders of SCs, and STs, and BCs say that it is important to provide reservations based on the numerical strength of the various sub-castes, rather than give a consolidated quota for all of them based on their overall population.

- The Madiga Reservation Porata Samithi (MRPS) chief Manda Krishna Madiga, who has been fighting for sub-categrisation in AP and Telangana, said reservations in education, government employment, local elected bodies, etc. should be provided based on the backwardness, social, and financial condition of each sub-caste.
- The SC sub-caste of Madiga, which is further divided into several other sub-castes, claims that the other main SC sub-caste, the Mala community, corners all reservation benefits in the state.

What has the Rajeev Ranjan Mishra commission recommended?

- The Commission recommended dividing the SCs in Andhra Pradesh into 59 SC sub-groups classified into three different categories.
  - Group 1 consists of the 'Most Backward', known as the Relli sub-group. This includes members of the sub-castes of Bavuri, Chachati, Chandala, Dandasi, Dom, Ghasi, Godagali, Mehtar, Paki, Pamidi, Relli, and Sapru.
  - Group 2 consists of 18 castes of the Madiga sub-group, and has been classified as `backward', including the Arundhatiya, Bindala, Chamar, Chambhar, Dakkal, Dhor, Godari, Gosangi, Jaggali, Jambuvulu, Kolupulavandlu, Madiga, Madiga Dasu, Mang, Mang Garodi, Matangi, Samagara, and Sindholu sub castes.
  - Group 3 comprises 29 castes of the Mala Group classified as `less backward', including Adi Dravida, Anamuk, Arayamala, Arvamala, Bariki, Byagara, Chalavadi, Yellamalavar, Holeya, Holeya Dasari, Madasi Kuruva, Mahar, Mala, Mala Dasari, Mala Dasu, Mala Hannai, Mala Jangam, Mala Masti, Mala Sale, Mala Sanyasi, Manne, Mundala, Samban, Yatala, Valluvan, Adi Andhra, Masti, Mitta Ayyalavar, Panchama.

And how are the quotas distributed?

- Group 1 – Most Backward (Relli sub-group) – 1.0% reservation
- Group 2 – Backward (Madiga sub-groups) – 6.5% reservation
- Group 3 – Relatively Less Backward (Mala sub-groups) – 7.5% reservation
  - For example, if 100 government jobs are available, 8 would go to the Mala community, 6 to Madigas, and 1 to Rellis. If 200 jobs are available, 15 would go to Malas, 13 to Madigas, and 2 to Rellis.

What will this sub-categorisation achieve?

- It is aimed at the integrated and equitable progress of various sub-castes in the state, ensuring their inclusion in education, government jobs, politics, and civil society representation.
- "The main objective of this ordinance is to ensure the integrated and equal advancement of all Scheduled Caste communities in society," Social Welfare Minister Dr Dola Veeranjaneya Swamy said.

SC sub-categorisation

- "SC sub-categorisation" refers to the proposed classification of Scheduled Castes (SCs) into sub-groups to ensure more equitable distribution of reservation benefits among various SC communities.
- This is a significant issue in Indian affirmative action and social justice discourse.

What is SC Sub-categorisation?

- The idea behind SC sub-categorisation is that reservation benefits are often cornered by a few dominant SC communities, while many smaller or historically more marginalized SC groups remain underrepresented in education, jobs, and political representation.
- Sub-categorisation aims to divide the total SC quota (15% in central government jobs and education) into smaller quotas for different sub-groups based on their relative socio-economic backwardness.

Background

- **Justice Ramachandra Raju Commission (1996, Andhra Pradesh):** Highlighted that certain communities were monopolizing SC benefits and recommended sub-categorisation.
  - Punjab, Tamil Nadu, Haryana and Andhra Pradesh have seen demands for SC quota sub-division.
- **Central Government's stand:** The issue has been debated but remains unresolved at the national level.
- **Supreme Court verdict (2020):** In State of Punjab v. Davinder Singh, the 5-judge bench ruled that States can sub-categorise SCs, referring the matter to a larger bench for clarity.

Legal and Constitutional Aspects

- Article 341 of the Constitution empowers the President to specify SCs for each state.
- But sub-classification within SCs was questioned earlier in the 2005 EV Chinnaiah case, where the Supreme Court held that SCs form a homogenous class and sub-division is not permissible.
- The 2020 Davinder Singh case seeks to revisit and possibly overturn Chinnaiah, enabling States to ensure equitable distribution.

