

# Entire Week's पिक

July 3<sup>rd</sup> to 7<sup>th</sup>



**#DAILY UPDATES**

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**2023**

## 1. Political Parties will now be able to file financial accounts online, with the Election Commission opening a web-portal for filing of three types of reports - Contribution Report, Audited Annual Account and Election Expenditure Statements by Political Parties: PIB

<b>Why is it in the news?</b>	The Political parties will now be able to file their financial accounts online to the Election Commission. The measure has been enabled with the launch of a new web-portal ( <a href="https://iems.eci.gov.in/">https://iems.eci.gov.in/</a> ) to facilitate the online filing of Contribution Report, Audited Annual Account and Election Expenditure Statement by the Political Parties.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies. Statutory, regulatory and various quasi-judicial bodies.</p>
<b>Important concepts</b>	Election Commission of India
<p style="text-align: center;"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Consider the following statements with reference to India: [2002]</p> <ol style="list-style-type: none"> <li>1. The Chief Election Commission and other Election Commissioners enjoy equal powers but receive unequal salaries,</li> <li>2. The Chief Election Commissioner is entitled to the same salary as is provided to a judge of the Supreme Court</li> <li>3. The Chief Election Commissioner shall not be removed from his office except in like manner and on like grounds as a judge of the Supreme Court</li> <li>4. The term of office of the Election Commissioner is five years from the date he assumes his office or till the day he attains the age of 62 years, whichever is earlier.</li> </ol> <p>Which of these statements are correct?</p>	

(a) 1 and 2

(b) 2 and 3

(c) 1 and 4

(d) 2 and 4

**Today's prelims practice question:**

**Q.** Which of the following statements is/are correct regarding the online filing of financial reports by political parties in India?

1. Online filing is mandatory for all political parties, and they cannot submit hard copies of their reports.
2. It is facilitated by a web-portal launched by the Election Commission of India (ECI).
3. The online filing aims to improve transparency, accountability and compliance of political parties with the legal provisions.
4. The parties must submit these reports to the ECI/State/UT CEOs as per the Representation of People's Act, 1951

Select the correct answer using the code given below:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 3 and 4 only

(d) 2, 3 and 4 only

**Answer: d**

**Explanation:**

- The parties that do not wish to file online have to convey the reasons to the ECI in writing and may submit hard copies of their reports along with CDs/Pen drive.

- Online filing is facilitated by a web-portal (<https://iems.eci.gov.in/>) launched by the ECI to enable the parties to submit three types of reports: Contribution Report, Audited Annual Account and Election Expenditure Statement.
- Online filing aims to improve transparency, accountability and compliance of political parties with the legal provisions such as the Representation of People's Act, 1951 and the transparency guidelines issued by the ECI from time to time.

## Mains PYQ exercise:

Simultaneous election to the Lok Sabha and the State Assemblies will limit the amount of time and money spent in electioneering but it will reduce the government's accountability to the people (2017)

## Today's mains practice question:

Analyse the role and functions of the Election Commission of India in regulating the financial affairs of political parties in India. Evaluate the benefits and drawbacks of online filing of financial reports by political parties in India.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Election Commission of India

- The Election Commission of India (ECI) is an autonomous constitutional authority responsible for administering election processes in India.
- The body administers elections to the Lok Sabha, Rajya Sabha, State Legislative Assemblies in India, and the offices of the President and Vice President in the country.
- Part XV of the Indian constitution deals with elections and establishes a commission for these matters.
- The Election Commission was established in accordance with the Constitution on 25th January 1950.
- Article 324 to 329 of the constitution deals with powers, function, tenure, eligibility, etc of the commission and the member.
- Originally the commission had only one election commissioner but after the Election Commissioner Amendment Act 1989, it has been made a multi-member body.



- The commission consists of one Chief Election Commissioner and two Election Commissioners.
- The President appoints Chief Election Commissioner and Election Commissioners.
- They have a fixed tenure of six years, or up to the age of 65 years, whichever is earlier.
- They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court of India.
- The Chief Election Commissioner can be removed from office only through a process of removal similar to that of a Supreme Court judge by Parliament.
- Removal requires a special majority of 2/3rd members present and voting supported by more than 50% of the total strength of the house.
- The current Chief Election Commissioner is Rajiv Kumar. He is the 25th CEC of India.

## 2. DAY-NRLM launches Mobile App to Market products made by women of Self-help Groups – PIB

Why is it in the news?	Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) launched eSARAS mobile App which will add to eCommerce initiatives for products made by the SHGs
UPSC SYLLABUS RELEVANCE for prelims and Mains	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies I: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.</p> <p>Development processes and the development industry —the role of NGOs, SHGs, various groups and associations, donors, charities, institutional and other stakeholders</p>
Important concepts	Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) eSARAS mobile App
Prelims PYQ Exercise-Find answer:	

Q Which one of the following is a purpose of 'UDAY', a scheme of the Government? [2016]

- a) Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
- b) Providing electricity to every household in the country by 2018
- c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- d) Providing for financial turnaround and revival of power distribution companies

**Today's prelims practice question:**

Q. Consider the following statements about the eSARAS mobile app:

- 1. It is an initiative by the Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) to market products made by women of Self-help Groups (SHGs).
- 2. It was launched by the Minister of Women and Child Development in July 2023.
- 3. It will showcase the best, authentic handicrafts and handlooms made by SHG women across the country.
- 4. It will be supported by a fulfillment centre in New Delhi that will handle the logistics of online orders.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) All of the above

**Answer: c**

**Explanation:**

- The eSARAS mobile app is an initiative by the Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM), which is a flagship program of the Ministry

of Rural Development that aims to alleviate rural poverty and enhance social and economic empowerment of rural poor households. The app is part of the DAY-NRLM's strategy to provide market linkages for SHG products and increase their income and livelihood opportunities.

- It was launched by Shri Shailesh Kumar Singh, Secretary, Ministry of Rural Development, Government of India at New Delhi on 3rd July 2023. The Minister of Women and Child Development is not directly involved in this initiative, although the SHG women may benefit from other schemes and programs of the ministry.
- This mobile app will showcase the best, authentic handicrafts and handlooms made by SHG women across the country. The app will feature a wide range of products such as sarees, dress materials, home decor items, jewellery, accessories, food products, etc. The app will also provide information about the SHG women who made the products, their stories, their skills and their impact on their communities.
- It will be supported by a fulfillment centre in New Delhi that will handle the logistics of online orders. The fulfillment centre will be managed by the Foundation for Development of Rural Value Chains (FDRVC), which is a not-for-profit company constituted jointly by Ministry of Rural Development and Tata Trust. The fulfillment centre will be used for processing, packaging and shipping of products that customers purchase through the eSARAS Portal and eSARAS mobile App. It will also ensure quality control, customer service and feedback mechanisms.

<b>Mains PYQ exercise:</b>	Can the vicious cycle of gender inequality, poverty and malnutrition be broken through microfinancing of women SHGs? Explain with examples. (2021)
<b>Today's mains practice question:</b>	Analyse the challenges faced by the Self-Help Groups (SHGs) in marketing their products in rural areas. How does the eSARAS mobile App launched by Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) address these issues? (15 marks)
<b>DETAILED EXPLANATION OF IMPORTANT CONCEPTS</b>	

## **Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM):**

- It is a flagship program of the Ministry of Rural Development (MoRD) for promoting poverty reduction through building strong institutions for the poor, particularly women, and enabling them to access a range of financial services and livelihoods.
- It was launched as Aajeevika - NRLM in 2011 and renamed as DAY-NRLM in 2015. It is a restructured version of the earlier Swarnjayanti Gram Swarozgar Yojana (SGSY) and is partially supported by the World Bank.
- It adopts a demand-driven approach, enabling the states to formulate their own state-specific poverty reduction action plans. It covers 7 crore rural poor households across 600 districts, 6000 blocks, 2.5 lakh gram panchayats and 6 lakh villages in the country through self-managed self-help groups (SHGs) and federated institutions.
- The mission aims to reduce poverty by enabling the poor households to access gainful self-employment and skilled wage employment opportunities, resulting in appreciable improvement in their livelihoods on a sustainable basis.

## **eSARAS mobile App:**

- eSARAS is an e-commerce mobile app that showcases the products made by self-managed self-help groups (SHGs) and federated institutions under the Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) of the Ministry of Rural Development (MoRD).
- The app was launched on 3rd July 2023 by the MoRD as an initiative to promote Indian heritage of handloom and handicraft and connect the customers with rural artisans, weavers, SHGs and federations.
- The app aims to provide a platform for the rural poor to access gainful self-employment and skilled wage employment opportunities, resulting in appreciable improvement in their livelihoods on a sustainable basis.
- The app also facilitates the rural poor to achieve increased access to their rights, entitlements, public services, diversified risk, and better social indicators of empowerment. It harnesses the innate capabilities of the poor and complements them



with capacities (information, knowledge, skills, tools, finance, and collectivization) to participate in the growing economy of the country.

- The app offers a variety of products such as women ethnic wear, men's ethnic wear, wooden toys, personal care range, food items, home decor, furniture, kitchenware, stationery, bags, lighting and jewellery. The products are crafted and designed by the rural SHGs using pure materials.

### 3. Buddha's teachings to empower the youth: President of India Smt. Droupadi Murmu – PIB

<b>Why is it in the news?</b>	The President of India, Smt. Droupadi Murmu today called upon the youth to learn from the teaching of the Buddha, to enrich themselves and immensely contribute to building a peaceful society, a nation, and a world.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies I: Salient aspects of Art Forms, Literature and Architecture from ancient to modern times.</p>
<b>Important concepts</b>	Buddha and Buddhism

#### Today's prelims practice question:

**Q. Why did Buddhism start declining in India in the early medieval times? [2010]**

1. Buddha was by that time considered as one of the incarnations of Vishnu and thus became a part of Vaishnavism.
2. Invading tribes from Central Asia till the time of last Gupta king adopted Hinduism and persecuted Buddhists.
3. Kings of Gupta dynasty were strongly opposed to Buddhism.

Which of the statements given above is/are correct?

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

**Mains PYQ exercise:**

What teachings of Buddha are most relevant today and why?  
Discuss. (150 words)10 (2020)

**Today's mains  
practice question:**

Discuss the contribution of Buddhism to Indian culture and soft diplomacy. Give examples of initiatives taken by the Indian government to promote Buddhism in India and abroad.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Buddha and Buddhism:

- Buddha was born as Siddhartha Gautama in 563 BCE in Lumbini, near the Indo-Nepal border. He belonged to the Sakya clan of Kshatriyas.
- He renounced his royal life at the age of 29 and became an ascetic in search of truth and enlightenment. He practiced various forms of meditation and self-mortification under different teachers but was not satisfied.
- He finally attained enlightenment (Bodhi) at the age of 35 under a pipal tree in Bodhgaya, Bihar. He became known as the Buddha, meaning “the awakened one”.
- He delivered his first sermon at Sarnath, near Varanasi, where he set in motion the wheel of law (Dharma-Chakra-Pravartana). He laid down the four noble truths and the eightfold path, which are the core teachings of Buddhism.
- He spent the next 45 years of his life travelling and preaching across northern India. He attracted many followers from different walks of life, including kings, merchants, women and outcastes. He also organized his followers into a monastic order (Sangha) with rules and regulations (Vinaya).

- He passed away (Mahaparinibbana) at the age of 80 in Kushinagar, Uttar Pradesh. His relics were distributed among eight clans and enshrined in stupas.
- Buddhism is based on the principle of non-violence (Ahimsa) and compassion (Karuna) for all living beings. It rejects the authority of the Vedas, the caste system, animal sacrifices and ritualism. It emphasizes ethical conduct (Sila), mental discipline (Samadhi) and wisdom (Prajna) as the means to achieve liberation (Nirvana) from the cycle of birth and death (Samsara).

The four noble truths are:

1. Suffering (Dukkha) is universal and inevitable.
2. The cause of suffering is desire (Tanha) or attachment to worldly things.
3. The cessation of suffering is possible by overcoming desire.
4. The way to overcome desire is by following the eightfold path

#### 4. India and Vietnam discuss measures for cooperation in areas of law and justice: PIB.

<b>Why is it in news?</b>	India and Vietnam have discussed measures for cooperation in the areas of law and justice. The two sides agreed to have official-level deliberations to take forward the discussions on broad areas of cooperation in the field of law and justice including entering into MoUs
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies Paper II: Governance, Constitution, Polity, Social Justice and International relations</p>
<b>Important concepts</b>	Vietnam
<p align="center"><b>Prelims PYQ Exercise-Find answer</b></p> <p><b>Q.</b> Which one of the following countries is not a member of ASEAN? [2006]</p> <p>(a) Vietnam</p> <p>(b) Brunei Darussalam</p> <p>(c) Bangladesh</p>	

(d) Myanmar

**Today's prelims practice question:**

**Q.** Which of the following statements is/are correct about Vietnam?

1. It is bordered by Myanmar and Laos in the west and China in the north.
2. It is a member of ASEAN and has a free trade agreement with India.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) None of the above

Answer: c

Explanation:

- Vietnam shares its land boundaries with three countries: Myanmar and Laos on its western side and China on its northern side.
- Vietnam is part of the Association of Southeast Asian Nations (ASEAN), which is a regional intergovernmental organization that promotes economic, political, social and cultural cooperation among its 10-member states.
- Vietnam has a free trade agreement (FTA) with India, which is a bilateral trade pact that eliminates or reduces tariffs, quotas and other trade barriers between the two countries. The FTA between Vietnam and India is part of the larger ASEAN-India FTA, which was signed in 2009 and came into force in 2010. The FTA covers trade in goods, services and investment.

**DETAILED EXPLANATION OF IMPORTANT CONCEPTS**

- Vietnam is a Southeast Asian country with a socialist-oriented market economy and a one-party political system. It has a history of foreign invasions, colonialism, nationalism, communism, and wars, especially the Vietnam War that ended in 1975 with the reunification of the country under communist rule.
- It has diplomatic relations with 189 countries and is a member of various regional and international organizations. It is a non-permanent member of the UN Security Council for 2020-2021. It cooperates with regional and global partners on various issues such as peace, security, trade, development, etc.
- Vietnam has a comprehensive strategic partnership with India since 2016. Bilateral relations are based on historical ties, cultural affinity, shared values, and mutual interests. The two countries cooperate in various fields such as defence, trade, energy, science and technology, education, culture, etc.
- It shares border with China, Laos, and Cambodia. The border was mostly drawn by the French colonialists and has been disputed by the neighboring countries.

