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September, 2022

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# **MONTHLY CURRENT AFFAIRS FOR UPSC CSE**

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### SHANGHAI COOPERATION ORGANISATION (SCO) 2022

### Why in the News?

Recently, the Prime Minister of India participated in the 22nd SCO Summit 2022 held in Samarkand, Uzbekistan.

### Key Points:

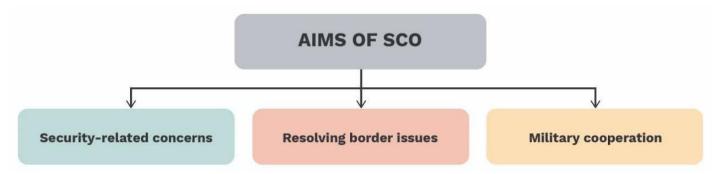
### Key Highlights of the Summit:

- The **Samarkand declaration** advocated "commitment to peaceful settlement of differences and disputes between countries through dialogue and consultation".
- **Infrastructure:** India urged SCO member states to give each other full right to transit, as it would enhance connectivity and help in establishing reliable and resilient supply chains in the region.
- **Food Security:** As the whole world is facing an unprecedented energy and food crisis, India emphasised the initiative to promote millet and address issues related to food security.
- » In this context, India is trying to popularise millets, as SCO can play a big role in marking 2023 as the International Year of Millets.

- Working Group on Traditional Medicine: World Health Organisation (WHO) opened its Global Center for Traditional Medicines in Gujarat in April 2022.
- **Cultural and historical heritage:** Varanasi was declared as the SCO Tourism and Cultural Capital for 2022-2023 to promote the rich cultural and historical heritage of the people and the tourism potential of SCO member states.

### About Shanghai Cooperation Organisation (SCO):

- The SCO is an **eight-member economic and security bloc** and has emerged as one of the largest transregional international organisations.
- The SCO Summit 2022 was first held in Shanghai in June 2002.
- **Members:** China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India, Pakistan, Iran
- **Observer States of SCO:** Afghanistan, Belarus, and Mongolia.
- The last two countries (India and Pakistan) joined as full members in 2017.
- It was founded as Shanghai 5 at a summit in Shanghai in 2001 by the Presidents of Russia, China, Kyrgyz Republic, Kazakhstan, Tajikistan and Uzbekistan.



### Importance of SCO for India:

- Shanghai Cooperation Organisation is seen as an **eastern counterbalance to NATO**. With India being its member, it will allow the country to push effective action in combating terrorism and on issues related to security.
- SCO membership also **bolsters India's status as a significant pan-Asian player**, which is boxed in the South Asian paradigm.
- In the absence of the SAARC summit, the SCO summit allows Indian and Pakistani leaders to meet informally on the sidelines.
- India's membership in SCO will strengthen her position in Central Asia.
- » It will also help the country's aim of regional integration and promote connectivity and stability across borders.
- India can make use of the RATS mechanism for Counterterrorism.

### Challenge:

- The presence of Pakistan and the dominance of China in the SCO limit India to a secondary role in the organisation.
- For Example: Due to Pakistan- China in the SCO, India's ability to push the issue of terrorism gets limited, as Pakistan itself has indulged in a major proxy war with India.

### Way Forward:

- Positive outcomes from SCO will depend on how Indian diplomacy deals with its rivals in SCO.
- India will have to walk a thin diplomatic line and adopt a careful approach while engaging in the SCO.
- It has to take care of its interests and remain neutral on issues which are not directly related to it.
- India needs to ensure the participation of all SCO members including China and Pakistan, despite the tensions, that is scheduled to be held next year in

India.

### RATS-SCO:

- RATS is a **permanent organ of the SCO** which serves to promote cooperation of member states against the **three evils** of **terrorism, separatism** and **extremism**.
- Headquarters: Tashkent, Uzbekistan.

### Additional Information:

### About Colour Revolution:

- At the SCO summit Chinese President Xi appealed to Russia, India, and other members to cooperate with each other to prevent foreign powers from destabilising their countries by inciting "colour revolutions".
- Colour revolutions refer to a series of uprisings that first began in former communist nations in Eastern Europe in the early 2000s.

Protesters often wear a specific colour.

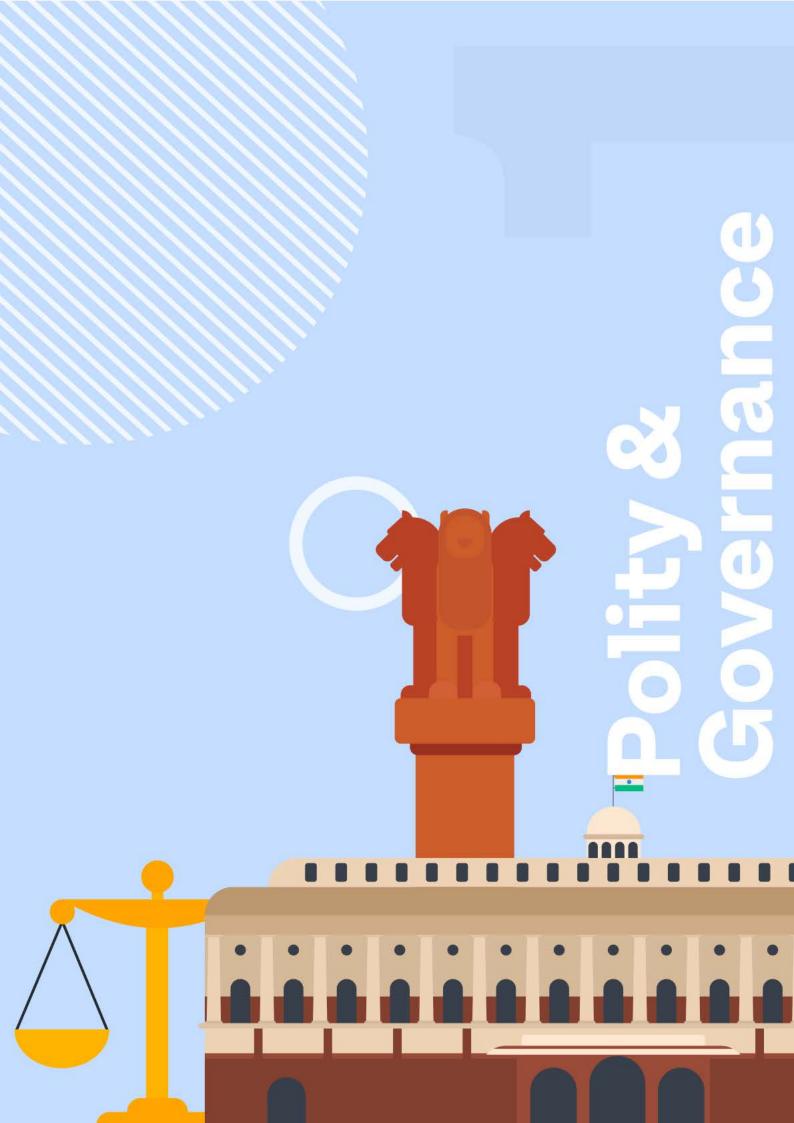
### Some of the better known "colour revolutions":

Orange Revolution	Ukraine
Tulip Revolution	Kyrgyzstan
Jasmine Revolution	Tunisia
Lotus Revolution	Egypt

### **Probable Question:**

**Q.** "One of the goal of the SCO is to contain and prevent terrorism but because of its inherent contradiction it has only limited success in this regard." Examine

News Source: The Indian Express



### **INDIAN DIASPORA**

### Why in the News?

Recently, a Parliamentary Panel criticized the government over the absence of a "Clear-Cut" Policy on engaging with the Indian Diaspora.

### **Key Points:**

### About

### Indian Diaspora

- Indian Diaspora is a generic term used for addressing people who have migrated from the territories that are currently within the borders of the Republic of India.
- It constitutes NRIs (Non-resident Indians) and PIOs (Persons of Indian origins).
- According to **'International Migration 2020 Highlights' UN report,** India has the most migrants abroad -- 18 million persons from India were living outside of their country of birth.

### India's Policy towards Diaspora:

- Jawaharlal Nehru, India's first Prime Minister, pursued a policy of "active dissociation" from the Indian diaspora.
- » He was concerned that connecting with, and advocating for, them would impair the sovereignty of host countries.
- However, the policy of reaching out to the Indian diaspora began in earnest during the tenure of Atal Bihari Vajpayee.
- » It was under NDA-I that Pravasi Bharatiya Divas(PBD) was first launched in 2003.
- The **Modi government** has brought the **merger of PIO (Persons of Indian Origin) and OCI (Overseas Citizenship of India),** which has been a longstanding demand of the Indian community.

### Significance of Indian Diaspora:

- Indians contribute 13% of global remittances and the remittance sent by Indians back to India amount to approximately 3.2% of the Indian GDP.
- Members of the Diaspora are a major asset to intelligence agencies inimical to India.
- Diaspora philanthropy has played an important role in education, healthcare and rural development.
- They are the most important tool for India's soft power diplomacy.
- The importance of Diasporas extends to knowledge transfer, the sharing of resources, acting as unofficial Indian ambassadors and pushing for India's interests abroad.

- The dominance of Indians in computer software, particularly in the Silicon Valley, has **strengthened the image of India** as a technology powerhouse.
- With focus on 'Make in India', Indian diaspora can be facilitated to contribute to the Indian development story by investing in the greenfield and brownfield projects,

### Suggestions to Boost Connect with Indian Diaspora:

- The Indian Council for Cultural Relations (ICCR) should deepen linkages with the Diaspora.
- The scope and activities of the Cultural Centres in countries with a substantial Indian presence should be expanded.
- Initiatives for establishing sister city relationships by NRIs or PIOs should be supported
- The Birth right Israel programme which assists the younger generation of the Jewish Diaspora to visit Israel and learn about their cultural roots should be emulated.

### **Conclusion:**

- Indian Diaspora has an impact on India's foreign policy. They are an important factor in the bilateral relationship with the countries where they have a significant presence.
- Overseas Indians also benefit immensely from the standing of India in the international arena.
- Prestige and strength of India has a direct impact on the position of Diaspora in the countries of their settlement.
- In a nutshell, the destinies of India and its Diaspora are intertwined. It is in the interest of both India and her Diaspora to develop a mutually beneficial relationship.

### **Probable Question:**

**Q.** "Turning Indian diaspora into the ambassador of brand India needs concerted efforts on multiple fronts "Elucidate.

News Source: The Indian Express

### **CONTEMPT OF COURT**

### Why in the News?

 Recently, the Attorney General of India K K Venugopal declined a request for consent to initiate criminal contempt of court proceedings against a Member of Parliament.



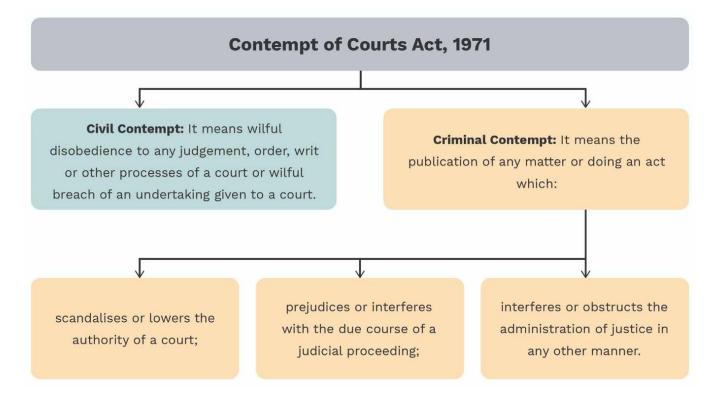
Key Points:

About

**Contempt of Court** 

In Simple terms, Contempt of Court is defined as "the disobedience of an order of a court" and, "also conduct tending to obstruct or interfere with the orderly administration of justice".

Image Source: Lawcorner



# Who can bring a charge of criminal contempt of court against an individual?

- The Contempt of Courts Act, 1971, lays down the law on Contempt of Court.
- The Contempt case is heard by a Bench of at least two judges.
- In the case of the Supreme Court, the Attorney General or the Solicitor General, and in the case of High Courts, the Advocate General, may bring in a motion before the court for initiating a case of criminal contempt.
- However, the motion can be brought by a private citizen as well and in such a case, the **consent of the Attorney General (or the Advocate General,** as the case may be,) is required.

# What is the reason that the consent of the A-G is required?

- The A-G's consent is meant to be a **safeguard against** frivolous petitions
- If the A-G denies consent, the matter all but ends. The complainant can urge the court to take **suo motu (on its own motion) cognizance.**
- However, If the court does take suo motu cognizance, the consent of the AG is not required.

# What if a court itself decides to bring a case of contempt?

- Article 129 of the Constitution gives the Supreme Court, the power to initiate contempt cases on its own, independent of the motion brought before it by the AG or with the consent of the AG.
- In such a situation, the A-G's consent is not required.

### What does not come under the purview of 'Contempt of Court'?

Innocent publication and distribution of some matter.

### Fair and accurate report of judicial proceedings.

Fair and reasonable criticism of judicial acts.

Comment on the administrative side of the judiciary do not amount to contempt of court.

### Implications of disobeying Court:

• Attachment of property, simple imprisonment up to six months, or with a fine which may extend to two thousand rupees.

### **Probable Question:**

**Q.** Without power of contempt of court, justice may be reduced to hollow promise. In this context, discuss the various types of the contempt and its role in strengthening the Judiciary as an institution.

News Source: The Hindu

### NATIONAL LIST OF ESSENTIAL MEDICINES (NLEM)

### Why in the News?

The Government has released 384 medicines under the National List of Essential Medicines (NLEM).

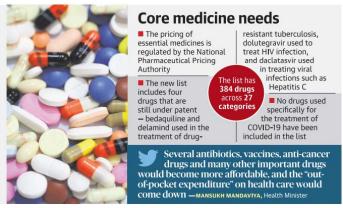
### **Key Points:**

### About

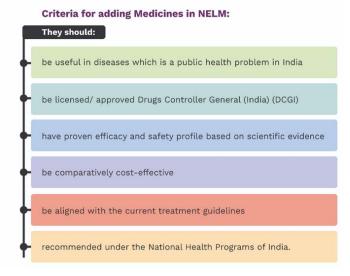
### National List of Essential Medicine (NLEM)

- The National List of Essential Medicines was **first** formulated in 1996.
- The Essential Medicines List (EML) published by the WHO, served as the model for the creation of NLEM.
- **Nodal Ministry:** Ministry of Health and Family Welfare
- NLEM is created to **rationalise the use of limited resources** for drugs needed the most by the greatest number of people.

- **Prices of medicines** included in NLEM are **controlled by the Centre**, ensuring lower prices.
- It is a dynamic list that takes into account any changing profile of diseases, newer drugs available on the market, and changing treatment protocols.
- Drugs deleted from the NLEM include medicines banned in India and those having reports of concerns on the safety profile.
- In NLEM, the medicines are categorized based on the level of the healthcare system as
- » P- Primary; S- Secondary and T- Tertiary.
- Based on this list, the **NPPA (National Pharmaceuticals Pricing Authority)** will decide the ceiling prices.



### Image Credits: The Hindu



### Benefits

- Several antibiotics, vaccines and anti-cancer drugs are set to become more affordable with their addition to the list.
- Optimum utilization of healthcare resources.
- Helpful in drafting pharmaceutical policies.
- Ensure the **accessibility of affordable quality** medicines
- Contributes towards a reduction in Out of Pocket Expenditure.

### National Pharmaceutical Pricing Authority (NPPA):

- (NPPA) was constituted in 1997 as an attached office of the Department of Pharmaceuticals (DoP).
- Nodal Ministry: Ministry of Chemicals & Fertilizers
- It acts as an independent Regulator for the pricing of drugs and ensures the availability and accessibility of medicines at affordable prices.

### **Probable Question:**

Q. "Expenditure on medicines constitute the majority of the Out -of - pocket expenditure in India." Explain. Can National List of Essential Medicine reduce the burden Out -of - pocket expenditure on poor people? Examine

News Source: The Indian Express

# APPOINTMENT OF CHIEF JUSTICE OF INDIA

### Why in the News?

Recently, Justice Uday Umesh Lalit has been sworn in as the 49th Chief Justice of India.

### Key Points:

About

**Chief Justice of India** 

### Eligibility:

- Indian citizenship
- Judge of a High Court for at least five years or of two or more such Courts in succession
- Advocate of a High Court for at least ten years or of two or more such Courts in succession
- Distinguished jurist in the opinion of the President of India

### Who appoints the CJI?

- The Chief Justice of India and the other judges of the Supreme Court are appointed by the **President** under **Article 124** of the Indian Constitution.
- It is mentioned in Article 124 that appointment by the President is to be done "after consultation" with judges of the Supreme Court, as the President may "deem necessary".

### Appointment of High Court Judges:

• Article 217, which deals with the appointment of High Court judges.

- Accordingly, the **President should consult the CJI**, **Governor, and Chief Justice of the High Court** concerned.
- Further, the tenure of a CJI is until they attain the age of 65 years, while High Court judges retire at 62 years.

# What is the System followed for recommending and appointing judges?

- The Collegium system is followed in the appointment of judges, consisting of five seniormost judges of the Supreme Court and the High Courts.
- The Government gets a background inquiry done by the Intelligence Bureau (IB) at times from the names first suggested for appointment by the collegium.
- While the government can also raise objections, usually the collegium's will prevails.

### **Collegium System:**

- It is the **system of appointment and transfer of judges** that has evolved through judgments of the Supreme Court, and not by an Act of Parliament or by a provision of the Constitution.
- The **Supreme Court collegium is headed by the Chief Justice** of India and comprises four other senior-most judges of the court.
- A **High Court collegium is led by its Chief Justice** and four other senior-most judges of that court. Names recommended for appointment by a High Court collegium reach the government only after approval by the CJI and the Supreme Court collegium.

### **Evolution of Collegium System:**

- The collegium system has its genesis in a series of judgments called **"Judges Cases".**
- The collegium came into being through interpretations of pertinent constitutional provisions by the Supreme Court in the Judge's Cases.
- » First Judges Case (1981): It declared that the "primacy" of the CJI's recommendation on judicial appointments and transfers can be refused for "cogent reasons." The ruling gave the Executive primacy over the Judiciary in judicial appointments for the next 12 years.
- » The Second Judges Case (1993): It introduced the Collegium system, holding that "consultation" really meant "concurrence". It added that it was not the CJI's individual opinion, but an institutional opinion formed in consultation with the two senior-most judges in the Supreme Court.

» Third Judges Case (1998): On a Presidential Reference the Supreme Court expanded the Collegium to a five-member body, comprising the CJI and four of his senior-most colleagues.

### **Probable Question:**

**Q.** "The system of judges appointing judges may dilute the accountability and reduce the transparency. "Critically Examine. Also mention the constitutional provisions for appointing judges in higher judiciary.

News Source: The Indian Express

### SC QUOTA FOR DALIT MUSLIMS AND CHRISTIANS

### Why in the News?

Several petitions are pending before the Supreme Court seeking Scheduled Caste (SC) reservation benefits for Dalits who converted to Christianity or Islam.

• Government is likely to set up a panel to study the status of Scheduled Castes converts to Christianity and Islam.

### Key Points:

### Background

- The Constitution (Scheduled Castes) Order,1950 under Article 341 stipulates that only persons from Hinduism, Sikhism or Buddhism can get a Scheduled Caste reservation.
- But, many petitions are pending in Supreme Court for SC reservation benefits for Dalits who converted to Christianity or Islam.
- The rationale behind giving reservations to SCs was that these sections had suffered discrimination, which was practised among Hindus.
- Brief timeline:
- » **1950:** Under **Art 341** of the Constitution the first order was issued in 1950 and covered only Hindus.
- » **1956:** Sikh communities were included among the beneficiaries of the SC quota.
- » **1990:** The government acceded to a similar demand from Buddhists of Dalit origin.

### Government's response:

• The Government of India is all set to constitute a National Commission to study the social, economic and educational status of members of Scheduled Castes or Dalits who converted to religions other than Hinduism, Buddhism and Sikhism. • The commission will also study the impact of adding more members to the current SC list.

### Panels set by the Government:

- The National Commission for Religious and Linguistic Minorities (Ranganath Mishra Commission) 2004:
- » It recommended that SC status should be completely de-linked from religion and it should be made fully religion neutral like scheduled Tribes.
- » However, the then government rejected the proposal on grounds that it was not substantiated by field studies.
- **Sachar committee:** It observed that the social and economic situation of Dalit Muslims and Dalit Christians did not improve after conversion.

### News Source: The Hindu

### **Probable Question:**

**Q.** Reservation for Dalits is not to undo economic backwardness, but as remedy for untouchability. Comment

### **EWS RESERVATION**

### Why in the News?

Recently, the Supreme Court decided to examine, whether The Constitution (103rd Amendment) Act, which introduced a 10 per cent quota for Economically Weaker Sections (EWS) violates the basic structure of the Constitution.

### **EWS, AS DEFINED**

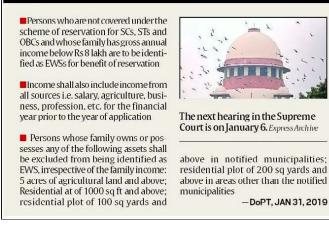


Image Source: Indian Express

### **Key Points:**

### **Background:**

- The EWS reservation was granted based on the recommendations of a **Major Sinhoo commission.**
- The commission, which was constituted in March

### 2005, submitted its report in July 2010.

 It recommended that all **below-poverty-line (BPL)** families within the general category, and also whose annual family income is below the taxable limit, should be identified as EBCs (economically backward classes).

### About the 103rd Constitution Amendment Act:

- The Constitution (103rd) Amendment Act 2019 provides up to 10 per cent reservation in employment and educational institutions.
- » It inserted clauses 15(6) and 16(6) in the Constitution.
- The amendment empowered both the centre and state governments to provide reservation on the basis of economic backwardness.
- Eligibility criteria:
- » People who are not covered under the existing reservations for BCs, SCs, STs and whose gross annual family income is below **Rs 8 lakh per annum**.

### Challenges to the 103rd Constitution amendment:

- Violates the basic structure of the Constitution: Special protections guaranteed to socially disadvantaged groups are part of the basic structure, and the 103rd Amendment provides special protections on the basis of economic status.
- Violates the SCs 1992 ruling in Indra Sawhney: The ruling upheld the Mandal commission report and capped reservations at **50 per cent.**
- » The court had held that economic backwardness cannot be the sole criterion for identifying a backward class.
- **Private and unaided educational institutions:** They have argued that their fundamental right to practise a trade/ profession is violated when the state compels them to implement its reservation policy.

### Government's stand:

- The government argued that under **Article 46 of the Constitution**, the state has a duty to protect the interests of economically weaker sections.
- The government said that "to sustain a challenge against a constitutional amendment, it must be shown that the very identity of the Constitution has been altered".
- On the Indra Sawhney principle, the government has relied on the SC's 2008 in which the court upheld the 27 per cent quota for OBCs.
- OBCs were not made on the sole criterion of caste but a mix of caste and economic factors.

### Additional Information:

- Article 15(6): It empowers states to make special provisions for the advancement of any EWS on their admission to educational institutions including aided or unaided private.
- Article 16 (6): It empowers the State to make any provision for reservation of appointments or posts in favour of any EWS in addition to the existing reservation and subject to a maximum of 10 per cent of the posts in each category.

### **Probable Question:**

**Q.** "Reservation in government services is not merely a tool of poverty alleviation but a comprehensive instrument of social justice. " In this context, discuss the various constitutional issues associated with 103rd Constituional amendment act.

News Source: The Indian Express

### FOUNDATIONAL LEARNING STUDY (FLS)

### Why in the News?

Recently, a nationwide Foundational Learning Study (FLS) was carried out jointly by the Ministry of Education and NCERT.

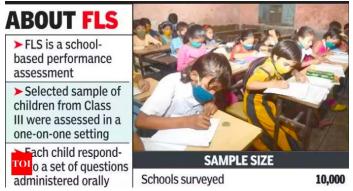


Image Source: Times of India

### Key Points:

### About Foundational Learning Study (FLS):

- **Conducted by:** Ministry of Education and the National Council of Educational Research and Training (NCERT).
- **Methodology:** The findings of the Foundational Learning Study (FLS) were based on one-to-one interviews with each participant.
- Key Findings:
- » **National:** 11% of students lack the most basic knowledge and skills.

- 37% of the students enrolled in Class III have "limited" foundational numeracy skills.
- » States: In numeracy, Tamil Nadu (29%) had the maximum number of students who could not complete the most basic grade-level tasks, followed by Jammu and Kashmir (28%), Assam, Chhattisgarh and Gujarat (18%).

### Significance of Findings:

• The findings will set the baseline for **NIPUN Bharat** (National Initiative for Proficiency in Reading with Understanding and Numeracy), the Centre's scheme to improve foundational learning.

### **Probable Question:**

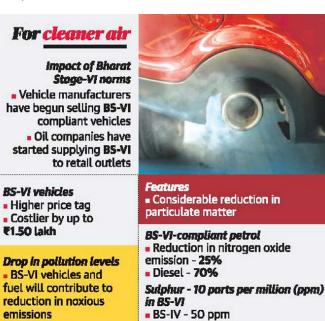
**Q.** In light of the findings of Foundational Learning Survey, discuss the significance of NIPUN Bharat initiative.

News Source: The Indian Express

### **BHARAT STAGE (BS)-VI NORMS**

### Why in the News?

Recently, The government has allowed retrofitment of CNG and LPG kits in petrol and diesel vehicles that are compliant with BS-VI emission norms.