QUESTIONS

Solve the multiple choice questions:

20. Which of the following differentiates the Local Government SC reservation articles from legislative reservation articles?

    A. Articles 330–332 are enforceable only in Fifth Schedule areas.

    B. Articles 243D(4) and 243T(4) apply to local self-government, not to legislative bodies.

    C. Articles 243D and 243T grant judicial review powers to the NCSC.

    D. Articles 243D and 243T were inserted by the 102nd Amendment Act.

21. Which of the following is not one of the powers/functions of the National Commission for Scheduled Castes (NCSC)?

    A. Summoning individuals and examining them on oath

    B. Imposing penalties on violators of SC rights

    C. Receiving evidence on affidavits

    D. Requisitioning public records from any office

9. World's first market for particulate emissions trading in Gujarat

- A new study on the world's first-ever market for trading particulate emissions, which are tiny particles that can impact human health, revealed that employing the market mechanism helped reduce pollution by 20-30 per cent in an industrial cluster in Surat.
- Published in the May issue of the Quarterly Journal of Economics, the study saw researchers compare the emissions performance of participating plants with those complying with the business-as-usual pollution standards.

- It covered 162 plants, predominantly in the textile sector.
- Plants which were part of the market mechanism reduced emissions significantly more than those under conventional regulation and had permits to cover their emissions 99% of the time, the study found.
- On the other hand, plants outside the market failed to meet pollution norms for nearly a third of the study period of almost two years.
- The study builds on the idea of emissions trading, which has been in operation in Europe since 2005 and in China since 2021, and has at times been criticised. We explain.

What is an emissions trading scheme, and how does it work?

- An Emissions Trading Scheme (ETS), also known as a cap-and-trade system, is a market-based regulatory tool aimed at reducing greenhouse gas emissions.
- It provides financial incentives for industries to comply with emission norms and encourages investment in cleaner technologies.
- Under an ETS, regulators establish a cap on the total amount of pollutants that can be emitted.
- Instead of relying on traditional enforcement mechanisms like fines or legal notices, industries receive emissions permits or allowances, each allowing them to emit a specific amount of pollution, such as a ton of carbon dioxide or a kilogram of particulate matter.
- These permits can be traded among industries. Companies that install pollution-reducing technologies may emit less than their allocated amount, allowing them to sell their unused permits.
- In contrast, industries that exceed their emission limits can buy permits to cover their excess, giving them time to gradually adopt cleaner technologies.
- This trading mechanism helps maintain flexibility while ensuring overall emissions remain within the set cap.
- To maintain market stability and attractiveness, regulators often set a minimum floor price and a maximum ceiling price for permits.
- Caps can be tightened over time based on pollution monitoring data, ensuring progressive reductions in emissions.
- Industries that exceed their caps without sufficient permits are penalized, often with per-tonne charges or the forfeiture of permits.
- As the ETS progresses, regulators issue fewer permits, making them more expensive and pushing industries toward more sustainable practices.
- This evolving system helps achieve long-term environmental goals while supporting economic efficiency and technological innovation.

And what are some criticisms of emissions trading?

- Emissions trading systems (ETS) have been implemented in regions such as the United States, Europe, and more recently, China, with the objective of reducing greenhouse gas emissions by allowing industries to trade emission permits.
- However, these markets have faced significant criticisms for design flaws that have undermined their environmental effectiveness.
- One of the primary criticisms, as highlighted by the French publication Le Monde in its 2023 "Right to Pollute" investigation, pertains to the over-allocation of permits in the European Union's ETS.
- This surplus kept carbon prices artificially low, reducing the incentive for industries to adopt cleaner technologies. Furthermore, insufficient regulatory oversight hampered the transparency and effectiveness of the system.

- In the United States, the influence of fossil fuel industry lobbying has been a major concern.

- These companies have often succeeded in delaying the tightening of emission caps and securing free permits, effectively turning the ETS into a mechanism that allows continued pollution for a price.

- China's national carbon market has also been criticized for its use of emissions intensity targets—emissions per unit of output—instead of absolute caps, thereby allowing total emissions to rise as production increases.