**Today's  
mains  
practice  
question:**

Analyze the significance and potential of cooperation in the areas of law and justice between India and Vietnam. How can such cooperation contribute to bilateral relations and regional stability? (15 marks)

## 5. India acquires over 200 patents for 6G Technology says Communications & IT Minister Ashwini Vaishnaw: AIR

<b>Why is it in the news?</b>	India has acquired over 200 patents for 6G technology so far. This was stated by Communications and IT Minister Ashwini Vaishnaw at the launch of Bharat 6G Alliance in New Delhi.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies Paper III: Awareness in the fields of IT, Space, Computers, robotics, nanotechnology, biotechnology and issues relating to intellectual property rights.</p>



<b>Important concepts</b>	6G technology
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q. With reference to Communication technologies, what is/are the difference between LTE (Long-Term Evolution) and VoLTE (Voice over Long-Term Evolution)</p> <p>1.LTE is commonly marketed as 3G and VoLTE is commonly marketed as advanced 3G. 2.LTE is data-only technology and VoLTE is voice only technology.</p> <p>Which among the statements mentioned above is/are correct?</p> <p>A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p>Q. Which of the following statements is/are correct regarding 6G technology?</p> <p>1) It is the sixth generation of wireless communication systems that will offer faster speeds, lower latency, higher capacity, and more diverse applications than 5G networks. 2) It is expected to use millimeter waves and terahertz radiation to achieve ultra-high data rates and bandwidth. 3) It is expected to integrate artificial intelligence, blockchain, mobile edge computing, and short-packet communication to enable intelligent, decentralized, and secure network management. 4) It is expected to support ubiquitous instant communications, pervasive intelligence, and the Internet of Things to enable new use cases beyond current mobile scenarios.</p> <p>Select the correct answer using the code given below:</p> <p>a) 1 only b) 1 and 2 only c) 1, 2 and 3 only</p>	

d) 1, 2, 3 and 4

Answer: d

Explanation:

- 6G technology will be able to transmit and receive more data in less time, with less delay, and with more reliability than 5G technology. It will also be able to support more types of services and devices, such as virtual reality, augmented reality, holograms, smart cities, smart homes, etc.
- 6G technology will use electromagnetic waves with very high frequencies (30 to 3000 GHz) to carry information. These waves have very short wavelengths (1 to 10 mm) and can carry more data than lower frequency waves. However, they also have more challenges in terms of propagation, interference, and penetration.
- 6G technology will use advanced technologies to optimize the performance and security of the network. For example, artificial intelligence can help in network planning, optimization, and fault detection; blockchain can help in ensuring data integrity, privacy, and trust; mobile edge computing can help in reducing latency and bandwidth consumption by processing data closer to the source; and short-packet communication can help in reducing overhead and increasing efficiency by transmitting small amounts of data.
- 6G technology will enable seamless and instantaneous communication between people, devices, and things anywhere and anytime. It will also enable pervasive intelligence by using sensors, data analytics, and machine learning to provide context-aware and personalized services. It will also enable the Internet of Things by connecting billions of devices and things to the network and enabling them to communicate and cooperate with each other.

**Mains PYQ exercise:**

Has digital illiteracy, particularly in rural areas, couples with lack of Information and Communication Technology (ICT) accessibility hindered socio-economic development? Examine with justification. (2021)

**Today's mains  
practice question:**

What is 6G technology and how is it different from 5G technology?  
Discuss the potential benefits and challenges of 6G technology for India.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### 6G Technology

- 6G technology is the sixth generation of wireless communication systems that will offer faster speeds, lower latency, higher capacity, and more diverse applications than 5G networks.
- It is still in the early stage of development and there is no universally accepted standard for what qualifies as 6G yet.
- 6G technology might use millimeter waves and terahertz radiation to achieve ultra-high data rates and bandwidth, and integrate artificial intelligence, blockchain, mobile edge computing, and short-packet communication to enable intelligent, decentralized, and secure network management.
- It might support ubiquitous instant communications, pervasive intelligence, and the Internet of Things to enable new use cases beyond current mobile scenarios.
- 6G technology might roll out sometime around 2030 or even earlier in some regions that were first to introduce 5G, but there are many challenges and uncertainties involved in the development and deployment of 6G technology.
- Several companies, research institutes, and countries have shown interest in 6G technology and have started to conduct research and experiments on it. Some examples of recent achievements include a world record of 206.25 gigabits per second data rate in the terahertz frequency band, and a record data streaming speed of 1 terabyte of data over a distance of 1 km using vortex millimeter waves

**MODEL MAINS ANSWER FOR TODAY'S EXPECTED MAINS QUESTION**

**Q. What are the challenges faced by the Self Help Groups (SHGs) in marketing their products in rural areas. How does the eSARAS mobile App launched by Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) address these issues?**

<p><b>Why this question</b></p>	<p><b>The question theme is reflected several times in UPSC (including prelims) and APPSC mains.</b></p> <p><b>UPSC PYQs</b></p> <p>The legitimacy and accountability of self-Help groups (SHGs) and their patrons, the micro-finance outfits, need systematic assessment and scrutiny for the sustained success of the concept. Discuss (2013)</p>					
<p><b><u>First step is to understand the demand of the question</u></b></p>	<p>Question has two parts:</p> <ol style="list-style-type: none"> <li>1. Challenges and opportunities faced by the Self-Help Groups (SHGs) in marketing their products in rural areas?</li> <li>2. How does the eSARAS mobile App launched by Deendayal Antyodaya Yojna- National Rural Livelihoods Mission (DAY-NRLM) address these issues?</li> </ol>					
<p><b>Introduction</b></p>	<p>Self Help Groups (SHGs) are voluntary associations of people, usually women, who come together to save, borrow, and engage in income-generating activities. SHGs have been recognized as an effective tool for empowering women, reducing poverty, and promoting social development in rural areas.</p>					
<p><b>Body</b></p>	<p><b>SHGs also face many challenges and opportunities in marketing their products in rural areas. Some of these are.</b></p> <table border="1" data-bbox="480 1715 1369 2074"> <thead> <tr> <th data-bbox="480 1715 703 1776">Dimension</th><th data-bbox="703 1715 1369 1776">Content</th></tr> </thead> <tbody> <tr> <td data-bbox="480 1776 703 1957" rowspan="2"><b>Challenges</b></td><td data-bbox="703 1776 1369 1957">Lack of access to market information, such as demand, supply, price, quality, and competition</td></tr> <tr> <td data-bbox="703 1957 1369 2074">Lack of product diversification, standardization, branding, and packaging</td></tr> </tbody> </table>	Dimension	Content	<b>Challenges</b>	Lack of access to market information, such as demand, supply, price, quality, and competition	Lack of product diversification, standardization, branding, and packaging
Dimension	Content					
<b>Challenges</b>	Lack of access to market information, such as demand, supply, price, quality, and competition					
	Lack of product diversification, standardization, branding, and packaging					

	Lack of adequate infrastructure, such as transportation, storage, communication, and electricity
	Lack of financial resources, such as working capital, credit, insurance, and subsidies
	Lack of managerial skills, such as accounting, bookkeeping, planning, budgeting, and decision making.
	Lack of technical skills, such as product design, innovation, quality control, and maintenance
	Social and cultural barriers, such as gender discrimination, caste hierarchy, family pressure, and mobility constraints

**eSARAS mobile app launched by DAY-NRLM provides the following benefits to SHGs.**

Dimension	Content
<b>Benefits</b>	The app is a digital platform that connects SHG members with customers across the country. It allows SHG members to showcase their products online with details such as product name, description, price, quantity available etc.
	It also allows customers to browse through the products offered by different SHGs based on categories such as handicrafts, food products etc. Customers can place orders online through the app and pay through various modes such as cash on delivery (COD), debit card, credit card etc.



		The app also provides feedback mechanism for both SHG members and customers to rate and review the products and services	
		This App Increases their income and profitability by reducing intermediaries and transaction costs.	
		It will Increase their bargaining power and competitiveness by improving their product quality and variety	
		Increase their confidence and empowerment by enhancing their digital literacy and market awareness.	
<b>Conclusion:</b>	SHGs are an important instrument for empowering women, reducing poverty, and promoting social development in rural areas. However, they face many challenges and opportunities in marketing their products in rural areas. The eSARAS mobile app launched by DAY-NRLM is one of the initiatives that aims to address these issues by providing a digital platform for SHGs to connect with customers across the country. The app has the potential to improve the income, profitability, competitiveness, and empowerment of SHGs and their members. However, the app also requires proper implementation, monitoring, evaluation, and improvement to ensure its effectiveness and sustainability.		

## 1. Human Rights Group Reports Execution of at Least 354 Individuals in Iran during the First Half of 2023: AIR

<b>Why is it in news?</b>	According to Norway-based Iran Human Rights, at least 354 individuals, including six women, were executed in Iran during the first six months of 2023.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies II : Statutory, regulatory and various quasi-judicial bodies</p>
<b>Important concepts</b>	Iran
<p style="text-align: center;"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q. Other than the Fundamental Rights, which of the following parts of the Constitution of India reflect/reflects the principles and provisions of the Universal Declaration of Human Rights (1948)? [2020]</p> <ol style="list-style-type: none"> <li>1. Preamble</li> <li>2. Directive Principles of State Policy</li> <li>3. Fundamental Duties</li> </ol> <p>Select the correct answer using the code given below:</p> <p>(a) 1 and 2 only</p> <p>(b) 2 only</p> <p>(c) 1 and 3 only</p> <p>(d) 1, 2 and 3</p>	
<p style="text-align: center;"><b>Today's prelims practice question:</b></p> <p>Q. Which of the following statements is/are correct about the human rights situation in 2023?</p> <ol style="list-style-type: none"> <li>1. At least 354 individuals, including six women, were executed in Iran during this period.</li> <li>2. The Baluch minority in Iran accounted for about one-fifth of the executions.</li> </ol> <p>Select the correct answer using the code given below:</p>	

a) 1 only b) 1 and 2 only c) Both 1 and 2 d) Neither 1 nor 2

**Answer: c**

**Explanation:**

Norway-based Iran Human Rights reported that at least 354 individuals, including six women, were executed in Iran during the first six months of 2023. In the first half of 2023, 71 individuals from the Baluch minority were executed for drug-related, murder, and moharebeh (enmity against God) charges. The Baluch population constitutes only 2-6% of Iran's overall population.

**Mains PYQ exercise:**

NHRC in India can be most effective when its tasks are adequately supported by other mechanisms that ensure the accountability of a government. In light of above observation asses, the role of NHRC as an effective complement to the judiciary and other institutions in promoting and protecting human rights standards. (2014)

**Today's mains practice question:**

Critically examine the human rights situation in Iran, especially with respect to the rising number of executions. What are the implications of this trend for regional and global peace and security?

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

**Iran:**

- Iran is a Western Asian country with a population of 83 million and a GDP of \$454 billion. It has a mixed economy, an Islamic republic system and a Shia majority.
- Iran has a long and rich history that spans from ancient civilizations to modern revolutions. It has a diverse and vibrant culture that reflects its historical influences and contributions.
- Iran faces economic and social challenges such as sanctions, inflation, unemployment, corruption, human rights violations and environmental degradation.
- Iran has historical and cultural ties with India and shares common interests in trade, energy, connectivity, security and regional stability. They cooperate on various regional and multilateral issues despite the US sanctions on Iran.
- Chabahar port is a seaport in Iran that serves as Iran's only oceanic port and India's gateway to Afghanistan and Central Asia.
- Chabahar port is important for India's trade, connectivity, strategic, security and regional interests. It also helps India in balancing its relations with other countries in the region and promoting regional cooperation and integration.

- Iran is bordered by seven countries on land and six countries on sea. The countries that border Iran on land are:
  - 1.Armenia and Azerbaijan in the northwest
  - 2.Turkmenistan in the northeast
  - 3.Afghanistan and Pakistan in the east
  - 4.Iraq and Turkey in the west
- The countries that border Iran on sea are:  
Kuwait, Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, and Oman

## 2. President Droupadi Murmu addresses closing ceremony of 125th birth anniversary of Sri Alluri Sitarama Raju at Hyderabad – AIR

<b>Why is it in news?</b>	Addressing the valedictory programme of 125th Birth Anniversary Celebrations of Freedom Fighter Alluri Sitarama Raju in Hyderabad, the President paid rich tributes to Sitarama Raju who fought for the rights of Adivasis and freedom from British rule.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<b>Prelims:</b> Current events of National and International Importance. <b>Mains:</b> General Studies Paper I Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues
<b>Important concepts</b>	Rampa Rebellion 1922 Alluri Sitarama Raju
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q With reference to the history of India, “Ulgulan” or the Great Tumult is the description of which of the following events? [2020-I]</p> <p>(a) The Revolt of 1857 (b) The Mappila rebellion of 1921 (c) The Indigo revolt of 1859 – 60 (d) Birsa Munda’s revolt of 1899-190</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p><b>Q.</b> Which of the following statements is/are correct about the Rampa Rebellion of 1922?</p> <p>1. It was a tribal uprising against the British colonial rule in the Eastern Ghats region of Madras Presidency. 2. It was led by Alluri Sitarama Raju,</p>	

3. It was triggered by the Madras Forest Act of 1882, which banned the traditional Podu cultivation system of the tribal people.
4. It was influenced by the Non-Cooperation Movement of Mahatma Gandhi and had a nationalist fervour.