We began supplying BS-VI fuel to retailers a fortnight ago. Machinery is being readied to increase the scale of production. Our plan is to ensure availability of cleaner fuel nationwide from March 1 onwards, a month before the norms take effect.

BPCL SOURCES

### Key Points:

- The BS-VI (BS6) vehicles has mandated from **April 1**, **2020**.
- Vehicle emission norms were introduced in India in **1991 for petrol** and in **1992 for diesel** vehicles.
- Since 2000, Euro norms are followed in India under the name **Bharat Stage Emission Standards.**

### Bharat stage (BS) Norms:

- Bharat stage (BS) emission standards were adopted to regulate air pollutants from the internal combustion engines, and engine equipment, including motor vehicles.
- They are based on **European regulations** that were first introduced in India in **2000.**
- They are set by the **Central Pollution Control Board** under the Ministry of Environment and Climate Change.
- In 2016 Indian government announced that it would skip the BS-V and adopt BS-VI norms by 2020.

### **Probable Question:**

**Q.** With the implementation of Bharat stage (BS) norms, the Graded Response Action Plan will be implemented in a more effective manner. Examine

News Source: The Hindu

### AADHAAR-VOTER ID LINKAGE

### Why in the News?

• The Election Commission (EC) recently launched a campaign to integrate Voter ID with Aadhaar.

### Key Points:

### Rationale behind the Aadhar-Voter ID Integration:

- To maintain an updated and accurate record of the voter base.
- To weed out duplication of voters, such as migrant workers
- Linkage of Aadhaar with voter IDs will assist in ensuring that only one Voter ID is issued per citizen of India.

### Is the linking mandatory?

- In December 2021, Parliament passed the **Election** Laws (Amendment) Act, 2021.
- It states that the electoral registration officer may

ask the citizens to furnish their Aadhar numbers for the purpose of authentication.

- To implement this amendment, in June 2022, the government notified changes to the **Registration of Electors Rules, 1960.**
- It provides that "every person whose name is listed in the roll may intimate his Aadhar number to the registration officer".
- To that extent, the element of choice has been incorporated in the amendments.

### **Challenges:**

- **Issues of disenfranchisement:** This can lead to voters being disenfranchised.
- » Nearly 55 lakh voters saw their names deleted from the voter list after voter IDs were linked to Aadhaar numbers in Telangana and Andhra Pradesh.
- Security concern: Lack of data protection law
- **Misuse of Information:** Potential of misuse of this information for voter profiling and targeted campaigning.
- Violate citizens' rights: Linking Aadhaar and voter IDs may also violate citizens' fundamental rights.

In 2017, the Supreme Court had laid down certain criteria that had to be met to restrict the right to privacy.

**Unconstitutional:** Voting is a constitutional right under **Article 326** that can only be restricted on grounds of non-residence, unsoundness of mind, crime or corrupt or illegal practice.

### Way Forward:

- It is important that the government clarifies that linking is not mandatory.
- Government should expedite the enactment of a data protection legislation that allays concerns of unauthorised processing of personal data held by the government.

### **Probable Question:**

**Q.** "Linking of Aadhar to voter id may strengthen electoral democracy but it may go against the principle of liberal democracy. " Critically Examine.

News Source: The Hindu



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### INDIA AND CELAC MEETING

### Why in the News?

Recently, the India-CELAC (Community of Latin American and the Caribbean States) Quartet Meeting was held on the sidelines of UNGA in New York.



Image Source: The Financial Express

### **Key Points:**

About

Community of Latin American and Caribbean States(CELAC)

- CELAC is a **regional forum**, an intergovernmental mechanism for dialogue and political agreement, that brings together all Latin America and Caribbean countries.
- » Caribbean Countries of CELAC:
  - Antigua and Barbuda, Grenada, Guyana, St. Lucia, Suriname, Trinidad and Tobago, Dominican Republic, Saint Kitts and Nevis, Saint Vincent and The Grenadines.
- CELAC **makes decisions by consensus** and is governed by rules adopted by the Heads of State and Government Summit in Caracas in 2011.
- As a conglomerate, CELAC is the third largest economy in the world with a GDP of around \$ 7 trillion dollars.

### Significance of CELAC for India:

- Strengthening of diasporic ties with the Caribbean.
- India could become a member of the **Inter-American Development Bank**, thus gaining access to greater credit facilities for Indian investors in Latin America.

### Important details of the New York meeting:

- Participants reviewed the status of the post-COVID pandemic economic recovery in trade, commerce, agriculture, food security, and logistics.
- Matters such as UN reforms and climate change were also discussed.

### **Probable Question:**

**Q.** India and Latin American and Carribean countries have many shared concerns, objectives and complementary goals. In this regard, Community of Latin American and Caribbean States(CELAC) can play as most leveraging pillar for the convergence of interset. Analyse.

News Source: MEA

### 38TH MEETING OF JOINT RIVERS COMMISSION OF INDIA AND BANGLADESH

### Why in the News?

Recently, the 38th Meeting of the Ministerial level Joint Rivers Commission of India and Bangladesh was held in New Delhi.



Image Source:newsonair.com

### **Key Points:**

About

Outcomes of 38th Meeting of Ministerial-level Meeting

- Finalization of
- » The **Memorandum of understanding** on **interim** water sharing of the Kushiyara river.
- » Location of water intake point on the Feni River, to meet the drinking water needs of Sabroom town in Tripura.
- 8 more rivers have been added for data exchange in developing the framework of water sharing agreements between the India-Bangladesh.
- Water sharing of common rivers.
- Sharing of flood data.
- Addressing river pollution.
- Conducting joint studies on sedimentation management.

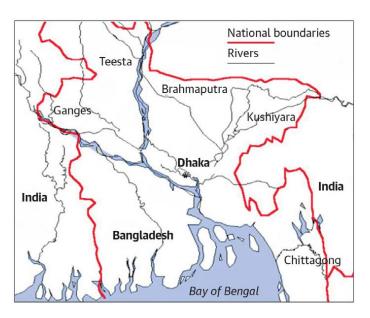
River bank protection works.

### Joint Rivers Commission of India and Bangladesh

- **1972:** The Joint Rivers Commission of India and Bangladesh was constituted as a bilateral mechanism to address issues of mutual interest on common / border / transboundary rivers.
- India and Bangladesh share 54 rivers, of which 7 rivers have been identified earlier for developing the framework of water sharing agreements on priority.

### The Kushiyara River:

- It is a distributary river in Bangladesh and Assam.
- It forms on the India-Bangladesh border as a branch of the Barak River, when the Barak separates into the Kushiyara and Surma.
- The waters of the Kushiyara thus originate in the state of Nagaland in India and pick up tributaries from Manipur, Mizoram and Assam.
- From its origin at the mouth of the Barak, also known as the Amlshid bifurcation point, the Kushiyara flows westward forming the boundary between Assam, India, and the Sylhet District of Bangladesh.



### Image Source: The Hindu

### Feni River:

- The Feni river, which forms part of the India-Bangladesh border, originates in the South Tripura district, and passes through Sabroom town on the Indian side.
- It meets the Bay of Bengal after it flows into Bangladesh

### **Probable Question:**

**Q.** Water diplomacy have remained the key focal pillar of Indo-Bangladesh relation. In this context , discuss the various mechanism of cooperation, regional stability, and peace over shared water resources between India and Bangladesh.

News Source: Press Information Bureau

### EASTERN ECONOMIC FORUM 2022

### Why in the News?

Recently, Prime Minister delivered a video address at Eastern Economic Forum 2022 being held in Russia's Vladivostok.

The **theme** for this year's forum is **"The Path to a Multipolar World".** 



### Key Points:

### About

### Eastern Economic Forum (EEF)

- 2015: The Eastern Economic Forum was established by a decree of the President of the Russian Federation, Vladimir Putin.
- The EEF is an international platform aiming to foster communication and cooperation between members of the business community, political figures, experts, and journalists from Russia and the Asia-Pacific region.
- It aims to support the economic development of Russia's Far East by encouraging foreign investment, and to expand international cooperation in the Asia-Pacific region.

### Russia's Far East Region:

- The Russian Far East stretches from Lake Baikal to the Pacific Ocean and comprises roughly a third of Russia's territory.
- Despite being rich in natural resources, it is an

economically underdeveloped region.

### India's Engagement with region:

- Although **India participated in EEF in 2019** for the first time, it is not new to the Russian Far East.
- **Primarily,** an **area of special interest for India** is the exploration of hydrocarbon reserves along the coast of Russia's the the Far East.
- In 2001 India's **Oil and Natural Gas Corporation** acquired a **20 per cent stake** in the **Sakhalin reserves.**
- India and Russia are also looking to open a maritime route linking Vladivostok with Chennai.
- » The Vladivostok route will **provide India with an alternative to the Suez Route** on which it currently depends for trade with Europe.

### **Probable Question:**

**Q.** Elaborate the scope and significance of India's Engagement with Russia's far east region.

News Source: The Indian Express

### **BANGLADESH'S PM VISITS INDIA**

### Why in the News?

Recently, Bangladesh Prime Minister Sheikh Hasina visited India.



Image Source: The Indian Express

### **Key Points:**

### Outcomes of Visit:

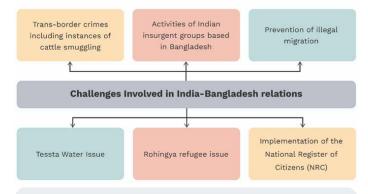
 India and Bangladesh will soon commence negotiations on a Bilateral Comprehensive Economic Partnership Agreement (CEPA).

### » Focus Areas of CEPA:

 Trade in goods, services, and investment and reduction of the trade gap between the two countries.

# What is the Comprehensive Economic Partnership Agreement (CEPA)?

- A partnership agreement or cooperation agreement is more comprehensive than a Free Trade Agreement.
- CEPA also looks into the **regulatory aspect of trade** and encompasses an agreement covering the regulatory issues.
- CEPA covers negotiation on the trade in services and investment and other areas of economic partnership.
- It may even consider negotiation in areas such as trade facilitation and customs cooperation, competition, and IPR.
- India has signed CEPAs with South Korea and Japan.
- India and Bangladesh signed seven Memorandum of Understandings (MoU) namely:
- » water sharing of the Kushiyara river.
- » Council of Scientific and Industrial Research (CSIR), India and Bangladesh Council of Scientific Industrial Research (BCSIR).
- » National Judicial Academy, Bhopal and the Bangladesh Supreme Court.
- » India will train personnel of Bangladesh Railways in the Indian Railways' training institutes.
- » **IT solutions** to Bangladesh Railways.
- » Bangladesh Television and Prasar Bharati.
- » **cooperation in space technology** and scientific and research collaboration.
- Inauguration of Rupsha rail bridge (5.13-km) which is a key part Khulna-Mongla Port single-track broad gauge rail project.
- **Development of Maitree Power plant** with Indian Development Assistance under the Concessional Financing Scheme.
- **Boosting Bilateral Rail Connectivity:** India would supply road construction equipment and machinery cross-border rail at Birol (Bangladesh)-Radhikapur (West Bengal).
- A Khulna-Darshana railway line link project



### **Brief Overview:**

### India- Bangladesh Cooperation

- Under **South Asian Free Trade Area (SAFTA)**, Bangladesh extends preferential tariffs to Indian exports of products outside the 'sensitive list' of 993 items.
- India is **Bangladesh's second biggest trade partner** and its largest export market in Asia.
- A **Protocol on Inland Waterways Trade and Transit (PIWTT)** has been in place since 1972 to facilitate trade and transit through inland waterways.
- Currently, four Border Haats two each in Meghalaya (Kalaichar and Balat) and Tripura (Srinagar and Kamalasagar) — are functional between India-Bangladesh.

### **Conclusion:**

- The **spirit of comradeship of 1971** remains the foundation stone of the two countries' ties.
- From having shared historical, social, and cultural affinities to working towards fulfilling common interests, India-Bangladesh ties have always been marked by the salient values of openness, mutual trust, cooperation, and mutual respect.
- **Bangladesh** is **central** to **India's "Neighbourhood First Policy"**, particularly given the outreach made by China through its Belt and Road initiative (BRI).
- Only **India's proactiveness** in South Asia would keep both China and Pakistan in check.

### **Probable Question:**

**Q.** Political stability and policy continuity have helped India and Bangladesh to deepen bilateral ties in the recent time ; Yet there are more to cooperate , converge and complement each other. Crticilay Examine.

News Source: The Indian Express

### **INDIA-JAPAN 2+2 DIALOGUE**

### Why in the News?

Recently, the 2+2 ministerial dialogue was held between India & Japan.

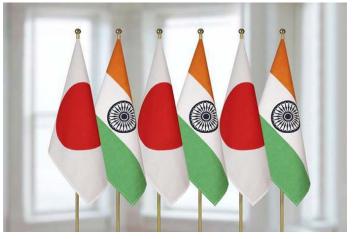


Image Source: The Hindu

Key Points: About

Key Outcomes,

### India-Japan 2+2 Ministerial Dialogue

- Both Countries expressed their:
- » Strong support for ASEAN's unity and centrality and their full support for the "ASEAN Outlook on the Indo-Pacific (AOIP).
- » Commitment to a rules-based global order
- » Commitment to a **common strategic goal** of achieving a free and open Indo-Pacific.
- » Agreement to launch the **Joint Service Staff talks** between the Japan Joint Staff and the Indian Integrated Defence Staff.

### Convergence of Interests: India and Japan

- India-Japan are constituent members of the G-4 grouping.
- Both countries have faced difficulties in recent times in their relationship with **China** due to latter **confronted policies.**
- India-Japan envisages making the **Indo-pacific multipolar**, free, open, and inclusive.
- India and Japan **share common ideals** like democracy, the rule of law, and human rights, in addition to the prevalence of complementarities that bind their economies.
- India is a **big market for Japanese companies** while in turn, Japanese companies bring investment to India boosting infrastructure and employment creation.

### **Challenges:**

- **Trade Potential:** The trade potential between India and Japan has not been realized its potential.
- » For Example, in 2017-18 the bilateral stood at a meagre of \$15.71 billion between India-Japan as compared to the Sino-Indian bilateral trade insane period which stood at \$84.44 billion in spite of the political tensions.
- Diverging Interests: India- Japan have divergent interests on economic issues such as **Regional** Comprehensive Economic Partnership.
- Balancing Act between QUAD and BRICS: India is a member of groups like the BRICS and QUAD.

### What are '2+2 talks'?

- **'2+2 talks'** is a **term adopted in foreign diplomacy** that implies a dialogue between two countries **defence** and **external affairs ministries.**
- It enables the partners to better understand and appreciate each other's strategic concerns and sensitivities taking into account political factors on both sides.
- It helps to build a stronger, more integrated strategic relationship in a rapidly changing global environment.
- India has 2+2 dialogues with **four key strategic partners:**
- USA
- Australia
- Japan
- Russia

### Way Forward:

- India's emergence as the fifth-largest as well as the fastest-growing economy in the world will definitely ensure further growth in strategic ties with Japan.
- Both Japan and India must exploit their natural complementarities:
- » Japan is a "hard" power with manufacturing prowess. India is "soft" power in IT and services.
- » Japan is short of the natural resources which India has. Japan has the capital. India has skilled labour.
- » Japan seeks markets. India has a flourishing huge domestic market.

### **Probable Question:**

**Q.** In the recent years,the dialogues held in the 2+2 format, have produced tangible and far-reaching results for India and have uplifted the the

strategic bilateral relationship with its partners. In this context explain the major outcome of **India-Japan 2+2 Ministerial Dialogue. Also** mention how this 2+2 dialogue will lead to more convergence between India and Japan?

News Source: The Indian Express

### **ABRAHAM ACCORDS**

### Why in the News?

Recently, Israel, the United Arab Emirates and Bahrain marked the second anniversary of the United Statesbrokered Abraham Accords.



Image Credits: The Hindu

### Key Points:

### About

### Abraham Accords:

- The Accords were called 'the Abraham Accords' as the three major monotheistic religions of the world, Islam, Christianity and Judaism, all find their roots in Prophet Abraham.
- Under the agreement, the UAE and Bahrain would normalise ties with Israel, starting a new phase of better economic, political and security engagement.
- As per the agreements, the UAE and Bahrain will establish embassies, and exchange ambassadors, with Israel.
- In return, Israel agreed to "suspend" its annexation plans for West Bank.

### Why was Abraham Accords were signed?

- Iran's growing influence in the region was a major factor in the signing of the Abraham accords.
- The coming together of Israel, the UAE, and Bahrain are being done so because of their shared worry over Iran's growing regional influence and ballistic missile development.

### Significance:

- These accords will boost cooperation in tourism, trade, healthcare and security among signatory countries.
- They also open the door for Muslims around the world to visit the historic sites in Israel and to peacefully pray at Al-Aqsa Mosque in Jerusalem.

### Implications for India:

- **Geopolitically,** India has **welcomed** the **establishment of diplomatic relations** between the UAE and Israel, calling both its strategic partners.
- The Abraham Accords provide the **atmospherics** for India **to foster stronger ties** with **Arabs** countries as well as **Israel.**
- In general, the Israel-Gulf Cooperation Council (GCC) normalisation of relations widens the moderate constituency for peaceful resolution of the Palestine dispute, **easing India's diplomatic balancing act.**

### **Probable Question:**

**Q.** The signing of the Abraham Accords and the subsequent normalisation of formal diplomatic relations among Israel, UAE and Bahrain have opened new vistas for India. Comment

News Source: The Indian Express

### **UN HIGH SEAS TREATY**

### Why in the News?

Negotiations involving 168 countries, including the European Union, to agree on a UN High Seas Treaty for protecting oceans failed.

### What are the High seas?

- The high seas are the vast open ocean and deep seabed areas found beyond any country's national jurisdiction.
- They hold great biodiversity but also remain the least-protected areas.

### **Key Points:**

### About

### **UN High Seas Treaty:**

- It is also referred to as the **'Paris Agreement for the Ocean'.**
- It is a proposed treaty **to deal with Biodiversity** Beyond National Jurisdiction.

- The treaty was to be negotiated under the **United Nations Convention on Laws of the Sea (UNCLOS)** of 1982.
- It concerns the ocean existing beyond the Exclusive Economic Zones, till where a country has special rights for exploration.
- Some aspects of negotiations under the treaty include establishing marine protected areas to put limits on certain activities such as:
- environmental impact assessments, financial support to countries and sharing other scientific knowledge.
- Conversely, every country has the right to access open seas, resulting in large-scale drilling and trawling operations for catching fish and other animals for commercial purposes.

### UNCLOS & Regulation of World's Oceans:

- UNCLOS governs the rights of countries regarding marine resources.
- It regulates the conduct on the high seas.
- It led to the establishment of territorial sea boundaries 22 km offshore, deciding the region up to which countries could claim full sovereign territorial rights.
- It also created the International Seabed Authority and other conflict-resolution mechanisms.
- But a treaty dedicated to protecting ocean health does not exist as of now.

### Exclusive Economic Zone (EEZ):

- An EEZ is a region in which a nation has special rights in terms of marine resource exploration and use.
- These regions are adjacent and beyond a country's territorial waters and do not extend beyond 200 nautical miles (nmi) from a nation's coast.
- These exclusive economic zones also include the continental shelf within the 200 nmi limit.

### **Probable Question:**

**Q.** Elaborate the scope and significance of the UN High Seas Treaty.

News Source: Hindustan Times

### **PRICE CAP PLAN ON RUSSIAN OIL**

### Why in the News?

Recently, the G 7 Finance Ministers agreed to impose a price cap on Russian oil.

### **Key Points:**

### About the Price cap plan:

- It is a form of economic regulation that establishes an upper limit on the prices that a utility provider can charge.
- The price cap plan is the latest of the sanctions proposed by Western countries against Russia.
- It is expected to be finalised when G-20 countries meet in Bali in November 2022.
- Members:
- » The G7 nations want to enlist other countries, including India and China.

### How will it be enforced?

- For countries that join the coalition would not buy Russian oil unless the price is reduced to where the cap is determined.
- For countries that don't join the coalition would lose access to all services provided by the coalition countries including, for example, insurance, and currency payment.

### Impact of Price Cap Plan:

- Control inflation globally
- **On Russia:** Russia would not supply "anything at all" if it contradicts Russian interests.
- » It will Hurt the Russian economy and its ability to fund the war in Ukraine.
- **On India:** So far, India has not obliged, and India's oil intake from Russia has soared 50 times over since the war started.

### About G7:

- It began as the Group of Six in 1975- with a meeting of leaders of US, UK, West Germany, Italy, France and Japan, as a result of the Oil crisis and global currency exchange issues.
- **Canada joined in 1976-** making it the G-7. The EU leadership is always invited to G-7 meets.
- In 1998, Russia was added to make it the G-8.
- However, after the Russian wars with Georgia in 2008, and the annexation of Crimea in 2014, the **club ousted Russia permanently.**

### **Probable Question:**

**Q.** The G7 price cap plan on Russian oil is a test for India's 'strategic autonomy' approach. Comment

News Source: The Indian Express

### INDIA, IRAN SIGN MOU FOR SMOOTH MOVEMENT OF SEAFARERS

### Why in the News?

 Recently, India and Iran signed a Memorandum of Understanding(MoU) on recognition of Certificates of Competency in Unlimited Voyages.

### **Key Points:**

- The MoU was signed as per the provisions of the International Convention on Standards of Training, Certification and Watch Keeping for Seafarers in 1978 (STCW).
- Significance of MoU:
- » Help seafarers from both countries as per the STCW.



### Image Source: World Atlas

### India - Iran Relations

### **Background:**

- India and Iran share close historical ties from the times of Persian Empire and Indian kingdoms.
- The two countries shared a border until India's partition and independence in 1947.
- In 1950 India and Iran established diplomatic relations.
- In 2001 and 2003, the Tehran and New Delhi

declarations were signed to enhance the strategic partnership between the two nations.

### Areas of cooperation:

**Political relations:** India and Iran signed a **friendship treaty on March 15, 1950.** 

• **Tehran Declaration:** The two countries signed the "Tehran Declaration" in 2001, which set forth the areas of possible cooperation between the two countries.

### **Economic links:**

- India-Iran economic and commercial ties have traditionally been buoyed by Indian import of Iranian crude oil.
- India's major exports: Rice, tea, sugar, soya, medicines/pharmaceuticals, man-made staple fibres, electrical machinery, etc.
- **Major imports:** Inorganic/organic chemicals, fertilisers, cement clinkers, fruits and nuts, leather, etc.

### Humanitarian Assistance:

- In 2020, India provided for 40,000 litres of Malathion 96% ULV pesticides to Iran via Chabahar port to mitigate locust threat to agriculture and enhance food security in the region.
- India delivered PPE kits and PCR machines during the COVID-19 crisis.

### **Connectivity Projects:**

- International transport and transit corridor **project:** This project initially conceived in 2003 was finally agreed to in 2016.
- Iran, India and Afghanistan signed the 'International Transport and Transit Corridor Agreement' in 2016 in Tehran(Iran).

### About Chabahar Port:

- Location: Chabahar port is located in Iran's southeastern Sistan and Baluchestan province on the edge of the Indian Ocean.
- It is the **only deep-sea port in Iran** with direct ocean access.
- **Important Commercial Hub:** It acts as a key transit center on the burgeoning International North-South Transport Corridor, giving it the potential to develop into one of the most important commercial hubs in the region.

### Significance of the Chabahar Port for India:

• To harness the trade opportunities by India with Central Asian countries.

- Increase in trade and shipment volume.
- Catalyst to unlock the huge trade potential in the region.
- Strengthen India's position as a regional and global power.
- Counter Chinese presence in the Arabian Sea which China is trying to ensure by developing the Gwadar port.



Image Source: cbnme.com

### Way Forward:

- India and Iran can revamp their worldview by using common identities and interests to carve a space for themselves in Afghanistan.
- With the Iran nuclear deal unlikely to come through soon, India may well consider restarting oil imports from Iran.
- India and Iran could play a major part in giving INSTC the required boost to reap benefits of resultant trade.
- India engagement with Iran could open a huge potential of cooperation between these two great nations and civilizations. Time is therefore ripe for a reset.

### **Probable Question:**

**Q.** Chabahar port is now not a stand-alone initiative, it has become a focal point in the entire INSTC framework besides serving India's strategic objective to counter China's Belt and Road Initiative. Comment

News Source: The Hindu



### NATIONAL TECHNICAL TEXTILES MISSION (NTTM)

### Why in the News?

• The Ministry of Textiles has launched several strategic research projects under the flagship programme 'National Technical Textiles Mission (NTTM).

### **Key Points:**

• **Projects areas:** Speciality fibres, sustainable textiles, geotextiles, mobiltech and sports textiles.

### About National Technical Textiles Mission:

- It was launched in 2020 (for a period of 2020-2024) with the goal of making India a global leader in technical textiles and increasing their use.
- Ministry: Ministry of Textiles
- » Presently, India shares only 6% of the world market and the usage level is only 5-10% (usage in advanced countries 30-70%)



### What are technical textiles?

- Textile materials that are manufactured for their technical performances and functional properties rather than aesthetic and decorative features fall under the technical textiles category.
- Technical textiles have applications across various industries including automobiles, civil engineering and construction, agriculture, healthcare, industrial safety, personal protection etc

### **Probable Question:**

• Q. What are the challenges faced by Technical Textiles as a Sunrise Sector In Indian Textile Industry?

### PLI SCHEME FOR SOLAR CELL MANUFACTURING

### Why in the News?

Recently, the Union Cabinet approved the Production Linked Incentive (PLI) Scheme on 'National programme on High-Efficiency Solar PV Modules'.