- Additionally, social justice concerns have emerged, particularly in California. A 2018 study published in PLOS Medicine found that between 2011 and 2015, facilities regulated under California's cap-and-trade system were mostly located in economically disadvantaged neighborhoods.

- Instead of reducing emissions, these areas experienced an increase in pollution during the initial years, raising concerns about the unequal distribution of environmental burdens under emissions trading regimes.

What did the Surat study find?

- The Surat-ETS was introduced in 2019 across 342 highly polluting industries to control fine particulate pollution emitted due to the use of solid fuel sources, such as coal and lignite, and liquid sources such as diesel.

- It is the world's first ETS pilot to control particulate pollution and India's first for any pollutant.

- The scheme was designed and developed by the Gujarat Pollution Control Board (GPCB) along with researchers from Abdul Latif Jameel Poverty Action Lab (J-PAL), Energy Policy Institute at the University of Chicago (EPIC) and Yale University.

These were the important steps followed in the Surat ETS:
Cap

- A total load or mass of suspended particulate matter was set at 280 tons of particulate emissions per month.

- This initial cap was based on assumptions that the plants would run at the maximum available capacity and produce emissions at maximum concentration.

- Once data from continuous monitoring was evaluated, the initial cap was tightened and revised downwards to 170 tons per month.

Permits

- Each permit was equal to 1 kg of particulate matter emission, and these permits were only valid during one compliance cycle, which lasted four to six weeks.

- They expired at the end of each compliance period.

- GPCB issued 80 per cent of the permits for free, in proportion to a plant's capacity and past emissions. The remaining 20 per cent were sold in auctions.

- The rationale behind issuing free permits early is rooted in making the scheme attractive and preventing additional costs of buying permits from the get-go.

- As a scheme takes root, the volume of free permits is reduced, putting a premium on the purchase of permits and polluting the environment.

Auctions, trading and price

- A uniform price auction happens at the beginning of each compliance period through price discovery, which sees participation of both buyers and sellers.

- Based on the number of permits available in each compliance window, buyers and sellers quote their bid price and bid quantity, thus leading to the discovery of the permit price.

- As with any market, demand and supply help decide the permit price. Trade also happens in a continuous market following the opening trades.
- Permit prices are limited to between Rs. 5 per kg and Rs. 100 per kg, as the floor and ceiling price, respectively.
- This ensures that the permit prices do not drop so low that it is easier to pay and pollute, while a ceiling price ensures there's no price inflation for permits.
- Companies also get time to sell or buy permits equal to their emissions in a 'true-up' period, or a time extension to avoid penalties.

Compliance

- At the end of a compliance period, industries with sufficient permits to meet their emissions targets are said to comply.
- In the Surat study, plants posted a bond known as an Environmental Damage Compensation Deposit before the market began.
- Plants with insufficient permits were fined twice the ceiling price for every unit of emissions above their permits, the study stated. This fine is deducted from the bond.

Why are emissions trading markets used?

- In India, pollution monitoring and enforcement work in a command-and-control system.
- Under this system, regulators at the central and state levels, such as the Union Environment Ministry, the Central Pollution Control Board and state pollution control boards, spell out rules to regulate and enforce pollution norms.
- If industries fail to comply with them, they face hefty fines, shutdowns and even bureaucratic red tape, in some instances.
- However, given the vast number of industries and limited manpower, pollution monitoring and compliance can be expensive and are often inefficient.
- Also, with uniform norms, industries with varying resources have the same compliance burden with little flexibility.
- This gives an advantage to larger plants, along with more negotiating power.
- Emission trading schemes attempt to address these monitoring and enforcement gaps by bringing in more flexibility, offering incentives for compliance rather than taking a one-size-fits-all approach.

QUESTIONS

Solve the multiple choice questions:

22. Which of the following statements is/are true correct regarding the Emissions Trading Scheme (ETS)?
    1. It is a market-based regulatory tool aimed at reducing greenhouse gas emissions.
    2. Under an ETS, regulators establish a cap on the total amount of pollutants that can be emitted.

    Select the correct answer using codes given below:
    A. 1 Only
    B. 2 Only
    C. Both 1 and 2
    D. Neither 1 nor 2

23. Why are emissions trading markets considered an improvement over the traditional command-and-control approach in pollution regulation?