Select the correct answer using the code given below:

- a) 1 and 3 only
- b) 2 and 4 only
- c) 1, 2 and 3 only
- d) 1, 2, 3 and 4

**Answer: d**

**Explanation:**

- The rebellion was initiated by the tribal people who lived in the hills of the Eastern Ghats region, which was part of the Madras Presidency under the British rule. The tribal people were unhappy with the British policies that affected their livelihood and culture. They wanted to resist the colonial exploitation and oppression
- This rebellion was guided by a charismatic leader named Alluri Sitarama Raju, who was a sannyasin (a renunciant) and a freedom fighter. He inspired the tribal people with his courage and charisma, and claimed to have magical powers and divine blessings. He also used guerrilla warfare tactics to attack the British forces and police stations
- Rampa rebellion was sparked by a law passed by the British government in 1882, which gave them control over the forests and restricted the tribal people from practicing their traditional form of agriculture called Podu.
- Podu was a system of shifting cultivation, where the tribal people would clear some areas of forest by burning them and grow crops on them for a few years, then move to another area and repeat the process. This way, they could maintain the fertility of the soil and preserve the biodiversity of the forest. The British banned this system because they wanted to use the forest resources for their own commercial purposes, such as building railways and ships. This law deprived the tribal people of their food security and their customary rights over the land
- Rampa rebellion was also motivated by the national movement for independence from British rule, which was led by Mahatma Gandhi and other leaders. Gandhi launched the Non-Cooperation Movement in 1920, which called for boycotting British goods, institutions, courts, titles, honours and services, and adopting swadeshi (indigenous) products, education, justice and governance.
- The movement aimed to weaken the British economic and political power in India through peaceful and non-violent means. The Rampa Rebellion was influenced by this



movement and had a nationalist fervour, as Raju and his followers also wanted to end British rule in India and establish self-rule for their people	
<b>Mains PYQ exercise:</b>	The 1857 uprising was the culmination of the recurrent, big and small local rebellions that had occurred in the preceding hundred years of British rule. Elucidate. (Answer in 150 words) 10(2019)
<b>Today's mains practice question:</b>	Discuss the causes, nature and significance of the Rampa Rebellion of 1922 in the context of the Indian freedom struggle. (15 marks)

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Rampa Rebellion 1922

- The Rampa Rebellion of 1922, also known as the Manyam Rebellion, was a tribal uprising led by Alluri Sitarama Raju in Godavari Agency of Madras Presidency, British India.
- It began in August 1922 and lasted until the capture and killing of Raju in May 1924.
- This Rebellion had no connection with the Rampa Rebellion of 1879.
- The revolt was mainly against the passing of Madras Forest Act, 1882 which put restrictions on the free movement of tribal communities in the forest land and prevented them from engaging in their traditional Podu agricultural system.
- The British wanted to take control of the forest land for building railways and ships. This commercial exploitation had a great impact on the local tribal people, as they lost their land to traditional cultivation activities.
- The tribal people of the forested hills, who now faced starvation, had long felt that the legal system favoured the zamindars and merchants of the plains areas, which had also resulted in the earlier Rampa Rebellion of 1879.
- Alluri Raju also used guerrilla warfare to fight against the British. He raided many police stations like Dammanapalli, Krishna Devi Petra and Annavaram.
- The revolt had no connection with the Indian National Congress or Gandhi's Non-Cooperation Movement. It was a spontaneous expression of tribal discontent against colonial oppression.

### Alluri Sitarama Raju.

- Alluri Sita Ramaraju was an Indian revolutionary who waged an armed campaign against the British colonial rule in India. He was born on 4 July 1897 or 1898 in Pandrangi, Madras Presidency, British India (present-day Andhra Pradesh, India).
- He was involved in opposing the British in response to the 1882 Madras Forest Act that effectively restricted the free movement of adivasis in their forest habitats and

prevented them from practicing their traditional form of agriculture called 'podu', which threatened their very way of life.

- He was inspired by the Non-cooperation movement (1920-1922) led by Mahatma Gandhi and started the Rampa rebellion (1922-1924) in which he played the major role as its leader. He mustered combined forces of tribals and other sympathizers to the cause and engaged in guerilla campaigns against the British forces across the border regions of present-day Andhra Pradesh and Odisha states in India.
- He was given the title "Manyam Veerudu" by the local people for his heroic exploits. He also used the nicknames Rama Chandra Raju and Aluri Rampa Rama Raju.
- He led numerous raids on the imperial police stations to acquire firearms for his under-equipped forces. After each raid, he would leave a written note in the station signed by him informing the police about the details of his plunder there including details of the weaponry he acquired and dare them to stop him if they can. Police stations in and around areas of Annavaram, Addateegala, Chintapalle, Dammanapalli, Krishna Devi Peta, Rampachodavaram, Rajavommangi, and Narsipatnam were all targeted by his forces, which resulted in significant police casualties.
- In response to these raids and to quell the rebellion, the British colonial authorities undertook a nearly two-year long manhunt for Alluri Sita Ramaraju that resulted in expenditures reaching over ₹4 million rupees then. Eventually in 1924, he was trapped at Koyyuru village in Chintapalle forests. There, he was captured, tied to a tree, and was summarily executed by a firing squad on 7 May 1924. His tomb is situated at Krishnadevipeta, Andhra Pradesh, India.

### 3. SCO Heads of State adopt New Delhi Declaration; call for cooperation to counter radicalization, separatism & terrorism – AIR

<b>Why is it in news?</b>	Shanghai Cooperation Organisation (SCO) have reaffirmed their commitment to fight terrorism, separatism and extremism. They emphasized on taking measures to disrupt the terror financing channels, stop the radicalization of youth and eliminate sleeper cells and places used as terrorist safe havens, and cross-border movement of terrorists
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies Paper III: Security challenges and their management in border areas - linkages of organized crime with terrorism.</p>

<b>Important concepts</b>	Shanghai Cooperation Organisation (SCO) New Delhi Declaration
<p align="center"><b>Today's prelims practice questi on:</b></p> <p><b>Q.</b> Consider the following statements: [2007]</p> <ol style="list-style-type: none"> <li>China has the observer's status at the South Asian Association for Regional Cooperation.</li> <li>India has the observer's status at the Shanghai Cooperation Organisation Which of the statements given above is/are correct?</li> </ol> <p>(a) 1 only (b) 2 only (c) Both 1 and 2 (d) Neither 1 nor 2</p>	
<b>Mains PYQ exercise:</b>	Analyse the complexity and intensity of terrorism, its causes, linkages and obnoxious nexus. Also suggest measures required to be taken to eradicate the menace of terrorism. (Answer in 250 words) (2021)
<b>Today's mains practice question:</b>	Critically examine the SCO Delhi Declaration's approach to combating terrorism, separatism and extremism in the region. How does the declaration address the concerns and challenges faced by India and other member states in this regard?
<p align="center"><b>DETAILED EXPLANATION OF IMPORTANT CONCEPTS</b></p>	
<p><b>Shanghai Cooperation Organisation (SCO)</b></p> <ul style="list-style-type: none"> <li>SCO is a permanent intergovernmental international organisation.</li> <li>It's a Eurasian political, economic and military organisation aiming to maintain peace, security and stability in the region.</li> <li>It was created in 2001 by six founding members: Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.</li> <li>The SCO Charter was signed in 2002, and entered into force in 2003. It is a statutory document which outlines the organisation's goals and principles, as well as its structure and core activities.</li> <li>The SCO's official languages are Russian and Chinese.</li> <li>There are eight member nations of SCO: Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India and Pakistan. India and Pakistan became members in 2017. Iran and Belarus are likely to be the two newest additions to the SCO.</li> <li>There are four observer states: Afghanistan, Belarus, Iran and Mongolia.</li> <li>There are six dialogue partners: Azerbaijan, Armenia, Cambodia, Nepal, Turkey and Sri Lanka</li> </ul>	

- In SCO Summit to be held in September 2022 in Uzbekistan, Varanasi has been selected as the SCO region's first "Tourism and Cultural Capital for 2022-23"

### **New Delhi Declaration**

- It is a joint statement issued by the leaders of the Shanghai Cooperation Organisation (SCO) after the virtual summit hosted by India on July 4, 2023. The declaration covers various aspects of cooperation among the SCO member states, such as

### **Countering Terrorism, Separatism and Extremism**

- The declaration reaffirms the commitment of the SCO members to fight terrorism, separatism and extremism in all their forms and manifestations.
- It emphasizes the need to take measures to disrupt the terror financing channels, stop the radicalization of youth and eliminate sleeper cells and places used as terrorist safe havens, and cross-border movement of terrorists.
- It also opposes the interference in the internal affairs of states under the pretext of countering terrorism and extremism, and the use of terrorist, extremist and radical groups for mercenary goals.
- The declaration calls for developing common principles and approaches to form a unified list of terrorist, separatist and extremist organizations whose activities are prohibited on the territories of the SCO member states.

### **Promoting Peace and Stability in Afghanistan**

- The declaration expresses concern over the evolving humanitarian situation in Afghanistan and supports continued efforts to assist the Afghan people.
- It calls for establishing an inclusive government in Afghanistan with the participation of representatives of all ethnic, religious, and political groups in Afghan society.
- It stresses the importance of ensuring that Afghan territory is not used for sheltering, training, planning or financing terrorist acts.

### **Enhancing Economic and Trade Cooperation**

- It reaffirms the support for multilateralism, free trade and a rules-based international order.
- It calls for greater effectiveness of the World Trade Organization and early implementation of an inclusive reform of the organization.
- The declaration supports the ongoing work to jointly implement the Belt and Road Initiative (BRI) by some SCO members, while India does not endorse it due to its concerns over sovereignty and debt issues.

### **Strengthening Cultural and Humanitarian Ties**

- It expresses the intention to strengthen cooperation in education, science and technology, culture, health, disaster management, tourism, sports, and people-to-people contacts.
- It welcomes the selection of Varanasi as the SCO region's first "Tourism and Cultural Capital for 2022-23".

- The declaration also supports the initiatives to promote digital literacy, e-commerce, e-governance and smart cities among the SCO members.

#### 4. UN nuclear watchdog approves plans for release waste water from Fukushima disaster: PIB

<b>Why is it in news?</b>	A UN nuclear watchdog has approved plans by Japan to release waste water from the tsunami-wrecked Fukushima nuclear plant into the sea.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<b>Prelims:</b> Current events of National and International importance. <b>Mains:</b> GS Paper III: Issues with Nuclear Energy and Nuclear Disaster
<b>Important concepts</b>	<b>Japan</b> The International Atomic Energy Agency (IAEA) Fukushima nuclear plant
<p align="center"><b>Prelims PYQ Exercise-Find answer</b></p> <p><b>Q.</b>Consider the following countries [2015]</p> <ol style="list-style-type: none"> <li>China</li> <li>France</li> <li>India</li> <li>Israel</li> <li>Pakistan</li> </ol> <p>Which among the above are Nuclear Weapons States as recognized by the Treaty on the Non-Proliferation of nuclear weapons, commonly known as Nuclear Non-Proliferation Treaty (NPT)?</p> <p>(a) 1 and 2 only  (b) 1, 3, 4 and 5 only  (c) 2, 4 and 5 only  (d) 1, 2, 3, 4 and 5</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p><b>Q.</b> Which of the following statements is/are correct about the Fukushima nuclear power plant?</p>	



1. It was damaged by a tsunami triggered by a magnitude 9 earthquake in March 2011.
2. It contains about 1.25 million tonnes of wastewater that was used to cool the reactors.
3. It has treated the wastewater to remove all radioactive isotopes except tritium.
4. It has received the endorsement of the International Atomic Energy Agency (IAEA) to discharge the wastewater into the Pacific Ocean.

Choose the correct option:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 2, 3 and 4 only
- d) All the above

Answer: d

**Explanation:**

- The Fukushima nuclear power plant was hit by a massive earthquake and tsunami on 11 March 2011, which caused the meltdown of three of its six reactors and the release of radioactive materials into the environment.
- The plant operator, TEPCO, has been using seawater to cool down the damaged reactors and prevent further overheating. This water becomes contaminated with radioactive elements and is stored in tanks at the site. The total amount of water stored is about 1.25 million tonnes.
- The contaminated water has been treated by a system called ALPS, which removes most of the radioactive elements, except for tritium, which is a form of hydrogen that is difficult to separate from water. Tritium is considered to be relatively harmless to humans and the environment in low doses.
- Japan has decided to release the treated water into the Pacific Ocean after diluting it to meet the international standards for tritium in drinking water. This plan has been approved by the IAEA, which says that the release will have a negligible impact on the environment and human health. However, some countries and groups have expressed concerns and opposition to the plan, fearing that it will harm the marine life and the reputation of the region.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

**Japan:**

- Japan is a key partner of India in its economic transformation, strategic cooperation and regional stability.

- It has been a leading financial donor to India in the form of ODA (Official Development Assistance) and has supported India's mega infrastructure projects like the DMIC, CBIC and the bullet train.
- Japan and India have also collaborated on the Asia-Africa Growth Corridor (AAGR), a development initiative to enhance connectivity and trade between Asia and Africa.
- Japan and India have strengthened their defence ties through the Quadrilateral Security Dialogue (Quad) with the US and Australia, the Malabar naval exercise, the 2+2 dialogue at the defence and foreign minister level, and the negotiations of the Acquisition and Cross-Servicing Agreement (ACSA) for mutual logistics support.
- Japan and India have also enhanced their cultural and people-to-people exchanges, as reflected by the establishment of the Act East Forum, the inauguration of the Zen Garden-Kaizen Academy in Ahmedabad, and the celebration of the 70th anniversary of diplomatic relations and the 75th anniversary of India's independence.
- It has a long history of industrialization, modernization and democratization since the Meiji Restoration in 1868, which transformed Japan from a feudal society to a major world power in less than half a century.
- It is also known for its technological innovation, cultural diversity and environmental sustainability, as well as its challenges such as aging population, natural disasters and regional security threats.
- Japan is one of the leading countries in combating infectious diseases such as Japanese encephalitis (JE), which is caused by a flavivirus that affects the brain. Japan has developed vaccines and diagnostic kits for JE and has supported other countries in their prevention and control efforts
- Japan has maritime borders with seven countries: China, North Korea, South Korea, Russia, Taiwan, the Philippines, and the Northern Mariana Islands.