### Image Source: The Hindu

### **Key Points:**

- India has international climate commitments, to a target of installing 5,00,000 MW of electricity from non-fossil fuel-based sources by 2030.
- PLI will be disbursed for 5 years post commissioning of solar PV manufacturing plants.
- Nodal body: Ministry of New and Renewable Energy

### **Benefits:**

- Reduce the industry's reliance on China-made panels.
- Create direct employment
- give impetus to research and development to achieve higher efficiency.
- Allow import substitution of Rs. 1.37 lakh crore approx.
- strengthen the Atamnirbhar Bharat initiative
- Secure energy security through renewable sources of energy

### **Challenges:**

- No Common Set of Parameters
- Target for Companies for Incentives too Steep
- Domestic Companies Relied on One or Two Supply Chains

### About Production Linked Incentive (PLI) Scheme:

It was launched by central government in 2020 to

News Source: PIB

boost domestic manufacturing and cut import bills and employment generation.

It aims to give companies incentives on incremental sales from products manufactured in domestic units.

### About Solar PV modules:

- Solar PV modules are created by joining together solar cells with photovoltaic (PV) cells.
- They are produced using semiconductors like crystalline silicon.
- Solar modules transform solar energy into electric energy.

### **Probable Question:**

**Q.** To what factors can be the recent dramatic fall in equipment costs and tariff of solar energy be attributed? What implications does the trend have for thermal power producers and related industries? (UPSC 2015)

News Source: The Indian Express

### CRIMINAL PROCEDURE (IDENTIFICATION) ACT, 2022

### Why in the News?

Recently, The Ministry of Home Affairs (MHA) has notified the rules governing The Criminal Procedure (Identification) Act, 2022



### Image Source: opindia

### **Key Points:**

### About the Act:

• The act replaced the 102-year-old Identification of Prisoners Act, 1920.

**Provision of the Act:** 

- **Collection of Samples:** would enable police and central investigating agencies to collect, store and analyse physical and biological samples including retina and iris scans of arrested persons.
- » Some of the measurements are finger impressions, palm-print impressions, foot-print impressions, photographs, iris and retina scans, and physical, and biological samples, behavioural attributes including signatures, handwriting.
- Who is covered under the Act: It widens the ambit of such persons to include all convicts, arrested persons, as well as persons detained under any preventive detention law.
- **Retention of details:** The Act requires the details collected to be retained in digital or electronic form for **75 years from the date of collection.**
- » Information about **first-time offenders** will be deleted after all legal remedies have been exhausted.
- » The **National Crime Records Bureau** under the Union Ministry of Home Affairs, will **collect, store, process**, share and destroy the data.
- **Powers of Magistrate:** Magistrate may direct a person to give details for the purpose of an investigation or proceeding under the CrPC.
- Rule-making power extended to the central government: The 1920 Act vested rule-making power only in the state government.
- » It extends this power to the central government as well.

### Significance:

- It will help the investigating agencies **to obtain necessarylegallyadmissible evidence** and establish the crime of the accused person.
- It will **minimise the threat from organised crime**, **cybercriminals and terrorists** who are proficient in identity theft and identity fraud.

### What are the concerns?

- Selvi Vs State of Karnataka: The Supreme Court had held that investigative techniques when taken against a person's consent would infringe the fundamental right against self-incrimination guaranteed by Article 20(3) of the Constitution and the right to life guaranteed under Article 21 of the Constitution.
- It could also violate a **person's right to privacy.** Currently, India does not have a data protection law.
- » In such a scenario, the collection of such extensive data by the police also raises questions on how this data might be used.
- It can be misused / a mix-up of samples could result in the conviction of the wrong person. DNA evidence

is not 100% accurate.

### Probable Question:

**Q.** The Criminal Procedure (Identification) Act, 2022, gives police the legal authority to obtain physical and biological samples from convicts and detainees. Do you think it violates the Right to Privacy? critically analyze

News Source: The Hindu

### **PM KAUSHAL VIKAS YOJANA**

### Why in the News?

• PM inaugurates four Particularly Vulnerable Tribal Groups skilling centres under PM Kaushal Vikas Yojana.

### **Key Points:**

### About Particularly Vulnerable Tribal Groups (PVTG):

- Particularly Vulnerable Tribal Groups (PVTG) are specially identified tribal groups that are more vulnerable among the tribal groups
- The Particularly Vulnerable Tribal Groups are identified on the basis of: -
- » Pre-agricultural level of technology,
- » Low level of literacy,
- » Economic backwardness,
- » A declining or stagnant population.
- They were first identified by **Dhebar Commission in 1973** and created Primitive Tribal Groups as a separate category.
- In 2006, the government renamed as PVTGs.
- At present, **75 tribal groups** are listed as PVTGs. E.g. Chenchu, Birhor, Asur, Jarawa, Onge etc.

# About Prime Minister Kaushal Vikas Yojana (PMKVY):

- It was launched in **2015 by the Ministry of Skill Development & Entrepreneurship (MSDE).**
- Implemented by: National Skill Development Corporation.
- It is a skill certification scheme that aims to enable youths to take up industry-relevant skill training for a better livelihood.

### Probable Question:

**Q.** Who are Particularly Vulnerable Tribal Groups(PVTGs)? What are the issues faced by them? Also mention the measures taken by the government to address these issues.

News Source: PIB

### **PM PRANAM SCHEME**

### Why in the News?

The Union government plans to introduce a new scheme – **PM PRANAM**, which stands for **PM Promotion of Alternate Nutrients for Agriculture Management Yojana.** 

### **Key Points:**

About

### **PM PRANAM**

- **Objective:** To reduce the subsidy burden on chemical fertilisers.
- Budgetary Allocation:
- » There will be no separate budget for the PM PRANAM scheme.
- » It will be financed through the -" savings of existing fertiliser subsidy" provided by the department of fertilisers under various schemes.

### Why has PM PRANAM been launched?

- It is estimated that the burden of chemical fertilisers subsidy has reached Rs 2.25 lakh crore in 2022-23.
- Government does not have enough financial resources to sustain such a subsidy burden.
- This scheme is also in line with the government's focus on promoting the balanced use of fertilisers or alternative fertilisers in the last few years.

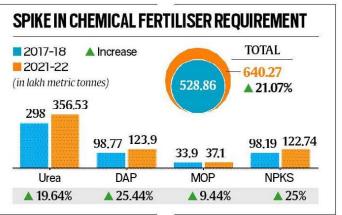


Image Credits: The Indian Express

### **Utilising Subsidy Savings**

- 50% subsidy savings will be passed on as a grant to the state that saves the money.
- 70% of the grant provided under the scheme can be used for **asset creation** related to the technological adoption of alternate fertilisers and alternate fertiliser production units at the village, block and district levels.
- The remaining 30% of grant money can be used for incentivising farmers, panchayats, farmer producer organisations and self-help groups that are involved in the reduction of fertiliser use and awareness generation.

### **Probable Question:**

Q. The PM PRANAM scheme is a step in the right direction for envisaging the vision of sustainable agriculture. Discuss

News Source: The Indian Express

### **PM SCHOOLS FOR RISING INDIA (PM-**SHRI)

### Why in the News?

Recently, the Union Cabinet approved the PM SHRI scheme to turn existing government schools into model schools for implementation of the National Education Policy, 2022.



Total Central share will be Rs. 18128 crore

Image Source: PIB

f @EduMinOfIndia

**Key Points:** About **PM-SHRI** 

- Under the scheme, 14,500 schools across India's states and Union Territories will be redeveloped to reflect the key features of the New Education Policy(NEP), 2020.
- Nodal Ministry: Ministry of Education
- . Nature: Centrally Sponsored Scheme
- Time Period: 2022-23 to 2026-27.
- **Budget:** ₹ 27,360-crore
- . It will be application-based, which means states will have to identify schools for upgradation under the scheme.
- Selection Methodology:
- Selection of PM SHRI schools will be done through Challenge Mode wherein Schools to self-apply on the online portal.
- Maximum two schools would be selected per block or Urban Local Bodies.
- Elementary, secondary, and senior secondary » schools managed by centre, state and UT governments, local bodies having Unified District Information System for Education (UDISE) code will be considered for selection under the scheme.

### **Centrally Sponsored Scheme:**

- A Centrally sponsored scheme is one in which the cost of implementation is mostly split in a 60:40 ratio between the Union government and the states/UTs.
- In the case of the Northeastern states. Himachal Pradesh, Uttarakhand, Jammu and Kashmir, and UTs without legislatures, the Centre's contribution can go up to **90 per cent.**

### How PM SHRI schools will be different from existing government-run schools?

- Energy-efficient infrastructure and integration of organic lifestyle in the curriculum.
- These schools will also "offer mentorship" to other schools in their vicinity.
- To be developed as Green Schools.
- Special modules on improving foundational literacy and numeracy.
- Linkage of schools with higher education institutions for mentoring.
- Provisions for internships with local artisans.
- Pedagogy adopted in these schools will be more experiential, holistic, integrated, play/ toy-based (particularly, in the foundational years) inquiry-

driven.

- Focus will be on the learning outcomes of every child in every grade.
- Assessment at all levels will be based on **conceptual understanding and application of knowledge** to real-life situations and will be competency-based.
- Linkage with Sector Skill Councils and local industry for enhancing employability and providing better employment opportunities will be explored.
- A School Quality Assessment Framework (SQAF) is being developed, specifying the key performance indicators to measure outcomes.

### Implementation strategy

 PM SHRI Schools would be implemented through the existing administrative structure available for Samagra Shiksha, Kendriya Vidyalaya Schools & Navodaya Vidyalaya Samiti.

### Significance:

- The PM SHRI schools will deliver quality teaching for the cognitive development of students.
- They will strive to create and nurture holistic and well-rounded individuals equipped with key 21st-century skills.
- The institutions developed under PM SHRI will become "model schools" and will be in the full spirit of NEP.

### **Probable Question:**

• Q. The linkage of Sector Skill Councils with local industry under PM- SHRI scheme will be helpful in enhancing the employability of youth with better employment opportunities. Comment

News Source: Press Information Bureau

### WOMEN IN ENGINEERING, SCIENCE, AND TECHNOLOGY (WEST)

### Why in the News?

Recently, the Centre launched **Women in Engineering, Science, and Technology (WEST)**, as part of a new **I-STEM (Indian Science Technology and Engineering facilities Map)** initiative.

### Key Points:

### About

### WEST Initiative

• Under the WEST initiative, the current support being provided to S&T startups by women entrepreneurs

by I-STEM will be enhanced.

- The WEST programme will cater to women with a STEM background.
- » STEM is an acronym for the fields of science, technology, engineering and Mathematics.
- It will empower women to contribute to the science, technology, and innovation ecosystem.
- Through the WEST initiative, I-STEM shall provide a separate platform for scientifically inclined women researchers and scientists for pursuing research in basic or applied sciences.
- This effort will also assist women who have taken a professional break in S&T fields to return.

### I-STEM Web Portal:

- It is an initiative of the Office of the Principal Scientific Adviser.
- I-STEM is a **national web portal** for sharing research equipment/facilities.
- Through the I-STEM platform, women can start their own businesses and work as consultants for the upkeep and operation of expensive equipment and devices.
- The portal facilitates researchers to access slots for the use of equipment, as well as to share the details of the outcomes, such as patents, publications and technologies.



Image Source: Vikaspedia

### **Probable Question:**

**Q.** Assess the impact of the WEST Initiative in empowering women to contribute to the science, technology, and innovation ecosystem.

News Source: The Indian Express

### PRADHAN MANTRI TB MUKT BHARAT ABHIYAN

### Why in the News?

 Recently, the Ministry of Health and Family Welfare (MOHFW) launched the **'Pradhan Mantri TB Mukt** Bharat Abhiyan to eliminate TB by 2025.

### Key Points:

### About

### Pradhan Mantri TB Mukt Bharat Abhiyan

### **Components:**

- "Ni-kshay" Portal: A portal was launched to adopt TB patients.
- » It can be used by Individuals, NGOs and others.
- **Ni-kshay Mitras initiative:** The Ministry of Health announced **"adopt a TB-patient" (Ni-kshay Mitras)** initiative.
- » Ni-kshay Mitra would provide additional support to all the on-treatment TB patients.
- » **Ni-kshay Mitra includes** Co-operative societies, corporates, individuals and others.
- » Only individual Ni-kshay Mitra can choose the patients from a given health facility.
- » The other Ni-kshay Mitras have to choose the entire geographical unit (blocks/urban wards/districts/ States).

### Additional support:

- Nutritional support
- Additional investigations for the diagnosed TB patients,
- Vocational support
- Time: 1-3 years.

### Significance

Increase the active involvement of society in the fight against tuberculosis.

Increase awareness

Reduction of the stigma

Reduction of the out-of-pocket expenditure for the family of the TB patient.

Improved nutrition for the TB

### **About Tuberculosis**

• It is an airborne communicable disease caused by the bacteria bacillus Mycobacterium

tuberculosis.

- **Mode of transmission:** Airborne and therefore through coughing, sneezing or spitting.
- **Prevention:** BCG vaccine for children, currently no effective vaccine for adults
- **Treatment:** DOTS strategy (Directly observed Treatment Short Course) is a WHO-recommended cost-effective strategy.

### **TB** incidence in India

• India has the **world's highest tuberculosis** (**TB**) burden, with an estimated 26 lakh people contracting the disease and approximately 4 lakh death every year.

### Initiatives:

1962	The <b>National TB Programme (NTP)</b> was launched by the Government of India with BCG vaccination and TB treatment.
1993.	The Government of India revitalized NTP as <b>Revised National TB Control</b> <b>Programme (RNTCP).</b>
2017	National Strategic Plan for TB Elimination 2017-2025:
	<ul> <li>RNTCP has released a 'National strategic plan for tuberculosis 2017- 2025' (NSP) for the control and elimination of TB in India by 2025.</li> </ul>
2020	The <b>Revised National Tuberculosis</b> <b>Control Programme (RNTCP)</b> has renamed the <b>National TB Elimination</b> <b>Program (NTEP).</b>
	• It aims to reduce the TB burden in India by 2025, five years ahead of the Sustainable Development Goals.

### Probable Question:

**Q.** India's National TB Elimination Programme is strengthened to meet the goal of ending the TB epidemic by 2025 from the country, with the launch of 'Pradhan Mantri TB Mukt Bharat Abhiyan'. Examine

News Source: The Hindu

### **DOMICILE-BASED JOB QUOTA**

### Why in the News?

 Recently, the Jharkhand assembly passed "The Jharkhand State Employment of Local Candidates Bill, 2021".

### **Key Points:**

- It provides **75% reservation** for local people in the private sector up to **₹40,000 salary a month.**
- **Jharkhand** will become the **third State** in the country, after Andhra Pradesh and Haryana, to pass such a law.

### Concerns and issues associated with this policy:

- It violates the constitutional guarantee of every citizen to work.
- Impacts 'Unity in Diversity'
- It may discourage capital investment in the region.
- Impacts freedom of a business.
- Against the competitive spirit.
- The burden of imparting the required skills and employing locals will fall on the industrial units

### Other states with similar legislation:

- In 2019, Andhra Pradesh passed such a law
- In 2022 Haryana passed a law, reserving 75% quota for the local people in private jobs with monthly salary less than ₹50,000.

### **Probable Question:**

**Q.** Discuss issues related to Jharkhand's decision to reserve 75% of private jobs.

News Source: The Hindu

### JHARKHAND CABINET APPROVED 'LOCAL RESIDENT OF JHARKHAND BILL' 2022

### Why in the News?

 Recently, the Jharkhand cabinet approved two bills, one 'Local Resident of Jharkhand Bill' 2022 and another bill to increase reservation in jobs for socially and economically weaker sections to 77%.

### **Key Points:**

### About the Bill:

- The current domicile policy had fixed 1985 as the base year to determine the domicile of Jharkhand.
- The new bill kept 1932 as the cut-off year for "proof of land records" for defining a local.
- The second bill proposes to increase reservation in state jobs for the socially and economically weaker sections of the society from 60% to 77%.
- This would take the total reservation beyond the 50% quota, which is why the state want centre to include

them in the Ninth Schedule of the Consitution.

A law in the Ninth Schedule is shielded from judicial review.

### Why did the draft bill choose 1932 year?

• The living conditions of the tribal community have been negatively impacted due to pre and post 1932 migration of people from other states to Jharkhand (erstwhile Bihar).

### **Probable Question:**

**Q.** The Approval of 'local Resident Of Jharkhand Bill' 2022 has the potential to fuel the Son of Soil theory. Comment

News Source: The Hindu

# THE COMPETITION (AMENDMENT) BILL, 2022

### What is the News?

Recently, the Competition (Amendment) Bill, 2022 was introduced in the Lok Sabha.

### **STRONGER COMPETITION LAW**

Salient Features of Competition (Amendment) Bill, 2022

- Permit CCI to seize documents and records during probes
- CCI approval needed if value of the transaction over Rs 2,000 crore
- Assessment in 150 days
- Reduce litigations through penalty
- Incentivise parties during an investigation with lesser penalty

### Key Points:

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- The Bill seeks to amend the **Competition Act, 2002**.
- Amendments became necessary to sustain and promote market competition to address the needs of new-age markets.
- A review committee was established in 2019 which proposed several major amendments.

### Key features of the Bill:

Some of the major amendments include

- The Act empowers the central government to appoint a Director General to CCI.
- Permit CCI to seize documents and record during probes.
- Assessment in 150 days
- Reduces litigations through penalty
- Incentivise parties during an investigation with lesser penalty

### **Conclusion:**

• By implementing these amendments, the Commission would be better equipped to handle certain aspects of the new-age market and transform its functioning to be more robust.

### About the Competition Commission of India (CCI):

- It is a **statutory body** of the Government of India responsible for enforcing the Competition Act, 2002.
- It was duly constituted in March 2009.
- The **Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act)** was repealed and replaced by the Competition Act, 2002, on the recommendations of the Raghavan committee.
- The National Company Law Appellate Tribunal (NCLAT) shall be the Appellate Tribunal for the purpose of this Competition Act 2002.

### **Probable Question:**

**Q.** Critically examine the significance of the Competition Commission due to the changing dynamics of the market.

News Source: The Hindu

# **BATTERY WASTE MANAGEMENT RULES,** 2022

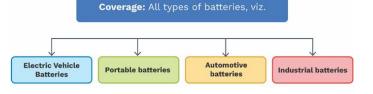
### Why in the News?

Recently, the Ministry of Environment, Forest and Climate Change notified the Battery Waste Management Rules 2022.

• It will replace **Batteries (Management and Handling) Rules, 2001.** 

### Key Highlights:

• **Objective:** To ensure environmentally sound management of waste batteries.



### The salient feature of the rules:

- **Extended Producer Responsibility (EPR):** It is based on the concept of Extended Producer Responsibility (EPR) where the producers (including importers) of batteries are responsible for collection and recycling/refurbishment.
- **Online Portal:** Online registration & reporting, auditing, and committee for monitoring the implementation of rules.
- **New Industries:** The rules promote setting up of new industries and entrepreneurship in collection and recycling/refurbishment of waste batteries.
- **Compensation:** Environmental compensation will be imposed for non-fulfilment of Extended Producer Responsibility targets.
- **Utilisation of Funds:** The funds collected under environmental compensation shall be utilised in collection and refurbishing or recycling of uncollected and non-recycled waste batteries.

### Significance:

- Bring new technologies and investment in recycling and refurbishment industry.
- Create new business opportunities.
- Reduce the dependency on new raw materials
- Save natural resources.

### **Probable Question:**

**Q.** What is Extended Producer Responsibility (EPR) in the context of Battery Waste Management Rules 2022?

News Source: The Hindu

### FOREIGN EXCHANGE MANAGEMENT (OVERSEAS INVESTMENT) RULES, 2022

### Why in the News?

Recently, the **Ministry of Finance** released the Foreign Exchange Management (Overseas Investment) Rules, 2022.

 It subsumed the extant regulations for Overseas Investments and Acquisition and Transfer of Immovable Property Outside India Regulations, 2015.

### **Key Points:**

- Current overseas investment in India is governed by:
- » **The Foreign Exchange Management** (Transfer or Issue of Any Foreign Security) Regulations, 2004 and
- » **The Foreign Exchange Management** (Acquisition and Transfer of Immovable Property Outside India) Regulations, 2015.

### Need for the new rules:

- Evolving needs of businesses in India
- Increasingly integrated global market
- Increasing need of Indian corporates to be part of the global value chain

### What are the new rules?

- **No-Objection Certificate:** Any Indian **wilful defaulter** have to seek a no objection certificate before making any overseas financial commitment.
- Annual Performance Report (APR): Any resident in India acquiring equity capital in a foreign entity have to submit an Annual Performance Report (APR) for each foreign entity, every year.
- Liberalised Remittance Scheme- Any resident individual can make overseas direct investment (ODI) by way of investment in **equity capital** subject to overall ceiling under Liberalised Remittance Scheme.
- **Prohibitions-** The new rules prohibit making investments into foreign entities that are engaged in **real estate and gambling** in any form.

### **Probable Question:**

**Q.** The Foreign Exchange Management (Overseas Investment) Rules, 2022 are in sync Increasing need of Indian corporates to be part of the global value chain. Assess

News Source: The Indian Express

### SCHEME FOR ECONOMIC EMPOWERMENT OF DENOTIFIED, NOMADIC, SEMI-NOMADIC (SEED)

### Why in the News?

Recently, the **Ministry of Social Justice** has received several applications online for benefits under the Scheme for Economic Empowerment of Denotified, Nomadic, Semi-nomadic (SEED) Tribes.

### **Key Points:**

### About

### Scheme for Economic Empowerment of DNTs (SEED):

- It is an **umbrella scheme** for empowering Denotified, Nomadic and Semi Nomadic Communities (DNTs, NTs, SNTs).
- **Timeline and Fund:** Rs.200 crore to be spent over five years beginning 2021-22.
- **Implementing agency:** Development and Welfare Board for DNTs, SNTs & NTs (DWBDNC)

### Components of the SEED:

Educational empowerment: Free coaching to students for these communities for civil services, entry to professional courses like medicine, engineering, MBA, etc.

Health Insurance: Through PMJAY of National Health Authority.

Livelihood to support income generation, and

Housing (through Pradhan Mantri Awas Yojana PMAY/IAY)

### Feature of this scheme:

- Online Portal: Online portal has been developed to ensure seamless registration and will also act as a repository of the data on these communities.
  - It will provide real-time status of the application to the applicant.

### About DNT/NT/SNT

- De-notified Tribes (DNTs), Nomadic Tribes (NTs) and Semi-Nomadic Tribes (SNTs) are one of the most deprived and economically weaker communities in India.
- De-notified Tribes stand for those communities which were notified as 'born criminals' under Criminal Tribes Act (CTA) 1871.
- Post-independence, CTA, 1871 was repealed, and these communities were **"De-Notified"**.
- It was replaced with the Habitual Offenders Act, 1952.
- **Population:** More than 10 crores from 1,400 communities.

### **Probable Question:**

**Q.** Discuss the role of the National Commission for Denotified, Nomadic and Semi-Nomadic Tribes in empowering De-notified, Nomadic and Semi Nomadic Communities.

News Source: The Indian Express



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## **HUMAN DEVELOPMENT INDEX**

## Why in the News?

• India has been ranked 132 out of 191 countries in the Human Development Index(HDI) 2021.

## Key Points:

## About

## Human Development Index

- HDI is part of the Human Development Report 2021-2022 released by the **United Nations Development Programme.**
- HDI is a composite index that measures average achievement in human development taking into account **four indicators:**
- » Life expectancy at Birth
- » Expected years of Schooling
- » Mean years of Schooling
- » Gross National Income (GNI) per capita

#### Human Development Index 2021-22 \*Gross national income **THEME: Uncertain** 1 P 6 3 TP **Times, Unsettled Lives:** Life Expected Mean GNI\*\* per **Shaping our Future** years of expectancy capita years of at birth schooling schooling in a Transforming World (Health×Education ×Income) HDI =<u>Answer/score is</u> WHERE NEIGHBOURING COUNTRIES STAND HDIVALUE Sri Lanka 73 0.633 0.732 79 China India World 127 Bhutan score ke हिसाब से rank is 129 Bangladesh INDIA'S RANK 143 Nepal 132 130 Pakistan 161 in 2021 in 2020 TOP 5 COUNTRIES BOTTOM 5 South Sudan Switzerland 191 1 190 Chad 2 Norway Niger 3 Iceland 189 188 CAR 4 Hong Kong Burundi 5 Australia 187

## Image Credits: Mrunal.org

## India's Performance:

- India's rank on the Human Development Index has slipped from 130 in 2020 to 132 in 2021.
- » It is in line with a global fall in HDI scores in the wake of the Covid-19 pandemic, the Ukraine -Russia War.

## **Significance of HDI**

- HDI helps the **policy-makers** to focus on the usual economic statistics of development to human outcomes.
- It **re-emphasizes** that people and their capabilities should be the **ultimate criteria for assessing the development of a country,** not economic growth.

## Objectives of the Human Development Report:

- Advancement of human development
- Global expansion of people's options, choices, and freedom
- An introduction to innovative thinking in human development
- Advocacy of concrete policy reforms
- Contesting the practises and principles that restrict human development

## **Probable Question:**

**Q.** Examine the significance of Human Development Index in policy making.

News Source: The Hindu

## WORLD SOCIAL PROTECTION REPORT 2021-22

## Why in the News?

Recently, **International Labour Organisation (ILO)** released a report titled 'World Social Protection Report 2020-22: Regional companion report for Asia and the Pacific'.



Image Source: ILO

## Key Points:

## **Key Findings:**

## Global:

- **Social Protection Benefit:** Mongolia, New Zealand, Singapore and Australia have 100 per cent social protection net.
- » As of 2020, only **46.9 % of the global population** was effectively covered by at least one social protection benefit.
- **Gender Inequality:** Women's coverage lag behind men's by a substantial 8 percentage points.
- Working-age population: 69.4 percent are only partially protected or not protected at all.