    A. They eliminate the need for pollution control boards.

    B. They impose higher penalties for non-compliance.

    C. They offer flexibility and incentives for compliance, addressing monitoring inefficiencies.

    D. They prioritize large industries by easing regulatory burdens.

10. Key issues in the challenge to the new Waqf law

- The Supreme Court deferred its interim decision on the pleas challenging the Waqf Act, 2025 to May 5.
- This came after the Centre sought time to file an affidavit defending the law, but assured the court it will not, till the next hearing, appoint non-Muslims to Waqf boards or change the character or status of any Waqf.

The challenge

- On April 16, a three-judge Bench of the Supreme Court, headed by Chief Justice of India Sanjiv Khanna, and comprising Justices P V Sanjay Kumar and K V Viswanathan, held an early hearing for a batch of nearly 65 petitions challenging the validity of a controversial new law.
- The petitioners include notable political leaders such as All India Majlis-e-Ittehadul Muslimeen (AIMIM) MP Asaduddin Owaisi, TMC MP Mahua Moitra, RJD MP Manoj Kumar Jha, Samajwadi Party MP Zia Ur Rehman, Congress MPs Imran Masood and Mohammad Jawed, former MP Udit Raj, Maulana Mahmood Asad Madani (Principal of Darul Uloom Deoband), the YSR Congress Party, and the Communist Party of India (CPI).
- The petitions argue that the law infringes upon constitutional rights, particularly under Article 26, which guarantees the freedom to manage religious affairs.
- Senior Advocate Kapil Sibal, representing the petitioners, argued that the law violates this fundamental right by interfering with the "essential and integral parts of the faith."
- Article 26 provides individuals and religious groups with the right to manage their own religious practices, and such rights are only subject to three specific restrictions: public order, morality, and health.
- During the two-hour hearing, the Bench questioned the central government on the law's validity, asking for clarification and raising concerns over its potential impact.
- At the same time, the judges acknowledged that there are aspects of the law that could be seen as beneficial.
- The petitioners have framed their challenge based on the assertion that the law unconstitutionally impinges upon religious freedoms, which is protected by Article 26, and they argue that such interference from Parliament violates the principle of religious autonomy.
- This case is a significant legal challenge that touches on the balance between government regulation and the right to religious freedom, with far-reaching implications for the relationship between law and religion in India.

Key Issues

- Petitioners have challenged several provisions of the 2025 Waqf law, raising concerns over its implications on the management and recognition of Waqf properties.

- A key issue is the removal of the concept of "Waqf by use" (or "Waqf-by-user"), which traditionally allowed land used for Muslim religious or charitable purposes over a long period to be treated as Waqf, even without formal registration.

- The new law restricts this recognition only to already-registered properties, and excludes disputed or government-claimed lands. Critics argue that such lands, often containing mosques or graveyards, are difficult to register and have long been acknowledged by courts, including in the 2019 Ayodhya judgment.

- Another controversial provision grants district collectors the authority to declare land as government-owned, which then temporarily strips it of Waqf status until resolved in court—raising concerns about due process.

- Although this hasn't been stayed, the Centre assured the court that the status of Waqf land won't be altered arbitrarily.

- The inclusion of non-Muslims in Waqf boards is also under scrutiny.

- Petitioners argue this violates constitutional rights of religious communities to manage their affairs independently, while the Supreme Court questioned if similar cross-religious appointments would be acceptable in other contexts, like Hindu endowment boards.

- Additionally, the applicability of the Limitation Act to Waqf properties is being contested, as it may bar legal claims on encroachments after time limits, potentially affecting long-standing community-held lands. The Supreme Court has indicated it may stay some of these contentious provisions.

The Waqf (Amendment) Act, 2025

- The Waqf (Amendment) Act, 2025 was introduced in the Indian Lok Sabha on 8 August 2024.

- It seeks to repeal Mussalman Wakf Act, 1923 and amend the Waqf Act, 1995.

- The Act regulates waqf property in India.

- The act renames the Act to United Waqf Management, Empowerment, Efficiency and Development Act, 1995 (UWMEED Act 1995).