### **The International Atomic Energy Agency (IAEA) :**

- The IAEA is a UN agency that promotes peaceful uses of nuclear technologies. It was established in 1957 and has 171 members. It reports to the UNGA and has regional offices and research laboratories.
- The IAEA has various functions such as assisting research, development and applications of nuclear technologies, establishing and administering safeguards, verifying compliance with treaties, helping countries upgrade nuclear safety and security, and supporting countries in using nuclear science and technology for development.
- India is a member of the IAEA since 1957. India is not a party to the NPT or other treaties that require comprehensive safeguards by the IAEA. However, India has voluntarily placed some of its civilian nuclear facilities under IAEA safeguards as part of its civil nuclear cooperation agreements. India has also signed an Additional Protocol with the IAEA and cooperated with it in various fields.

- One of the recent issues involving the IAEA is its role in monitoring Iran's nuclear activities under the JCPOA or Iran Nuclear Deal signed in 2015. The deal aimed to curb Iran's nuclear activity in return for the lifting of sanctions. The IAEA was tasked with verifying Iran's compliance. However, in 2018, the USA abandoned the deal and reinstated sanctions on Iran. Since then, Iran has been breaching some of its commitments under the deal. In 2021, Iran and the IAEA agreed to temporary measures to offset Iran's decision to restrict access to inspectors. This agreement was seen as a way to defuse a crisis and revive the JCPOA.

## **Fukushima nuclear plant**

- The Fukushima nuclear plant is a nuclear power station in Japan that suffered a major accident in 2011 after a powerful earthquake and tsunami. The disaster caused three of the reactors to melt down and release radioactive material into the environment, forcing more than 150,000 people to evacuate from the area. The cleanup work is still ongoing and expected to take decades.

<b>Mains PYQ exercise:</b>	Give an account of the growth and development of nuclear science and technology in India. What is the advantage of fast breeder reactor programme in India?
<b>Today's mains practice question:</b>	Japan's plan to release waste water from the Fukushima nuclear plant into the ocean has been approved by the UN nuclear watchdog, but opposed by some neighbouring countries and local communities. Analyse the ethical, environmental and geopolitical implications of this plan. Suggest some alternative solutions that could address the concerns of all stakeholders. (250 words)

## **MODEL MAINS ANSWER FOR TODAY'S EXPECTED MAINS QUESTION**

**Q. Critically examine the SCO New Delhi Declaration's approach to combating terrorism, separatism and extremism in the region. How does the declaration address the concerns and challenges faced by India and other member states in this regard?**

<b>Why this question</b>	The question theme is reflected several times in UPSC (including prelims) and APPSC mains.
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	<p><b>UPSC PYQs</b></p> <p>With growing energy needs should India keep on expanding its nuclear energy programme? Discuss the facts and fears associated with nuclear energy? (2018)</p>						
<p><u><a href="#">First step is to understand the demand of the question</a></u></p>	<p>Question has two parts:</p> <ol style="list-style-type: none"> <li>1. SCO New Delhi Declaration's approach to combating terrorism, separatism and extremism in the region</li> <li>2. How does the declaration address the concerns and challenges faced by India and other member states in this regard</li> </ol>						
<p><b>Introduction</b></p>	<p>The Shanghai Cooperation Organisation (SCO) is a regional multilateral organisation comprising eight member states: China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan. The SCO aims to promote cooperation in various fields such as politics, security, trade, economy, culture and humanitarian ties. The SCO summit under India's presidency concluded on July 4, 2023 with the adoption of the New Delhi Declaration, which outlines the collective vision and commitments of the member states on various regional and global issues.</p>						
<p><b>Body</b></p>	<p><b>SCO New Delhi Declaration's approach to combating terrorism, separatism and extremism in the region</b></p> <table> <tr> <th>Dimension</th><th>Content</th></tr> <tr> <td></td><td>The New Delhi Declaration reaffirms the strong commitment of the SCO members to fighting terrorism, separatism and extremism, which are considered as common threats to regional peace and stability.</td></tr> <tr> <td></td><td>The declaration states that the member states are determined to continue taking active measures to eliminate the conditions conducive to the spread of terrorism, to disrupt the terror financing channels, to suppress recruitment activities and cross-border movement of terrorists, to counter</td></tr> </table>	Dimension	Content		The New Delhi Declaration reaffirms the strong commitment of the SCO members to fighting terrorism, separatism and extremism, which are considered as common threats to regional peace and stability.		The declaration states that the member states are determined to continue taking active measures to eliminate the conditions conducive to the spread of terrorism, to disrupt the terror financing channels, to suppress recruitment activities and cross-border movement of terrorists, to counter
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		extremism and radicalization of youth, the dissemination of terrorist ideology, as well as to eliminate "sleeper cells" and places used as terrorist safe havens					
		The declaration emphasizes a key role of the UN in countering threats in the information space, creating a safe, fair and open information space built on the principles of respect for state sovereignty and non-interference in the internal affairs of other countries					
		The declaration also considers it important to build up joint coordinated efforts by the international community to counter the attempts to involve young people in the activities of terrorist, separatist and extremist group					
		The declaration notes the effective activities of the SCO Regional Anti-Terrorist Structure (RATS) in promoting cooperation between competent authorities in countering terrorism, separatism and extremism, including the implementation of the relevant Program for 2022-2024					
		The declaration also states that subject to their national laws and on the basis of consensus, the member states will seek to develop common principles and approaches to form a unified list of terrorist, separatist and extremist organizations whose activities are prohibited on the territories of the SCO Member States					
		<b>New Delhi declaration's approach to combating terrorism, separatism and extremism in the region can be critically examined from two perspectives: positive and negatives</b>					
		<table><tr><th>Dimension</th><th>Content</th></tr><tr><td></td><td>On the positive side, the declaration reflects a</td></tr></table>	Dimension	Content		On the positive side, the declaration reflects a	
Dimension	Content						
	On the positive side, the declaration reflects a						



	<p>high degree of consensus and solidarity among the SCO members on addressing these common challenges. The declaration also demonstrates a comprehensive and holistic approach that covers various aspects such as prevention, disruption, cooperation and coordination.</p> <ul style="list-style-type: none"> <li>The declaration also acknowledges the role of international law and multilateral institutions in countering these threats. The declaration also shows a willingness to enhance cooperation with other regional and international partners on these issues.</li> </ul> <p>On the negative side, however, some challenges and limitations can be identified in implementing the declaration's approach. First, there may be divergences among the SCO members on defining terrorism, separatism and extremism, as well as identifying their sources and sponsors.</p> <p>For instance, India has repeatedly raised its concerns over cross-border terrorism emanating from Pakistan which is also an SCO member. Similarly, China has accused some Western countries of supporting separatist movements in Xinjiang, while Russia has faced allegations of interfering in Ukraine's internal</p> <p>These differences may hamper effective cooperation and coordination among the SCO members on these issues.</p> <p>There may be practical difficulties in forming a unified list of terrorist, separatist and extremist organizations due to varying national laws and interests</p> <p>There may be challenges in ensuring compliance and accountability of all SCO members in fulfilling their commitments under the declaration. Fourth, there may be external pressures and influences from other actors that</p>
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		may affect the SCO's approach to these issues.	
<b>Conclusion:</b>	<p>The SCO Delhi Declaration's approach to combating terrorism, separatism and extremism in the region is a significant step towards enhancing regional security and stability. The declaration reflects a strong political will and a comprehensive strategy among the SCO members to address these common threats. However, there are also some challenges and limitations that need to be overcome in implementing this approach effectively. Therefore, it is important for all SCO members to adhere to their commitments under the declaration, resolve their differences through dialogue and consultation, strengthen their cooperation mechanisms such as RATS, and engage constructively with other regional and international partners on these issues.</p>		



## 1. G20 Research Ministers resolve to transform research and innovation systems to address the challenges of tomorrow: PIB

Why is it in news?	The G20 Research and Innovation Ministerial Meeting, chaired by Union Minister of State (Independent Charge) for Science and Technology, Dr. Jitendra Singh concluded successfully in Mumbai
UPSC SYLLABUS RELEVANCE for prelims and Mains	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies II : Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests</p>
Important concepts	G20
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q. [2009]</p> <p>A present group of nations known as G-8 started first as G-7. Which one among the following was not one of them?</p> <p>(a) Canada      (b) Italy</p> <p>(c) Japan      (d) Russia</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p><b>Q.</b> Which of the following statements is/are correct regarding the G20 Research and Innovation Ministerial Meeting held in Mumbai in 2023?</p> <ol style="list-style-type: none"> <li>1. The meeting resulted in an "Outcome Document and Chair's Summary" that reflected the engagements and discussions on four priority areas: Materials for Sustainable Energy; Circular Bio-Economy; Eco-Innovations for Energy Transition; and Sustainable Blue Economy</li> <li>2. Series of meetings held under the overarching theme of 'Research and Innovation for an Equitable Society'.</li> <li>3. It recommended the elevation of the RIIG to the status of a formal Working Group under the Sherpa Track.</li> <li>4. It endorsed India's LiFE initiative that promotes lifestyles for sustainable development.</li> </ol> <p>Select the correct answer using the code given below:</p> <p>(a) 1 and 2 only (b) 1, 2 and 3 only (c) 2, 3 and 4 only (d) 1, 2, 3 and 4</p> <p>Answer: d</p> <p><b>Explanation:</b></p> <ul style="list-style-type: none"> <li>The meeting resulted in an "Outcome Document and Chair's Summary" that reflected the engagements and discussions on four priority areas: Materials for Sustainable Energy; Circular Bio-Economy; Eco-Innovations for Energy Transition; and Sustainable Blue Economy.</li> </ul>	

- The meeting was part of a series of meetings that were organized by India's Presidency for Research and Innovation Initiative Gathering (RIIG), which is a platform for stakeholders from the research and innovation sector to share ideas and create new partnerships. The theme of these meetings was to explore how research and innovation can contribute to a more equitable society.
- The meeting suggested that the RIIG should become a formal Working Group under the Sherpa Track, which is one of the two tracks of the G20 process. The Sherpa Track deals with issues such as development, climate change, health, education, etc. The elevation of the RIIG would mean that it would have more influence and recognition in the G20 agenda.
- India's LiFE initiative, which stands for Lifestyles for Environment. This initiative aims to promote sustainable consumption and production patterns, such as reducing waste, saving energy, using renewable resources, etc. The initiative also encourages people to adopt green habits and practices in their daily lives.

**Mains PYQ exercise:**

Explain the purpose of the Green Grid Initiative launched at World Leaders Summit of the COP26 UN Climate Change Conference in Glasgow in November, 2021. When was this idea first floated in the International Solar Alliance (ISA)? (2021)

**Today's mains practice question:**

What are the key features and objectives of India's LiFE initiative that promotes lifestyles for sustainable development? How does it align with the global agenda of the 2030 Sustainable Development Goals?

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

**G20:**

- The G-20 is an intergovernmental forum comprising 19 countries and the European Union (EU). It works to address major issues related to the global economy, such as international financial stability, climate change mitigation and sustainable development.
- The G-20 was founded in 1999 after the Asian financial crisis as a forum for the Finance Ministers and Central Bank Governors to discuss global economic and financial issues. It was upgraded to the level of Heads of State/Government in 2008 in the wake of the global economic and financial crisis of 2007, and, in 2009, was designated the "premier forum for international economic cooperation".
- The G-20 Summit is held annually, under the leadership of a rotating Presidency. The G-20 Presidency is responsible for bringing together the G-20 agenda in consultation with other members and in response to developments in the global economy<sup>2</sup>. India holds the Presidency of the G-20 from 1 December 2022 to 30 November 2023.
- The G-20 consists of two parallel tracks: the Finance Track and the Sherpa Track. Finance Ministers and Central Bank Governors lead the Finance Track while Sherpas lead the Sherpa Track. Sherpas are personal emissaries of the Leaders. Within the two tracks, there are thematically oriented working groups in which representatives from the relevant ministries of the members as well as from invited/guest countries and various international organisations participate.
- The G-20 members represent around 85% of the global GDP, over 75% of the global trade, and about two-thirds of the world population. The G-20 initially focused largely on broad

macroeconomic issues, but it has since expanded its agenda to inter-alia include trade, sustainable development, health, agriculture, energy, environment, climate change, and anti-corruption

## 2. U.N. Security Council to hold first-ever meeting on threats of AI – AIR

<b>Why is it in news?</b>	The U.N. Security Council will hold a first-ever meeting on the threats of Artificial Intelligence (AI) on July 18th
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International Importance.</p> <p><b>Mains:</b> General Studies II : Important International institutions, agencies, for a (structure, mandate); Bilateral, Regional, Global groupings &amp; Agreements (involving and/or affecting India)</p>
<b>Important concepts</b>	The U.N. Security Council Artificial Intelligence (AI)

### Prelims PYQ Exercise-Find answer:

Q [2009]

The Security Council of UN consists of 5 permanent members, and the remaining 10 members are elected by the General Assembly for a term of \_\_

- (a) 1 year      (b) 2 years  
(c) 3 years      (d) 5 years

### Today's prelims practice question:

**Q.** Which country is set to organize the U.N. Security Council first-ever meeting on threats of AI ?

- a) UK  
b) USA  
c) China  
d) France

Answer: a

Explanation:

- The U.N. Security Council will hold a first-ever meeting on the threats of Artificial Intelligence (AI) on July 18th. The meeting organized by the United Kingdom, will see global leaders discussing the potential threats of artificial intelligence (AI) to international peace and security. It has been presented as a centrepiece of the UK's presidency of the council.
- This was announced by the UK's ambassador to the UN, Dame Barbara Woodward.
- The meeting will include briefings by international AI experts and Secretary-General Antonio Guterres. Guterres has been known for speaking up against the risks of new technologies such as AI. The UN chief has revealed plans to appoint a scientific advisory board with expertise in this area. He also said he would react favourably to the creation of a new UN agency on AI with some regulatory powers, similar to the International Atomic Energy Agency.



<b>Mains PYQ exercise:</b>	Discuss the impediments India is facing in its pursuit of a permanent seat in UN Security Council.
<b>Today's mains practice question:</b>	In a View of U.N. Security Council meeting on the threats of Artificial Intelligence, Critically Analyze the impact and implications of AI on various aspects of international peace and security, such as human rights, humanitarian law, disarmament, cyber security, and terrorism? What are the best practices and principles that can guide the responsible and beneficial use of AI for global development?

