

# UPSC CURRENT AFFAIRS CAPSULES



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# Monthly Current Affairs Magazine – December 2021

To ease the preparation, we are providing monthly current affairs compilation for the aspirants. The magazine contains subject-wise distribution of comprehensive news articles, which have been derived from the sources like PIB, The Hindu, The Indian Express, etc. We have also added Practice questions for Prelims, with solution and detailed explanation. Aspirants should attempt these questions after reading the magazine, in order to evaluate their knowledge of Current Affairs.

*"Every day is a chance to begin again. Don't focus on the failures of yesterday, start today with positive thoughts and expectations."*

– Catherine Pulsifer

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## Polity & Governance

### Annual Status of Education Report | ASER 2021

#### Context

- The Annual Status of Education Report (ASER) 2021 was recently published by the PRATHAM, a non-governmental organization (NGO).

#### Key Points

- **About ASER Report:** ASER is an annual survey that aims to provide reliable annual estimates of children's schooling status and basic learning levels for each state and rural district in India.
  - ASER has been conducted every year since 2005 in almost all rural districts of India.
  - ASER is the largest citizen-led survey in India.
  - ASER is conducted by the Pratham, a non-government organization.
- **Geographical and Demographic coverage:**
  - ASER It is a nationwide survey of rural education and learning outcomes.
  - Unlike other surveys, ASER is a household-based rather than school-based survey.
  - ASER includes children who have never been to school or have dropped out, as well as those who are in government schools, private schools, religious schools or anywhere else.

#### Key Findings

- **About ASER 2021:** ASER 2021 surveyed over 76,000 households with children aged six to 14.
  - ASER 2021 was conducted in 26 states and 4 Union Territories.
- **16<sup>th</sup> ASER a phone survey:** Due to the pandemic, ASER's 16th annual report was based on a phone survey assessing enrolment in schools and tuition classes, and access to devices and learning resources.
  - Earlier, ASER conducted face-to-face survey which assessed learning outcomes and children's competencies in reading and arithmetic skills.
  - ASER 2020 (conducted in September 2020) was the first ever phone-based ASER survey.
- **Enrollment:** The percentage of rural children who were not enrolled in school doubled during the pandemic.
  - Over a third of children enrolled in Classes 1 and 2 have never attended school in person.

- **Shift in Enrollment:** The Government schools saw an increase (64.3% in 2018 to 70.3% in 2021) in enrolment at the expense of private schools (dropped from 32.5% in 2018 to 24.4% in 2021).
  - Shift to government school enrolment could be a result of financial distress, the closure of affordable private schools and the movement of migrants to rural areas
- **Learning Outcomes:** while 92% of children had textbooks for their grade, only a third had access to any other learning resources or support.
- **Traditional learning:** About 65% of students did some type of traditional learning activity during the week of the survey, with engagement ranging from 44% in Jharkhand to almost 90% in Kerala.
- **Online learning:** With smartphone availability and access limited, online learning was restricted to a quarter of students.
  - **Inter-state variations:** 91% of students from Kerala and almost 80% from Himachal Pradesh had online education, but only 10% from Bihar and 13% from West Bengal.
- **Tuition Classes:** During the pandemic, almost 40% of students took tuition classes, as many parents struggled to provide the learning support students were not receiving from closed schools.
- **Access to study materials:** textbook distribution was a success story in most States, with 92% of students having the texts for their grade level.
  - **Deficiency:** Just over a third of students enrolled in closed government schools in 2021 received worksheets, phone messages or any other sort of learning activities or materials in the week of the survey.

### ADR report on political donations

#### Context

- Recently, Association of Democratic Rights (ADR) has released a report where it has revealed that more than 55% of the donations received by regional parties in FY 2019-20 came from "unknown" sources.

#### Key points

- ADR has analysed 23 regional parties which filed their annual audit and contribution reports, and reported that 54.32% came from "unknown" sources.
- According to the report, electoral bonds accounted for nearly 95% of the donations from "unknown" sources.

- The report noted that donations received by national parties from “unknown” sources added up to 70% of their income.
- Parties in the south — TRS, TDP, YSR Congress Party, DMK and JD(S) — topped the list of regional parties with highest incomes from “unknown” sources.
- The donations received by regional parties from “known” donors added up to 22.98% of their total income.
  - Known donors are those whose details are available from contribution report submitted to Election Commission.

#### ADR suggestions

- ADR has noted that since a very large percentage of the income of political parties cannot be traced to the original donor, full details of all donors should be made available for public scrutiny under the RTI.
- Also, any organisation that receives foreign funding should not be allowed to support or campaign for any candidate or party.
- ADR has also suggested that the mode of payment of all donations (above and below Rs 20,000), income from sale of coupons, membership fees, etc. should be declared by the parties in audit reports, submitted to the I-T department and Election Commission of India.

#### About Electoral Bonds

- Electoral Bond is a financial instrument for making donations to political parties.
- It is an initiative of Department of Economic Affairs, Ministry of Finance.
- Electoral Bond is in the nature of a Promissory Note and an interest free banking instrument.
- A citizen of India or a body incorporated in India will be eligible to purchase the bond.
- Electoral bond would be issued/purchased for any value, in multiples of 1,000, from the specified branches of the State Bank of India (SBI).
- Know more about Electoral Bonds here.