- The amendment incorporates 25 recommendations from the Joint Parliamentary Committee (JPC), aims for the removal of inequality, introduction of gender equality by mandating representation of at least two Muslim women on the Central Waqf Council and State Waqf Boards and ensuring female inheritance rights, and promotion of sectarian inclusivity by requiring representation from various Muslim sects on State Waqf Boards.

- The act empowers the Central Government to create rules for Waqf registration, auditing, and accounts, ensuring transparency and accountability. An appeal process is also included, allowing decisions made by Waqf tribunals to be challenged in the High Court within 90 days.

- The validity of the act is challenged by CPI general secretary D Raja.

- Waqf Act 1995 was the last act which was regulating waqf properties in India prior to its renaming in 2025, and defines Waqf as an endowment of movable or immovable property for purposes considered pious, religious, or charitable under Muslim law.

- Every state is required to constitute a Waqf Board to manage waqf.

First waqf in the Indian subcontinent

- The first waqf in the Indian subcontinent was documented in the 12th century when Muhammad Ghori, after his victory over Prithviraj Chauhan, established Muslim rule in India and a waqf with two villages through a recorded grant.

- Under the Delhi Sultanate, Waqf properties expanded, with sultans like Iltutmish, Muhammad bin Tughlaq and Alauddin Khilji establishing and maintaining them.

- The Mughal Empire furthered Waqf development, with Akbar and Shah Jahan endowing significant properties, including the Taj Mahal.

- The system's reach extended into rural areas with Muslim community expansion and conversions.

- Funding for Waqf was generated through the revenue of endowed villages, which were often predominantly Hindu villages, and were utilised for mosques and madrasas.

- Waqf system gained a more formal modern legal structure during British rule in the Indian subcontinent under the still applicable Indian laws when Waqf Boards were formed in 1913.

- Mussalman Waqf act 1923 was established for the purpose of advising it on matters pertaining to the working of the State Waqf Boards and proper administration of the Waqfs in the country.

- Waqf is a permanent donation of movable or immovable properties for religious purposes without any intention of reclaiming it as recognised by Muslim Law.

- The grant is known as mushrut-ul-khidmat, while a person making such dedication is known as Wakif.

- The Act allows waqf to be formed by: (i) declaration, (ii) recognition based on long-term use (waqf by user), or (iii) endowment when the line of succession ends (waqf-alal-aulad).

- The Bill states that only a person practising Islam for at least five years may declare a waqf. It clarifies that the person must own the property being declared.

- It removes waqf by user. It also adds that waqf-alal-aulad must not result in denial of inheritance rights to the donor's heir including women heirs.

- Omitting the provisions relating to the "waqf by user".

- Providing the functions of the Survey Commissioner to the Collector or any other officer not below the rank of Deputy Collector duly nominated by the Collector for the survey of waqf properties.

- Providing for a broad based composition of the world Waqf Council and the State Waqf Boards and ensuring the representation of Muslim women and non-Muslims.

- Providing for establishment of separate Board of Auqaf for Boharas and Aghakhanis.

- Providing for representation of Shia, Sunni, Bohra, Agakhani and other backward classes among Muslim communities.

- Streamlining the manner of registration of waqfs through a central portal and database.

- Providing for a detailed procedure for mutation as per revenue laws with due notice to all concerned before recording any property as waqf property.

- Reforming the Tribunal structure with two members and providing for appeals against the orders of the Tribunal to the High Court within a specified period of ninety days.

- Omission of section 107 so as to make the Limitation Act, 1963 applicable to any action under the Act; and omission of sections 108 and 108A relating to special provision as to evacuee waqf properties and Act to have overriding effect.

- Renaming of the Waqf Act, 1995 as the Unified Waqf Management, Empowerment, Efficiency and Development Act, 1995.

Joint Parliamentary Committee

- A 31-member JPC had been established to review the Waqf (Amendment) Bill, 2024.
- The committee comprised 21 members from the Lok Sabha and 10 from the Rajya Sabha.
- The formation of the committee was announced by MoMA Kiren Rijiju on 9 August 2024. Some rounds of the JPC meetings were boycotted by few members from opposition parties.
- The Waqf committee chairperson is Jagdambika Pal, a BJP MP from Uttar Pradesh.

Article 26 of the Indian Constitution

- Article 26 of the Indian Constitution guarantees the freedom to manage religious affairs, specifically for every religious denomination or section thereof.
- It grants them the right to establish and maintain religious institutions, manage their own religious affairs, own and acquire movable and immovable property, and administer such property in accordance with the law.
- These rights are subject to public order, morality, and health.