## India's Specific:

- Only **24.4 per cent** of Indians, even fewer than Bangladesh (28.4 per cent), are under any sort of social protection benefit.
- India's social security spending is Lower than **5% of GDP per capita.**

## **Recommendation:**

• Follow a 'high-road' development approach and make social protection more inclusive while supporting greater growth.

## What is Social Protection?

- Social protection helps people through the shocks and stresses of life providing income replacement and access to services where they are needed most.
- » It includes measures related especially to old age, unemployment, sickness, disability, work injury and maternity etc.

## Few Government steps:

- Social Security Code 2020
- PM Garib Kalyan Ann Yojana (PMGKAY)
- One Nation One Ration Card
- Atmanirbhar Bharat Rozgar Yojana, and
- MGNREGA
- Pradhan Mantri Jan Aarogya Yojana (PM-JAY)

## About International Labour Organisation (ILO):

• 1919: It was established **by the Treaty of versailles.** 

- 1946: It became **specialized agency** of the United Nations.
- It is the only tripartite UN agency which brings together governments, employers and workers of **187 member States.**
- It sets labour standards, develops policies and devises programmes promoting decent work.
- Headquarters: Geneva, Switzerland.

## **Probable Question:**

**Q.** Universalisation of social security remains an unfulfilled aspiration. Comment

News Source: The Indian Express

## OXFAM INDIA'S DISCRIMINATION REPORT 2022

## Why in the News?

Recently, Oxfam India's released the 'India Discrimination Report 2022.



## "Gender-based discrimination is the reason for 98% of the employment gap between salaried males and females in urban areas."

India Discrimination Report 2022

## Image Source: The Quint

## Key Points:

- Discrimination in the labour market is when people with identical capabilities are treated differently because of their identity or social backgrounds.
- **Source of Data:** The report's findings are based on Government of India data on employment and labour from 2004-05 to 2019-20.

**Key findings:** 

## Women:

LFPR Particip:	(Labour ation Rate)	Force	2004-05	2021
Women			42.7%	25.1%

This shows the withdrawal of women from the workforce despite rapid economic growth during the same period.

• Overall discrimination in wages for people from SC, ST and Muslim communities declined in regular/ salaried jobs, it increased for women in this period – from 67.2% in 2004-05 to 75.7% in 2019-20.

## SC/ST:

- In 2019-20, the average income for people from SC or ST communities with regular employment in urban areas was Rs 15,312 compared to Rs 20,346 for those from the 'general' category.
- This means the general category is earning 33% more than SCs or STs.

## **Muslims:**

• In 2019-20, 68.3% of Muslims in urban areas faced

discrimination, up from 59.3% in 2004-05.

## **Reasons for Discrimination:**

- Gender-based discrimination is the reason for 98 percent of the employment gap.
- 'societal and employers' prejudices" for women's lower wages.
- Poor access to education or employment.

## **Conclusion:**

- The fallout of discrimination in Indian society is not just social and moral but also economic, leading to adverse consequences to society.
- The government, political parties, policymakers and civil society must work together to build a discrimination-free India.

## **Probable Question:**

**Q.** Suggest measures to increase the participation of Indian women in the workforce.

News Source: The Indian Express



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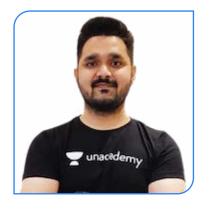


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\*Source: The Indian Edtech Story, Q1 2022 Round-Up by Markelytics. \*\*T&C Apply.





**By: Arpit Sharma** 

# INDIA NOW THE FIFTH LARGEST ECONOMY OF THE WORLD TOPPLING UK

- India has surpassed the United Kingdom to become the fifth largest economy in the world, according to Bloomberg Report. India overtook the UK in the final three months of 2021 to become the fifth-largest economy, pushing the UK to the sixth spot for the second time after it had done the same in 2019. As we know that India is Import based economy and but now statistics are changing and now we are having a paradigm shift towards a self-sufficient and export based economy which will benefit our forex reserves and economic development and for becoming a global player in the long run.
- According to the report, the size of the Indian economy in 'nominal' cash terms in the quarter through March was \$854.7 billion while the UK was \$816 billion. This was an adjusted basis and using the dollar exchange rate on the last day of the relevant quarter.
- The report comes just two days after the government put out the GDP data for the first quarter according to which the Indian economy grew at 13.5 per cent year-on-year. While this number was little lower than what the RBI had forecast, the growth rate was still highest among the developing countries. India is projected to grow at about 7 per cent this fiscal.
- But I would like to highlight that still we are lacking behind in the per capita income with comparison to United kingdom.Need of the hour is inclusive growth and reducing the poverty gap which will prove that 21<sup>st</sup> century is India's century with immense opportunities.

## MARKET-BASED ECONOMIC DISPATCH (MBED) MECHANISM

## Why in the News?

Recently, the Ministry of Power proposed the Market-Based Economic Dispatch (MBED) mechanism to centralised scheduling for dispatching the entire annual electricity consumption.

## About the Centralised Model of MBED:

- It is a proposed mechanism to centralised the scheduling of power dispatches, both inter-state and intra-state.
- This will mark a clear shift from a decentralised model followed now.
- The implementation of the first phase of MBED was earlier planned to start from April 1, 2022, but it was put off for later in 2022.

## Advantages:

- It would deepen the power markets in line with the Centre's 'One Nation, One Grid, One Frequency, One Price' formula.
- It will ensure that the cheapest electricity generating resources across the country by prioritizing the least-cost and most efficient generators and removing more expensive ones.

## **Disadvantages:**

- It is seen as impinging on the relative autonomy of states in managing their electricity sector.
- This could take away the states of their freedom to decide their own electricity requirement while managing seasonal and local demand trends.
- It can create constitutional problems because power lies in the concurrent list.
- It could potentially clash with emerging market trends.
- » Increase in renewable energy in the overall generation mix and the increasing numbers of electric vehicles actually necessitate greater decentralisation of markets.

## Additional Information:

- The concept of "One Nation, One Grid, One Frequency, One Price" was announced in October 2021.
- The policy is based on the market-based economic dispatch, or MBED, mechanism.

## **Probable Question:**

**Q.** What is the Market-Based Economic Dispatch (MBED) mechanism? Discuss the advantages and disadvantages associated with it.

News Source: The Indian Express

## PROMPT CORRECTIVE ACTION FRAMEWORK

## Why in the News?

The Reserve Bank of India (RBI) removed the Central Bank of India from its Prompt Corrective Action Framework (PCAF).



## Image Credits: Livemint

## **Key Points:**

## About

## **PCA Framework**

- It was **introduced in 2002** as a structured early intervention mechanism along the lines of the US Federal Deposit Insurance Corporation's PCA framework.
- Under the PCA framework, Banks that show weak financial parameters are put under watch by the Reserve Bank of India.
- Basically, It helps alert the regulator as well as investors and depositors if a bank is heading for trouble i.e. Non-Performing Assets (NPAs).
- The idea behind PCA is to proactively solve problems before they attain crisis proportions.
- It acts as a tool for effective market discipline.
- It is applicable to all banks operating in India, including foreign banks operating through branches or subsidiaries based on breach of risk thresholds of identified indicators.
- Key Monitoring Areas: Capital, asset quality and leverage
- The RBI has specified certain regulatory trigger points, as a part of the PCA Framework, in terms of three parameters, i.e.
- » Capital to Risk-Weighted Assets Ratio (CRAR)
- » net Non-Performing Assets (NPA)
- » Return on Assets (RoA)

## What curbs do Banks face under the PCA?

• Banks move from risk thresholds 1 through 3 with

increasing restrictions if they are unable to arrest deterioration.

- **First,** Banks face curbs on dividend distribution/ remittance of profits. For foreign banks, promoters are to bring in capital.
- In the **second category,** Banks additionally face curbs on branch expansion.
- In the **final category**, the Bank additionally faces restrictions on capital expenditure with some exemptions.
- Further, the RBI also has the option of discretionary actions across strategy, governance, credit risk, market risk and human resources.

## **Revised PCA Framework:**

- Applicable From January 1, 2022.
- The revised notification has **removed return on assets** as an indicator to qualify for PCA.
- Difference between 2017 & 2021 PCA Framework: The 2017 notification of the PCA framework applied to scheduled commercial banks but excluded Regional Rural Banks from its purview, while the 2021 version excludes Small Finance Banks and Payment Banks too.

## **Probable Question:**

**Q.** Examine the efficacy of Prompt Corrective Action Framework in managing Non-Performing Assets (NPAs).

News Source: Livemint

## NATIONAL LOGISTICS POLICY

## Why in the News?

Recently, the **Ministry of Commerce and Industry** launched the National Logistics Policy (NLP).

## Key Points:

## About

## **National Logistics Policy**

- Aim:
- » To ensure seamless movement of goods and services across the country.
- » Cut logistics costs from as much as 13-14 per cent of its GDP to to global best practices of 8%.
- Four Critical Features:

## » Integration of Digital System (IDS):

- Under the IDS, 30 different systems of seven

departments are integrated; these include data from the road transport, railways, customs, aviation and commerce departments.

- » **Unified Logistics Interface Platform (ULIP):** It will bring all the digital services related to the transportation sector into a single portal,
- » Ease of Logistics (ELOG): Through this portal, industry associations can directly take up any such matters which are causing problems in their operations and performance with the government agencies
- » System Improvement Group (SIG)
- It will **complement the PM Gati Shakti** national masterplan initiative.
- NLP will focus on world-class infrastructure, modern warehousing, digitalisation, regulations, tracing and tracking, and ease of shipping.

## Why the National Logistics Policy was launched?

- The need for a national policy was felt since the logistics cost in India is high compared to other developed economies.
- While the Indian logistics sector has a 14.4 per cent contribution to the country's Gross Domestic Product (GDP), it incurs a cost of 14 per cent of the GDP.

## Potential of Indian Logistics Sector:

- Provides livelihood to more than 2.2 crore people.
- Improving the sector will facilitate a 10 % decrease in indirect logistics costs leading to the growth of 5 to 8% in exports.
- Further, it is estimated that the worth of the Indian logistics market will be around 215 billion dollars in the next two years compared to about 160 billion dollars at present.



## What Are Logistics?

- Logistics refers to the **overall process of managing** how resources are acquired, stored, and transported to their final destination.
- Although the **term 'Logistics'** was used in parlance for the military, in earlier years, now it is used by many businesses, especially those in the industrial sector, to describe how resources are managed and moved along the supply chain.

## PM Gati Shakti - National Master Plan:

- The **PM Gati Shakti plan is a campaign to lend more speed (Gati) and power (Shakti) to projects** by connecting all concerned departments on one platform.
- It envisages a centralised portal to unite the infrastructural initiatives planned by central ministries and departments.
- » This way, the infrastructure schemes of various ministries and state governments will be designed and executed with a common vision.
- **Use of Technology:** It seeks to leverage technology by including spatial planning tools with ISRO imagery.

## **Probable Question:**

**Q.** The launch of National Logistics Policy is a step in the right direction to boost 'Make in India Initiative'. Comment

News Source: The Hindu

## WINDFALL TAX

## Why in the News?

Recently, the Finance Minister defended the windfall tax imposed by the Centre on domestic crude oil producers.

## Key Points:

About

## Windfall Tax

- A windfall gain tax is imposed by the government on a company.
- When a corporate gains from something that it can't control or are responsible for, that financial gain is windfall profits.
- » **For Example**, the energy price rise as a result of the Russia-Ukraine conflict.

# Why do Governments worldwide introduce windfall taxes?

- To redistribute unexpected gains when high prices benefit producers at the expense of consumers.
- To fund social welfare schemes.
- As a supplementary revenue stream for the government.
- Analysts also saw the windfall tax as a way for the Centre to narrow the country's widened trade deficit.

## What are the issues with imposing such taxes?

- Windfall taxes creates uncertainty in the market about future taxes since they are applied in a retrospective manner.
- **Populist Measure:** Windfall taxes are populist and politically opportune in the short term.
- Companies may argue that it is the profit they earned as a reward for the **industry's risk-taking** to provide the end user with the petroleum product.

## **Probable Question:**

**Q.** The implementation of the Windfall Tax does not augur well for the initiatives like 'Make in India' and 'Ease of Doing Business'. Critically Examine

News Source: The Financial Express

## 26TH MEETING OF FINANCIAL STABILITY AND DEVELOPMENT COUNCIL (FSDC)

## Why in the News?

The 26th Meeting of the Financial Stability and Development Council (FSDC) was chaired by the Union Finance Minister.

## Key Points:

## About

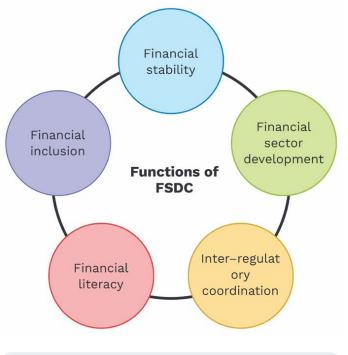
## Outcome of 26th Meeting of FSDC:

- The Council, inter alia, deliberated on:
- » Improving the efficiency of the existing Financial/ Credit Information Systems
- » Issues of governance and management in Systemically Important Financial Institutions
- » Strengthening cyber security framework in the financial sector,
- » Issues relating to the financing of Power Sector,
- » strategic role of GIFT IFSC and inter-regulatory Issues of GIFT-IFSC

Early Warning Indicators for the Economy and Our Preparedness to Deal with them.

# What is the Financial Stability and Development Council?

- FSDC was set up in 2010 as a **non-statutory apex council** under the aegis of the **Ministry of Finance**.
- The Chairman of the FSDC is the Finance Minister.
- The **FSDC Sub-committee** is chaired by the **Governor, RBI.**
- Membership:
- » FSDC members include:
  - The heads of- (RBI, SEBI, PFRDA, IRDA)
  - Finance Secretary and/or Secretary, Department of Economic Affairs,
  - Secretary, Department of Financial Services,
  - Chief Economic Adviser.
  - the Minister of State responsible for the Department of Economic Affairs (DEA),
  - Secretary of the Department of Electronics and Information Technology,
  - Chairperson of the Insolvency and Bankruptcy Board of India (IBBI)
  - the Revenue Secretary
  - Secretary, Ministry of Corporate Affairs



## **Probable Question:**

**Q.** What is the significance of Financial Stability and Development Council for a middle income economy like India?

News Source: Press Information Bureau

## **CBDCs vs. Cryptocurrencies**

## CENTRAL BANK DIGITAL CURRENCY (CBDC)

## Why in the News?

• According to reports, the RBI's digital rupee – the Central Bank Digital Currency (CBDC) may be introduced in phases in the 2022-23.

## Key Points:

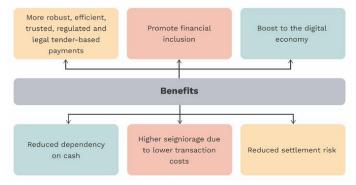
## About

## **Central Bank Digital Currency:**

According to the RBI, CBDC is the **legal tender** issued by a central bank in a digital form.

## What is Legal Tender?

- Legal Tender is **any form of payment recognized by a government**, used to pay debts or financial obligations, such as tax payments.
- » **For Example,** National currencies, such as the U.S. dollar, Rupee are legal tender.
- In the U.S, the Treasury is authorised to create and issue dollars to the public.
- Laws ensure nothing other than official legal tender gains enough traction to be used as money in the economy.
- It is the same as a fiat currency and is exchangeable one-to-one with the fiat currency.
- » Only its form is different.
- The digital fiat currency or CBDC can be transacted using wallets backed by blockchain.
- CBDCs enable the user to conduct both domestic and cross-border transactions which do not require a third party or a bank.
- Central bank digital currencies would also reduce the risks of using digital currencies in their current form.
- The digital rupee will be the digital version of physical cash.



Cr	yptocurrencies	CBDCs	
•	Unregulated and decentralized.	<ul> <li>Regulated by Central Bank i.e. incase of India (RBI)</li> </ul>	a
•	Use a permissionless open network	<ul> <li>Use a private permissioned block chain network</li> </ul>	
•	Users that use cryptocurrency have anonymity	<ul> <li>CBDCs will be attached to a person's existing bank account, containing their personal information.</li> </ul>	,

## Similarities cryptocurrencies and CBDCs

- Both cryptocurrencies and CBDCs are virtual assets that exist in online infrastructure.
- They both reduce the need for physical cash and streamline paying for goods and services.
- They also use the basic concept of blockchain technology, like storing transaction data in blocks and using nodes to verify transactions.

## **Types of CBDCs**

## Wholesale CBDCs

- » Wholesale CBDCs are similar to holding reserves in a central bank.
- » The central bank grants an institution an account to deposit funds or use to settle interbank transfers.
- » Central banks can then use monetary policy tools such as reserve requirements or interest on reserve balances to influence lending and set interest rates.



## Retail CBDCs

- » Retail CBDCs are **government-backed digital currencies** used by consumers and businesses.
- » Retail CBDCs **eliminate intermediary risk**—the risk that private digital currency issuers might become bankrupt and lose customers' assets.

## What is Blockchain Technology?

- Also referred to as **Distributed Ledger Technology (DLT)**, Blockchain is a system which helps in recording information.
- The system is basically a digital ledger of transactions that is distributed with the entire network of computer systems and servers on the blockchain.
- Every block in the chain contains information of transactions made and every new transaction's information is added to each participant's ledger.
- In this way, the database is managed by multiple participants and is decentralised (there is no central agency managing the system).
- **Bitcoin** and other digital currencies such as **Ethereum** use blockchain technology to function.

## **Probable Question:**

**Q.** How is the Central Bank Digital Currency (CBDC) different from Cryptocurrency?

News Source: The Indian Express

## **ETHEREUM CRYPTOCURRENCY**

## Why in the News?

• Recently, The second-largest cryptocurrency Ethereum has undergone a technical upgrade and this upgrade is called the 'Merge'.



## Image Source: Economic Times

## **Key Points:**

- Most blockchains use large amounts of energy and have come under fire from environmentalists.
- Now, Ethereum has been transitioned from the Proof-of-Work (PoW) consensus method of setting transactions to the Proof-of-Stake (PoS).
- » Proof of work system: energy-hungry computers validate transactions by solving complex maths problems.
- » **Proof of stake system:** where individuals and companies act as validators, using their ether as collateral, to win newly created tokens.
- **Significance:** This will make Ethereum at least "99 per cent more energy efficient".

## About Cryptocurrency:

- A Cryptocurrency is a medium of exchange, such as the rupee or the US dollar, but is digital in format.
- » For Example Bitcoin, Ethereum
- These are **decentralised** in nature, which means that no single entity owns or controls them.
- There are **two types of crypto assets** coins and tokens.
- Coins have their own blockchain network while **tokens** are part of projects built on top of existing blockchains.

## **Benefits:**

- **Checks Corruption:** As blocks run on a peer-topeer network, it helps keep corruption in check by tracking the flow of funds and transactions.
- **Cost Saving:** Cryptocurrencies and blockchains bring many advantages, including cost savings, decentralisation and transparency.
- **Saves Time:** They are entirely conducted on the internet so, can save substantial time for the remitter and the receiver.

## **Probable Question:**

**Q.** Discuss the benefits and concerns associated with cryptocurrency.

News Source: The Indian Express

## EMERGENCY CREDIT LINE GUARANTEE SCHEME (ECLG SCHEME)

## Why in the News?

One in every six loans disbursed under the **Emergency Credit Line Guarantee Scheme (ECLG Scheme)** has turned NPA in 27 months.

## **Key Points:**

## About

## Emergency Credit Line Guarantee Scheme (ECLGS):

- It was announced as part of the **Atma Nirbhar Bharat Package in 2020.**
- » ECLGS was launched in different phases ECLGS 1.0, ECLGS 2.0, ECLGS 3.0, ECLGS 4.0.
- The scheme is under the operational domain of the Ministry of Finance, Department of Financial Services (DFS).
- » National Credit Guarantee Trustee Company Ltd (NCGTC) has been set up as a company by the Union Ministry of Finance to manage and provide guarantees to these loans.

## **Objective:**

- To help the **Micro, Small and Medium Enterprises** (**MSMEs**) sector in view of the economic distress caused by the COVID-19 pandemic.
- To provide **100 percent guaranteed coverage** to the banks, NBFCs and other lenders.

## Significance of ECLGS

- ECLGS has helped save 1.5 crore jobs in the MSME sector.
- MSME loan accounts worth Rs 1.8 lakh crore were saved from moving into NPA.

## **Classification of MSME:**

Types of Enterprises	Investments in plant, machinery/ equipment
Micro Enterprises	Investment < 1 Crore and Turnover < 5 Crore
Small Enterprises	Investment < 10 Crore and Turnover < 50 Crore
Medium Enterprises	Investment < 50 Crore and Turnover < 250 Crore

## **Probable Question:**

Q. What is Emergency Credit Line Guarantee Scheme (ECLGS)? Explain the role of ECLGS in helping the Micro, Small and Medium Enterprises (MSMEs) sector in view of the economic distress caused by the COVID-19 pandemic.

News Source: The Indian Express

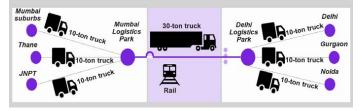
## **MULTI-MODAL LOGISTICS PARK (MMLP)**

## Why in the News?

Recently, the Government of India signed the tripartite agreement for swift development of modern **Multi Modal Logistics Parks (MMLP)** under **Bharatmala Pariyojna** across the country.

## **Key Points:**

 It was signed by National Highways Logistics Management Limited (NHLML), Inland Waterways Authority of India (IWAI) and Rail Vikas Nigam Limited (RVNL).



## Image Source: PIB

## About Multi Modal Logistics Parks (MMLP):

- It forms a key policy initiative of the Government of India, which are aimed at improving the freight logistics sector.
- It will integrate multiple modes of freight transport through highways, railways & inland waterways.
- Developed under a 'Hub & Spoke' model.
- **Objective:** To centralize freight consolidation and reduce logistics costs.

## Advantages of MMLP:

- Provide seamless modal shift
- Reduce congestion
- Improved warehousing
- Economic and environment-friendly logistic movement
- Empower and energies the economies scale via PM Gati Shakti
- One-stop solution for all services related to cargo movement like warehousing, customs clearance, parking, maintenance of trucks, etc.
- Focus on a technology-driven implementation for a state-of-the-art freight management system.

## Additional Information:

- The **NHLML is a Special Purpose Vehicle (SPV)** of the National Highway Authority (NHAI) under the Ministry of Road Transport & Highways.
- IWAI is a statutory authority under the Ministry

of Ports, Shipping & Waterways.

• The **RVNL is a wholly owned Public Sector Enterprise** under the Ministry of Railways.

## About Bharatmala Pariyojna:

- **About:** It is an umbrella program for the highways sector envisaged by the Ministry of Road Transport and Highways.
- The Bharatmala is the name that is given to the road development and it will include many other related schemes as well.
- **Focus:** It calls on optimizing the efficiency of freight and passenger movement across the country by bridging critical infrastructure gaps through,
- » Development of Economic Corridors
- » Inter Corridors and Feeder Routes
- » National Corridor Efficiency Improvement
- » Border and International connectivity roads
- » Coastal and Port connectivity roads and
- » Green-field expressways.

## **Probable Question:**

Q. What is the significance of Industrial Corridors in India? Identifying industrial corridors, explain their main characteristics ?(2018)

News Source: PIB

## ECONOMIC ADVISORY COUNCIL RELEASES 'ROADMAP FOR INDIA@100

## Why in the News?

Recently, the Economic Advisory Council to the Prime Minister (EAC-PM) released the **Competitiveness** Roadmap for India@100.

## **Key Points:**

## Key highlights of the report:

- **Prepared by:** It is a collaborative effort between **EAC-PM and Institute for Competitiveness.**
- It guides the way for India to become a high-income country by **2047** through sector-specific and region-specific policies based on **'4S principle'**.



- Challenges for India to address:
- » Rising inequality
- » Lack of convergence across regions.
- » Difficult to employ its labour force ( especially women and less skilled).
- » Impact of policy interventions in terms of job creation (Jobless growth)
- » Rising geopolitical tensions and climate change
- Suggestions:
- » Improving labour productivity
- » Enhancing labour mobilization,
- » Developing key Performance Indicators(KPIs)
- » Boosting the creation of competitive job opportunities,
- » Improving policy implementation through greater coordination across different ministries.

## **Probable Question:**

**Q.** Economic growth acts as a precondition for inclusive growth, though the nature and composition of growth have to be in line with inclusion. Comment

News Source: PIB





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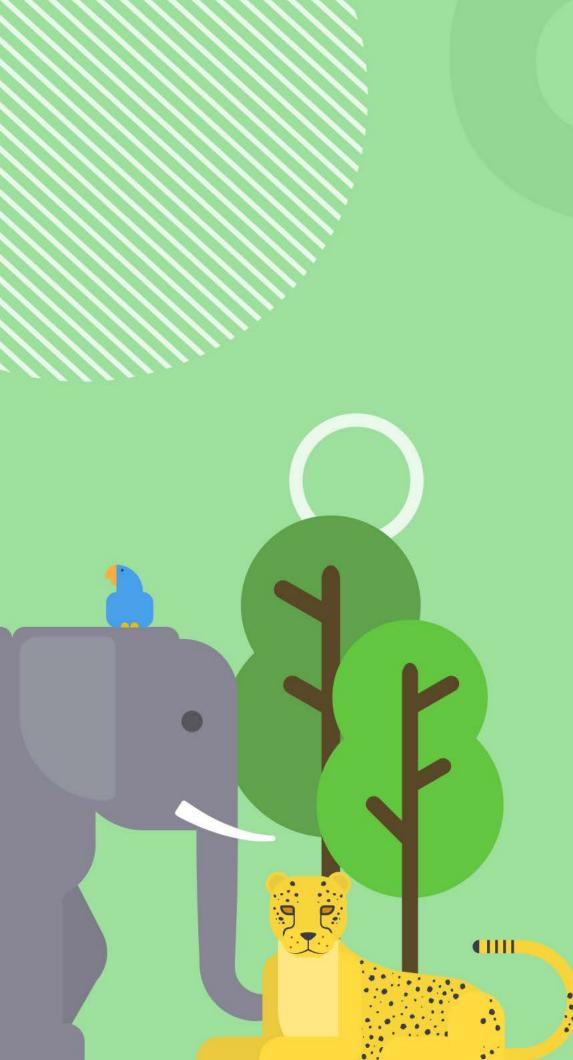


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## INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE (ITPGRFA)

## Why in the News?

India will host the 9th Session of the Governing Body of the ITPGRFA.