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### The U.N. Security Council:

- The U.N. Security Council is one of the six principal organs of the United Nations, established in 1945 by the UN Charter, with the primary responsibility of maintaining international peace and security.
- The U.N. Security Council has 15 members, of which five are permanent: China, France, Russia, the United Kingdom, and the United States. These were the great powers that were the victors of World War II (or their successor states). The other 10 members are elected on a regional basis for a term of two years by the UN General Assembly.
- The U.N. Security Council has the authority to issue binding resolutions on member states, such as establishing peacekeeping operations, enacting international sanctions, and authorizing military action. All member states are obligated under the UN Charter to carry out the Security Council's decisions.
- The permanent members have the power to veto (block) any substantive resolution, which has been a source of criticism and controversy. The veto power has been used to protect the interests of the permanent members or their allies, often at the expense of other countries or regions<sup>24</sup>.
- India has been one of the leading voices for reforms in the U.N. Security Council. India has served as a non-permanent member of the U.N. Security Council eight times, most recently in 2021-22. India has also been seeking a permanent seat in the U.N. Security Council, along with other countries like Brazil, Germany, and Japan (the G4 group). India's case for permanent membership is based on its population, democracy, economic strength, contribution to peacekeeping, and role in global affairs

### Artificial Intelligence (AI):

- Artificial Intelligence (AI) is an emerging technology that facilitates intelligence and human capabilities of sense, comprehend, and act with the use of machines. AI can perform tasks that have historically required human intelligence, such as understanding and translating language, analyzing data, making recommendations, and playing strategic games.
- It is based on various techniques and tools, such as machine learning, natural language processing, neural networks, inference algorithms, etc. AI can be classified into different types, such as weak AI (designed for a specific task), strong AI (equivalent to human intelligence), and super AI (surpassing human intelligence).
- It has many applications and benefits for various sectors and domains, such as education, health care, agriculture, defense, security, governance, etc. AI can help in improving efficiency, accuracy, productivity, innovation, and quality of life.

- Artificial Intelligence (AI) also poses many challenges and risks for society, economy, and environment, such as ethical issues, social impact, legal implications, data privacy and security, human dignity and rights, employment and skill development, digital divide and inequality, etc. AI also requires adequate infrastructure, regulation, governance, and international cooperation to ensure its responsible and sustainable development.

### 3. July 3 was World's hottest day ever due to climate change & emerging El Nino pattern– AIR

<b>Why is it in news?</b>	According to data from the U.S. National Centers for Environmental Prediction, July 3rd was the hottest day recorded globally. The average global temperature reached 17.01 degrees Celsius.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<b>Prelims:</b> Current events of National and International importance. <b>Mains:</b> General Studies-III : Conservation, environmental pollution and degradation, environmental impact assessment.
<b>Important concepts</b>	El Nino
<b>Prelims PYQ Exercise-Find answer:</b> Q. [2011] La Nina is suspected to have caused recent floods in Australia. How is La Nina different from El Nino ?  1. La Nina is characterized by unusually cold ocean temperature in equatorial Indian Ocean whereas El Nino is characterized by unusually warm ocean temperature in the equatorial Pacific Ocean.  2. El Nino has adverse effect on south-west monsoon of India, but La Nina has no effect on monsoon climate.  Which of the statements given above is/are correct?  (a) 1 only                      (b) 2 only (c) Both 1 and 2            (d) Neither 1 nor 2	
<b>Today's prelims practice question:</b> <b>Q.</b> Which of the following statements is/are correct about ElNiño?  1) It is a climate pattern that occurs when the ocean surface temperatures in the tropical Pacific Ocean are above normal for a long time. 2) It is responsible for warmer July 3rd, 2023, because it causes the ocean surface temperatures in the tropical Pacific Ocean to rise above normal levels, releasing more heat into the atmosphere and creating wetter and warmer air. 3) Indian monsoon tends to be weaker and less reliable during El Nino years, leading to below normal rainfall and drought-like situations	

4) El Niño can also increase the frequency and intensity of cyclones in the Bay of Bengal, affecting the winter crops due to higher temperatures and lower soil moisture, and influencing the occurrence of heat waves, floods and diseases.

Select the correct answer using the code given below:

(a) 1 and 2 only (b) 1, 2 and 3 only (c) 2 and 3 only (d) 1, 2, 3 and 4

**Answer: d**

**Explanation:**

- The water near the coast of South America becomes warmer than usual, while the water near Australia and Indonesia becomes cooler than usual. This affects the atmospheric pressure and wind patterns over the Pacific Ocean, which in turn influence the weather and climate in different regions of the world.
- El Niño is responsible for warmer July 3rd 2023 because it causes the ocean surface temperatures in the tropical Pacific Ocean to rise above normal levels, releasing more heat into the atmosphere and creating wetter and warmer air. This can intensify extreme weather events and send global temperatures soaring to record levels in the next few years. According to data from the U.S. National Centers for Environmental Prediction, July 3rd was the hottest day recorded globally. The average global temperature reached 17.01 degrees Celsius (62.62 degrees Fahrenheit), surpassing the previous record of 16.92 degrees Celsius (62.46 degrees Fahrenheit) set in August 2016.
- Indian monsoon tends to be weaker and less reliable during El Niño years, leading to below normal rainfall and drought-like situations. This is because El Niño weakens the monsoon circulation over the Indian subcontinent, which reduces the moisture and rainfall over India. El Niño can also increase the frequency and intensity of cyclones in the Bay of Bengal, affecting the winter crops due to higher temperatures and lower soil moisture, and influencing the occurrence of heat waves, floods and diseases.

**Mains PYQ exercise:**

How do the melting of the Arctic ice and glaciers of the Antarctic differently affect the weather patterns and human activities on the Earth? Explain. (2021)

**Today's mains practice question:**

Explain how EL NINO affects the global weather patterns and what are the possible impacts of climate change on the frequency and intensity of EL NINO pattern.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### EL NINO

- ELNINO is a phenomenon that occurs when the trade winds that blow across the equatorial Pacific Ocean weaken or reverse, allowing warm water to spread eastward from Asia and Australia towards South America. This disrupts the normal temperature and pressure gradients across the Pacific, which in turn affects the atmospheric circulation and precipitation patterns around the world.
- EL NINO is part of a larger cycle called the El Niño-Southern Oscillation (ENSO), which also includes La Niña, the opposite phase of EL NINO, where cold water dominates the eastern Pacific. EL NINO and La Niña are considered the ocean part of ENSO, while the Southern Oscillation is its atmospheric changes.

- EL NINO events occur irregularly at two- to seven-year intervals, but they are not predictable in advance. They are measured by the Oceanic Nino Index (ONI), which tracks the deviations from normal sea surface temperatures in the central and eastern tropical Pacific. EL NINO events are indicated by sea surface temperature increases of more than 0.9° Fahrenheit for at least five successive three-month seasons.
- EL NINO has an impact on ocean temperatures, the speed and strength of ocean currents, the health of coastal fisheries, and local weather from Australia to South America and beyond.

Some of the effects of EL NINO on global weather are:

- Increased rainfall and flooding in the eastern Pacific regions, such as Peru, Ecuador, California and Mexico.
- Droughts and wildfires in the western Pacific regions, such as Indonesia, Australia, India and southern Africa.
- Shifts in the tropical cyclone activity, with fewer storms in the Atlantic and more in the eastern Pacific.
- Changes in the jet stream and storm tracks, leading to warmer and drier winters in northern Europe and North America, and colder and wetter winters in southern Europe and Asia.
- Higher global surface temperatures due to the release of heat from the warmer ocean waters into the atmosphere

#### 4. JAPAN INDIA MARITIME EXERCISE 2023 (JIMEX 23): PIB

<b>Why is it in news?</b>	The seventh edition of the bilateral Japan-India Maritime Exercise 2023 (JIMEX 23) hosted by the Indian Navy, is being conducted at/off Visakhapatnam from 05 -10 July 2023. This edition marks the 11th anniversary of JIMEX, since its inception in 2012.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies II : Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.</p>
<b>Important concepts</b>	JIMEX 23
<p align="center"><b>Prelims PYQ Exercise-Find answer</b></p> <p><b>Q. [2007]</b> What was the purpose of the Operation Sukoon launched by the Government of India?            (a) Helping Indonesia in its efforts to rehabilitate the victims of earthquake in that country            (b) Evacuating the Indian Nationals from Lebanon during the conflict in the Middle East            (c) Assisting United Nations in its efforts to help the civil war victims in the Darfur region of North Africa            (d) Providing a relief package to farmers after a spate of suicides by other farmers in Andhra Pradesh.</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p><b>Q.</b> Match the following bilateral exercises between India and Japan with their respective domains:</p>	



Exercise	Domain
A. Dharma Guardian	1. Air Force
B. Shinyuu Maitri	2. Army
C. JIMEX	3. Navy
D. Sahyog-Kaijin	4. Coast Guard

Select the correct answer using the code given below:

- a) A-2, B-1, C-3, D-4
- b) A-1, B-2, C-4, D-3
- c) A-3, B-4, C-2, D-1
- d) A-4, B-3, C-1, D-2

Answer: a) A-2, B-1, C-3, D-4

Explanation:

**Dharma Guardian:** A joint military exercise between the Indian Army and the Japan Ground Self-Defense Force (JGSDF) that focuses on counter-terrorism operations. The first edition was held in 2018 in Mizoram, India.

**Shinyuu Maitri:** A joint air force exercise between the Indian Air Force (IAF) and the Japan Air Self-Defense Force (JASDF) that aims to enhance interoperability and cooperation in various air operations. The first edition was held in 2019 in West Bengal, India.

**JIMEX:** A bilateral maritime exercise between the Indian Navy (IN) and the Japan Maritime Self-Defense Force (JMSDF) that focuses on maritime security cooperation. The first edition was held in 2012 in Japan and the latest edition was held in 2021 in the Arabian Sea.

**Sahyog-Kaijin:** A joint exercise of the Coast Guards of India and Japan that aims to strengthen the bilateral cooperation and coordination in maritime law enforcement, search and rescue, and environmental protection. The first edition was held in 2000 in Chennai, India.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### JIMEX 23:

- JIMEX is a bilateral maritime exercise between the Indian Navy and the Japan Maritime Self-Defence Force that focuses on maritime security cooperation. The purpose of JIMEX is to develop common understanding of operational procedures and enhance inter-operability through conduct of advanced exercises across the entire spectrum of maritime operations. JIMEX also aims to consolidate coordination between the two navies and fortify the long-standing bond of friendship between the two countries. JIMEX was first held in 2012 and has been conducted regularly since then.

### Mains PYQ exercise:

The time has come for India and Japan to build a strong contemporary relationship, one involving global and strategic partnership that will



	have a great significance for Asia and the world as a whole. Comment (2019)
<b>Today's mains practice question:</b>	Discuss the evolution and significance of the 'Special Strategic and Global Partnership' between India and Japan in the context of the Indo-Pacific region and the world.

## MODEL MAINS ANSWER FOR TODAY'S EXPECTED MAINS QUESTION

**Q. In a View of U.N. Security Council meeting on the threats of Artificial Intelligence, Critically Analyze the impact and implications of AI on various aspects of international peace and security, such as human rights, humanitarian law, disarmament, cyber security, and terrorism? What are the best practices and principles that can guide the responsible and beneficial use of AI for global development?**

<b>Why this question</b>	<p>The question theme is reflected several times in UPSC (including prelims) and APPSC mains.</p> <p><b>UPSC PYQs</b></p> <p>Why is nanotechnology one of the key technologies of the 21st century? Describe the salient features of Indian Government's Mission on Nanoscience and Technology and the scope of its application in the development process of the country? (2016)</p>						
<b><u>First step is to understand the demand of the question</u></b>	<p>Question has two parts:</p> <ol style="list-style-type: none"> <li>1. Impact and implications of AI on various aspects of international peace and security.</li> <li>2. Best practices and principles that can guide the responsible and beneficial use of AI for global development</li> </ol>						
<b>Introduction</b>	<p>Artificial intelligence (AI) is the ability of machines or software to perform tasks that normally require human intelligence. AI has been advancing rapidly, offering unprecedented opportunities and challenges for international peace and security. AI can enhance international peace and security by improving humanitarian assistance, conflict prevention, peacekeeping operations, and development programs.</p>						
<b>Body</b>	<p><b>Impact and implications of AI on international peace and security</b></p> <table border="1"> <thead> <tr> <th>Dimension</th><th>Content</th></tr> </thead> <tbody> <tr> <td><b>Human rights:</b></td><td>AI can infringe on human rights such as privacy, freedom of expression, non-discrimination, and due process, by enabling mass surveillance, censorship, profiling, manipulation, or discrimination. AI can also undermine human dignity and autonomy by reducing human agency and accountability.</td></tr> <tr> <td><b>Humanitarian</b></td><td>It can violate humanitarian law by increasing</td></tr> </tbody> </table>	Dimension	Content	<b>Human rights:</b>	AI can infringe on human rights such as privacy, freedom of expression, non-discrimination, and due process, by enabling mass surveillance, censorship, profiling, manipulation, or discrimination. AI can also undermine human dignity and autonomy by reducing human agency and accountability.	<b>Humanitarian</b>	It can violate humanitarian law by increasing
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<b>Humanitarian</b>	It can violate humanitarian law by increasing						