### Beating the heat: a sustainable cooling handbook for cities

#### Context

- Recently, UN Environment Programme (UNEP) has published detailed guidance to help the world’s cities address warming, which is occurring at **twice the global average rate in urban areas.**

#### Key points

- **Demand for space cooling is increasing.** The energy requirement for space cooling is predicted to triple from 2016 to 2050 as millions of households in developing countries acquire air conditioners in the coming decades.
- **Impacts of urban heat are not evenly distributed.** Cooler cities, homes and streets are key to ensure climate justice. Lower-income districts and communities are usually the most vulnerable to heat, placing the negative impacts of excess warming disproportionately on those least likely to be able to afford or access thermal comfort. We need to transition to more equitable and sustainable ways of cooling our cities and make them liveable for all.
- **The benefits of sustainable urban cooling are far reaching,** including improved health and productivity, reduced power energy requirements, lower emissions, and economic benefits.
- **Cooling strategies can be optimized to work together efficiently.** The report calls for a whole-system approach—that is, reduce heat at urban scale, reduce cooling needs in buildings and serve cooling needs in buildings efficiently—to benefit from integrative effects.

#### Example case studies

- **United States:** Heat reduction services from urban tree cover in the United States are estimated to be worth USD 5.3 billion to USD 12.1 billion annually. Globally, investing USD 100 million annually in street trees would give 77 million people a 1°C reduction in maximum temperatures on hot days.
- **Seoul, South Korea:** An effort to restore the Cheonggyecheon stream that runs through the city replaced 5.8 kilometres of elevated expressway covering the stream with a mixed-use waterfront corridor. The waterfront corridor decreased temperature 3.3°C to 5.9°C compared to a parallel road a few blocks away.
- **Medellín, Colombia:** Green corridors were created that follow and restore the geography of the area prior to recent development. From 2016 to 2019, the city created 36 corridors, 18 along major roads and 18 along waterways, covering over 36 hectares. The areas with green corridors have already seen temperature reductions of up to 4°C.
- **Paris, France:** Paris is home of the first and largest district cooling system in Europe. When the water temperature in the Seine River that cuts through city is below 8°C, this water is used to provide “free cooling.”

- **Toronto, Canada:** The municipal government implemented the largest lake-source cooling system in the world. Commissioned in 2004, Enwave's 264 MW of refrigeration Deep Lake Water Cooling (DLWC) system uses Lake Ontario's cold water as a renewable energy source.
- **Guangzhou, China:** The municipal government adopted regional centralized cooling as part of a green and environmentally friendly modern urban centre in the core area of the Pearl River New City development. The local environmental temperature in the core area of Zhujiang New Town was reduced by 2-3°C compared to using distributed cooling systems.

### 103rd Constitutional Amendment Act: Revisiting Income Criterion for EWS Quota

#### Context

- Recently, the Union Government informed the Supreme Court that it would revisit the "criteria" for determining Economically Weaker Sections (EWS) to provide them reservation (EWA Quota).
  - The government said a committee would be set up to review the "criteria" to identify the EWS category.
  - The EWS quota was meant for persons who earned less than ₹8 lakh annually and did not benefit from any other existing reservation.
- The SC was hearing a case filed by NEET aspirants challenging a July 29 notification announcing 27% quota to OBCs and 10% reservation to the EWS in the All-India Quota (AIQ) category.

#### 103rd Constitutional Amendment Act- Key Amendments

The Parliament of India amended following sections of the constitution through 103rd Constitutional Amendment Act 2019 to bring EWS quota for economically weaker section of the society.

- **Article 15 (6):** It was added in the constitution of India with an aim to provide reservations to economically weaker sections for admission to educational institutions including private educational institutions, whether aided or unaided by the State, other than the minority educational institutions referred to in clause (1) of Article 30.
  - The **103rd Constitutional Amendment Act** aims to provide reservation to those who do not fall in the article 15 (5) and 15(4).
  - Article 15(4) and 15(5) of the Indian Constitution provides reservation to SCs, STs and OBCs.

- **Article 16 (6):** It was added in the constitution to provide reservations to people from economically weaker sections in government posts.
  - **Criteria for deciding EWS quota beneficiaries:** A provision in the 103rd Constitutional Amendment states that- "economic weakness" shall be decided on the basis of "family income" and other "indicators of economic disadvantage."

#### EWS Quota Eligibility

- As per the 103rd Constitutional Amendment Act 2019, the government has provided eligibility criteria for EWS Quota beneficiaries. EWS Quota is available to those-
  - To those who are not covered in existing quotas
  - Whose Family income below 8 lakhs a year or agricultural land below 5 acres.
  - Who have a house above 1,000 square feet or a 100-yard plot.
  - In case of a residential plot in a non-notified municipality area, the residential plot should be below 200 yards.