## About

## International Treaty On Plant Genetic Resources For Food And Agriculture:

- It is a **legally binding comprehensive agreement** adopted in **November 2001 at Rome** during the 31st session of the Food and Agriculture Organization of the UN.
- **Parties:** 149 Contracting Parties, including India.
- The treaty provides solutions to achieve food and nutritional security as well as climate resilient agriculture.

## Significance:

- · Facilitate to develop the climate resilient varieties.
- Roadmap for exchange of scientific information on plant genetic resources for increasing crop production and productivity
- Provide a common platform to discuss the issues related to the development, conservation and protection of Plant Genetic Resources for the benefit of the farming community.

## **Probable Question:**

**Q.** Discuss the significance and key features of the International Treaty On Plant Genetic Resources For Food and Agriculture.

News Source: The Hindu

## **GREEN FINS HUB**

## Why in the News?

Recently, The **United Nations Environmental Programme(UNEP)** launched the Green Fins Hub which would give a major boost to sustainable marine tourism.

## Key Points:

## About Green Fins Hub:

• It is the first global digital platform for the marine tourism industry.

## Features:

- It will help diving and snorkelling operators worldwide to make simple, cost-efficient changes to their daily practices by utilising tried and tested solutions.
- It will keep track of its annual improvements and communicate with its communities and customers.

## About

## **Green Fins:**

- It is a conservation management approach, which leads to a measurable reduction in the negative environmental impacts associated with marine tourism.
- **Implementated by** The Reef-World Foundation(UK) and the UN Environment Programme.
- It protects coral reefs through environmentally friendly guidelines promoting sustainable diving and snorkelling.

## **Probable Question:**

**Q.** As a conservation management approach, Green fins hub plays an important role in the minimising the environmental impacts associated with marine tourism. Comment.

News Source: The Hindu

## **CHEETAH REINTRODUCTION**

## Why in the News?

Recently, eight cheetahs were relocated from Namibia in Africa to India's Kuno Wildlife Sanctuary in Madhya Pradesh.



## **Key Points:**

- The name cheetah is believed to have originated from the Sanskrit word Chitrak, which means 'the spotted one.
- In India, the native cheetah species was the **Asiatic** cheetah.
- It was officially declared extinct by the **Indian** government in 1952.
- Currently, only **Iran** has Asiatic cheetahs in the wild.
- Majority of the Cheetah around the world are African cheetahs.
- 7 big cats of the world: 1) tiger, 2) lion, 3) leopard and
  4) snow leopard 5) Cheetah 6) Jaguar 7) Cougar.
- » Five of them Tiger, Lion, Leopard, snow leopard and

Cheetah are now found in India.

## Benefits of translocation of Cheetah:

- Act as a flagship species to revive grassland forests and their biome and habitat.
- Global conservation, in case the African cheetah population is wiped out by some pandemic.

## Causes of extinction of cheetahs in India:

- Its reduced levels of genetic heterogeneity due to a historical genetic bottleneck resulting in low fertility and high infant mortality in the wild.
- Its inability to breed in captivity.
- Sport hunting and bounty killings.

African Cheetah	Asian Cheetah
IUCN status: Vulnerable	IUCN status: Critically Endangered.
Population: less than <b>7,000, found</b> primarily in the African savannas.	Population: 40-50 found only in Iran.
Distribution: approx 7000 Cheetah present around the world.	Distribution: 40-50 Found only in Iran.

## About Kuno National Park:

- Location: It is located in the Sheopur district of Madhya Pradesh.
- It is part of the Khathiar-Gir dry deciduous forests ecoregion.
- Flora: Dry savanna forest, grassland and tropical riverine forest.
- Fauna: Indian leopard, jungle cat, sloth bear, dhole, Indian wolf, golden jackal, striped hyena and Bengal fox.

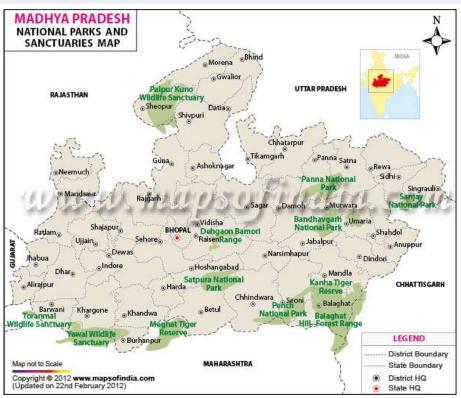


Image Source: Map of India

## Additional Information:

## About Snow Leopard:

- It cannot roar, and has the longest tail among 1) tiger,
  2) lion, and 3) leopard.
- Its tail has two purposes:
- » Balancing
- » Warmth in snow.
- The snow leopard is the state animal of Ladakh and Himachal.

## **Probable Question:**

**Q.** What are the factors responsible for the extinction of cheetahs in India? Discuss the environmental challenges associated with the reintroduction of Cheetah.

News Source: The Hindu

## LA NINÃ CONDITIONS

## Why in the News?

La Ninã conditions prevailing over the equatorial Pacific Ocean since September 2020 have entered the third year.



Image Source: National Oceanic and Atmospheric Administration

## **Key Points:**

## About

## El Niño-Southern Oscillation (ENSO) Cycle

- El Nino and La Nina are the exact opposite phases of a climatic phenomenon called the El Niño-Southern Oscillation (ENSO) cycle.
- ENSO takes place in the Pacific Ocean.
- Generally, El Nino and La Nina occur every 4 -5 years.

• El Nino is more frequent than La Nina.

## What is La Nina?

- La Niña means "little girl" in Spanish. It is also known as 'El Viejo' or a cold event.
- La Nina is **caused by the build-up of cold water** on the ocean surface dropping the temperature.
- It mostly **occurs in the tropical Pacific region**, between the Tropic of Cancer and the Tropic of Capricorn.
- La Niña is characterized by lower-than-normal air pressure over the western Pacific.
- » These low-pressure zones contribute to increased rainfall.
  - For Example, The 2010 La Niña event correlates with one of the worst floods in the history of Queensland, Australia.
- It is **considered to be the counterpart to El Nino**, which is characterized by unusually warm ocean temperatures in the equatorial region of the Pacific Ocean.

## Impact of La Nina:

- La Nina causes:
- » drought in the South American countries of Peru and Ecuador
- » high rainfall and tropical cyclones across countries in the Pacific region.
- » high temperatures in the Western Pacific, and the Indian Ocean.
- During La Niña, waters off the Pacific coast are colder and contain more nutrients than usual which support more marine life.
- La Niña usually has a positive impact on the fishing industry of western South America.

## La Nina & India:

- La Nina has a **cooling influence in India** even as it recorded a very unusual spring and summer dominated by extreme record-breaking heat spells.
- La Niña **influences the Indian subcontinent** by piping in cold air from Siberia and South China, which interacts with the tropical heating to produce a north-south low-pressure system.
- In the 'La Nina year', **rainfall** associated with the summer monsoon in Southeast Asia tends to be **greater than normal,** especially in northwest India and Bangladesh.
- La Niña years are infamous for frequent and intense hurricanes and cyclones in the Atlantic Ocean and the Bay of Bengal.

## **Probable Question:**

**Q.** Most of the unusual climatic happenings are explained as an outcome of the El-Nino effect. Do you agree?

News Source: The Hindu

## **CLIMATE REPARATION**

## Why in the News?

Recently, Pakistan has begun demanding reparations, or compensation, from the rich countries that are mainly responsible for causing climate change.

## **Key Points:**

## **About Climate Reparations:**

- It is a framework where those most responsible for climate change must provide support to those who have been wronged.
- It is an extension of the universally acknowledged "Polluter Pays" principle.
- » It makes the polluter liable for paying the cost of remedial action and compensating the victims of environmental damage caused by their actions.
- Burden of responsibility:
- » The burden of responsibility falls on those rich countries that have contributed most of the greenhouse gas emissions since 1850.
- » The United States and the European Union, including the UK, account for over 50% of all emissions during this time.

## Need for Climate Reparation:

- The impact of climate change is much more severe on the poorer nations because of their geographical locations and weaker capacity to cope.
- Further, loss and damage caused by climate change go into billions of dollars, or even more.
- The economic loss from cyclone Amphan in India and Bangladesh in 2020 has been assessed at \$15 billion.

## Institutional Mechanisms for Climate Finance:

# UN Framework Convention on Climate Change (UNFCCC) (1994):

- It lays down the broad principles of the global effort to fight climate change.
- It explicitly acknowledges this differentiated responsibility of nations.
- It makes it very clear that rich countries must provide both finance and technology to developing

nations to help them tackle climate change.

- It is this mandate that later evolved into the **\$100 billion** amount that the rich countries agreed to provide every year to the developing world.
- This \$100 billion per year promise is yet to be met.

## Warsaw International Mechanism (WIM):

- It was set up in 2013. It was the first formal acknowledgement of the need to compensate developing countries struck by climate disasters.
- However, the progress on this front has been painfully slow. No funding mechanism, or even a promise to provide funds, has come about.

## **Probable Question:**

**Q.** Discuss the need for climate reparation. What are the Institutional Mechanisms for Climate Finance?

News Source: The Hindu

## **RED-EARED SLIDER TURTLES**

## Why in the News?

Recently, concerns have been raised that the presence of south Red-Eared Slider Turtles would lead to the extinction of native species of their own kind.



Image Source: Scroll.in

## **Key Points:**

 India is home to 29 freshwater turtles and tortoise species of the 356 turtle species recognised worldwide and around 80% of them are threatened.

## About Red-Eared Slider Turtles:

- It is primarily aquatic and will emerge from the water for basking on rocks and logs.
- **Habitat:** They can tolerate a wide range of habitats and are sometimes found in estuaries and coastal wetlands with brackish water.
- They are native to **South-Eastern USA and Mexico.**
- In India, It is widely found in urban wetlands, such

as — Sukhna lake in Chandigarh, temple ponds of Guwahati, and Yamuna river in Delhi etc.

- Protection Status:
- » IUCN Red List: Least Concern

## Threat to Native Species:

- The species breeds faster compared to other local turtle varieties.
- The species has a wide set of diet and eats almost all vegetation, unlike native species.
- The red-eared slider is also aggressive, it drives away the native species.
- The species is considered as one of the world's 100 worst invasive non-native species.

## Way Ahead:

• These turtles should be restrained, captivated and sent to local zoos.

## **Probable Question:**

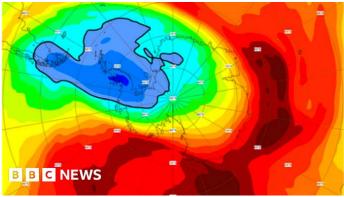
**Q.** The invasive alien species causes ecological or economic harm in a new environment where it is not native. Analyse.

News Source: Down To Earth

## WORLD OZONE DAY

## Why in the News?

World Ozone Day is celebrated on 16th September each year to commemorate the signing of the Montreal Protocol.



## Image Source: BBC

## Key Points:

- **1985:** Meteorologist Jonathan Shanklin found the 'Ozone Hole'
- **September 16, 1987:** Montreal Protocol was signed by 46 countries to protect the Ozone layer.
- The theme World Ozone Day 2022: "Global

Cooperation to Protect Life on Earth"

## About

## Montreal Protocol:

- The Montreal Protocol on Substances that Deplete the Ozone Layer (the Montreal Protocol) is an international agreement made in 1987.
- It was designed to stop the production and import of ozone-depleting substances and reduce their concentration in the atmosphere to help protect the earth's ozone layer.
- Montréal protocol banned Chlorofluorocarbons (CFCs) and Hydrochlorofluorocarbons (HCFCs) used in AC/Fridge etc.
- Because they may be damaging to the Ozone Layer. However, these chemicals were later replaced by hydrofluorocarbons (HFCs).
- HFCs do not damage the ozone layer but increase greenhouse gas/global warming.

## **Kigali Amendment:**

- **2016:** Kigali (the capital of Rwanda) amendment was adopted at the 28th meeting of the Parties to the Montreal Protocol.
- » It aims for ban/phaseout of HFCs

## **Probable Question:**

**Q.** What is Ozone Layer Depletion? What efforts are being made to protect the Ozone Layer?

News Source: PIB

## **TYPHOON HINNAMNOR**

## Why in the News?

The Super Typhoon 'Hinnamnor', has been moving across the western Pacific Ocean.

• It is a category 5 typhoon (the highest classification) and the strongest tropical storm of 2022.

## Cyclones

- Cyclones are a type of low-pressure environment with rapid inward air circulation.
- Cyclone rotates anti-clockwise in Northern Hemisphere and clockwise in the southern Hemisphere.
- This happens because of the Coriolis effect, which in turn occurs because the earth is a rotating sphere.

## **Tropical cyclones**

 Tropical cyclones are violent storms that originate over oceans in tropical areas (between the Tropics

## of Cancer and Capricorn).

- They bring about large scale destruction caused by violent winds, very heavy rainfall and storm surges.
- Tropical cyclones originate and intensify over warm tropical oceans.
- Once **tropical cyclones make landfal**l, they **become weaker** since they are no longer fed by the heat of the ocean, but before dying out completely, they move far inland dumping inches of rainwater and causing wind damage.
- The conditions favourable for the formation and intensification of tropical storms are:
- Large sea surface with a temperature higher than 27°
   C;
- » Presence of the Coriolis force;
- » Small variations in the vertical wind speed;
- A pre-existing weak low-pressure area or low-levelcyclonic circulation;
- » Upper divergence above the sea level system.

## Region Wise Nomenclature:

Indian Ocean/Arabian Ocean	Cyclones
Atlantic	Hurricanes
Western Pacific and South China Sea	Typhoons
Western Australia	Willy-willies

## **Probable Question:**

• **Q**. What do you understand by tropical cyclones? Discuss the conditions favourable for the formation and intensification of tropical storms.

News Source: The Indian Express

# COALITION FOR DISASTER RESILIENT INFRASTRUCTURE (CDRI)

## Why in the News?

Recently, the Coalition for Disaster Resilient Infrastructure (CDRI) and the Central government signed the "**Headquarter Agreement**" in New Delhi.

• It granted CDRI the status of an "Independent and International Legal Entity."

## Key Points:

## About the Headquarter agreement:

- **Headquarter Agreements** is an agreement between international organizations and their host State.
- **Benefit:** It will enable CDRI to pursue functions internationally with all rights, immunities, and privileges, as per United Nations (Privileges & Immunities) Act,1947.
- » India enacted the UN (Privileges & Immunities) Act, 1947 to give effect to the Convention on Privileges and Immunities of the United Nations, adopted by the UN General Assembly in 1946.

## About

#### **Coalition for Disaster Resilient Infrastructure (CDRI):**

- It is a global partnership of national governments,
   UN agencies and programmes, private sector, and
   academic and research institutions.
- It was launched in **2019 by the Indian Prime Minister** at UN Climate Action Summit in New York.
- It'll work at the intersection of the **Sendai Framework** for **Disaster Risk Reduction** and the Paris Climate Agreement.
- **Aims**: To promote resilience of infrastructure systems to climate and disaster risks, thereby ensuring sustainable development.
- **Members:**31Countries,6InternationalOrganisations and 2 private sector organisations.
- Headquarters: New Delhi

## About International legal personality:

- International legal personality refers to entities endowed with rights and obligations under public international law.
- This includes states, international organizations, NGOs etc.
- It will help CDRI to deploy funds & experts globally and receive funds or bring experts from member countries to achieve its commitments for disaster resilient infrastructure.

## **Probable Question:**

• **Q.** Highlight the role that can be played by the Coalition for Disaster Resilient Infrastructure (CDRI) to promote the resilience of infrastructure systems to climate and disaster risks.

News Source: The Indian Express

## **ONE NATION ONE FERTILISER**

## Why in the News?

Recently, the **Ministry of Chemicals and Fertilisers** announced the implementation of '**One Nation One Fertiliser**'.



## Key Points:

- It will introduce a "Single Brand for Fertilisers and Logo" under the fertiliser subsidy scheme named "Pradhanmantri Bhartiya Janurvarak Pariyojna" (PMBJP).
- The single brand name for UREA, DAP, MOP and NPK etc. would be BHARAT UREA, BHARAT DAP, BHARAT MOP and BHARAT NPK etc.
- Companies are only permitted to advertise their name, brand, logo, and other pertinent product information on one-third of their bags under the new "One Nation One Fertilizer" initiative.
- The "Bharat" brand and Pradhanmantri Bharatiya Jan Urvarak Pariyojana logo will need to be displayed on the remaining two-thirds of the space.

## Government arguments:

- A single brand name will help in the reduction of freight charges due to stopping of crisscross movement of fertilizers.
- It will also stop the diversion of urea for industrial purposes.
- Farmers prefer to purchase urea of his choice. If a certain brand is not available, he doesn't buy it even though urea is the same.

• The Government gives a huge subsidy on these products, therefore, subsidy scheme will also be mentioned on the bag.

## **Challenges:**

- Disincentivise fertiliser companies from undertaking marketing and brand promotion activities.
- Currently, the blame is put on the company for not meeting the required standards. But now, that may be passed on fully to the government.

## **Probable Question:**

**Q.** Discuss the rationale behind the implementation of 'One Nation One Fertiliser'.

News Source: PIB

## **ZOMBIE ICE**

## Why in the News?

Recently a study published in the journal Nature Climate Change calculated minimum ice loss in Greenland and the corresponding rise in global sea level.

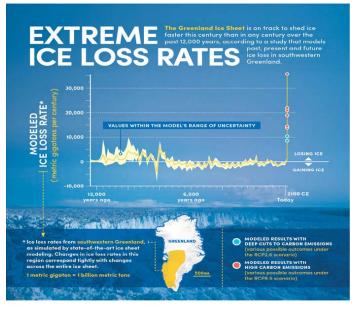


Image Source: CBS

## **Key Points:**

## What is 'Zombie ice'?

- Zombie ice is **dead or doomed ice** that is attached to thicker areas of ice and is no longer getting replenished by parent glaciers.
- The doomed ice is melting from climate change and will inevitably raise seas.

## Formation of Zombie ice:

There is an equilibrium state where snowfall from the higher reaches of the Greenland ice cap flows

down to recharge the edges of the glaciers, and thicken them.

- Over the last several decades there has been more melting and less replenishment.
- This led to the formation of Zombie ice.
- Implication:
- » It will raise global sea levels by at least 10.6 inches.





Image Credits: Britannica

## Probable Question:

**Q.** What are the consequences of spreading of 'Zombie ice' on global sea level?

News Source: The Indian Express

## Additional information:

• The Intergovernmental Panel on Climate Change in its 2021 report projected a range of 2 to 5 inches (6 to 13 centimetres) for likely sea level rise from Greenland ice melt by the year 2100.

## About Greenland:

- It is the world's largest island, lying in the North Atlantic Ocean.
- It is a territory of Denmark.

## **CLOUD SEEDING**

## Why in the News?

Recently, China and Middle East countries plan to lead the effort to seed clouds and increase precipitation.

## Key Points:

About

## Cloud Seeding:

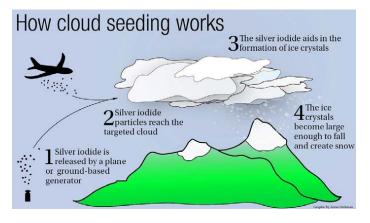
- Cloud seeding is an artificial way of inducing moisture in the clouds to cause rainfall.
- Only certain kinds of clouds can be seeded and it needs to have enough nuclei to process cloud seeding and thunder cloud development.
- It uses silver iodide and dry ice to improve the creation of ice crystals in clouds.
- It involves using aircraft or drones to add small particles of silver iodide.

## Concerns:

- Uses potentially harmful chemicals and is necessary.
- It is expensive.
- Creates Weather Issues
- Reliance on atmospheric circumstances.

## **Benefits of Cloud Seeding:**

- Create more winter snowfall
- Enhance the natural water supply to communities
- Lessen hailstorms by reordering water vapour in clouds, which breaks down large hailstones.



## **Probable Question:**

**Q.** Discuss the concept of Cloud Seeding and explain its role in macro-climatic changes.

News Source: The Indian Express

# GLOBAL ALLIANCE FOR INDUSTRY DECARBONIZATION

## Why in the News?

Recently, the **International Renewable Energy Agency** (**IRENA**) and 13 other companies have launched the Global Alliance for Industry Decarbonization.

## Key Points:

 It was formed under the Bali Declaration adopted during IRENA's Investment Forum on Energy Transitions held in Bali, Indonesia.

## About Global Alliance for Industry Decarbonization:

• Aim: To accelerate **net-zero ambitions** and decarbonisation of industrial value chains in pursuit of the 2015 Paris Agreement climate goals.

## Significance:

- It will accelerate decarbonization by installing a first-class exchange forum for industry, technology, and knowledge partners.
- Benefit business opportunities for green industrialization
- Share best practices to cut industry emissions.
- Encourage action for decarbonizing industrial value chains.

Enhance understanding of renewables-based solutions and their adoption by industry.

## **Probable Question:**

**Q.** What are the aims and objectives of the Global Alliance for Industry Decarbonization? Discuss the significance of the alliance.

News Source: The Indian Express

## **SMURTI VAN: A MIYAWAKI FOREST**

## Why in the News?

Recently, Prime Minister inaugurated Gujarat's Smurti Van memorial dedicated to earthquakes victim in **Kutch (2001)**.



Image Source: Hindustan Times

## **Key Points:**

- Location: At the Bhujiya hill in Bhuj district.
- The dense forest is made through the Miyawaki method.
- It has been made in just 37 days.

## About the Miyawaki method:

- The Miyawaki technique is a method of planting saplings close together in small plots of land to create a forest in a short duration.
- Introduced by Japanese botanist Akira Miyawaki.
- Plants draw nutrients from each other and become healthy.
- A dense forest, which grows in 300 years is created in 30-35 years.
- Trees grow 10 times faster and density is 30 times that of normal trees plantations.

## Significance:

- » Greater bio-diversity than monoclonal plantations
- » Absorb 30 times more carbon dioxide

## **Probable Question:**

**Q.** What are the benefits of Miyawaki method of aforestation? Do Miyawaki forests help in Ecological restoration?

News Source: PIB



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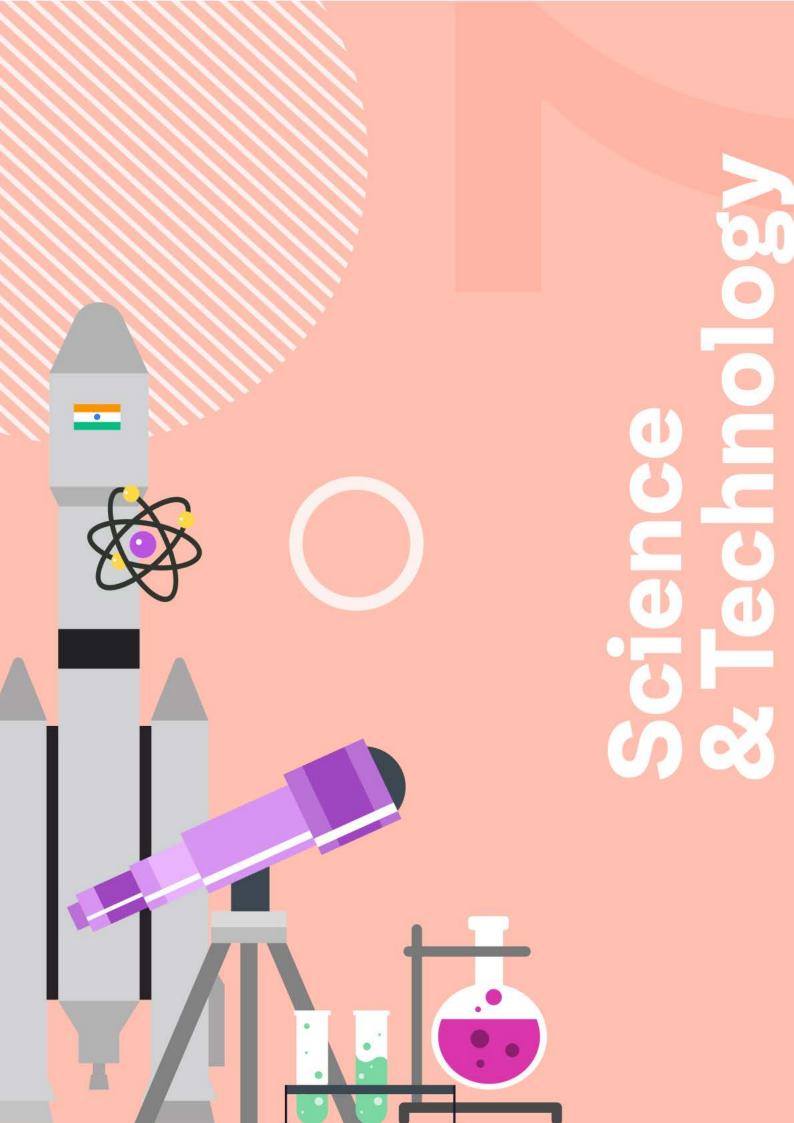
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\*Source: The Indian Edtech Story, Q1 2022 Round-Up by Markelytics. \*\*T&C Apply.