	<b>law:</b>	the likelihood of civilian casualties, indiscriminate attacks, or disproportionate use of force in armed conflicts. AI can also challenge the principles of distinction, proportionality, and precaution by introducing uncertainty and unpredictability in the behavior and outcomes of autonomous weapons systems.						
	<b>Disarmament</b>	It can undermine disarmament efforts by enabling the development of new types of weapons of mass destruction or mass disruption, such as cyberattacks, bioweapons, or hypersonic missiles. AI can also increase the risk of accidental or unauthorized use of nuclear weapons by compromising command and control systems or triggering false alarms						
	<b>Cyber security</b>	It can threaten cyber security by facilitating cyberattacks that are more sophisticated, scalable, and stealthy. AI can also increase the vulnerability of critical infrastructure and information systems to cyberattacks by creating new attack vectors or exploiting existing weaknesses						
	<b>Terrorism:</b>	AI can enable terrorism by providing terrorists with new capabilities or opportunities to carry out attacks. For example, terrorists could use AI to create fake videos or audio to spread propaganda or misinformation, to recruit or radicalize followers online, to coordinate attacks using encrypted communication platforms, or to weaponize drones or robots.						
	<b>Best practices and principles that can guide the responsible and beneficial use of AI for global development</b>							
<table><tr><th>Dimension</th><th>Content</th></tr><tr><td><b>Human-centered</b></td><td>AI should respect human dignity, rights, values, and interests, and should be designed and deployed with the participation and consent of the affected individuals and communities. AI should also enhance human capabilities and well-being, and should not replace or undermine human agency or responsibility</td></tr><tr><td><b>Inclusive</b></td><td>It should be accessible, affordable, and beneficial to all people, especially those who are marginalized, vulnerable, or disadvantaged.</td></tr></table>			Dimension	Content	<b>Human-centered</b>	AI should respect human dignity, rights, values, and interests, and should be designed and deployed with the participation and consent of the affected individuals and communities. AI should also enhance human capabilities and well-being, and should not replace or undermine human agency or responsibility	<b>Inclusive</b>	It should be accessible, affordable, and beneficial to all people, especially those who are marginalized, vulnerable, or disadvantaged.
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		AI should also reflect the diversity and plurality of human cultures, languages, and perspectives, and should not create or reinforce biases, stereotypes, or discrimination	
	<b>Transparent</b>	It should be open, understandable, and explainable to the users, stakeholders, and regulators. AI should also provide clear and accurate information about its purpose, function, performance, limitations, and risks, and should allow for feedback and correction.	
	<b>Accountable</b>	It should be subject to appropriate oversight, regulation, and governance mechanisms that ensure its compliance with international law and human rights standards. AI should also be subject to audit, review, or redress mechanisms that ensure its liability and remedy for any harm or damage caused	
	<b>Sustainable</b>	It should be aligned with the environmental, social, and economic goals of the Sustainable Development Agenda. AI should also minimize its negative impact on the natural resources, ecosystems, and biodiversity of the planet.	
<b>Conclusion:</b>	AI is a transformative technology that has profound implications for international peace and security. While AI can offer immense opportunities for enhancing human welfare and development, it can also pose serious challenges for human rights, humanitarian law, disarmament, cyber security, and terrorism. Therefore, it is imperative that the U.N Security Council takes proactive and preventive measures to address the ethical and legal issues raised by AI.		

## 1. First-ever IIT campus outside India to be set up at Zanzibar in Tanzania: AIR

<b>Why is it in news?</b>	The first IIT campus outside India will come up at Zanzibar in Tanzania, the Ministry of External Affairs said. A Memorandum of Understanding (MoU) has been signed for the setting up of a campus of IIT Madras in Zanzibar
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies III : Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.</p>
<b>Important concepts</b>	<p>Tanzania</p> <p>IIT</p>

### Prelims PYQ Exercise-Find answer:

Q. [2016]

‘SWAYAM’, an initiative of the Government of India, aims at

- (a) promoting the Self Help Groups in rural areas
- (b) providing financial and technical assistance to young start-up entrepreneurs
- (c) promoting the education and health of adolescent girls
- (d) providing affordable and quality education to the citizens for free

### Today's prelims practice question:

**Q.** Consider the following statements about the Indian Institutes of Technology (IITs)

1. The IITs are Centrally Funded Technical Institutes under the ownership of the Ministry of Education of the Government of India and are governed by the Institutes of Technology Act, 1961.
2. The first IIT was established in 1950 at Kharagpur, West Bengal,
3. The first IIT campus outside India will be set up in Zanzibar, Tanzania, by IIT Madras

Which of the above statements are correct?

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

Answer: d

Explanation:

- The IITs are Centrally Funded Technical Institutes under the ownership of the Ministry of Education of the Government of India and are governed by the Institutes of Technology Act, 1961.
- IITs receive funding from the central government and are regulated by a common law that defines their powers, duties and framework for governance. The law also declares them as Institutes of National Importance and lays down their objectives and functions.
- The first IIT was established in 1950 at Kharagpur, West Bengal, at the site of the Hijli Detention Camp. The oldest IIT was founded at a place that was used as a prison camp by the British colonial authorities during the Indian independence movement. The camp was converted into an academic building for the institute and was inaugurated by Maulana Abul Kalam Azad, the first education minister of independent India.
- The first IIT campus outside India will be set up in Zanzibar, Tanzania, by IIT Madras.
- IIT Madras, one of the top-ranked IITs in India, will establish a branch campus in Zanzibar, an island region of Tanzania in East Africa. The campus will offer courses in engineering, science and technology to students from Tanzania and other African countries. The project is part of India's development cooperation with Africa and is expected to be completed by 2025.

**Mains PYQ exercise:**

Should the premier institutes like IITs/IIMs be allowed to retain premier status, allowed more academic independence in designing



	<p>courses and also decide mode/criteria of selection of students.</p> <p>Discuss in light of the growing challenges.</p>
<b>Today's mains practice question:</b>	<p>Discuss the significance and challenges of setting up an IIT campus in Tanzania, by IIT Madras. How will it benefit India and Africa in terms of education, research and development?</p>

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Tanzania :

- Tanzania is a sovereign state in East Africa that was formed in 1964 through the union of Tanganyika and Zanzibar. It shares borders with Uganda, Kenya, Mozambique, Malawi, Zambia, Burundi and Rwanda. It also has a long coastline along the Indian Ocean.
- It is home to Africa's highest mountain, Kilimanjaro, and the world's second deepest lake, Tanganyika. It also has rich biodiversity and natural resources, such as gold, gemstones, cashew nuts and spices.
- Tanzania and India have enjoyed traditionally close, friendly and cooperative relations since the 1960s. They share common views on anti-racism, anti-colonialism and non-alignment. India has a High Commission in Dar es Salaam and a Consulate General in Zanzibar.
- India is the largest trading partner of Tanzania, comprising 16% of Tanzania's foreign trade. India is also among the top five investment sources in Tanzania. The main items of trade are petroleum products, pharmaceuticals, motor vehicles, electrical goods, sugar, machinery, gold ore, cashew nuts, pulses, timber, spices and gemstones.
- India and Tanzania have signed several bilateral treaties and agreements on various fields such as trade, agriculture, education, defence, hydrography and water resource management. India has also extended lines of credit and development assistance to Tanzania for various projects.
- India and Tanzania have also cooperated in defence and security matters. In October 2019, four indigenously built ships of the Indian Navy visited the ports at Dar es Salaam and

Zanzibar. India has also provided training to Tanzanian defence personnel and donated military equipment.

- India and Tanzania have also maintained cultural and educational linkages. India has offered scholarships to Tanzanian students under various schemes. In August 2021, India signed an MoU with Tanzania to establish IIT Madras' first global campus in Zanzibar.
- Tanzania is bordered by eight neighboring countries. To the north, it is bordered by Kenya and Uganda; to the west, it is bordered by Rwanda, Burundi, and the Democratic Republic of Congo; to the southwest, it is bordered by Zambia; and to the south, it is bordered by Malawi and Mozambique.

## 2. Iran taken to World Court over passenger jet downing in 2020– AIR

<b>Why is it in news?</b>	Iran has been taken to World Court over passenger jet downing in 2020. Canada, Sweden, Ukraine, and the United Kingdom have asked the International Court of Justice (ICJ) to open proceedings against Iran
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International Importance.</p> <p><b>Mains:</b> General Studies II: Important International institutions, agencies and fora- their structure, mandate</p>
<b>Important concepts</b>	<p>International Court of Justice (ICJ)</p> <p>Montreal Convention</p>
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q .2016</p> <p>Which of the following is not a member of 'Gulf Cooperation Council'?</p> <p>(a) Iran</p> <p>(b) Saudi Arabia</p> <p>(c) Oman</p> <p>(d) Kuwait</p>	

## Today's prelims practice question:

**Q.** Which of the following statements is/are correct about the Montreal Convention?

- It is a multilateral treaty that bans the use of chemical weapons in war and prohibits all development, production, acquisition, stockpiling, or transfer of such weapons.
- It is a multilateral treaty that establishes airline liability in the case of death or injury to passengers, as well as in cases of delay, damage or loss of baggage and cargo.
- It is a multilateral treaty that regulates the production, consumption and emissions of ozone-depleting substances.
- It is intended to limit the global temperature rise to well below 2 ° C above pre-industrial levels by 2100.

Answer: b

Explanation:

- Montreal Convention is a multilateral treaty that establishes airline liability in the case of death or injury to passengers, as well as in cases of delay, damage or loss of baggage and cargo.
- The multilateral treaty that bans the use of chemical weapons in war and prohibits all development, production, acquisition, stockpiling, or transfer of such weapons is the Chemical Weapons Convention
- The multilateral treaty that regulates the production, consumption and emissions of ozone-depleting substances is the Montreal Protocol,

**Mains PYQ exercise:**

How have the US sanctions against Iran affected India's bilateral relations with Iran?

**Today's mains practice question:**

Discuss the ethical and humanitarian aspects of the shooting down of a Ukrainian passenger plane by Iran in 2020. How does this incident reflect the vulnerability and responsibility of civilian air travel in conflict zones? What are the measures and mechanisms to prevent such tragedies in the future?

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### International Court of Justice (ICJ):

- The ICJ is the principal judicial organ of the United Nations, established in 1945 by the UN Charter and started working in 1946. It is the successor of the Permanent Court of International Justice (PCIJ), which was established by the League of Nations in 1920.
- It has its seat in The Hague, Netherlands, and consists of 15 judges elected by the UN General Assembly and Security Council for nine-year terms. No two judges can be from the same nationality, and the judges must represent the main forms of civilization and legal systems of the world. The current President of the ICJ is Joan E. Donoghue from the USA.
- It has two types of jurisdiction: contentious and advisory. Contentious jurisdiction means that the ICJ can settle legal disputes between states that have consented to its jurisdiction, either by a special agreement or by a declaration under Article 36 of the ICJ Statute. Advisory jurisdiction means that the ICJ can give advisory opinions on legal questions referred to it by authorized UN organs or specialized agencies.
- It applies international law as sources of law, such as treaties, customary international law, general principles of law, judicial decisions and teachings of eminent jurists. The ICJ's decisions and opinions are binding on the parties concerned and are considered as authoritative sources of international law. However, the ICJ has no power to enforce its judgments, and relies on the cooperation of states and the support of the UN Security Council

### Montreal Convention:

- The Montreal Convention is a multilateral treaty that was adopted by a diplomatic meeting of ICAO member states in 1999. It amended important provisions of the Warsaw Convention's regime concerning compensation for the victims of air disasters.
- The Convention attempts to re-establish uniformity and predictability of rules relating to the international carriage of passengers, baggage and cargo. It protects passengers by

introducing a two-tier liability system that eliminates the previous requirement of proving willful neglect by the air carrier to obtain more than US\$75,000 in damages.

- The Convention also amended the jurisdictional provisions of Warsaw and now allows the victim or their families to sue foreign carriers where they maintain their principal residence, and requires all air carriers to carry liability insurance.
- The Convention does not recognize compensation for psychiatric injury or damage unless linked to physical injury. This has been criticized by some people injured in plane accidents, legal experts and their families.
- The Convention establishes the legal framework that allows airlines to make use of electronic documentation for shipments, thereby reducing costs and increasing efficiency. It also facilitates faster and more efficient trade by replacing paper documents of carriage, such as Air Waybills, with electronic versions.
- The Montreal Convention is designed to be a single, universal treaty to govern airline liability around the world. However, only 137 of the 191 ICAO-contracting States, or 72% of the total are Parties to it. This means that a patchwork of liability regimes continue exists around the world. The result is unfairness, confusion and complexity in determining which regime covers a particular passenger or cargo itinerary.

### 3. India and Singapore sign a Protocol Document today extending for five years the current MoU on Cooperation in the field of Personnel Management and Public Administration till 2028– PIB

<p><b>Why is it in news?</b></p>	<p>The Department of Administrative Reforms and Public Grievances, Ministry of Personnel, Public Grievances and Pensions, Government of India and The Public Service Division, of the Republic of Singapore signed a Protocol Document on 6th July, 2023, extending for five years the current MoU on Cooperation in the field of Personnel Management and Public Administration till 2028.</p>
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<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<b>Prelims:</b> Current events of National and International importance. <b>Mains:</b> General Studies II: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
<b>Important concepts</b>	Singapore
<p style="text-align: center;"><b>Today's prelims practice question:</b></p> <p><b>Q. 2005</b></p> <p>Consider the following statements:</p> <ol style="list-style-type: none"> <li>Poverty Reduction and Growth Facility (PRGF) has been established by the International Development Association (IDA) to provide further assistance to low- income countries facing high level of indebtedness.</li> <li>Singapore regional Training Institute (STI) is one of the institutes that provides training in macroeconomic analysis and policy and related subject as a part of programme of the IMF institute.</li> </ol> <p>Which of the statements given above is/are correct?</p> <p>(a) 1 only (b) 2 only (c) Both 1 and 2 (d) Neither 1 nor 2</p>	
<b>Mains PYQ exercise:</b>	<p>Justify the need for FDI for the development of the Indian economy.</p> <p>Why there is gap between MOUs signed and actual FDIs? Suggest remedial steps to be taken for increasing actual FDIs in India. (2016)</p>
<b>Today's mains practice question:</b>	<p>Discuss the significance and benefits of the MoU on Cooperation in the field of Personnel Management and Public Administration between India and Singapore. How can it contribute to the improvement of governance and public service delivery in both countries?</p>

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Singapore:

- Singapore is a small island nation in Southeast Asia with a population of about 5.7 million and Singapore has no natural land borders with any other country, but it is surrounded by water and has maritime boundaries with Malaysia, Indonesia and Brunei.
- It is separated from Indonesia by the Singapore Strait and from Malaysia by the Straits of Johor
- Singapore is one of India's closest and most important partners in the region, with a history of strong commercial, cultural and people-to-people ties.
- India and Singapore have a strategic partnership since 2015, based on the 5-S Plank of scale up trade and investment, speed up connectivity, smart cities and urban rejuvenation, skill development and state focus.
- India and Singapore have extensive defence cooperation, including regular joint exercises, training, exchange of visits and defence technology collaboration. The Defence Cooperation Agreement (DCA) was signed in 2003 and enhanced in 2015.
- India and Singapore have a Comprehensive Economic Cooperation Agreement (CECA) since 2005, which is the first such agreement signed by India with any country. The CECA covers trade in goods and services, investment protection, mutual recognition of professional qualifications, customs cooperation and dispute settlement. The CECA is currently being upgraded to further enhance bilateral economic ties.
- India and Singapore have robust cooperation in various sectors such as finance, information technology, education, tourism, culture, health, urban development and civil aviation. Singapore is the second largest source of foreign direct investment (FDI) in India and the top destination for India's outward FDI. Singapore is also a key partner for India's initiatives such as Smart Cities Mission, Skill India, Startup India and Digital India.
- India and Singapore have close cooperation in regional and multilateral forums such as ASEAN, East Asia Summit, BIMSTEC, IORA, ADMM Plus, ARF, ASEM and the UN.