### District Good Governance Index

#### Context

- Recently, the Union Minister of Personnel, Public Grievances and Pensions announce that it will help Government of Uttar Pradesh in developing a District Good Governance Index.
- District Good Governance Index was announced at the Regional Conference organized by Department of Administrative Reforms & Public Grievances (DARPG) at Lucknow, Uttar Pradesh.
  - Theme of Regional Conference: "Strengthening the State Institutes of Public Administration"



### Key Points

- **About:** District Good Governance Index, first for any State, will be developed on the lines of the National Good Governance Index for improving the efficiency of Governance across Districts.
- **Developing Authority:** District Good Governance Index will be developed by Department of Administrative Reforms & Public Grievances (DARPG) collaborate with Uttar Pradesh government.
- **Significance:** Good Governance Index for the State can be replicated in other States to reach out to the last man in the last queue with all the benefits of the welfare schemes.

### One National One Portal for Grievance Redressal

- Union Government announced that DARPG will collaborate with the UP Government for integration of CPGRAMS with district portal of Uttar Pradesh.
  - This will enable citizens to lodge complaint from a single portal.
- One National One Portal is the goal and toward this end integration of CPGRAMS with State Grievance Portals will play an important role in redressal of grievance.

### Regional Conferences on “Strengthening the State Institutes of Public Administration”

- Regional Conferences on “Strengthening the State Institutes of Public Administration” is an effort to create a common platform to share experiences in-
  - the formulation and implementation of best practices in administrative training,
  - capacity building to facilitate citizen centric governance,
  - improved public service delivery through e-Governance,
  - transparent, accountable and citizen-friendly effective administration.
- **Importance of Public Administration:** role of training in public administration is essential not only for efficiency of administration but also for broadening the vision of the official.
- **Significance of the Conference:** These conferences are an excellent forum to generate awareness about training practices, administrative reforms and new developments in various States in this area.

### Dairy Sahakar Scheme- An initiative of Ministry of Cooperation

#### Context

- Recently, Union Minister of Home Affairs and Cooperation launched the "Dairy Sahakar" scheme at Anand, Gujarat
  - Dairy Sahakar scheme was launched during the function organised by Amul for celebration of 75th Foundation Year of Amul.

#### Key Points

- **About:** Dairy Sahakar scheme is launched to promote cooperative sector in India with an aim to realize the vision: “from cooperation to prosperity”
- **Funding:** Dairy Sahakar scheme is expected to get a total investment of Rs 5000 crore from the government.
- **Implementing Agency:** Dairy Sahakar scheme will be Implemented by the National Cooperative Development Corporation (NCDC) under the Ministry of Cooperation.
- **Key Beneficiaries:** Under the Dairy Sahakar Scheme, NCDC will extend financial support to eligible cooperatives for activities like-
  - Bovine development,
  - Milk procurement, processing,
  - Quality assurance,
  - Value addition,
  - Branding,
  - Packaging,
  - Marketing,
  - Transportation and storage of milk and milk products,
  - Exports of dairy products, etc.

#### Key Significance

- **Dairy Sahakar Scheme will** supplement the existing efforts of strengthening the dairy sector in the country’
- Dairy Sahakar Scheme will also help in doubling the farmer’s income.
- Dairy Sahakar Scheme will also play a key role in realizing the vision of ‘from cooperation to prosperity’.
- **Convergence of Various Schemes:** Convergence with various schemes of Government of India and/or of State Government/UT Administration/ Development agencies/ bilateral/multilateral assistance/ CSR mechanism is encouraged.
- **Promote exports:** Dairy Sahakar Scheme will also boost exports, resulting in "Doubling the farmers income" and realizing the objectives of "Atmanirbhar Bharat.

## Central Bureau of Investigation (CBI)

### Context

- Recently, the President of India promulgated two ordinances that would allow the Centre to extend the tenures of the directors of the Central Bureau of Investigation and the Enforcement Directorate from two years to up to five years.
  - The tenure of CBI was increasing by amending the Delhi Special Police Establishment Act, 1946.
- The chiefs of the Central agencies currently have a fixed two-year tenure, but can now be given three annual extensions.

### Key Points

- Background:** During World War 2, British government created Special Police Establishment under a DIG in the then Department of War.
  - It was** mandated to investigate cases of bribery and corruption in transactions with which War and Supply Department of the Government of India was concerned.
  - Later in 1963, the Santhanam Committee on Prevention of Corruption recommended the establishment of the CBI.
- About:** The CBI is the premier investigating agency of India. CBI was formed through a resolution of the Government of India in 1963.
  - CBI is not a statutory body and derives its powers from the Delhi Special Police Establishment Act, 1946.
- Mandate:** to investigate several economic crimes, special crimes, cases of corruption, and other cases.
  - To investigate cases of cheating and embezzlement and social crime, particularly of hoarding, black-marketing and profiteering in essential commodities, having all-India and inter-state ramifications.
- Parent Ministry:** Initially it was under ministry of home affairs and later transferred to Ministry of Personnel, Public Grievances and Pensions.
  - Presently, it works as an attached office of Ministry of Personnel.
  - CBI works under the supervision of the Central Vigilance Commission (CVC) in matters pertaining to the Prevention of Corruption Act, 1988.