## **FOREVER CHEMICALS**

## Why in the News?

A recent study has found that rainwater from many places across the globe is contaminated with "**perand polyfluoroalkyl substances," (PFAs),** known as "forever chemicals".

## Key Points:

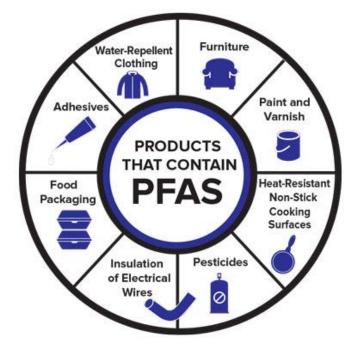
About

## PFAs

- PFAs are man-made chemicals used in products that resist grease, water and oil.
- These are used in the making of nonstick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, and firefighting forms.
- PFAs can migrate to the soil, water and air during their production and use.
- Since most PFAs do not break down, they remain in the environment for long periods of time.
- For this reason, they are called "forever chemicals".

## Health Risks attributed to PFA exposure:

- Decreased fertility
- Developmental effects in children
- · Interference with body hormones
- Increased cholesterol levels
- Increased risk of some cancers
- PFAs can make it difficult for humans to build antibodies after being vaccinated against various diseases



## **Probable Question:**

**Q.** What are 'Forever Chemicals'? Discuss their applications in our daily lives.

News Source: The Indian Express

## FINDINGS OF JAMES WEBB TELESCOPE: JUPITER

## Why in the News?

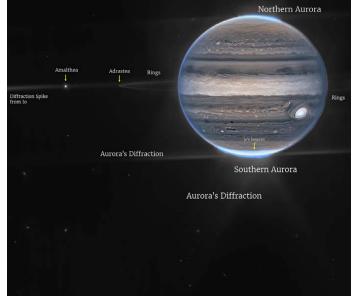
Recently, the new photographs of Jupiter has been released by the James Webb Space Telescope.

## **Key Points:**

About

## New Finding of Jupiter Planet

**Faint Rings Images:** It released photographs of faint rings and two small moons — Amalthea and Adrastea.



## Image Source: NASA

James Webb Space Telescope (JWST):

- JWST is an international collaboration between NASA, the European Space Agency (ESA) and the Canadian Space Agency.
- Launch: It was launched in 2021 on a European Ariane 5 rocket from French Guiana in South America.
- It is currently observed from Lagrange point 2, approximately 1.5 million km beyond Earth's orbit around the Sun.
- Lagrange point is a point **where net force acting on a body is zero**, in any revolving two-body system like Earth and Sun, where the gravitational forces of the two large bodies cancel each other out.

## **Key Features:**

- JWST is primarily an infrared telescope which allows it to look much deeper into the universe, and see-through obstructions such as gas clouds
- It has **one large mirror**, with a **diameter of 21 feet**, that will capture the infra-red light coming in from the deep universe while facing away from the Sun.

## Goals:

- To search for the first galaxies that formed after the Big Bang.
- To determine how galaxies evolved from their earlier formation until now.
- To observe the formation of stars from the first stages to the formation of planetary systems.
- To measure the physical and chemical properties of planetary systems and investigate the potential for life in such systems.

## PYQ:

**Q.** Launched on 25th December, 2021, James Webb Space Telescope has been much in the news since then. What are its unique features which make it superior to its predecessor Space Telescopes ? What are the key goals of this mission ? What potential benefits does it hold for the human race?

News Source: The Indian Express

## INDIA'S FIRST COMMERCIAL SPACE SITUATIONAL AWARENESS (SSA) OBSERVATORY

## Why in the News?

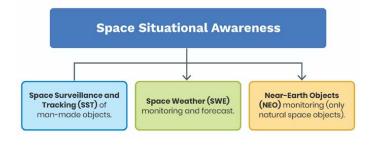
Digantara, a space sector start-up in India, is going to set up **India's first commercial space situational awareness observatory** in the **Garhwal region** of **Uttarakhand.** 

## **Key Points:**

## About

## What is Space Situational Awareness (SSA)?

• SSA is the **science of tracking objects** (man-made and natural) that are in orbit and also predicting where they would be at a given point in time.



## Utility

- **Track any activity in space** including that of space debris and military satellites hovering over the region.
- Fill the crucial gap in SSA observations in the region as there is a lack of such facilities between Australia and southern Africa.
- Improve India's ability to monitor events occurring in deep space, especially in the geostationary, medium-Earth, and high-Earth orbits.
- Tracking space weather.
- Prediction of threats from asteroids and meteorites.

## About

## **Space Debris:**

- Space Debris consists of rocket bodies that are used to launch satellites, defunct satellites and fragments from Anti-Satellite (ASAT) tests.
- These space objects move with an average speed of 27,000 km per hour in Low Earth Orbits; therefore, a collision even with a tiny fragment can be catastrophic to an operational space asset.
- These orbiting space debris pose a threat to critical modern communication, commerce, travel and security systems.

## **Probable Question:**

**Q.** What is the significance of India's first commercial space situational awareness observatory which is to be set up in the Garhwal region of Uttrakhand.

News Source: The Indian Express

## SOFTWARE-AS-A-SERVICE (SAAS)

## Why in the News?

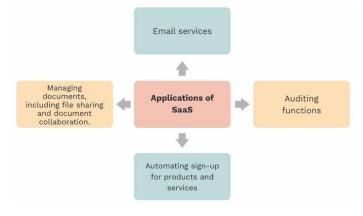
The study by CII and EY, titled -- India: The next global SaaS capital -- cited that India is rapidly emerging as a hub for SaaS start-ups.

## **Key Points:**

## About

## Software-as-a-Service (SaaS)

- Software-as-a-Service (SaaS) is a software licensing model, which allows access to software on a subscription basis using external servers.
- » For Example Google Docs, and DropBox.
- SaaS allows each user to access programs via the Internet, instead of having to install the software on the user's computer.
- SaaS has many business applications, including file sharing, email, calendars, customer retention management, and human resources.



## Software-as-a-Service (SaaS)

Ac	lvantages	Disadvantages	
•	Accessible from anywhere	Increased security risks	
•	Cost effective	Slower speed	
•	Easytoimplement, update, and debug	Loss of control	
•	Easy to scale	Lack of customization	

## **Probable Question:**

• **Q.** Discuss the advantages and disadvantages of Software-as-a-Service (SaaS).

News Source: The Indian Express

## CRISPR

## Why in the News?

India has approved a 5-year project to develop CRISPR to cure **sickle cell anaemia.** 

## Key Points:

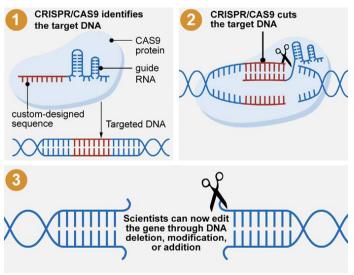
## About

## CRISPR

- CRISPR is shorthand for **"CRISPR-Cas9**." in which CRISPR stands for **Clustered Regularly Interspaced Short Palindromic Repeats.**
- **Discovered** in 2012 by American scientist **Jennifer Doudna,** and French scientist **Emmanuelle Charpentier.**
- It was adapted from the natural defence mechanisms of bacteria.
- It is a powerful tool for editing genomes

## How does CRISPR technology work?

- It's likened to a pair of molecular scissors, a cut-andpaste technology, that can cut the two DNA strands at a specific location and modify gene function.
- The cutting is done by enzymes like Cas9, guided by pre-designed RNA sequences, which ensure that the targeted section of the genome is edited out.



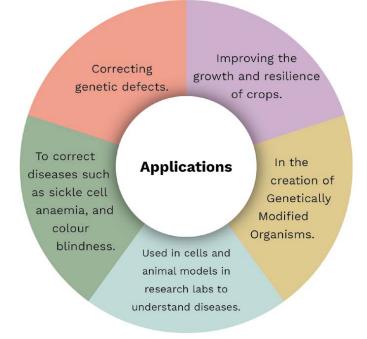
Source: GAO. | GAO-20-478SP

## What is Genome editing?

- Genome editing is a method for making specific changes to the DNA of a cell or organism.
- It can be used to add, remove or alter DNA in the genome.
- Editing DNA can lead to changes in physical traits, like eye colour, and disease risk. Scientists use different technologies to do this.

## What is Genome?

• It is the full set of genetic "instructions" that determine how an organism will develop.



## **Ethical Concerns**

- **Regulatory Challenges**: Many countries are struggling with questions of how to regulate CRISPR and other gene editing technologies.
- **Safety Concerns:** CRISPR. For example, it could target an unintended location within the DNA, producing changes that could cause disease or other harm.
- If genetic edits are made to embryos, these changes will be inherited by all future generations.
- » Eventually, the entire human species could bear the marks of genetic editing.

## What is Sickle Cell Disease?

- Sickle cell disease (SCD) is a group of inherited red blood cell disorders.
- People with sickle cell disease produce unusually crescent or sickle-shaped red blood cells.
- These sickle-shaped RBCs do not live as long as healthy blood cells and can block blood vessels which result in anaemia.

## **Probable Question:**

**Q.** Explain the mechanism and applications of CRISPR technology.

News Source: The Indian Express

## DARK SKY RESERVE LADAKH

## Why in the News?

India will establish the **country's first Dark Sky Reserve** in Ladakh by the end of 2022.



Image Source: Indian Express

## **Key Points:**

• The Department of Science & Technology (DST) has announced the setting up of India's first Dark Sky Reserve in Hanle, Ladakh in the next three months.

## About

## Dark Sky Reserve:

- It is public or private land with a distinguished nocturnal environment and starry nights that has been developed responsibly to prevent light pollution.
- » It consists of a core area meeting minimum criteria for sky quality and natural darkness, and a peripheral area that supports dark sky preservation in the core.
- **Location:** Hanle in Ladakh as a part of Changthang Wildlife Sanctuary.
- **Developed by:** Ladakh administration, Ladakh Autonomous Hill Development Council (LAHDC) Leh and the Indian Institute of Astrophysics (IIA).

## How does a site become a 'Dark Sky Reserve'?

- Individuals or groups can nominate a site for certification to the International Dark Sky Association (IDSA).
- » IDSA is a U.S.-based non-profit that designates places as International Dark Sky Places, Parks, Sanctuaries and Reserves.

**Objective:** To promote astronomy tourism in a sustainable and environment-friendly manner.

## Reason for selecting Ladakh:

- Cold desert with high mountainous terrains.
- Long and harsh winters with minimum temperatures.
- Aridity, limited vegetation, high elevation and large

areas with sparse populations.

Hanle is already home to optical, gamma-ray and infrared telescopes for space exploration.

All these factors make it the perfect setting for longterm astronomical observatories and dark sky places.

## **Probable Question:**

Q. What are the reasons for selecting Ladakh as a 'Dark Sky Reserve' site?

News Source: The Indian Express

## **INCOVACC: INTRANASAL VACCINE**

## Why in the News?

Recently, Bharat Biotech's intranasal Covid vaccine, iNCOVACC gets the DCGI nod for restricted emergency use of those aged 18 years and above.

# Nasal vaccines: A silver bullet for Covid-19?

The first of nasal vaccines targeting the Sars-CoV-2 were approved this week. A look at how they may be a game-changer

## THE CANDIDATES

According to the World Health Organization data, there are eight intranasal vaccines under development. Two of these now have received some form of approval

# Convidecia Air

PRODUCER: CANSINO BIOLOGICS Platform: Ad5 adenovirus based inhaled vaccine In July, Chinese scientists published a pre-print study that one booster dose of the inhaled vaccine led to more antibodies than a conventional booster shot. Four weeks after the dose of the inhaled vaccine, 92.5% of people had antibodies for Omicron, while those who got three doses of the intramuscular jab did not have any.

## Incovacc BHARAT BIOTECH orm: Ad35 adenovirus

Developed based in partnership with Precision vaccine Virologics and Washington University School of Medicine. this dose has in animal trials been shown to confer superior protection than conventional doses, elicited antibodies in the mucous membranes and epithelial cells in the lungs that the intramuscular jabs would not be able to Clinical trial data has not been released yet. The vaccine received official approval for emergency use on Tuesday

## THE ADVANTAGES

ection from nasal vaccines as akin to ne, instead of having them inside".

ROTECTION While a study that showed this involved a different vaccine, scientists at Yale found that the nasal vaccine they tested also lead to IgA antibody secretions in the lung, protecting it better.

**1.03** billion

. VIRAL 

DIFFICULT: These vaccines elicit what are known as IgA

further. In other words,

prevent infection in the first place.

iabbed till date

these are likely to

antibodies, which coat the mucous lining. This is crucial because the coronavirus first infects the mucous membrane in the nose and throat from where it spreads

the muscle only marginally limit a vaccinated person's tendency to spread the virus, though they are significantly protected from disease. Nasal vaccines will cut this infectivity drastically, which could blunt

new waves.

DROP

INFECTIVITY:

IN

Ö

\*

Shots delivered to

AND ANY CHALLENGES? While these vaccines are

largely safe, they are tough to get right. Efficacy depends entirely on the bioengineering and platform involved and current candidates employ a wide variety of approaches. People

## **Image Source: Hindustan Times**

## **Key Points:**

## About iNCOVACC:

- It is the first covid vaccine which will be delivered through the nasal route.
- Developed by: Bharat Biotech International Limited
- It can be administered only to the unimmunised.
- The vaccine uses a modified chimpanzee adenovirus, which cannot replicate in the body, to carry the Covid spike protein to induce immunity.
- Currently, Covishield, Covaxin and Corbevax are

part of the Government's Covid immunisation drive while vaccines like Covovax and Sputnik are available at private centres.

## Significance:

India's vaccination: In numbers

**Total shots** 

**ion** administered

- lt protects against infection reduces and transmission of the virus.
- It will do away with the need for needles and syringes. •
- Reduce dependence on trained personnel to administer the shots.
- Stable at 2-8°C, which makes it easy to store and distribute.

## **Probable Question:**

**Q.** What is the basic principle behind vaccine development? How do vaccines work? What approaches were adopted by the Indian vaccine manufacturers to produce COVID-19 vaccines? (UPSC 2022).

News Source: The Indian Express

## **DISEASE IN NEWS**

Disease	Causative Agent	Transmission	Vaccine
Hand, Foot, and Mouth Disease	Coxsackievirus	<ul> <li>Contagious in nature.</li> <li>spreads through person-to-person contact</li> </ul>	<ul> <li>no vaccine</li> <li>usually goes away on its own after 7 to 10 days.</li> </ul>
Cervical cancer	Human Papillomavirus (HPV)	• Sexual Contact	<ul> <li>Ceravac, developed by Serum Institute of India and Department of Biotechnology (DBT), GOI.</li> </ul>

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**By: Prakash Dutt** 

# **INDIGENIZATION OF DEFENCE SECTOR**

The Government has taken several policy initiatives in the past few years under the 'Make in India' program and brought in reforms to encourage indigenous design, development and manufacture of defence equipment in the country, thereby reducing import of defence equipment.

The need for defence indigenization is to make India self-reliant and reduce dependency on foreign players. It will also conserve foreign exchange and reduce the balance of payment deficit. It will also promote manufacturing sectors along with employment opportunities to the vast armies of unemployed.

The indiginisation of defence sector initiatives of Govt. of India are as follows:

- Procurement of capital items from domestic sources under Defence Acquisition Procedure (DAP)-2020;
- Announcement of 18 major defence platforms for industry-led design & development;
- Notification of two 'Positive Indigenisation Lists' of total 209 items of Services
- Simplification of Industrial licensing process with longer validity period;
- Liberalisation of Foreign Direct Investment (FDI) policy allowing 74% FDI under automatic route;
- Simplification of Make Procedure;
- Launch of Innovations for Defence Excellence (iDEX) scheme involving start-ups & Micro, Small and Medium Enterprises (MSMEs);
- Implementation of Public Procurement (Preference to Make in India) Order 2017;
- Launch of an indigenization portal namely SRIJAN to facilitate indigenisation by Indian Industry including MSMEs. Ministry of Defence has also launched a SRIJAN portal to promote indigenization by the industry.
- Reforms in Offset policy with thrust on attracting investment and Transfer of Technology for Defence manufacturing by assigning higher multipliers; and Establishment of two Defence Industrial Corridors, one each in Uttar Pradesh and Tamil Nadu.

But in this policy there are many challenging fronts. The first front is the lack of experience of India in defence manufacturing. There is also the paucity of private sector in defence manufacturing leading to the poor management and lack of innovation. Whatever manufacturing sector is available in India is mostly capital intensive and having lack of assured market. Foreign players are also hesitant in technology transfer. So, in such scenario it is very difficult to expect the success of **OFFSET MECHANISM.** Still the steps taken by the government for indignation of defence sector is definitely a welcome step for defence industry. With the quality experience in defence sector, the counties like Israel, France etc. will definitely enrich the Indian Defence Sector.

### NATIONAL AUTOMATED FINGERPRINT IDENTIFICATION SYSTEM

#### Why in the News?

Recently, the Union Home Minister inaugurated the National Automated Fingerprint Identification System (NAFIS) in New Delhi.

#### **Key Points:**

#### About

#### NAFIS

- NAFIS Project is a country-wide searchable **central information** database of crime- and criminal-related fingerprints.
- **Developed by:** National Crime Records Bureau (NCRB).
- It assigns a **unique 10-digit National Fingerprint Number (NFN)** to each person arrested for a crime.
- Helpful in the quick and easy disposal of cases.
- Digitizes the records of fingerprint data.

#### **Probable Question:**

• **Q**. The digitisation of police is the need of hour to tackle organised crimes. Discuss

News Source: The Indian Express

# **QRSAM WEAPON SYSTEM**

#### Why in the News?

Recently, DRDO and the Indian Army have successfully completed six flight tests of the QRSAM system from Integrated Test Range (ITR) Chandipur off the Odisha coast.



#### Image Source: PIB

#### Key Points:

#### About Quick Reaction Surface to Air Missile (QRSAM)

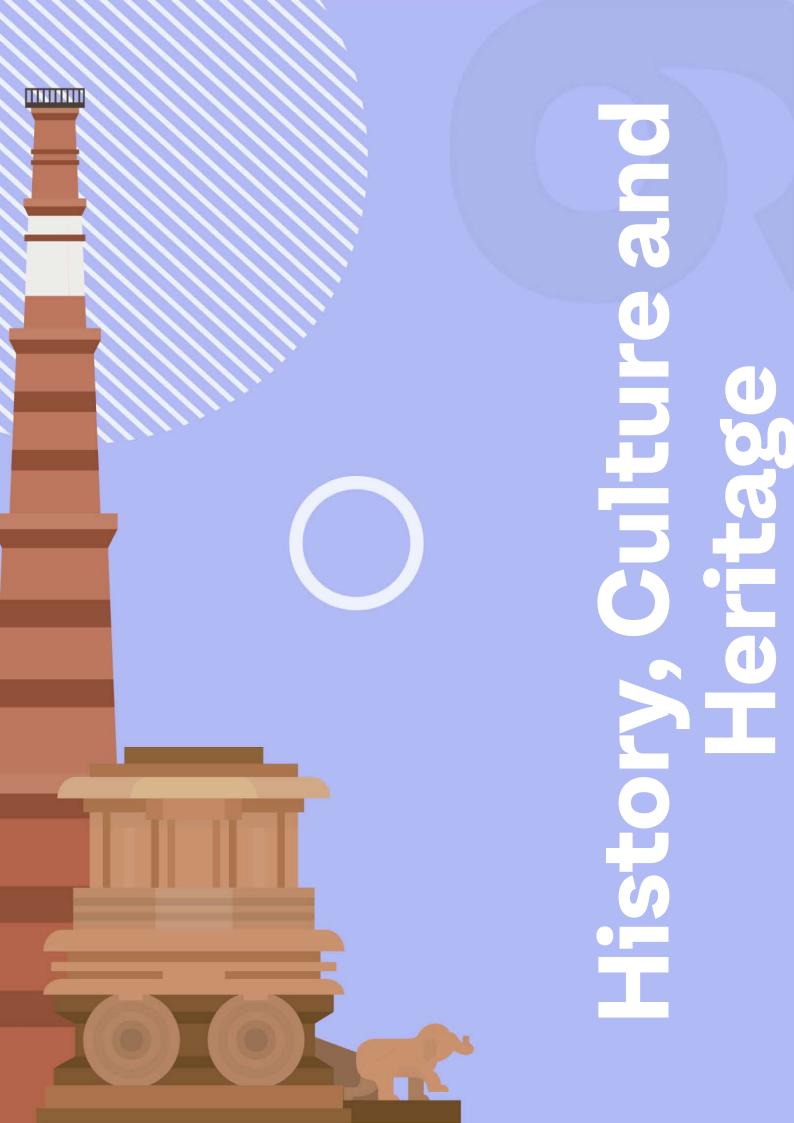
- It is a short-range Surface to Air Missile (SAM) system, primarily designed and developed to provide a protective shield to the moving armoured columns of the Army from aerial attacks.
- **Developed by:** Defence Research and Development Organisation (DRDO)
- **Range:** 30 km and target an altitude of up to 10 km.

- It is unique in its ability to **operate on the move**, searching for and tracking enemy targets; and then fire on a short halt.
- It is a **single-stage** and **solid propellant** missile.
- Use of QRSAM:
- » It is meant to give air defence coverage against striking columns of the Indian Army.
- » It has the ability to both detect moving targets and quickly engage them.
- » It can be kept in a canister and mounted on a truck.
- » The optical proximity fuze is used by the QRSAM system to ensure accuracy and prevent jamming.

News Source: The Indian Express

#### **Probable Question:**

**Q.** Discuss India's achievements in the field of Defence Technology. How the application of this technology has helped India in its national security?



# **NETWORK OF LEARNING CITIES' (GNLC)**

#### Why in the News?

Recently, **Nilambur** and **Thrissur** in **Kerala** and **Warangal** in **Telangana** have joined the UNESCO Global Network of Learning Cities.



**Image Source: UN** 

#### Key Points:

#### About

#### **Global Network of Learning Cities:**

- It is **coordinated by the UNESCO** Institute for Lifelong Learning (UIL).
- The cities included in the list can benefit greatly from the exchange of ideas and solutions for development with other cities.
- GNLC supports the achievement of particularly SDG 4 and SDG 11.
- » **SDG 4:**'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'.
- » **SDG 11:** Make cities and human settlements inclusive, safe, resilient and sustainable.

#### Thrissur

- Thrissur is known as the **cultural capital** of Kerala.
- As a member of the UNESCO GNLC, Thrissur will contribute to digital learning ecosystems and sustainable development.

#### Nilambur:

• Nilamubur is a major eco-tourism destination in Kerala.

#### Warangal:

• Warangal is a city with the **rich cultural heritage** of **Telangana.** 

#### **Probable Question:**

• **Q.** Mention the significance of the Global Network of Learning Cities in achieving the vision of the Smart City.

News Source: Press Information Bureau

## **HATTI COMMUNITY**

#### Why in the News?

The Union Cabinet approved a Constitution amendment Bill that seeks **to grant tribal status** to the **Hatti community** living in the **Trans-Giri region of Himachal Pradesh's** Sirmaur district.

#### Key Points:

#### About

#### Hatti Community:

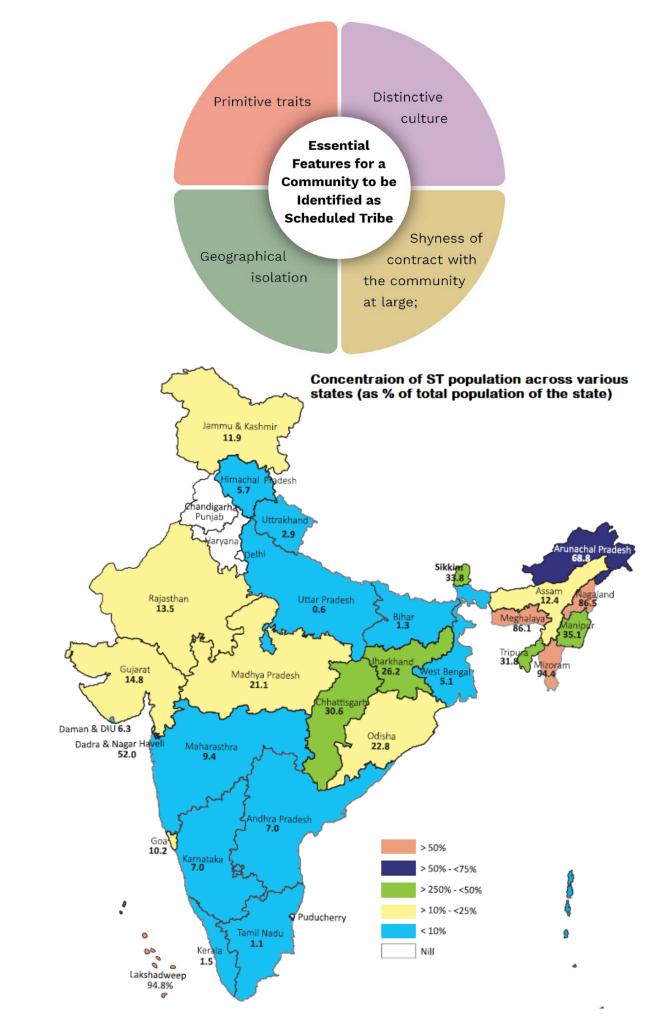
- The Hattis are a close-knit community that got their name from their tradition of selling homegrown vegetables, crops, meat etc. at small markets called **'haat'** in towns.
- The Hattis is **governed by a traditional council called Khumbli,** which like the khaps of Haryana, decides community matters.