Singapore has been supportive of India's Act East Policy and its aspirations for a greater role in the Indo-Pacific region. Singapore also co-chairs the India-ASEAN Dialogue Partnership along with Thailand.

#### 4. Peru declares state of emergency for 60 days in areas around Ubinas volcano: PIB

<b>Why is it in news?</b>	Peru declared a state of emergency for sixty days in areas around the Ubinas volcano yesterday. According to the Geophysical Institute of Peru, the volcano has been spewing ash and gas since earlier this week.
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> GS Paper I: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclones etc</p>
<b>Important concepts</b>	<p>Peru</p> <p>Ubinas volcano</p>
<p align="center"><b>Prelims PYQ Exercise-Find answer</b></p> <p><b>Q. 2018</b></p> <p>Consider the following statements:</p> <ol style="list-style-type: none"> <li>1. The Barren Island volcano is an active volcano located in the Indian territory.</li> <li>2. Barren Island lies about 140 km east of Great Nicobar.</li> <li>3. The last time the Barren Island volcano erupted was in 1991 and it has remained inactive since then.</li> </ol> <p>Which of the statements given above is/are correct?</p> <p>(a) 1 only</p> <p>(b) 2 and 3</p> <p>(c) 3 only</p> <p>(d) 1 and 3</p>	

## Today's prelims practice question:

**Q.** Which of the following statements is/are correct about Ubinas volcano?

1. It is the most active volcano in Peru and has been erupting regularly since 1550.
2. It is located in the Moquegua Region of southern Peru
3. It is part of the “Ring of Fire”, an area of seismic activity that surrounds the tectonic plate underneath the Pacific Ocean.

Which of the statements given above is/are correct?

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

Answer : d

Explanation:

- Ubinas has a long history of volcanic activity, with more than 20 recorded eruptions in the past 500 years. The eruptions have been mostly explosive, producing ash, gas, and pyroclastic flows. Ubinas is considered a high-risk volcano due to its frequent activity and its proximity to populated areas.
- It is situated in the southern part of the country, in the Andes mountain range. The nearest town to the volcano is Ubinas, which has about 4,000 inhabitants. The city of Arequipa, which has more than 800,000 inhabitants, is also within the potential impact zone of the volcano.
- It is one of the many volcanoes that are located along the edges of the Pacific Plate, which is constantly moving and colliding with other plates. The subduction of the Nazca Plate under the South American Plate creates magma that rises to the surface and forms volcanoes like Ubinas. The Ring of Fire is also a source of frequent earthquakes and tsunamis.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### Peru:

- Peru is a country in western South America, bordered by Ecuador, Colombia, Brazil, Bolivia, Chile, and the Pacific Ocean. its capital and largest city is Lima.
- It is a unitary presidential republic with a multiparty system. The president is both the head of state and the head of government. The legislature is a unicameral Congress of the Republic with 130 members. The judiciary is headed by the Supreme Court of Justice. Peru is divided into 25 regions, each with its own elected government
- It has a mixed economy based on agriculture, mining, fishing, manufacturing, tourism, and services. It is one of the fastest-growing economies in Latin America and has made significant progress in reducing poverty and inequality in recent decades.
- It is a member of various regional and international organizations, such as the United Nations, the Organization of American States, the Pacific Alliance, the Andean Community, the Asia-Pacific Economic Cooperation, and the World Trade Organization

### Ubinas Volcano:

- Ubinas is the most active volcano in Peru and has been erupting regularly since 1550.
- The current eruption began around June 22, 2023, and has been spewing ash for several days.
- The ash plume has reached up to 5,000 meters (16,404 feet) above the volcano's peak and has affected nearby villages and livestock.
- The Peruvian government has announced that it will declare a state of emergency for the area surrounding the Ubinas volcano, and has advised residents to wear face masks and protect their eyes from the ash as well as create an evacuation plan if necessary.
- Ubinas is part of the "Ring of Fire", an area of seismic activity that surrounds the tectonic plate underneath the Pacific Ocean.
- The last large eruption at Ubinas came in 2019, resulting in thousands of people being displaced and killing livestock with its toxic emissions.



<b>Mains PYQ exercise:</b>	Why are the world's fold mountain systems located along the margins of continents? Bring out the association between the global distribution of fold mountains and the earthquakes and volcanoes. (2014)
<b>Today's mains practice question:</b>	Mention the global occurrence of volcanic eruptions recently and their impact on regional environment. (Answer in 150 words)?

## MODEL MAINS ANSWER FOR TODAY'S EXPECTED MAINS QUESTION

**Q. Mention the global occurrence of volcanic eruptions recently and their impact on regional environment. (Answer in 150 words)?**

<b>Why this question</b>	<p>The question theme is reflected several times in UPSC (including prelims) and APPSC mains.</p> <p><b>UPSC PYQs</b></p> <p>Why are the world's fold mountain systems located along the margins of continents? Bring out the association between the global distribution of fold mountains and the earthquakes and volcanoes.</p>				
<b><u>First step is to understand the demand of the question</u></b>	<p>Question has two parts:</p> <ol style="list-style-type: none"> <li>1. Occurrence of volcanic eruptions in recent years</li> <li>2. Impact of Volcanic eruptions on regional environment</li> </ol>				
<b>Introduction</b>	Volcanic eruptions are natural phenomena that release lava, gas, ash and other materials from the Earth's crust. They can have significant impacts on the regional environment, as well as on human health, economy and society.				
<b>Body</b>	<p><b>SCO New Delhi Declaration's approach to combating terrorism, separatism and extremism in the region</b></p> <table border="1"> <thead> <tr> <th>Dimension</th><th>Content</th></tr> </thead> <tbody> <tr> <td></td><td>According to the Global Volcanism Program,</td></tr> </tbody> </table>	Dimension	Content		According to the Global Volcanism Program,
Dimension	Content				
	According to the Global Volcanism Program,				

		there were 48 volcanoes in continuing eruption status as of July 2023, with around 20 actively erupting on any particular day. Some of the recent notable eruptions include								
		<ul style="list-style-type: none"><li>Mauna Loa and Kilauea in Hawaii, which erupted in November 2022 and January 2023 respectively, producing lava flows, ash plumes and volcanic gases.</li></ul>								
		<ul style="list-style-type: none"><li>Nyiragongo in Democratic Republic of Congo, which erupted violently in May 2021, displacing thousands of people and causing fatalities, power outages and environmental damage.</li></ul>								
		<ul style="list-style-type: none"><li>Ubinas is the most active volcano in Peru has been spewing ash for several days</li></ul>								
	<p><b>The impacts of volcanic eruptions on the regional environment can be both positive and negative</b></p> <table><tr><th>Dimension</th><th>Content</th></tr><tr><td rowspan="3"><b>Positive Impacts</b></td><td>Creating new landforms and habitats by forming islands, cones and calderas.</td></tr><tr><td>Enhancing soil fertility by adding nutrients and minerals from volcanic ash.</td></tr><tr><td>Providing geothermal energy and mineral resources by tapping into the heat and fluids from volcanic systems.</td></tr><tr><td><b>Negative</b></td><td>Reducing air quality and visibility by emitting</td></tr></table>			Dimension	Content	<b>Positive Impacts</b>	Creating new landforms and habitats by forming islands, cones and calderas.	Enhancing soil fertility by adding nutrients and minerals from volcanic ash.	Providing geothermal energy and mineral resources by tapping into the heat and fluids from volcanic systems.	<b>Negative</b>
Dimension	Content									
<b>Positive Impacts</b>	Creating new landforms and habitats by forming islands, cones and calderas.									
	Enhancing soil fertility by adding nutrients and minerals from volcanic ash.									
	Providing geothermal energy and mineral resources by tapping into the heat and fluids from volcanic systems.									
<b>Negative</b>	Reducing air quality and visibility by emitting									

	<b>Impacts</b>	volcanic ash, dust and gases that can affect respiratory health, aviation and climate.	
		Destroying infrastructure and vegetation by producing lava flows, pyroclastic flows and lahars that can bury or burn buildings, roads and crops.	
		Triggering secondary hazards such as earthquakes, landslides, tsunamis and floods by destabilizing the ground or displacing water.	
<b>Conclusion:</b>	Volcanic eruptions are frequent and diverse events that occur around the world. They can have both beneficial and detrimental effects on the regional environment, depending on their type, magnitude and location. Therefore, it is important to monitor volcanic activity, assess its risks and prepare for its consequences.		

## 1. India & Panama signs MoU on Electoral Cooperation: PIB

<b>Why is it in news?</b>	The Election Commission of India and Electoral Tribunal (ET) of Panama today signed a Memorandum of Understanding in Panama City to establish the institutional framework for their ongoing cooperation in the field of election management and administration
<b>UPSC SYLLABUS RELEVANCE for prelims and Mains</b>	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies I: Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional Bodies. Statutory, regulatory and various quasi-judicial bodies.</p>
<b>Important concepts</b>	<p>Panama</p> <p>Association of World Election Bodies</p>
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p>Q. 2004</p> <p>Which one of the following does not border Panama?</p> <p>(a) Coast Rica</p> <p>(b) Pacific Ocean</p> <p>(c) Colombia</p> <p>(d) Venezuela</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p>Q.</p> <p>Which of the following statements is/are correct regarding the memorandum of understanding (MoU) signed between the Election Commission of India and the Electoral Tribunal of Panama in 2023?</p> <ol style="list-style-type: none"> <li>1) It is the first MoU signed by ECI with an EMB in the Latin Americas region.</li> <li>2) It aims to establish an institutional framework for their ongoing cooperation in the field of election management and administration.</li> <li>3) It was signed during the 11th Executive Board Meeting of the Association of World Election Bodies (A-WEB) in Colombia.</li> </ol>	

4) It covers areas of cooperation such as use of technology and social media in elections.

Select the correct answer using the code given below:

- a) 1 and 2 only
- b) 2 and 4 only
- c) 1 and 3 only
- d) 3 and 4 only

Explanation: b

Explanation:

- It is the fourth MoU signed by ECI with an EMB in the Latin Americas region, after Mexico, Brazil and Chile
- It aims to establish an institutional framework for their ongoing cooperation in the field of election management and administration.
- The ECI delegation attended the 11th Executive Board Meeting of A-WEB and an International Conference at Cartagena, Colombia after signing the MoU in Panama City.
- It covers areas of cooperation such as use of technology and social media in elections.

<b>Mains PYQ exercise:</b>	In the light of recent controversy regarding the use of Electronic Voting Machines, what are the challenges before the election commission of India to ensure the trustworthiness of elections in India? (2018)
<b>Today's mains practice question:</b>	Analyse the challenges and opportunities for the Election Commission of India in engaging with electoral bodies across the globe and sharing its expertise and knowledge in conducting free, fair and transparent elections

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS



## Panama:

- Panama is a Central American country that is bordered by Costa Rica and Colombia. It has a strategic location on the Isthmus of Panama, which connects the Atlantic and Pacific Oceans.
- Panama is famous for the Panama Canal, an artificial waterway that allows ships to cross between the two oceans without going around South America. The canal is 82 km long and has a series of locks that raise and lower ships to the level of Gatun Lake, an artificial lake that was created to reduce the amount of excavation work required for the canal.
- The Panama Canal was built by the United States between 1904 and 1914, after a failed attempt by a French company in the late 1800s. The canal was fully controlled by the United States until 1979, when it was transferred to a joint US-Panama commission. In 1999, Panama gained full control and ownership of the canal and created the Panama Canal Authority to manage and operate it.
- The Panama Canal is considered one of the modern world's wonders and a vital route for international trade and military transportation. It handles about 15,000 ships and 330 million tons of cargo per year. However, it also faces challenges such as environmental impacts, security threats, maintenance costs, and competition from other routes such as the Suez Canal or the Arctic passage.
- In 2016, Panama completed a major expansion project that added a third set of locks and widened and deepened the existing channels to accommodate larger ships. The project cost about \$5.4 billion and increased the canal's capacity by 50%.
- In 2016, Panama was at the center of a global scandal known as the Panama Papers, which revealed the financial arrangements of politicians, celebrities, businessmen, and criminals who used offshore companies set up by a Panamanian law firm called Mossack Fonseca to hide their wealth and avoid taxes.
- Panama has diplomatic relations with India since 1973 and both countries share common interests in democracy, trade, tourism, culture, and regional security. India is one of Panama's largest trading partners in Asia and both countries have signed agreements on cooperation in agriculture, science and technology, health, education, maritime transport, and air services.

## Association of World Election Bodies:

- The Association of World Election Bodies (A-WEB) is the largest international organisation in the field of election management. It consists of 119 election management bodies (EMBs) from 108 countries. It was established in 2013 in South Korea with the vision to efficiently and effectively spread free, fair, transparent and participative elections worldwide.
- Some of the features and functions of A-WEB are:
- It is the first global organization of EMBs and has 20 regional associations as associate members
- It has a secretariat based in Seoul, South Korea, and an executive board headed by a chairperson elected by the general assembly.
- It organizes election management capacity building programs, country programs, research projects, publications, and webinars for its members and partners.
- It convenes a general assembly every two years to discuss important issues related to elections and democracy and to elect the executive board members.