### Appointment, Composition and Jurisdiction

- Appointment of CBI Director:** The director is selected by a high-profile appointment committee provided in the Lokpal Act 2014. The committee consists of-
- Chairperson:** The Prime Minister of India

- Member:** Leader of Opposition of Loksabha or the Leader of the single largest opposition party in the Lok Sabha, if the former is not present due to lack of mandated strength in the Lok Sabha.
- Representation from Judiciary:** Chief Justice of India or a Supreme Court Judge recommended by the Chief Justice.
- Director of CBI:** S/he as Inspector General of Police, Delhi Special Police Establishment, is responsible for the administration of the CBI.
  - Tenure:** Director of CBI was provided security of two-year tenure, by the CVC Act, 2003 which can be increased to five years by central government as per the amended the Delhi Special Police Establishment Act, 1946.
- Jurisdiction of CBI:** The central government may extend to any area (except UTs) the powers and jurisdiction of the CBI for investigation, subject to the consent of the government of the concerned state.
  - The Supreme Court and High Courts, however, can order CBI to investigate a crime anywhere in the country without the consent of the State.
- Nodal Agency:

## Central Administrative Tribunal (CAT)

### Context

- Recently, the Union Minister of State (Independent Charge) of Science & Technology inaugurated a separate Bench of Central Administrative Tribunal (CAT) at Srinagarto to deal exclusively with service matters of government employees.
  - With this, Jammu and Kashmir have become the only State/UT in the country to have two CAT Benches- Srinagarto bench and Jammu bench.

### Key Points

- Background:** The Parliament of India created the Central Administrative Tribunal (CAT) under Article 323- A of the Indian Constitution by the Administrative Tribunals Act, 1985.
  - The Administrative Tribunals Act in 1985 provides for Central government to establish one Central Administrative Tribunal and the state administrative tribunals.
- Constitutional Provision:** Article 323A provides for Central Administrative tribunals. Under it, only parliament can establish the Central Administrative tribunal and not the State Legislatures.
  - Article 323B:** it deals with other tribunals, and enables such tribunals to be formed both by the Parliament and the State Legislatures.

- **About:** The Central Administrative Tribunal is a specialist body consisting of Administrative Members and Judicial Members who by virtue of their specialized knowledge are better equipped to dispense speedy and effective justice.
  - **Principal bench of Central Administrative Tribunal:** It is located at New Delhi, India.
  - **Other branches:** There are 17 Benches and 21 Circuit Benches in the Central Administrative Tribunal all over India.
- **Mandate of CAT:** Central Administrative Tribunals are expected to adjudicate matters related to the recruitment and conditions of service of personnel engaged in public service in the country.

### Power, and Jurisdiction of CAT

- **Jurisdiction:** The Central Administrative Tribunal (CAT) exercises original jurisdiction over all service matters of the following services:
  1. Members of the all-India services.
  2. Persons appointed to any civil service of the Union or civil post under the Union.
  3. Civilians appointed to any defence services or posts related to defence.
  4. Employees of PSUs or public sector organizations were notified by the government.
- **Exceptions:** The Central Administrative Tribunal (CAT) does not have any jurisdiction over the members of the defence forces, officers, Supreme Court staff, and Parliament's secretarial staff.
- **Powers:** The **Central Administrative Tribunal** has been conferred the power to exercise the same jurisdiction and authority regarding contempt of itself as a High Court.
- **Appeals against orders of the Central Administration Tribunal:** Appeals against the orders of a tribunal could be made in the High Court and not the SC directly.
  - In Chandra Kumar Case, 1997, the Supreme Court of India upheld the jurisdiction of High Courts over the appeals from the Central Administration Tribunals.

### Appointment and Composition

- **Appointment:** The Chairperson and members of the Central Administrative Tribunal (CAT) are appointment by the President of India.
- **Composition:** The CAT is a specialist body that consists of Administrative Members and Judicial Members. The members of the Central Administrative Tribunals are-
  - **Chairperson:** S/he who has been a sitting or retired Judge of a High Court heads the Central Administrative Tribunal.

- **Tenure: Chairperson** of the Central Administrative Tribunal (CAT) enjoys a tenure of 5 years or 65 years of age, whichever is earlier.

## The Editorial Analysis- Measuring Progress

### Context

- National Family Health Survey (NFHS) 5 second phase findings have been released by the government recently.

### Key Findings

- The results of the NFHS are usually mixed, and improvements in certain sectors ride along with stagnation and deterioration in other sectors, this year.
- In NFHS 5, there have been radical improvements in maternal and child health, sex ratio and population control.
- A greater proportion of births than ever before is now happening in institutions, more children in the 12-23 months age group have received their vaccinations.
- India has achieved a total fertility rate of 2.0, dropping further from the figure of 2.2 during NFHS-4, indicating that India has contained the population explosion.
- Having measured blood sugar and hypertension in the population for the first time, NFHS-5 highlighted the looming threat from lifestyle diseases.

### Key Observations

- Policies, some even coercive, as in the case of the family planning sector, seem to have borne fruit, years after they were implemented.
- While gender ratio has, for the first time, recorded more women per 1,000 men, gender ratio at birth in the last five years still underlines the persistence of a deep-rooted son preference.
- Childhood nutrition saw marginal gains, especially in wasting and severe wasting, but these are deemed insufficient, and require renewed corrective efforts.
- **Impact of the pandemic:** It shows that pandemics has caused disruption to services such as balanced nutrition for children.