#### Image Source: The Indian Express

#### **Scheduled Tribes in India**

 Broadly the Scheduled Tribes inhabit two distinct geographical areas – Central India and the North-Eastern Area.



#### **Constitutional Safeguards for STs:**

- Under **Article 15(4)** special provisions are made for the educational advancement of the Scheduled Tribes.
- Under **Article 46** the State is enjoined to promote with special care to education and economic interests of SC and ST and protect them from social injustice and all forms of exploitation.
- Articles 330 and 332 seats are reserved for SC and ST in Lok Sabha State Vidhan Sabhas.
- Under **Article 339(1)** the President may at anytime appoint a Commission to report on the administration of the Scheduled Areas and the welfare of the Scheduled Castes and Tribes in the State.

# Other Communities approved by Centre for inclusion in STs:

Community	State		
Brijia	Chattisgarh		
Narikuravar & Kurivikkaran	Tamil Nadu		
Betta Kuruba	Karnataka		

#### **Probable Question:**

**Q.** What are essential features for a community to be identified as 'Scheduled Tribe'?

News Source: The Hindu

# **MARTAND TEMPLE**

#### Why in the News?

Recently, the Archaeological Survey of India (ASI) raised objections to the 'Navgrah Ashtamangalam Puja' taking place on the premises of Martand Temple in Kashmir.



#### Key Points:

About Martand Sun Temple:

- It is a Hindu temple located near the city of Anantnag in the Kashmir.
- This eighth century AD temple was dedicated to Surya, the chief solar deity in Hinduism.
- Commissioned by: Lalitaditya Muktapida.
- It was destroyed by Sikandar Shah Miri in the 14th century.
- It was an excellent specimen of **Kashmiri architecture,** which had blended the Gandharan, Gupta and Chinese forms of architecture.

#### Who was Lalitaditya Muktapida?

- Lalitaditya was the most powerful ruler of the Karkota dynasty of Kashmir.
- The 12th-century chronicler, Kalhana characterizes Lalitaditya as a world conqueror in his **'Rajtarangini'**.
- He ruled for **37 years from 724 to 761 CE.**

#### **Probable Question:**

**Q.** Discuss the main contributions of Gupta period and Gandharan forms of architecture.

to Indian heritage and culture.



# **INSPIRE AWARDS**

#### Why in the News?

Recently, the **9<sup>th</sup> National Level Exhibition and Project Competition (NLEPC) of INSPIRE Awards – MANAK** (Million Minds Augmenting National Aspirations and Knowledge) was inaugurated in Delhi.

#### **Key Points:**

#### The INSPIRE Awards - MANAK

- The INSPIRE Awards MANAK scheme is aligned with the 'Start-up India' initiative.
- It is an **initiative to foster a culture of innovation and creative thinking** among school students to address societal needs through science and technology.
- The INSPIRE Award MANAK (Million Minds Augmenting National Aspiration and Knowledge) is awarded by the Department of Science & Technology and National Innovation Foundation-India.

News Source: PIB

# **NEW NAVAL ENSIGN**

#### Why in the News?

Recently, the Prime Minister unveiled the **new naval ensign (flag)** for the Indian Navy in Kochi.

#### Key Points:

#### About

#### What is a Naval Ensign?

- Simply put, a naval ensign is a flag that is hoisted atop all naval installations, including naval warships, ground stations and naval air bases.
- Each country's navy has its own ensign; the US Navy's ensign is the same as the national flag, but many other navies have distinctive naval ensigns which are "worn" by their war vessels.



Image Source: ANI

#### New Naval Ensign of Indian Navy

- The new naval ensign will replace the present ensign that carries the Saint George's Cross with the Tricolour in the canton (top left corner of the flag).
- The new ensign consists of the national flag in the upper left canton, and a navy blue-gold octagon at the centre of the fly.
- » The twin octagonal borders draw inspiration from Shivaji Maharaj Rajmudra or the seal of Chhatrapati Shivaji
- A blue octagonal shape with the national emblem sits atop an anchor, superimposed on a shield with the navy's motto.
- Below the shield, within the octagon, is inscribed the motto of the Indian Navy **'Sam No Varunah'**.
- » The octagonal shape represents the eight directions symbolizing the multi-directional reach of the Indian Navy.

News Source: The Indian Express

# VERTICAL LAUNCH SHORT-RANGE SURFACE-TO-AIR MISSILE (VL-SRSAM)

#### Why in the News?

Recently, the Defence Research and Development Organisation (DRDO) successfully flight tested the **Vertical Launch Short Range Surface to Air Missile** (VL-SRSAM), off the Chandipur coast in Odisha.

#### Key Points:

#### About

#### VL-SRSAM

- VL-SRSAM is a canisterised system, which means it is stored and operated from specially designed compartments.
- » In the canister, the inside environment is controlled thus making its transport and storage easier and improving the shelf life of weapons.
- The VL-SRSAM has been designed to **strike highspeed airborne targets** at the range of 40 to 50 km and at an altitude of around 15 km.
- Its design is based on the Beyond Visual Range Air to Air Missile known as the Astra.
- » A **Beyond-Visual-Range (BVR) missile** is an air-toair missile that can engage targets at distances of at least 20 nautical miles.

# **TEJAS MARK 2 PROJECT**

#### Why in the News?

Recently, the Cabinet Committee on Security (CCS) has **cleared the Tejas Mark-2 project** — a more capable version of the indigenous **Tejas light combat aircraft** (LCA).

#### **Key Points:**

#### About

#### **Tejas Mark-2 Project**

- Tejas 2.0 will be equipped with more powerful GE-F414 engines in the 98 Kilonewton thrust class.
- It would be a replacement for the Mirage 2000, Jaguar and MiG-29 combat aircraft in the IAF.
- It will give a **boost to the indigenous design & development** of the next-gen fighter aircraft and self-reliance in the domain of aircraft manufacturing.

News Source: The Times of India

# **E-CIGARETTES**

#### Why in the News?

Juul Inc, an e-cigarette company, agreed to pay a fine to 34 US states and territories for promoting E-cigarettes or ENDS in teenagers.

#### **Key Points:**

#### About

#### E-cigarettes

- E-cigarettes are **battery-powered devices** that **heat a solution of nicotine** and different flavours to create an aerosol, which is then inhaled.
- » These belong to a category of vapour-based nicotine products called Electronic Nicotine Delivery Systems (ENDS).
- In 2019 the Indian government banned the production, manufacture, import, export, transport, sale, distribution, storage and advertisement of all ENDS.

#### Harmful Impact:

- DNA damage
- Carcinogenesis
- · Cellular, molecular and immunological toxicity
- Respiratory, cardiovascular and neurological disorders
- · Impacts foetal development and pregnancy

# INDIAN IMPORTS OF ENDS PRODUCTS

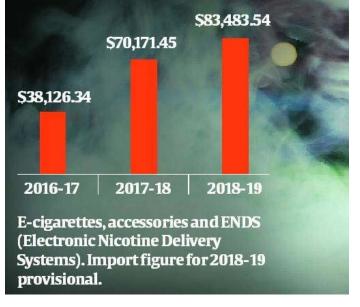


Image Credits: The Indian Express

News Source: The Indian Express

# TOLL COLLECTION THROUGH AUTOMATIC NUMBER PLATE READER (ANPR) CAMERAS

#### Why in the News?

The Ministry of Road Transport and Highways is planning to replace toll plazas on national highways with Automatic Number Plate Reader (ANPR) cameras for toll collection.

#### Key Points:

#### About

#### Automatic Number Plate Reader (ANPR) Cameras

- Under this model, at entry and exit of toll roads ANPR cameras are installed.
- These cameras, will read vehicle number plates and automatically deduct toll from the linked bank accounts of vehicle owners.
- **Limitation:** Not all number plates in India can be read, and only those that have come after 2019 will be registered by the cameras.

#### Present model for toll collection on Indian highways?

 Currently, about 97 per cent of the total toll collection of nearly Rs 40,000 crore happens through FASTags — the remaining 3 percent pay higher than normal toll rates for not using FASTags.

### **NEWLY IDENTIFIED GENE: CSA6**

#### Why in the News?

A newly identified gene **CSA6** can hold the key to prevent fungal infection Candidiasis which often affects intensive-care unit (ICU) patients.

• The gene has been identified in a fungal species known as Candida albicans.



Image Source: i-Stock

#### **Key Points:**

#### About

#### **Candida Albicans**

- Candida albicans is responsible for disease known as Candidiasis.
- It causes high morbidity and mortality in patients impacted by AIDS or cancer.
- Candida normally lives on skin and inside the body, such as the mouth, throat, gut, without causing problems.
- However, it can turn into a pathogen under immunecompromised conditions breathing the host defense thereby causing a life-threatening infection.

News Source: Press Information Bureau

### **HYDROGEN FUEL CELL BUS**

#### Why in the News?

A hydrogen fuel cell bus developed by KPIT-CSIR in Pune was unveiled by the Union minister of state for Science and Technology.

#### Key Points:

#### About

#### Hydrogen Fuel Cell Bus

- Hydrogen fuel cells present in the bus produce electricity by combining hydrogen and oxygen atoms.
- The two gases react across an electrochemical cell similar to a conventional battery cell to produce

electricity, water and small amounts of heat.

• This electricity is then used by electric motors to propel the vehicle forward.

#### Advantages of a Hydrogen Fuel Cell-Powered Vehicle:

- Hydrogen fuel cell electric vehicles (FCEV) only emit water vapour and warm air. They do not produce any tailpipe emissions.
- They are more efficient than internal combustion engine vehicles.
- Hydrogen can be refilled in a fuel cell vehicle in a matter of minutes, nearly as fast as an internal combustion engine can be refilled with fossil fuels.

News Source: The Times of India

### **DHAMRSHALA DECLARATION**

#### Why in the News?

Recently, a three-day National Conference of State Tourism Minister concluded with the adoption of the "Dharamshala Declaration".

#### **Key Points:**

#### Key Highlights of the Declaration Tourism sector

- Global leader in the tourism sector by 2047
- To develop "sustainable and responsible tourism"
- To achieve USD 1 Trillion by the sector in 2047
- to support MSMEs in the tourism sector
- To recover to the pre-pandemic level by mid-2024.
- Achieve a \$250 billion contribution of Tourism to the GDP by 2030.

#### Indian Tourism Sector

- India is ranked 10th among 185 countries in terms of travel & tourism's total contribution to GDP in 2019; contributing 6.8% of GDP.
- It is a labour-intensive sector, In 2020, the Indian tourism sector accounted for 39 million jobs, which was 8% of the total employment in the country.

News Source: Times of India

### BOARD OF CONTROL FOR CRICKET IN INDIA (BCCI)

- Board of Control for Cricket in India (BCCI) will introduce the 'Impact Player' regulation.
- According to the rule, teams can replace one member of their playing XI during a match, if they think it will be useful.

### **NUTRITION RATING STARS**

# CHHELLO SHOW' IS INDIA'S OFFICIAL ENTRY FOR OSCARS 2023

- Gujarati Film Chhello Show, a coming-of-age drama about a young boy's love for cinema in a village in Saurashtra, is India's official entry for the **95th Academy Awards.**
- It is directed and produced by **Pan Nalin (Nalin Kumar Pandya).**

News Source: The Indian Express

# **KRITAGYA 3.0**

#### Why in the News?

Recently, the **Indian Council of Agricultural Research(ICAR)** organized Hackathon 3.0 "**KRITAGYA**" on promoting 'speed breeding for crop improvement.

#### **Key Points:**

#### About KRITGYA:

- The definition of KRITAGYA is:
- » KRI for Krishi meaning Agriculture,
- » **TA** for Taknik meaning Technology and
- » **GYA** for Gyan meaning Knowledge.

**Significance:** Provide an opportunity to students/ faculties/entrepreneurs/innovators to showcase innovative approaches and technology solutions to promote innovation for crop improvement.

#### **News Source: The Indian Express**

### **AMBEDKAR CIRCUIT**

#### Why in the News?

Recently, the **Ministry of Tourism and Culture Minister** announced a special tourist train to cover the "Ambedkar Circuit".

#### Key Points:

#### Ambekar Circuit: It includes

- Madhya Pradesh's Mhow (Ambedkar's birthplace);
- Nagpur (converted to Buddhism);
- Delhi (lived during his last years); and
- Dadar in Maharashtra (body was cremated).

News Source: PIB

#### Why in the News

Recently, the **Food Safety and Standards Authority of India (FSSAI)** has released a draft notification for frontof-pack labelling.



# Food Safety and Standards Authority of India

#### **Key Points:**

- It will require pre-packaged food to carry a star graphic — ranging for 0 to 5.
- Like the star-rating system for energy efficiency of electronic products, the unhealthiest food items carry a 0-star rating and the healthiest carry a 5-star rating.
- It aims to discourage consumers from buying packaged food high in sugar, salt, and fat.

# About the Food Safety and Standards Authority of India (FSSAI):

- It is the country's apex food regulator body.
- It is a statutory body under the Food Safety and Standards Act, 2006.

News Source: PIB

# ASIA-PACIFIC INSTITUTE OF BROADCASTING DEVELOPMENT (AIBD)

#### Why in the News?

Recently at the 47th Asia-pacific Institute of Broadcasting Development (AIBD) Annual meeting in New Delhi, India's Presidency was extended for one more year.

#### Key Points:

# About Asia-pacific Institute of Broadcasting Development(AIBD)

It was Established in 1977 under the **United** Nations Educational, Scientific and Cultural

#### Organization(UNESCO).

- **Objective:** To achieve a vibrant and cohesive electronic media environment in the Asia-Pacific region through policy and resource development.
- Members: 26 countries
- Secretariat: Kuala Lumpur, Malaysia.

News Source: PIB

### **SWACHHTA PAKHWARA**

#### Why in the News?

Recently, the Ministry of Railways, Communications, and Electronics & Information Technology has launched **"Swachhta Pakhwara"** across Indian Railways.

#### **Key Points:**

- The Ministry of Railways is observing Swachhta Pakdwara from 16th September 2022 to 30th September 2022.
- During "Swachhta Pakhwara", Special Focus will be given to the Cleanliness of tracks at stations, approach to major stations, and elimination of plastic waste in Railway premises
- Focus areas: Seva, Sushashan and Gareeb Kalyan.

# Several initiatives are taken by railways for providing a clean environment:

- Bio toilets on coaches leading to clean tracks,
- segregation of bio degradable/non bio-degradable waste,

• Solid waste management etc

News Source: Hindustan Times

### **EMBEDDED SIM (ESIM)**

#### Why in the News?

Recently, Apple Inc. company has come up with an eSIM in order to access mobile networks.

#### **Key Points:**

- An embedded SIM is a SIM card that cannot be removed from a device.
- It is permanently embedded as part of the gadget's(smart phone) motherboard.
- Advantage:
- » **Security:** An eSIM prevents this, as there is no physical element to pull out and use in another device.
- » eSIM technology supports multiple accounts and switching between them is super easy.
- » It will help make devices smaller.
- » It could be extremely helpful for wearables devices.
- Disadvantage:
- » Unusable in countries with no eSIM support.
- » Emergencies: Traditional SIMs can be quickly pulled out of the affected/Damaged phone and into another backup device or secondary phone. It is not possible with eSIMs..



# HYDERABAD STATE LIBERATION DAY

#### Why in the News?

Recently, the Union government approved the yearlong commemoration (starting September 17, 2022) of Hyderabad Liberation Day.

#### **Key Points:**

#### Integration of Hyderbad:

- After India gained independence, the princely state of Hyderabad refused to join Indian union.
- Its Nizam used a **paramilitary force called the Razakars** to terrorise and suppress the peasantry.
- · 1948:
- » Operation Polo was launched by the Government of India, Under which the Indian Army was sent on September 17, 1948, to the princely state, which consisted of modern-day Telangana and some areas of Maharashtra and Karnataka.
- » It led to the surrender of the Nizam and the Razakar.
- **2022:** 17th Sept is going to be celebrated as 'Hyderabad State Liberation Day'.

News Source: PIB

# **MOONLIGHTING POLICY**

#### Why in the News?

Recently a Food Startup has announced a new "moonlighting" policy for its delivery personnel.

#### Key Points:

About

#### Moonlighting

- Moonlighting is the act of working at an extra job beyond regular working hours, usually without the knowledge of the employer.
- Since the side job was mostly at nighttime or on weekends, it was referred to as moonlighting.
- The term gained popularity when workers in the US started seeking a second job beyond their regular
   9-to-5 work for additional income.
- The day work suffers and loses importance when someone moonlights.
- **Legal but maybe unethical:** There is no general legislation that forbids someone from holding down more than one job.

» A individual with similar types of jobs, nevertheless, might raise concerns about confidentiality breaches.

News Source: The Indian Express

## **QUIET QUITTING**

- Quiet Quitting is defined as **performing only the jobs assigned to an employee** by the employer and **not going** above and **beyond the job description.**
- It is opposite to the "hustle culture."
- » Under that, the employees are encouraged to "make every moment count" and work hard to earn money as well as promotions.

News Source: The Indian Express

### **RULE CURVE FOR MULLAPERIYAR**

#### Why in the News?

**Recently,** the Rule Curve came into effect between June 10 and November 30, 2022, during which the Mullaperiyar dam gets maximum inflows from the South West Monsoon.



Image Source: The Indian Express

#### **Key Points:**

#### About

#### **Rule Curve**

- Rule Curve is a tabulation which specifies the quantum of storage of water or empty space to be maintained in a reservoir during different times of a year, based on the rainfall data for 35 years.
- It helps in decision-making for officials in charge of the dam, for the smooth operation of shutters, especially for the moderation of flood, during monsoon times.

#### About Mullaperiyar Dam:

- The Mullaperiyar Dam was constructed during 1887-1895, located on the **confluence of Mullayar and Periyar rivers in Kerala's Idukki district.**
- The dam is within the Periyar Tiger Reserve.
- It is operated and maintained by the Tamil Nadu following as 1886 lease indenture for 999 years.

• Dam purpose is to **divert the waters of the west**flowing river Periyar eastward to the arid rain shadow regions of Tamil Nadu.

#### **About Periyar River:**

- Periyar River originates from the **Sivagiri hills of Western Ghats** in Tamil Nadu and flows through the **Periyar National Park.**
- The Periyar River is the longest river in **Kerala**. It is also known as the **'Lifeline of Kerala'** as it is one of the few perennial rivers in the state.

News Source: The Hindu

### **INTERNATIONAL YEAR OF MILLET: 2023**

#### Why in the News?

Recently, the United Nations General Assembly declared the year 2023 as the International Year of Millet.



Image Source: UN

#### **Key Points:**

#### About

#### What are Millets?

- Millets are called the **'super grain'** because of their high nutritional value.
- » For Example, Jowar, bajra and ragi.
- Millets are high in dietary fibre.
- Due to their high density of nutrients including vitamins, minerals, phytochemicals and dietary fibre, millets are excellent grains to alleviate malnutrition and micronutrient deficiency.
- Additionally, millets do not require high-quality soil to grow and hence can easily cater to the need of the growing population.

#### Significance of International Year Of Millet: 2023

- India's significance in agricultural diplomacy is demonstrated by the FAO Committee on Agriculture's decision to support its proposal in Rome.
- Elevate awareness about the contribution of millets to food security and nutrition
- Inspire stakeholders on improving sustainable production and quality of millets
- Draw focus on enhanced investment in research and development and extension services to achieve the other two aims

News Source: The Hindu

# KARTVAYAPATH

#### Why in the News?

Recently, the historic Rajpath was renamed 'Kartavya Path' by Prime Minister.

#### Key Points:

#### About

#### Kartavyapath

- Kartavya Path will include the erstwhile Rajpath and Central Vista Lawns.
- It symbolises a shift from erstwhile Rajpath being an icon of power, to Kartavya Path being an example of public ownership and empowerment.
- During British rule, Rajpath was known as Kingsway

as an honour to the Emperor of India, King George V, who visited Delhi during the Durbar of 1911.

» The stretch was renamed 'Rajpath' following Independence as Rajpath was known as Kingsway.

News Source: Press Information Bureau

# **OPERATION "GEAR BOX"**

#### Why in the News?

Recently, **'Operation Gear Box'** was launched by the Directorate of Revenue Intelligence (DRI).

#### Key Points:

#### About

#### 'Operation 'Gear Box'

- **Objective:** To **detect the hidden drugs** in the gearboxes.
- The drug Syndicate used old gearboxes for concealing plastic packets containing the narcotic substances and shipped them along with metal scrap along to avoid authorities.

News Source: The Indian Express

### **SMART INDIA HACKATHON 2022**

#### Why in the News?

Recently, the Ministry of Education organised the Smart India Hackathon software and hardware edition for more than 15,000 students.

#### Key Points:

### About

#### Smart India Hackathon 2022

- Smart India Hackathon (SIH) was started in the year 2017.
- SIH is a **nationwide initiative** to provide students with a platform to solve the pressing problems of society, organizations, and government.
- From, this year, Smart India Hackathon Junior has also been introduced as a pilot for school students to build a culture of innovation at the school level.
- **Aim:** To inculcate the culture of product innovation, problem-solving and **out-of-the-box thinking** among students.



#### News Source: The Indian Express

# **ANTI-RADIATION PILLS**

#### Why in the News?

The European Union has decided to pre-emptively supply 5.5 million anti-radiation pills amid fears of growing nuclear disaster at Ukraine's Zaporizhzhia power plant.

#### Key Points:

#### About

#### **Anti-Radiation Pills**

- Anti-radiation pills provides protection in cases of radiation exposure.
- » For Example: Potassium iodide (KI) tablets
- Anti-radiation medications don't always offer complete defence.
- They are **preventive only** and cannot reverse any damage done by radiation to the thyroid gland.

News Source: The Indian Express

#### **PEN PLUS STRATEGY**

#### **Pen Plus Strategy**

• Pen Plus is a **Regional Strategy adopted in Africa** to address Severe **Non-communicable Diseases** at First-Level Referral Health Facilities.

News Source: Down to Earth

# **CENTRE-STATE SCIENCE CONCLAVE**

#### Why in the News?

Recently, the Prime Minister inaugurated the 'Centre-State Science Conclave' in Ahmedabad (Gujarat).

#### **Key Points:**

#### About Centre-State Science Conclave:

- It is a first-of-its-kind conclave being organized at Science City, Ahmedabad.
- **Aim:** To build a robust science, technology and innovation(STI) ecosystem across the country.
- **Significance:** It will strengthen Centre-State coordination and collaboration mechanisms in the spirit of cooperative federalism.

News Source: The Indian Express

### **36TH NATIONAL GAMES**

- The 36th National Games of India will be held in Ahmedabad (Gujarat) from September 27 to October 10.
- The event returns after a gap of seven years.
- The previous edition had happened in **Kerala in 2015.**

News Source: PIB

# US EQUIPMENT PACKAGE FOR PAK'S F-16 FLEET

#### Why in the News?

Recently, the US has planned to provide Foreign Military Sales (FMS) worth USD 450 million for hardware, software and spares for the F-16 fighter fleet of Pakistan.

#### Key Points:

#### **Concern for India:**

- India raised concern at the US decision to provide a sustenance package for Pakistan's F-16 fleet.
- The programme would enhance Pakistan's conventional deterrence versus India.
- India will have to effectively enhance combat conventional capability to continue to meet the challenges of the Pakistan air force.

# **BHITARKANIKA WILDLIFE SANCTUARY**

#### Why in the News?

Recently, the Odisha government cancelled leases granted to two aquaculture companies for shrimp farming inside Bhitarkanika Wildlife Sanctuary.

• Shrink farming was ignoring the eco-sensitive nature of the land.

#### **Key Points:**

#### About Bhitarkanika National Park:

- Location: Kendrapara district in Odisha.
- It has been designated as a second Ramsar site of the State after Chilika Lake.
- Bhitarkanika Wildlife Sanctuary is the 2nd largest Mangrove ecosystem of India.
- It is the breeding place for the endangered saltwater crocodiles.
- The Gahirmatha Beach which forms the boundary of the sanctuary in the east is the largest colony of the Olive Ridley Sea Turtles.
- **River:** Drained by rivers Brahmani, Baitarani, Dhamra and Patasala

News Source: The Indian Express

### CYBER SECURITY EXERCISE "SYNERGY"

#### Why in the News?

Recently, the **Indian Computer Emergency Response Team (CERT-In)** in collaboration with Cyber Security Agency of Singapore (CSA) conducted the Cyber Security Exercise "Synergy" for **13 Countries.** 



#### **Key Points:**

#### About the"Synergy"

- It was a part of the International Counter Ransomware Initiative- Resilience Working Group.
- » Ransomware is a malware designed to deny a user or organization access to files on their computer.
- **Objective:** To exchange best practices among Member-States to build network resiliency against ransomware & cyber extortion attacks.

# About Indian Computer Emergency Response Team (CERT-In):

- It is an organisation under the Ministry of Electronics and Information Technology with the objective of securing Indian cyberspace.
- It was formed in 2004 under Information Technology Act, 2000.
- It prevents cyber attacks and enhance security awareness among common citizens.

News Source: The Indian Express

### **TOMATO FLU**

#### Why in the News?

Recently, Tomato flu has been reported in four states, Kerala, Tamil Nadu, Haryana, and Odisha.