Detailed breakdown:

- **Right to Establish and Maintain Institutions:** Religious denominations can set up and maintain institutions for religious or charitable purposes.
- **Right to Manage Religious Affairs:** They have the autonomy to handle matters related to their religion.
- **Right to Own and Acquire Property**: Denominations can own both movable and immovable property.
- **Right to Administer Property:** They can manage their property, but this is subject to laws.
- **Subject to Limitations:** These rights are not absolute. They can be restricted for reasons of public order, morality, or health.

QUESTIONS

Solve the multiple choice questions:

24. Which of the following provisions introduced by the Waqf (Amendment) Act, 2025 is explicitly aimed at ensuring gender equality and inclusivity within Waqf governance?

    A. Repeal of the Mussalman Waqf Act, 1923

    B. Mandating representation of at least two Muslim women on Central and State Waqf Boards

    C. Streamlining waqf registration through a central portal

    D. Transfer of survey powers from the Survey Commissioner to the Deputy Collector

25. What procedural change has the 2025 Amendment introduced in relation to waqf property disputes?

    A. Appeals must go directly to the Supreme Court.

    B. Appeals against Waqf Tribunal orders can now be filed in the High Court within 90 days.

    C. The jurisdiction of civil courts over waqf matters has been fully restored.

    D. Only the Collector can resolve disputes relating to Waqf title.

ANSWER KEY AND EXPLANATION

1. C Sudan is a country in Northeast Africa. It borders the Central African Republic to the southwest, Chad to the west, Libya to the northwest, Egypt to the north, the Red Sea to the east, Eritrea and Ethiopia to the southeast, and South Sudan to the south.

2. D The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN). It was established in June 1945 by the Charter of the United Nations and began work in April 1946. The seat of the Court is at the Peace Palace in The Hague (Netherlands). Of the six principal organs of the United Nations, it is the only one not located in New York (United States of America). The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies. It is assisted by a Registry, its administrative organ. Its official languages are English and French. The International Court of Justice is composed of 15 judges elected to nine-year terms of office by the United Nations General Assembly and the Security Council. These organs vote simultaneously but separately. In order to be elected, a candidate must receive an absolute majority of the votes in both bodies. This sometimes makes it necessary for a number of rounds of voting to be held.

3. B Anatolia, also known as Asia Minor, is a large peninsula in Western Asia that makes up the majority of modern-day Turkey. It has great historical and geopolitical significance and is frequently in the news due to Turkey's internal and external affairs. The Amhara Region is one of the regional states of Ethiopia. It has been in the news due to ethnic conflicts and violence, especially related to the Tigray conflict and tensions within Ethiopia. Cabo Delgado is not in Italy. It is a province in northern Mozambique, Africa. It has been in the news due to Islamist insurgency and violence in the region, as well as issues related to natural gas exploration. Catalonia is an autonomous community in northeastern Spain. It is known for its strong separatist movement and has been a recurring topic in global news, especially around the 2017 independence referendum.

4. A Darfur is located in western Sudan, and has been the center of ethnic and government-paramilitary conflict. The Tigray conflict is between the Ethiopian federal forces and Tigray People's Liberation Front. Boko Haram operates primarily in northeastern Nigeria, causing massive displacement and violence. Al Shabaab is a militant Islamist group operating in Somalia, especially around Mogadishu.

5. C A large and unarmed crowd had gathered in the Jallianwala Bagh (A Large open space enclosed on three sides by buildings and with one exit gate)on 13 April 1919 at Amritsar (in Punjab), to protest against the arrest of their popular leaders, Dr Saifuddin Kitchlu and Dr Satyapal. The military commander of Amritsar, General Dyer, decided to terrorize the people into Complete submission. Dyer surrounded the garden (Bagh) with his army unit, closed the exit with his troops, and then ordered his men to shoot into the trapped crowd with rifles and machine-guns. They fired till their ammunition was exhausted. Thousands were killed and wounded. Martial law was proclaimed throughout Punjab after this massacre and the people were suppressed to most uncivilized atrocities.