### National Family Health Survey (NFHS) 5

- **About:** National Family Health Survey (NFHS) 5 phase 2 this year, covered over six lakh households across the country.

- **Objective:** NFHS 5 aims at providing data that will help shape the policies in a manner that will correct deficiencies, and ensure equitable access to services, particularly those with impact on social determinants that improve the quality of life.
  - State-level indices are also released, to provide comparisons, but also to allow States to launch course correction, or to be inspired by success stories in other regions.
- Inputs on marriage and fertility, family planning, access to education and health services are provided by the NFHS.

### Way forward

- States need to treat it as such, and while they might dispute some assessments, the greater idea is to recognise it as a matrix to work on, to improve the development indicators further.
- Centre must not treat findings of NFHS 5 as a mere stocktaking exercise, but harness the opportunities the NFHS provides for launching reform or re-assessing certain policies without using it as a political tool in a federal set up.

### Conclusion

- A periodic assessment of health and social development indicators is crucial for any country that is still clawing its way towards achieving ideal standards in the Human Development Index.
- Findings of NFHS 5 underscores the need for building resilient and fortified systems capable of delivering in the most trying circumstances.

## Longer term, better impact- Extension of CBI and ED tenure

### Context

- Recently, the Central government took a decision through ordinance to give a five-year tenure to heads of the Central Bureau of Investigation (CBI) and the Enforcement Directorate (ED).
- This extension of CBI and ED tenure has drawn criticism from different sections of people.
- Supreme court earlier in 1999 directed government to provide a security of tenure of two years to directors of CBI.

### Associated issues

- **Misuse of CBI and ED:** They are already alleged to be misused by the government and this extension of tenure has further caused the same concerns among many.

- **Periodic Approval of the Government:** The rule about three annual extensions can be misused by a tendentious government. It may be construed as a reward for 'good behaviour'.
  - At the end of the mandatory two-year tenure, the government will have to issue orders granting one-year extensions at a time.
  - It would have better if there was a straight five-year term for the Director.
- **Jurisdiction in States:** many of the state governments have withdrawn consent for the CBI to function in that State. This causes trouble CBI investigation and effective functioning.
  - Eight States- West Bengal, Maharashtra, Kerala, Punjab, Rajasthan, Jharkhand, Chhattisgarh, and Mizoram- have withdrawn the general consent.
  - The Court termed this a "serious issue".

### Way Forward

- **Ensuring Stability of tenure:** Cases involving Central Bureau of Investigation (CBI) and ED often require time to reach to conclusion.
  - In this context, extension of tenure helps in ensuring continuity of CBI director leading to timely resolution of investigation and judgement.
- **Learning from Global examples:** The Federal Bureau of Investigation chief in the U.S. gets a 10-year term.
  - A two-year tenure for a CBI head is too short for any officer to make an impact on the organisation.
- **Autonomy to launch investigation in states:** The CBI should be made to derive its authority for launching investigations from its own statute instead of depending on the Criminal Procedure Code, which makes the CBI a police organisation.
  - Apt analogies are the Income Tax Act and the Customs Act, which enable the officers to act on their own, without being at the mercy of State governments.



## Global State of Democracy Report 2021

### Context

- Recently, the Global State of Democracy Report, 2021 was released by the International Institute for Democracy and Electoral Assistance (International-IDEA).
- The Global State of Democracy Report, 2021 said that the number of countries moving towards authoritarianism in 2020 was higher than that of countries going in the other direction, towards democracy.

### Key Findings

- **Increasing authoritarianism:** The Global State of Democracy Report, 2021 finds that more countries are moving towards authoritarianism than democracy in 2020.
  - **Global State of Democracy Report found that** while 20 countries moved in the direction of authoritarianism, seven countries moved towards democracy in 2020.
  - Globally, more than one in four people live in a backsliding democracy, a proportion that rises to more than two in three with the addition of authoritarian or “hybrid” regimes.
- **COVID-19 Impact:** Global State of Democracy Report 2021 said that the covid 19 pandemic has prolonged this existing negative trend into a five-year stretch.
  - It is the longest such period since the start of the third wave of democratisation in the 1970s.
  - Global State of Democracy Report states that the year 2020 was the worst on record, in terms of the number of countries affected by deepening autocratisation.
  - Global State of Democracy Report 2021 found that the pandemic has had a particularly damaging effect on non-democratic countries, further closing their already reduced civic space.
- **Democratic regimes using authoritarian tactics:** Global State of Democracy Report 2021 found that Democratically elected Governments, including established democracies, are increasingly adopting authoritarian tactics.
  - Global State of Democracy Report 2021 says that this democratic backsliding has often enjoyed significant popular support.
  - Global State of Democracy Report 2021 highlighted the case of Brazil and India as some of the most worrying examples of backsliding.

- **The U.S included in “backsliding” democracies:** The United States and three members of the European Union [Hungary, Poland and Slovenia] have also seen concerning democratic declines.
  - The US has been added to an annual list of “backsliding” democracies for the first time pointing to a “visible deterioration”.