• The **Ministry of Health** issued a set of guidelines on prevention, testing, and treatment of the infection.

# TO KEEP VIRUS AT BAY



CAUTIOUS: Officials screening the children travelling to the district from Kerala for symptoms of tomato flu

#### WHAT IS TOMATO FLU? According to the health department officials, it is a kind of viral infection in children aged below five years. The fever is accompanied by rashes, skin irritation and dehydration. Infected people may develop blisters, which generally appear red in colour. Hence the name tomato flu or tomato fever. Medically, it is known as the hand, foot and mouth disease

SYMPTOMS



Image Source: Times of India

#### Key Points:

#### About Tomato Flu:

- It is caused by a **virus** and It was first identified in **Kerala's Kollam district.**
- The flu gets its name because it **causes red blisters** in the body.
- The flu affects children below **five years** of age.
- **Symptoms:** Body aches, skin irritation, fever, vomiting swelling of joints etc.
- **Treatment:** This flu is a **self-limiting one** and there is no specific treatment or vaccine available.
- Prevention:
- » Maintain proper hygiene and sanitization of the surroundings.
- » Refrain from physical contact with other children or alienated bodies.

News Source: The Indian Express

# **UNIVERSAL POSTAL UNION**

#### Why in the News?

Recently, The Union Cabinet approved the ratification of amendments to the Constitution of the **Universal Postal Union (UPU).** 



#### **Key Points:**

• The 27th UPU Congress held at Abidjan (Cote d'Ivoire) in 2021 adopted several amendments to the constitution of UPU.

#### Significance:

• These amendments ensure further legal clarity and stability to the Acts of the Union.

#### About Universal Postal Union(UPU):

- **Established by:** It is a United Nations specialized agency, established by the **Treaty of Bern** in 1874
- Headquarters: Bern, Switzerland

News Source: The Hindu

# INTEGRATED PHARMACEUTICAL DATABASE MANAGEMENT SYSTEM & PHARMA SAHI DAAM

#### Why in the News?

Recently, the Ministry of Health and Family Welfare launched **IPDMS 2.0** and **Pharma Sahi Daam 2.0** mobile applications.

#### Key Points:

#### About

# Integrated Pharmaceutical Database Management System 2.0 (IPDMS 2.0):

- It is an integrated, responsive, cloud-based application **developed by the NPPA.**
- Significance:
- » To promote the government's thrust on "ease of doing business".
- » It will provide a single window for submissions of various forms as mandated under the Drug Price Control Order (DPCO), 2013.

#### Pharma Sahi Daam 2.0 app:

- It is an online search tool for checking prices of Scheduled / Non-Scheduled medicines.
- Developed by: NPPA
- Updated features in 2.0, such as speech recognition, availability in Hindi and English, share button and medicine bookmarking.
- Significance:
- » Raising consumer complaints will also be made easier.

News Source: The Indian Express

# MARS OXYGEN IN-SITU RESOURCE UTILIZATION EXPERIMENT (MOXIE)

#### Why in the News?

Recently, **Mars Oxygen In-Situ Resource Utilization Experiment(MOXIE)** has produced oxygen on Mars with components from the planet's atmosphere.



#### Image Source: Nasa

 It is a small box sent with the Perseverence rover of the National Aeronautics and Space Administration(NASA). It works like a tree, splitting carbon dioxide absorbed from the atmosphere to produce pure oxygen.

News Source: The Indian Express

# INFLATABLE AERODYNAMIC DECELERATOR (IAD): ISRO

#### Why in the News?

Recently, ISRO tested the Inflatable Aerodynamic Decelerator system to recover spent rocket stages.

#### **Key Points:**



#### Image Source: Parabolicarm.com

#### About Inflatable Aerodynamic Decelerator (IAD):

- **Developed by:** ISRO's Vikram Sarabhai Space Centre (VSSC).
- How it Works?
- » The IAD serves to decelerate an object plunging down through the atmosphere.
- » It systematically reduced the velocity of the payload through aerodynamic drag.
- » Once the IAD fell into the sea, it deflated by firing a deflation pyro valve.

#### Significance:

- » It could aid the cost-effective recovery of spent rocket stages.
- » safely land payloads on other planets.
- » Making space habitats for human space flight missions.

#### News Source: PIB

# **MALARIA VACCINE: R21/MATRIX**

#### Why in the News?

According to a recent study, a malaria vaccine booster shot at one year following a primary three-dose regime can provide 70-80% protection against the disease.

#### **Key Points:**

- **Mosquirix** is the only malaria vaccine to receive approval from the World Health Organization (WHO).
- The study found that the **R21/Matrix-M vaccine candidate** demonstrated high efficacy (75%) after the administration of three primary doses.
- Significance:
- » It could be an effective weapon to fight against malaria.
  - Malaria is one of the biggest reasons for children's death globally.

# BIHAR'S MITHILA MAKHANA GETS A GI TAG

#### Why in the News?

Recently, Bihar's Mithila Makhana gets a GI tag.



Image Source: Indian Express

#### Key Points:

- Mithila Makhana, simply known as 'Makhan', is a variety of aquatic fox nut.
- They are rich in protein and fiber and have various micro-nutrients such as magnesium, calcium, phosphorous and iron.
- It is famously consumed during Kojagara Puja by Maithil Brahmins. It is cultivated in the Mithila region of Bihar and some parts of Nepal.
- It will help farmers get the maximum price for their produce.









# **UPSC CSE GS Combat Original Structures Original Structures Original Structures Original Structures**



AIR - 29

Bhavishya Combats - 6





Akshay Pillay Combats - 9



AIR - 107

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# **MIKHAIL GORBACHEV**

#### Why in the News?

Recently, Mikhail Gorbachev, the last Soviet union leader passes away.



Image Source: Livemint

#### **Key Points:**

About

#### **Mikhail Gorbachev**

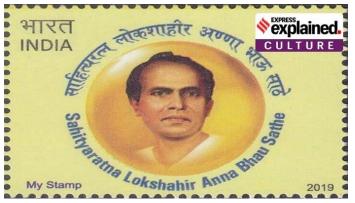
- Gorbachev was the **last leader of the USSR**, serving both as its general secretary and later president from 1985 until its collapse in 1991.
- **1990:** He is **credited with ending of coldwar with West.** For this, feat he won the **Nobel Peace Prize** in **1990**.
- Brezhnev Doctrine: Until 1985, Soviet foreign policy was based on the Brezhnev Doctrine which advocated maintaining Moscow's influence (by force if needed,) over all its satellite states.
- » Gorbachev instead favoured an approach based on shared ethical principles rather than on Marxist-Leninist concepts of the inherent conflict between capitalism and communism.
- **1980s**: He introduced the **ideas of "glasnost"** and **"perestroika"**.
- » **Glasnost,** (Russian: "openness") Soviet policy of open discussion of political and social issues and began the democratization of the Soviet Union.
- » Perestroika, (Russian: "restructuring") program was instituted in the Soviet Union to restructure Soviet economic and political policy. Seeking to bring the Soviet Union up to economic par with capitalist countries such as Germany, Japan, and the United States.

News Source: The Hindu

### **ANNABHAU SATHE**

#### Why in the News?

Recently, a statue of Lok Shahir **(balladeer) Annabhau Sathe** was unveiled in Moscow.



#### Image Source: The Indian Express

#### **Key Points:**

#### About

#### Annabhau Sathe

- Annabhau Sathe, was born in 1920 in a **Matang Dalit family** in Maharashtra.
- Sathe's literary work was immensely inspired by the Russian revolution, Marxism and the Communist ideology.
- He formed **Dalit Yuvak Sangh,** a cultural group and started writing poems on workers' protests.
- In 1939, he wrote his first ballad 'Spanish Povada'.
- He has made significant contributions to the Ambedkarite movement and is often considered the **Father of Dalit Literature.**
- Important Works:
- 'Aklechi Goshta,' 'Stalingradacha Povada,' 'Mazi Maina Gavavar Rahili,' 'Jag Badal Ghaluni Ghav', 'Bangalchi Hak' (Bengal's Call), Fakira

News Source: The Indian Express

#### **ROGER FEDERER**

- **Switzerland** tennis star Roger Federer announces his retirement from professional tennis at age **41**
- He was the first person to win **20 grand slam titles.**
- He has won the Laureus World Sportsman of the Year award a record five times.

# PANDURANG SADASIV KHANKHOJE

#### Why in the News?

Recently, Lok Sabha Speaker unveiled statues of Swami Vivekananda and agriculturalist Pandurang Khankhoje in Mexico.



Image Source: The Indian Express

#### **Key Points:**

#### About Pandurang Khankhoje (1883-1967):

- Born: Wardha, Maharashtra, in the late 19th century.
- He was inspired by Bal Gangadhar Tilak
- Association with the Indian independence movement:
- » He was the founding members of the **Ghadar Party** in 1914.
- **Relation with Mexico:** Sought refuge in Mexico due to his association with Ghadar Party.
- » He was revered as an **agricultural scientist in Mexico.**
- » He researched **corn, wheat, pulses and rubber**, developing frost and drought-resistant varieties.
- » He was part of efforts to bring in the **Green Revolution in Mexico.**



# EGYPT

#### Why in the News?

Recently, India and Egypt, signed a Memorandum of Understanding (MoU) to further enhance bilateral defence cooperation.

#### **Key Points:**

#### About

#### Egypt

- **Location:** Egypt is located in the northeastern part of Africa.
- Maritime Bordering Areas:
- » It borders the Mediterranean Sea to the north and the Gulf of Suez and the Red Sea to the east.
- **Land Border:** It is bordered by Libya in the west, the Palestinian territory (Gaza Strip) and Israel in the northeast, and Sudan in the south.



Image Credits: Brittanica

News Source: The Hindu

# UZBEKISTAN

#### Why in the News?

Recently, the 22nd Shanghai Cooperation Organisation (SCO) summit 2022 was held in Uzbekistan.

#### **Key Points:**

#### About

#### Uzbekistan

- Uzbekistan is a **landlocked** country in **Central Asia**, located in the Northern and Eastern hemispheres of the Earth.
- Uzbekistan is bordered by **Kazakhstan to the northwest** and **north**, **Kyrgyzstan** and **Tajikistan** to **the east** and **southeast**, **Afghanistan** to the **south**, and **Turkmenistan** to the **southwest**.



Image Source: World Atlas

**News Source: The Hindu** 

# MCQS

- 1. The term 'Abraham Accords' often seen in news is related to which of the following countries?
  - (a) UAE, Israel, Bahrain
  - (b) Isreal, Saudi Arabia, Palestine
  - (c) Iran, Iraq, Bahrain
  - (d) Oman, Qatar, Syria
- 2. With reference to "per- and polyfluoroalkyl substances," (PFAs)', consider the following statements:
  - 1. These substances readily react with grease, water and oil.
  - 2. They are called 'forever chemicals'.

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

# 3. With reference to 'Fastag',consider the following statements:

- 1. It is based on radio frequency identification (RFID) technology.
- 2. It is operated by the Ministry of Science and Technology.

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
- 4. The 'National Automated Fingerprint Identification System (NAFIS)' is under the aegis of:
  - (a) Ministry of Defence (MoD)
  - (b) Ministry of Electronics and Information Technology (MEITY)
  - (c) National Crime Records Bureau (NCRB)
  - (d) Ministry of Science and Technology
- 5. With reference to 'UNESCO Global Network of Learning Cities (GNLC)', consider the following statements:
  - 1. GNLC supports the achievement of particularly SDG 4 and and SDG 11.
  - 2. Nilambur and Thrissur in Kerala and Warangal

in Telangana have joined the GNLC.

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

#### 6. The theme for 'Eastern Economic Forum 2022' is:

- (a) The Path to a Multipolar World
- (b) People, Planet, Prosperity
- (c) Realizing Opportunities of the 21st Century For All'.
- (d) Building consensus for fair and sustainable development
- 7. OPERATION "GEAR BOX" often seen in news is related with:
  - (a) Drugs
  - (b) Anti-Piracy
  - (c) Envirnoment Awareness
  - (d) Biodiversity
- 8. The term 'CRISPR', often seen in news is related with:
  - (a) Biotechnology
  - (b) Astronomy
  - (c) Earth Sciences
  - (d) Economy

# 9. India has 2+2 dialogues with which of the following countries?

- 1. USA
- 2. Australia
- 3. Japan
- 4. Russia

Select the correct answer using the code given below:

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

10. Recently, which of the following Communities are approved by Centre for inclusion in Scheduled Tribes (STs) ?

- 1. Brijia
- 2. Betta Kuruba
- 3. Hatti

Select the correct answer using the code given below:

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

#### 11. With reference to 'Financial Stability and Development Council(FSDC)',consider the following statements:

- 1. The Chairman of the FSDC is the Finance Minister.
- 2. The FSDC Sub-committee is chaired by the Deputy Governor, RBI.

Which of the statements given above is/are not correct?

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

# 12. 'National Logistics Policy (NLP)' has been launched by:

- (a) Ministry of Commerce & Industry
- (b) Ministry of Labour & Employment
- (c) Ministry of Micro, Small and Medium Enterprises (MSME)
- (d) Ministry of Statistics and Programme Implementation (MoSPI)

# 13. Which of the following countries shares land border with Egypt?

- 1. Libya
- 2. the Palestinian territory (Gaza Strip)
- 3. Israel
- 4. Sudan

Select the correct answer using the code given below:

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

# 14. Which of the following is/are examples of Software-as-a-Service (SaaS)?

- 1. Google Doc
- 2. Dropbox

3. Slack

Select the correct answer using the code given below:

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

# 15. With reference to the 'The INSPIRE AwardsMANAK scheme', consider the following statements:

- 1. It is aligned with the 'Start-up India' initiative.
- It is awarded by the Department of Science & Technology and National Innovation Foundation-India.

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

# 16. Which of the following literary work had been compiled by 'Annabhau Sathe'?

- 1. Aklechi Goshta
- 2. Stalingradacha Povada
- 3. Mazi Maina Gavavar Rahili
- 4. Bangalchi Hak
- 5. Fakira

Select the correct answer using the code given below:

- (a) 1, 2 and 4 only
- (b) 2 and 5 only
- (c) 1 and 3 only
- (d) 1, 2, 3, 4 and 5

# 17. The term 'Glasnost' and 'Perestroika' often seen in news are related to:

- (a) Mikhail Gorbachev
- (b) Valadimir Putin
- (c) Boris Yeltsin
- (d) Dmitry Medvedev

# 18. With reference to the 'La Nina',consider the following statements:

- 1. La Nina is caused by the build-up of cold water on the ocean surface dropping the temperature.
- 2. It mostly occurs in the tropical Pacific region.

correct?

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

#### 19. With reference to 'Central Bank Digital Currency (CBDC)', consider the following statements:

- 1. It uses a private permissioned block chain network.
- 2. Users that use CBDCs have anonymity.
- 3. Antigua and Barbuda had launched their CBDC.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1 and 3 only
- 20. What does not come under the purview of 'Contempt of Court'?
  - 1. Innocent publication and distribution of some matter.
  - 2. Fair and accurate report of judicial proceedings.
  - 3. Fair and reasonable criticism of judicial acts.

Select the correct answer using the code given below:

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

#### 21. Which of the following statement is/are correct about James Webb Space Telescope (JWST)?

- 1. It is an international collaboration between NASA, the European Space Agency (ESA) and the ISRO.
- 2. It is considered a successor of the Hubble Telescope.
- 3. It will not be able to look in the infrared spectrum.

Select the correct answer using the code given below:

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

### Which of the statements given above is/are 22. With reference to 'Hyderabad Liberation Day', consider the following statements:

- 1. 17th Septisgoing to be celebrated as 'Hyderabad State Liberation Day'.
- 2. Hyderabad was liberated under 'Operation Polo'.

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

#### 23. The Objective of PM PRANAM Scheme is:

- (a) To reduce the subsidy burden on chemical fertilisers.
- (b) Pension for Senior citizens under Below Poverty Line.
- (c) To role out One Rank One Pension scheme
- (d) Development of Tourist circuits

### 24. Prompt Corrective Action (PCA) mechanism is formulated by:

- (a) SEBI
- (b) Reserve Bank of India
- (c) Ministry of Home Affairs
- (d) Ministry of Corporate Affairs

### 25. The Smart India Hackathon is organised by which of the following?

- (a) Ministry of Education
- (b) Ministry of Finance
- (c) Ministry of Science and Technology
- (d) Ministry of Commerce & Industry

#### 26. Consider the following Pairs:

- Schedule Species Covered
- Indian Ocean 1. Cyclones
- 2. Atlantic Typhoons
- Willy-willies 3. Western Australia

Which of the given above pairs is/are correctly matched?

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

#### 27. Consider the following Pairs:

Colour revolutions Countries

- 1. Orange Revolution Ukraine
- 2. Tulip Revolution Kyrgyzstan
- 3. Jasmine Revolution Tunisia

How many pairs given above are correctly matched?

- (a) Only 1 Pair
- (b) Only 2 Pairs
- (c) Only 3 Pairs
- (d) All Three Pairs

# 28. With reference to 'Red-Eared Slider Turtles', consider the following statements:

- 1. They are native to South-Eastern USA and Mexico.
- 2. They are critically endangered in the IUCN Red List.

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

# 29. With reference to '103rd Constitution Amendment Act', consider the following statements:

- 1. It provides up to 10 per cent reservation in employment and educational institutions.
- 2. It inserted clauses 15(6) and 16(6) in the Constitution
- 3. It empowered only centre to provide reservation on the basis of economic backwardness.

Which of the statements given above is/are correct?

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

#### 30. With reference to the 'Global Alliance for Industry Decarbonization', consider the following statements:

- 1. The International Renewable Energy Agency (IRENA) have launched the Global Alliance for Industry Decarbonization.
- 2. It is observed under the aegis of UNFCCC.

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

# 31. With reference to the 'Bhitarkanika Wildlife Sanctuary', consider the following statements:

- 1. It has been designated as the first Ramsar site of India.
- 2. It is the 2nd largest Mangrove ecosystem of India.
- 3. It is the breeding place for the endangered saltwater crocodiles..

Which of the statements given above is/ are correct?

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

#### 32. India's first-ever Dark Sky Reserve is located in:

- (a) Ladakh
- (b) Himachal Pradesh
- (c) Uttarakhand
- (d) Jammu and Kashmir

# 33. With reference to 'Aurobindo Ghosh', consider the following statements:

- 1. He was inspired by Bal Gangadhar Tilak.
- 2. He was the founding members of the Swaraj Party in 1923.
- 3. He was part of efforts to bring in the Green Revolution in Mexico.
- 4. He was revered as an agricultural scientist in Mexico

Select the correct answer using the code given below:

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

# 34. With reference to 'Cloud Seeding', consider the following statements:

- 1. It is an artificial way of inducing moisture in the clouds to cause rainfall.
- 2. It uses silver iodide and dry ice to improve the creation of ice crystals in clouds.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) 1 and 2 only
- (d) Neither 1 nor 2
- 35. Consider the following statements regarding the 'Coalition for Disaster Resilient Infrastructure (CDRI)':
  - 1. It aims to promote resilience of infrastructure systems to climate and disaster risks..
  - 2. It is launched by the Britain government..

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

# 36. In the context of 'Miyawaki method', consider the following statements:

- 1. It is a method of afforestation to grow urban forests.
- 2. This technique is pioneered by Japanese botanist Akira Miyawaki.

Select the correct answer using the code given below:

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

### 37. With reference to the ''Particularly Vulnerable Tribal Groups (PVTG)' initiative', consider the following statements:

- 1. They were first identified by Dhebar Commission in 1973.
- 2. At present, 95 tribal groups are listed as PVTGs.

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

# 38. With reference to 'One Nation One Fertiliser', consider the following statements:

1. It will be implemented by The Ministry of

Chemicals and Fertilisers..

2. This scheme applies to public sector companies only.

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

# 39. With reference to 'Multi Modal Logistics Parks (MMLP)', consider the following statements:

- 1. It is being developed under a 'Hub & Spoke' model.
- 2. It was signed under Bharatmala Pariyojana.

Which of the given above statements is/are correct?

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

#### 40. Consider the following Pairs:

GI tag	State
--------	-------

- 1. Mithila Makhana Bihar
- 2. Kaji Nemu Assam
- 3. Khola Chilli Tamil Nadu
- 4. Tawlhlohpuan Mizoram

Which of the given above pairs is/are correctly matched?

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

# 41. With reference to Martand Sun Temple, consider the following statements:

- 1. It is a Hindu temple located near the city of Anantnag in Kashmir.
- 2. It was destroyed by Aurangzeb in the 17th century.
- 3. It was an excellent example of Kashmiri architecture, incorporating Gandharan, Gupta, and Chinese styles.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 1 only

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

# 42. With reference to Bharat stage (BS) Emission Norms, consider the following statements:

- 1. It is based on European regulations.
- 2. They are set by the Central Pollution Control Board under the Ministry of Environment and Climate Change.
- 3. The BS-VI (BS6) vehicles were mandated from April 1, 2022.

Which of the statements given above is/are correct?

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

# 43. Consider the following statements about National Pharmaceutical Pricing Authority (NPPA):

- 1. It is an independent Regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices.
- 2. It was constituted in 1997 under the Ministry of Chemicals & Fertilizers.

Select the correct answer using the code given below:

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

#### 44. With reference to the Economic Advisory Council to the Prime Minister, consider the following statements:

- 1. The Economic Advisory Council to the Prime Minister (EAC-PM) is an independent body.
- 2. It is a statutory body.

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

# 45. Which of the following statements correctly describes the term 'Zombie Ice', which was recently mentioned in the news?

(a) It is a chunk of ice that has recently broken free

from the Siachin glacier.

- (b) It is dead or doomed ice that is attached to thicker areas of ice and is no longer getting replenished by parent glaciers.
- (c) It is a piece of freshwater ice more than 15 m long that has broken off a glacier and is floating freely in open (salt) water.
- (d) The carbon-covered ice tends to have more surface melting than normal.

#### 46. Which of the following is/are the aim of Scheme for Economic Empowerment of Denotified/Nomadic/ Seminomadic (SEED)?

- 1. Provide Health Insurance through Pradhan Mantri Suraksha Bima Yojana.
- 2. Provide free competitive exam coaching
- 3. Provide financial assistance for housing.
- Select the correct answer using the code given below:
- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

# 47. Which of the following organisation has released the World Social Protection Report 2021-22?

- (a) International Labour Organisation (ILO)
- (b) IMF
- (c) World bank
- (d) Sustainable Development Solutions Network(SDSN)

#### 48. 'Pradhan Mantri TB Mukt Bharat Abhiyan' launched by the Government of India pertains to:

- (a) Immunization of children and pregnant women
- (b) Elimination of TB by 2025 from India.
- (c) Mission is technically supported by WHO, UNICEF, .
- (d) Launched under mission Indradhanush

# 49. With reference to Cheetah, consider the following statements:

- 1. Cheetah reintroduction project aims to reintroduce cheetah in Jim Corbett National Park, Uttarakhand.
- 2. It was officially declared extinct by the Indian government in 1952.
- 3. Asiatic cheetah is classified as a "critically endangered" species by the IUCN Red List..

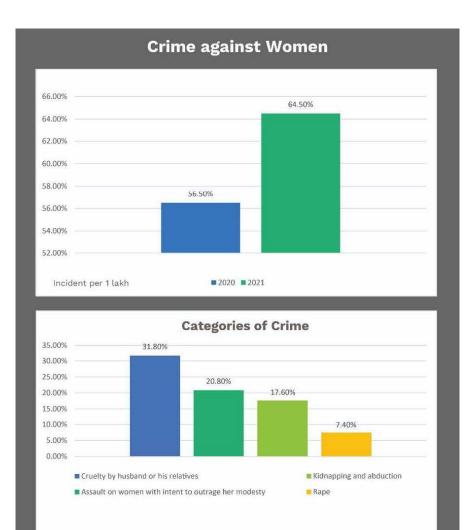
correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3 only
- Which of the statements given above is/are 50. Which one of the following is associated with the issue of control and phasing out of the use of ozone-depleting substances?
  - (a) Bretton Woods Conference
  - (b) Montreal Protocol
  - (c) Kyoto Protocol
  - (d) Nagoya Protocol

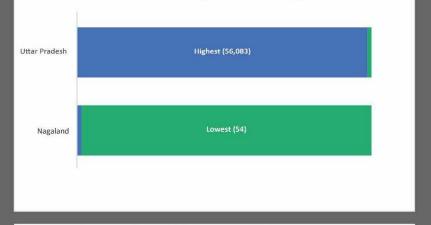
## **ANSWER BOX:**

1 (a)	6 (a)	11 (b)	16 (d)	21 (b)	26 (c)	31 (c)	36 (c)	41 (a)	46 (b)
2 (b)	7 (a)	12 (a)	17 (a)	22 (c)	27 (d)	32 (a)	37 (a)	42(a)	47(a)
3 (a)	8 (a)	13 (d)	18 (c)	23 (a)	28 (a)	33(d)	38 (a)	43 (c)	48 (b)
4 (c)	9 (d)	14 (d)	19 (d)	24 (b)	29 (b)	34 (c)	39 (c)	44 (a)	49 (b)
5 (c)	10 (d)	15 (c)	20 (d)	25 (a)	30 (a)	35 (a)	40 (c)	45(b)	50 (b)

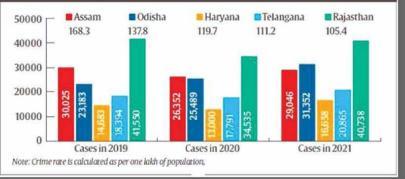
### **FACT FILE**



State Wise (in terms of no)



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Incident per 1 lakh children