## 2. India and UK agree to enhance cooperation to address violent extremism and radicalism– PIB

Why is it in news?	United Kingdom National Security Adviser Tim Barrow on 7th July 2023, Friday met National Security Adviser Ajit Doval in New Delhi. The two sides discussed regional and global issues of mutual interest.
UPSC SYLLABUS RELEVANCE for prelims and Mains	<b>Prelims:</b> Current events of National and International Importance.  <b>Mains:</b> General Studies III: Linkages between development and spread of extremism. Role of external state and non-state actors in creating challenges to internal security
Important concepts	UK

## Prelims PYQ Exercise-Find answer:

**Q. 2008**

“Hand-in-Hand” a joint anti-terrorism military training was held by the officers of the Indian Army and officers of Army of which one of the following countries?

- (a) China
- (b) Japan
- (c) Russia
- (d) USA

## Today's prelims practice question:

**Q.** Which of the following statements is/are correct about the recent India-UK Strategic Dialogue?

- 1) It was held in New Delhi between the National Security Advisors of both countries.
- 2) It focused on enhancing cooperation to address violent extremism and radicalism in both countries.
- 3) It also discussed collaboration in critical and emerging technologies such as artificial intelligence and quantum computing.

Select the correct answer using the code given below:

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

Answer: d

Explanation:

- The India-UK Strategic Dialogue was a high-level meeting that took place in the capital city of India, New Delhi. The meeting was attended by the National Security Advisors (NSA) of both countries, who are the senior-most officials responsible for advising their respective governments on matters of national security and foreign policy. The NSA of India is Ajit Doval and the NSA of UK is Tim Barrow.

- The main agenda of the meeting was to discuss how India and UK can work together to prevent and counter the threats posed by violent extremism and radicalism in both countries. Violent extremism and radicalism refer to the ideologies and actions that promote violence, hatred, intolerance and discrimination against others based on their religion, ethnicity, nationality, gender, etc. Such ideologies and actions can lead to terrorism, communal violence, hate crimes, etc. India and UK have faced such challenges in the past and present and have agreed to cooperate more closely to deal with them.
- Apart from the security issues, the meeting also explored the possibilities of enhancing cooperation in the fields of science and technology, especially in the areas of critical and emerging technologies such as artificial intelligence and quantum computing.

## Mains PYQ exercise:

Analyse the complexity and intensity of terrorism, its causes, linkages and obnoxious nexus. Also suggest measures required to be taken to eradicate the menace of terrorism.

## Today's mains practice question:

Critically examine the opportunities and challenges of India-UK cooperation in countering violent extremism and radicalism. How can the two countries adopt a holistic and comprehensive approach to prevent and counter these threats?

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

### United Kingdom (UK):

- United Kingdom (UK) is a sovereign state in Europe that consists of four countries: England, Scotland, Wales and Northern Ireland.
- It is a parliamentary democracy with a constitutional monarch as the head of state.
- It is a member of the United Nations, the Commonwealth of Nations, NATO, the European Union (until 2020) and other international organizations.

- It has a mixed economy that is the fifth-largest in the world by nominal GDP and the tenth-largest by purchasing power parity. It is a global leader in banking, finance, aerospace, pharmaceuticals, education and culture.
- It is one of the permanent members of the UN Security Council and a nuclear-weapon state. It has strong diplomatic and military ties with many countries, especially the United States.
- **Brexit:** The process of UK leaving the European Union after a referendum in 2016. It has implications for UK's economy, politics, society and international relations.
- **Scotland Independence:** The movement for Scotland to become an independent country from UK. It gained momentum after the Brexit vote and the Scottish National Party's electoral success. It raises questions about UK's constitutional future and its impact on India.
- **Northern Ireland Protocol:** The agreement between UK and EU to avoid a hard border between Northern Ireland and the Republic of Ireland after Brexit. It has caused tensions between UK and EU over trade and customs issues and sparked protests among some unionist groups in Northern Ireland.

### 3. India has the potential to be a Green Hydrogen exporter: Science & Technology Minister Dr Jitendra Singh– PIB

Why is it in news?	Addressing the International Conference of Green Hydrogen 2023 in New Delhi on 7th July 2023, Friday, Dr Singh said, Prime Minister Narendra Modi approved the launch of the National Green Hydrogen Mission with a budgetary outlay of about 2.4 billion US dollars
UPSC SYLLABUS RELEVANCE for prelims and Mains	<p><b>Prelims:</b> Current events of National and International importance.</p> <p><b>Mains:</b> General Studies II : Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment environmental pollution and degradation, environmental impact assessment.</p>



Important concepts	Green Hydrogen
<p align="center"><b>Prelims PYQ Exercise-Find answer:</b></p> <p><b>Q: 2023</b>          With reference to green hydrogen, consider the following statements:</p> <ol style="list-style-type: none"> <li>1. It can be used directly as a fuel for internal combustion.</li> <li>2. It can be blended with natural gas and used as fuel for heat or power generation.</li> <li>3. It can be used in the hydrogen fuel cell to run vehicles.</li> </ol> <p>How many of the above statements are correct?</p> <p>(a) Only one          (b) Only two          (c) All three          (d) None</p>	
<p align="center"><b>Today's prelims practice question:</b></p> <p><b>Q.</b>          With reference to the National Green Hydrogen Mission, consider the following statements:</p> <ol style="list-style-type: none"> <li>1. It was announced in the Union Budget 2021-22 to promote the production of green hydrogen from renewable sources.</li> <li>2. It aims to create a green hydrogen value chain and make India a global hub for green hydrogen technologies.</li> <li>3. It envisages setting up of green hydrogen electrolyser and fuel cell manufacturing facilities in the country.</li> </ol> <p>Which of the statements given above is/are correct?</p> <p>a) 1 only          b) 1 and 2 only          c) 2 and 3 only          d) All of the above</p>	

Answer: d

Explanation:

- Finance Minister of India, in her budget speech on February 1, 2021, declared that the government will launch a National Hydrogen Energy Mission to generate hydrogen from green power sources. This was part of the government's vision to make India a leader in clean energy and reduce its dependence on fossil fuels.
- This mission has the objective of developing a complete ecosystem for green hydrogen production, storage, transportation and utilization in various sectors such as industry, mobility, power and agriculture. It also intends to make India a global player in the field of green hydrogen technologies by fostering innovation, research and development, and manufacturing capabilities.
- This mission plans to establish domestic manufacturing units for key components of green hydrogen production and utilization, such as electrolyzers and fuel cells. Electrolyzers are devices that use electricity to split water into hydrogen and oxygen. Fuel cells are devices that convert hydrogen and oxygen into electricity and water. These facilities will help reduce the cost of green hydrogen and create employment opportunities in the country.

**Mains PYQ exercise:**

What do you understand by Hydrogen Energy? Why is it called as 'green' energy? Explain fuel cell technology for using hydrogen as a fuel.

**Today's mains practice question:**

Green hydrogen is emerging as a key enabler of the global transition to sustainable energy and net zero emissions. Discuss the benefits, challenges and prospects of green hydrogen in India.

## DETAILED EXPLANATION OF IMPORTANT CONCEPTS

**Green Hydrogen:**

- Green hydrogen is a type of hydrogen that is produced through the electrolysis of water using renewable energy sources like solar or wind energy. It is a clean source and has the potential to reduce carbon emissions.

- It is produced by using renewable energy to power the electrolysis of water. Electrolysis is a process that splits water molecules (H<sub>2</sub>O) into hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>) using an electric current in an electrolyzer. The electricity must be carbon-free or low-carbon to consider the hydrogen as green or renewable.
- It is different from other types of hydrogen, such as grey, blue, pink, yellow, or turquoise, which are produced using different methods and have different carbon footprints
- Green hydrogen can be used to decarbonize sectors that are hard to electrify, such as cement and iron production, as well as for long-duration energy storage and clean transportation. It can also be used to produce green ammonia, the main constituent of synthetic fertilizer.
- India has recently launched the National Green Hydrogen Mission with an initial outlay of Rs.19,744 crore, comprising an outlay of Rs.17,490 crore for the Strategic Interventions for Green Hydrogen Transition (SIGHT) programme, Rs.1,466 crore for several pilot projects, Rs.400 crore for Research and Development (R&D), and Rs. 388 crores for remaining components of the mission. The mission aims to create an enabling environment for developing the infrastructure to produce and transport green hydrogen for various industrial applications.
- The mission intends to facilitate the production of hydrogen from renewable energy. The mission aims to achieve the following targets by 2030: Development of green hydrogen production capacity of at least 5 MMT (Million Metric Tonne) per annum with related renewable energy capacity addition of nearly 125 GW in India.
- India has also set up its first 99.99% pure green hydrogen pilot plant in eastern Assam's Duliajan, at the petroleum exploration major's Jorhat pump station. Powered by a 500 KW solar plant, the green hydrogen unit has an installed capacity to produce 10 kg of hydrogen per day and scale it up to 30 kg per day. A specialised blender has also been installed for blending green hydrogen produced from the unit with the natural gas supplied by the Assam Gas Corporation Limited and supplying the blended gas to the Jorhat area for domestic and industrial use
- Green hydrogen can also be used to produce green steel, which is steel made from iron ore using renewable energy and green hydrogen instead of coal or natural gas. Green steel can

help reduce the carbon footprint of the steel industry, which accounts for about 7% of global carbon dioxide emissions.

## MODEL MAINS ANSWER FOR TODAY'S EXPECTED MAINS QUESTION

**Q. Green hydrogen is emerging as a key enabler of the global transition to sustainable energy and net zero emissions. Discuss the benefits, challenges and prospects of green hydrogen in India?**

<b>Why this question</b>	<b>The question theme is reflected several times in UPSC (including prelims) and APPSC mains.</b>					
	<b>UPSC PYQs</b>					
	Energy transition is considered the best measure to achieve the goal of carbon neutrality. Explain					
<b><u>First step is to understand the demand of the question</u></b>	Question has Two parts: <div>1. Benefits and challenges of Green Hydrogen</div> <div>2. Prospects of green hydrogen in India</div>					
<b>Introduction</b>	Green hydrogen is a type of hydrogen that is produced by using renewable energy to power the electrolysis of water. It is a clean and versatile fuel that can help reduce carbon emissions and fossil fuel dependence. Green hydrogen is emerging as a key enabler of the global transition to sustainable energy and net zero emissions.					
<b>Body</b>	<b>Benefits of Green Hydrogen</b> <table><tr><th>Dimension</th><th>Content</th></tr><tr><td><b>Benefits</b></td><td>Green hydrogen can help India achieve its climate goals and commitments under the Paris Agreement, such as reducing the</td></tr></table>		Dimension	Content	<b>Benefits</b>	Green hydrogen can help India achieve its climate goals and commitments under the Paris Agreement, such as reducing the
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		emission intensity of its economy by 33-35% from 2005 levels by 2030.						
		Green hydrogen can also help India enhance its energy security and self-reliance by reducing its import dependency on fossil fuels, which costs more than USD 90 billion per year.						
		Green hydrogen can be used to decarbonize sectors that are hard to electrify, such as cement, steel, fertilizer, refining, shipping, aviation, and long-haul transport. These sectors account for about 40% of India’s energy-related carbon dioxide emissions.						
		Green hydrogen can also create new opportunities for economic growth, innovation, and employment in India. According to the National Green Hydrogen Mission, green hydrogen can generate investments of over Rs. 8 lakh crore and create over 6 lakh jobs by 2030						
<b>Main Challenges and Prospects for Green Hydrogen in India are</b>								
<table><tr><th>Dimension</th><th>Content</th></tr><tr><td rowspan="2"></td><td>The main challenge for green hydrogen in India is its high production cost, which is currently about four times higher than grey hydrogen derived from natural gas</td></tr><tr><td>The production cost of green hydrogen depends on the availability and affordability of renewable electricity, water, and electrolyzers.</td></tr></table>				Dimension	Content		The main challenge for green hydrogen in India is its high production cost, which is currently about four times higher than grey hydrogen derived from natural gas	The production cost of green hydrogen depends on the availability and affordability of renewable electricity, water, and electrolyzers.
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	<b>Challenges</b>	India needs to invest in scaling up its renewable energy capacity, storage, and transmission infrastructure, as well as in developing domestic manufacturing of electrolyzers and securing critical minerals for them	
		The transportation and storage of green hydrogen also pose technical and economic challenges, as hydrogen is a low-density gas that requires high-pressure compression or liquefaction for long-distance transport. India needs to develop suitable pipelines, tankers, terminals, and refuelling stations for green hydrogen distribution and utilization.	
		The regulatory and policy framework for green hydrogen in India is still evolving and needs to be aligned with the national and international standards and norms. India also needs to create a conducive environment for public-private partnerships, research and development, innovation, and skill development in the green hydrogen sector	
	<b>Prospects for Green Hydrogen in India are</b>		
	<b>Prospects</b>	Despite the challenges, India has a huge potential to become a global leader in green hydrogen production and consumption, given its abundant renewable energy resources, low electricity production cost, large domestic market, and technological capabilities.	
India has already taken several initiatives to promote green hydrogen, such as launching the			

		<p>National Green Hydrogen Mission with an initial outlay of Rs.19,744 crore, setting up its first green hydrogen pilot plant in Assam, announcing incentives for domestic manufacturing of electrolyzers and green hydrogen production, and joining international platforms such as the Green Hydrogen Catapult and the International Partnership for Hydrogen Economy.</p>	
		<p>India can also leverage its green hydrogen potential to export low-carbon products such as green ammonia and green steel to the global market, which is expected to grow significantly in the coming years due to the rising demand for clean energy solutions</p>	
<p><b>Conclusion:</b></p>	<p>Green hydrogen is a promising fuel that can help India achieve its sustainable energy and net zero emissions goals. However, it also faces several challenges that need to be addressed through concerted efforts by the government, industry, academia, civil society, and international partners. India has a unique opportunity to harness its green hydrogen potential and become a key player in the global green hydrogen economy.</p>		