6. C The Rowlatt Act (officially called the Anarchical and Revolutionary Crimes Act of 1919) was passed by the British colonial government in India to curb the growing nationalist movement. It was based on the recommendations of the Rowlatt Committee headed by Justice Sidney Rowlatt. Allowed the British government to arrest and detain any person without trial for up to 2 years. Gave authorities the power to search premises without warrants. Banned public gatherings and imposed strict press restrictions.

7. **D** Blockchain is a decentralized and distributed public ledger. It records transactions in a secure, transparent, and immutable way. Everyone on the network can view the ledger, but no single entity has control over it. This transparency and lack of centralized control are core strengths of blockchain technology. Blockchain is not limited to cryptocurrency. While Bitcoin and Ethereum are early examples that use blockchain, the technology itself has broader applications. It's used in Supply chain tracking, Healthcare data records, Voting systems, Smart contracts, Identity management and more. Blockchain networks like Ethereum are permissionless platforms. Developers can build decentralized apps (dApps) on public blockchains without requiring approval from any authority. This is possible due to the open-source nature and decentralized governance of many blockchain protocols.

8. **B** Bitcoin operates on a decentralized blockchain network and is not regulated or tracked by central banks. While central banks may monitor Bitcoin-related activities for regulatory or tax purposes, they do not track individual transactions on the blockchain in real-time. Bitcoin is not issued or controlled by any central authority. A Bitcoin address acts like a digital wallet—anyone who knows your Bitcoin address can send you BTC, and vice versa. No intermediary (like a bank) is needed. This allows for peer-to-peer transactions globally. Bitcoin transactions are pseudonymous, not truly anonymous. You do not need to reveal your real-world identity to send or receive Bitcoin—only your Bitcoin address. However, all transactions are publicly visible on the blockchain. If someone links a Bitcoin address to a real identity (through exchanges, for example), then that address can be traced.

9. **D** NITI Aayog does not impose policies. It is built on the principle of cooperative federalism, meaning it works with States/UTs to design strategies collaboratively. Imposition of policies contradicts its consultative and inclusive nature. NITI Aayog has no power to allocate funds. That responsibility now lies with the Ministry of Finance and the Finance Commission. It serves as a policy think tank and is tasked with formulating vision documents, strategy papers, and frameworks for the nation's development.

10. **D** One of the primary aims of NITI Aayog is to guide the development agenda of India by offering strategic inputs and direction. It works on long-term vision, development strategies, and innovative planning. NITI Aayog is often described as a policy think tank of the Government of India. It helps in designing policies and identifying areas for reform. Monitoring and evaluation of government schemes and initiatives is a core responsibility of NITI Aayog. It uses tools like the Aspirational Districts Programme, SDG index, etc., for tracking progress. While it may facilitate cooperation between states through its Governing Council or Regional Councils, it is not a conflict resolution body nor a "provider of first and last resort" like the Supreme Court or central government mediation channels might be. The phrase "first and last resort" does not align with NITI Aayog's mandate or functioning. This is NOT an official or stated role of NITI Aayog.

11. **A** NITI Aayog was formed via a resolution of the Union Cabinet on 1 January 2015. The Governing Council of NITI Aayog, comprising Chief Ministers of all the States and Union Territories with legislatures and Lt Governors of other Union Territories, came into effect on 16 February 2015 via a notification by the Cabinet Secretariat. The Governing Council was reconstituted vide a notification dated 19 February 2021 by the Cabinet Secretariat. The Governing Council is the premier body tasked with evolving a shared vision of national priorities and strategies, with the active involvement of States, in shaping the development narrative. The Governing Council, which embodies the objectives of cooperative federalism, presents a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.

12. **C** NITI Aayog was formed via a resolution of the Union Cabinet on 1 January 2015. The Governing Council of NITI Aayog, comprising Chief Ministers of all the States and Union Territories with legislatures and Lt Governors of other Union Territories, came into effect on 16 February 2015 via a notification by the Cabinet Secretariat. The Governing Council was reconstituted vide a notification dated 19 February 2021 by the Cabinet Secretariat. The Governing Council is the premier body tasked with evolving a shared vision of national priorities and strategies, with the active involvement of States, in shaping the development narrative. The Governing Council, which embodies the objectives of cooperative federalism, presents a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.