### Key Points

- **About:** The Global State of Democracy Report is an annual report released by the Stockholm-based International Institute for Democracy and Electoral Assistance (International-IDEA).
- **International Institute for Democracy and Electoral Assistance (International-IDEA):** It is an inter-governmental organization supporting democracy.
  - International Institute for Democracy and Electoral Assistance (International-IDEA) was chaired by Australia and includes India as a member-state.
- **Mandate:** The Global State of Democracy report aims to influence the global debate and analyses current trends and challenges to democracy, exacerbated by the Covid-19 pandemic.
  - **The Global State of Democracy report** also suggests specific policy recommendations to spark new and innovative thinking for policymakers, governments and civil society organizations supporting democracy.

## Ganga Utsav 2021

### Context

- Recently, Ministry of Jal Shakti has inaugurated ‘Ganga Utsav 2021 – The River Festival’ to celebrate the glory of all the rivers of the country.

### Key points

- The festival will continue for two more days i.e. **2nd and 3rd Nov 2021**.
- The aim is to take Ganga Utsav to **all the river basins** in India.
- The festival will also continue to be celebrated as **Nadi Utsav** at different places in coming weeks.
- The objective of the Utsav is to **promote stakeholder engagement** and ensure public participation under the aegis of the Ganga Knowledge Center.

### About Ganga Utsav 2021

- The Utsav highlights the significance of “**Jan Bhagidari**” in the revival of Ganga, with a focus on encouraging stakeholder engagement and public participation towards the rejuvenation of river Ganga.
- The Utsav celebrates the mystical and cultural river Ganga through **storytelling, folklore, dialogues** with eminent personalities, quizzes, displaying traditional artforms, dance and music performances by renowned artists, photo galleries and exhibitions and much more.
- The message of river rejuvenation will be communicated through **stories at Kahani Junction**.

### Ganga Mashal

- An expedition ‘**Ganga Mashal**’ led by the Ganga Task Force would be flagged off in a ceremony from Delhi and will travel the route including 23 stations along the river Ganga which will help sensitization of the local people and bodies like NYKS, Ganga Mitras, Ganga Praharis etc.

### Ganga Tarang

- The event will also comprise, launch of the **Ganga Tarang Portal**, curtain raiser on Ganga Knowledge Portal and many more.

### CLAP

- **Continuous Learning and Activity Portal (CLAP)** developed by NMCG in association with Tree Craze Foundation was launched during the inauguration.
- CLAP is an **initiative by Namami Gange**, created and executed by TREE Craze Foundation.
- CLAP is also funded and supported by **World Bank**.
- This is an **interactive portal** that is working towards initiating conversations and action around the rivers in India.
- The Portal is also a platform to **facilitate debates and discussions** and express ideas on various issues pertaining to environment, water, rivers etc.
- CLAP will be an opportunity for people to **participate in quiz** and other activities throughout the year.

### Ganga Atlas

- Ganga Atlas developed by **IIT Kanpur** was also launched during Ganga Utsav.
- It **documents the changes in River Ganga** over the past 5-6 decades in terms of channel morphology, land use & land cover, river dynamics and associated issues.

- As part of this research project **funded by NMCG**, IIT Kanpur has also developed a workflow that allows users to process and analyze declassified imagery of riverine environments at minimal cost and using open-source software.

## Enforcement Directorate (ED)

### Context

- The President of India passed an ordinance authorizing an extension of the services of the heads of the Central Bureau of Investigation and the Enforcement Directorate until they complete a total tenure of five years.
- The Central Vigilance Commission Act, 2003 was amended with respect to the Enforcement Directorate (ED) Director’s post.
- The chiefs of the Central agencies currently have a fixed two-year tenure, but can now be given three annual extensions.

### Key Points

- **About:** Enforcement Directorate (ED) is a specialized financial investigation agency for enforcing following two laws- Foreign Exchange Management Act,1999 (FEMA) and Prevention of Money Laundering Act, 2002 (PMLA).
  - **Enforcement Directorate (ED) Office:** ED headquarter is situated at New Delhi, India.
  - **Enforcement Directorate (ED)** also has many regional offices all over the country.
  - Enforcement Directorate Chief: Enforcement Directorate (ED) is headed by the Director of Enforcement, who is an IRS officer (Indian Revenue Service).
- **Parent Ministry:** Enforcement Directorate (ED) functions under the Department of Revenue, Ministry of Finance, Government of India.

### Key Functions

- Enforcement Directorate (ED) is responsible for enforcing following two laws-
  - **Foreign Exchange Management Act,1999 (FEMA)** - A Civil Law, with officers empowered to-
    - Conduct investigations into suspected contraventions of the Foreign Exchange Laws and Regulations,
    - Adjudicate, contraventions, and impose penalties on those adjudged to have contravened the law.

- **Prevention of Money Laundering Act, 2002 (PMLA)** - A Criminal Law, with the officers empowered to-
  - Conduct investigations to trace assets derived out of the proceeds of crime,
  - Provisionally attach/ confiscate the same, and
  - Arrest and prosecute the offenders found to be involved in Money Laundering.
- **Other Important Functions:**
  - Processing cases of fugitive/s from India under **Fugitive Economic Offenders Act, 2018**. The objective of this Act is to-
- Provide for measures to deter fugitive economic offenders from evading the process of law in India by staying outside the jurisdiction of Indian Courts and
- Preserve the sanctity of the rule of law in India.
- Sponsor cases of preventive detention under **Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA)** in regard to contraventions of FEMA.
- Render **cooperation to foreign countries** in matters relating to money laundering and restitution of assets under the provisions of PMLA and to seek cooperation in such matters.