13. **D** Lok Adalats can settle: Pre-litigation matters (before a case is filed in court) AND Pending court cases (at any stage, provided both parties agree). So, this statement is wrong because it excludes pending cases, which they can handle. While Lok Adalats mainly handle civil cases, they can also take up compoundable criminal cases (e.g., simple assault, defamation, etc.). So, it's wrong to say they cannot handle criminal matters at all. Lok Adalats include: A judicial officer (as the chairperson) And other members, such as legal professionals, social workers, or respected public figures. So, it's not restricted to only serving or retired judges.

14. **D** NALSA along with other Legal Services Institutions conducts Lok Adalats. Lok Adalat is one of the alternative dispute redressal mechanisms, it is a forum where disputes/cases pending in the court of law or at pre-litigation stage are settled/ compromised amicably. Lok Adalats have been given statutory status under the Legal Services Authorities Act, 1987. Under the said Act, the award (decision) made by the Lok Adalats is deemed to be a decree of a civil court and is final and binding on all parties and no appeal against such an award lies before any court of law. When a matter is filed or referred to a Lok Adalat, there is no court fee charged. Even if a case was previously filed in a regular court and a court fee was paid, that amount is refunded if the matter is settled in the Lok Adalat. The award of a Lok Adalat is treated as a decree of a civil court, and it is final and binding on the parties. No appeal lies against such an award. However, if a party is dissatisfied and the award was not made with mutual consent, they may still initiate fresh litigation, but not as an appeal against the Lok Adalat award. If the parties are not satisfied with the award of the Lok Adalat though there is no provision for an appeal against such an award, but they are free to initiate litigation by approaching the court of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.

15. **B** Lok Adalats derive their statutory status from the Legal Services Authorities Act, 1987, which provides the framework for their functioning.

16. **C** DEWs provide lightning-speed engagement, cost-effectiveness, and lower collateral damage, making them an attractive alternative to traditional kinetic weapons and missile defense systems. Option (d) is factually incorrect since lasers can be affected by weather.

17. **D** The passage clearly explains that the Laser-DEW system uses a high-intensity laser beam to cut through the drone, causing structural failure or lethal damage. Options (a) and (b) describe other high-energy weapons under development, while (c) refers to kinetic energy weapons, which the DEW is designed to replace.

18. **C** The NCQG aims to triple the climate finance commitment for developing countries from the previous target of USD 100 billion to USD 300 billion per year by 2035. It emphasizes that developed countries must take the lead, not that all countries contribute equally.

19. **C** The declaration targets methane emissions from organic waste, which accounts for 20% of global methane emissions. Over 30 countries signed, but India is not a signatory, continuing its stance of not signing the Global Methane Pledge either.

20. **B** Articles 243D(4) and 243T(4) specifically relate to SC reservations in Panchayats and Municipalities respectively, distinguishing them from legislative seat reservations under Articles 330 and 332.

21. **B** The NCSC has powers similar to a civil court, but it cannot impose penalties; it can only investigate and recommend action.

22. **C** An Emissions Trading Scheme (ETS), also known as a cap-and-trade system, is a market-based regulatory tool aimed at reducing greenhouse gas emissions. It provides financial incentives for industries to comply with emission norms and encourages investment in cleaner technologies. Under an ETS, regulators establish a cap on the total amount of pollutants that can be emitted. Instead of relying on traditional enforcement mechanisms like fines or legal notices, industries receive emissions permits or allowances, each allowing them to emit a specific amount of pollution, such as a ton of carbon dioxide or a kilogram of particulate matter. These permits can be traded among industries. Companies that install pollution-reducing technologies may emit less than their allocated amount, allowing them to sell their unused permits. In contrast, industries that exceed their emission limits can buy permits to cover their excess, giving them time to gradually adopt cleaner technologies.

23. **C** Emissions trading schemes (ETS) offer flexibility in compliance and provide incentives, rather than relying solely on uniform regulations and penalties. They also reduce the burden on limited regulatory manpower.

24. **B** One of the core reforms of the Act is its effort to ensure gender equality by mandating representation of at least two Muslim women on State and Central Waqf Boards, and protecting inheritance rights of female heirs in waqf-alal-aulad cases.

25. **B** The Act introduces an appeal mechanism allowing aggrieved parties to challenge Waqf Tribunal decisions in the High Court within 90 days, improving legal recourse and accountability.