### Ease of Doing Business (EoDB) for Aatmanirbhar Bharat- Five Structural Reforms for EoDB

#### Context

- While speaking at CII National Conference on 'Ease of Doing Business for Aatmanirbhar Bharat', Union Minister of Commerce & Industry said that a New India will be powered by Aatmanirbhar Bharat & Ease of Doing Business (EoDB).
- In this context, he highlighted five structural reforms that are being undertaken by the union government for Ease of Doing Business (EoDB).

#### EoDB for Aatmanirbhar Bharat- Five structural Reforms for EoDB

- **National Single Window System:** It is a one-stop-shop for approvals & clearances needed by investors & businesses.
  - It includes Know Your Approval, Common Registration Form, Document repository, etc.
  - Portal hosts approvals across 18 Central Departments & 9 States. Another 14 Central Dept. & 5 States are expected to be added by December 2021.

- **Industrial Land Bank:** It is a GIS-based portal, serving as a one-stop repository of all industrial infrastructure related information.
  - Integrated with GIS systems of 17 states, the ILB has a database of more than 4,000 industrial parks mapped across an area of 5.5 lakh hectare of Land.
- **Regulatory Compliance Portal:** it's a real-time dashboard under direct monitoring of the Cabinet Secretary to track progress.
  - States & UTs have eliminated burdensome compliance by removal of unnecessary licenses, permissions, rationalization of renewals, self-regulation and self- certification should be the way forward.
- **State Reforms Action Plan (SRAP):** Centre working with the states trying to promote healthy competition in a spirit of cooperative federalism among states & led to digitization of procedures. Shri Goyal said, a 301-point State Reforms Action Plan, 2020 has been shared with the States/UTs covering 15 reform areas.
- **PM Gati Shakti:** PM Gati Shakti launched to build next-Gen infrastructure.
  - Gati Shakti portal provides multimodal connectivity to ensure integrated & seamless connectivity.
  - Gati Shakti is expected to break departmental silos & institutionalize holistic planning.
  - Through PM Gati Shakti, all Departments will have visibility of each other's projects through a centralized portal.

#### Ensuring enhanced industry contribution

- Indian Industry will have to lead the way in India's endeavour to become Aatmanirbhar. For this Industry should embark upon the following-
  - **Risk Taking:** For Indian Inc to be the best, it needs to have a greater appetite for taking risks.
  - **Resolving Disputes:** Indian Industry must build a "Holistic solution" to commercial disputes problems.
  - **Countering disasters like Covid-19:** Industry needs to "Look beyond cost" for building a "Resilient Ecosystem".
  - **Creating a 'Brand India':** Industry should ensure greater focus on Innovation, Sustainability and "Brand India".

## Draft Mediation Bill 2021

### Context

- Recently, Ministry of Law and Justice has released draft Bill of **country's first mediation law**—Draft Mediation Bill 2021.

### Key points

- The Bill takes into contemplation the international practice of using the terms 'conciliation' and 'mediation' interchangeably.
- Further, it has also become expedient to enact a law in mediation on issues of domestic and international mediation as India is a signatory to the **Singapore Convention on Mediation**.
- The bill aims to **promote, encourage and facilitate mediation** in the country, particularly institutional mediation.

### Draft Mediation Bill 2021: Key features

- The draft Bill proposes for **pre-litigation mediation** and at the same time safeguards the interest of the litigants to approach the competent adjudicatory forums/courts in case an urgent relief is sought.
- The successful outcome of mediation in the form of **Mediation Settlement Agreement (MSA)** has been made enforceable by law. Since the Mediation Settlement Agreement is out of the consensual agreement between the parties, the challenge to the same has been permitted on limited grounds.
- The mediation process **protects the confidentiality** of the mediation undertaken and provides for immunity in certain cases against its disclosure.
- The registration of Mediation Settlement Agreement has also been provided for with State/District/Taluk Legal Authorities **within 90 days** to ensure maintenance of authenticated records of the settlement so arrived.
- Provides for establishment of the **Mediation Council of India**.
- Provides for **community mediation**.

### Alternate Dispute Resolution mechanisms

- Arbitration, Mediation and Conciliation are the three Alternative Dispute Resolution (ADR) methods.

### Arbitration

- Arbitration is **like a court procedure** as the parties submit evidence alike a trial where a third party hear the entire situation and give his/her decision, which is binding upon the parties.
- Arbitration can be done through voluntary or compulsory method.

- Voluntary arbitration:** When a dispute arises between the two parties, and they are unable to resolve their differences by themselves, the parties agree to present their dispute to the fair authority and the decision will be binding upon both parties.
- Compulsory arbitration:** It is a method where the parties are required to accept arbitration without any willingness on their part.
  - When one party in any industrial dispute feels aggrieved by the act of the other party, it may approach the appropriate government to refer the dispute to any organization of adjudication for the settlement.

### Mediation

- Mediation is one of the alternative dispute resolutions which is **voluntary and informal process for resolution of disputes**.
- Mediation is a process which is **under the control of the parties**.
- The mediator **acts as a middle person** who assists to come on a negotiated point of their dispute.

### Conciliation

- A conciliator is a third party who is **involved in settling the dispute** of the parties.
- Generally, there is one conciliator for the settlement but there can be more than one conciliator, if the parties have requested for the same.
- If there is more than one conciliator then they will act jointly in the matter.

## The Editorial Analysis- Small Grant but a Big Opportunity for Local Bodies

### Context

- Recently, the Department of Expenditure released ₹8,453.92 crore to 19 States, as a health grant to rural and urban local bodies (ULBs).

### Distribution of Health Grants to Local Bodies: 15<sup>th</sup> Finance Commission Recommendation

- Health Grants for FY2021-22 to FY2025-26:** 15<sup>th</sup> Finance Commission (FC) made recommendation for allocation of the health grant of ₹70,051 crore which is to be released over five years.
  - Distribution:** Of the total ₹13,192 crore to be allocated in FY 2021-22, rural local bodies (RLBs) and ULBs will receive ₹8,273 crore and ₹4,919 crore, respectively.
- Health Grant:** for putting it in perspective, we have compared the grant with other health expenditures-
  - As a % of total health expenditure:** It would be 2.3% of the total health expenditure (both public and private spending together) of ₹5,66,644 crore in India.

- **As a % of Annual government health expenditure:** It would be 5.7% of the annual government health expenditure (Union and State combined) of nearly ₹2,31,104 crore (both figures for 2017-18).
- This grant is equal to 18.5% of the budget allocation of the Union Department of Health and Family Welfare for FY 2021-22 and
- It is around 55% of the second COVID-19 emergency response package announced in July 2021.
- Urban share is nearly five-fold that of the annual budget for the NUHM and rural allocation is one-and-a-half-fold that of the total health spending by RLBs in India.

### 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendment Act- Key Challenges

- **About:** In 1992, as part of the 73rd and 74th Constitutional Amendments, the local bodies (LBs) in the rural (Panchayati raj institutions) and urban (corporations and councils) areas were transferred the responsibility to deliver primary care and public health services.
- **Expectation:**
  - Creation of local bodies were expected to result in greater attention to and the allocation of funds for health services in the geographical jurisdiction of the local bodies.
  - Alongside, the rural settings continued to receive funding for primary health-care facilities under the ongoing national program.
- **Reality:** The government funding for urban primary health services was not channelled through the State Health Department and the ULBs did not make a commensurate increase in allocation for health.
  - **Reason:** This is due to resource crunch or a lack of clarity on responsibilities related to health services or completely different spending priorities.
- **Poor Funding:**
  - In 2017-18, the ULBs and RLBs in India were contributing 1.3% and 1% of the annual total health expenditure in India.
  - In urban settings, most local bodies were spending from less than 1% to around 3% of their annual budget on health, often lower than installation and repair of streetlights.
- **Other issues in the health sector:**
  - **Poor Urban Health Infrastructure:** Urban India, with just half of the rural population, has just a sixth of primary health centres in comparison to rural areas.

- Urban primary health-care services are weaker than what is available in rural India.
- **Lack of coordination** between a multitude of agencies which are responsible for different types of health services (by areas of their jurisdiction).

### Other steps taken by government to increase health funding

- **National Rural Health Mission (NRHM) 2005:** It was launched to bolster the primary health-care system in India partly ameliorated the impact of RLBs not spending on health.
  - However, urban residents were not equally fortunate.
- **The National Urban Health Mission (NUHM) 2013:** It was launched for urban population with a budgetary allocation of ₹1,000 crore.
  - **Issue:** Its budgetary allocation was just around 3% of budgetary allocation for the NRHM or ₹25 per urban resident against ₹4,297 per person per year health spending in India

### Way Forward

- **Generating Awareness:**
  - **Among Local Bodies and Administrators:** The grant should be used as an opportunity to sensitise key stakeholders in local bodies, on the role and responsibilities in the delivery of primary care and public health services.
  - **Awareness of citizens** about the responsibilities of local bodies in health-care services should be raised. Such an approach can work as an empowering tool to enable accountability in the system.
  - **Role of Civil society organisations:** They need to play a greater role in raising awareness about the role of LBs in health, and possibly in developing local dashboards (as a mechanism of accountability) to track the progress made in health initiatives.
- **Increasing Health Spending:** health grants should not be treated as a 'replacement' for health spending by the local bodies, which should alongside increase their own health spending regularly to make a meaningful impact.
- **Mechanisms for better coordination:** should be established among multiple agencies working in rural and urban areas should be institutionalised.
  - Time-bound and coordinated action plans with measurable indicators and road maps need to be developed.

- **Develop Innovative Health Models:** The young administrators in charge of such RLBs and ULBs and the motivated councillors and Panchayati raj institution members need to develop innovative health models.
- **Promoting and Funding Community Clinics:** Before the novel coronavirus pandemic started, a number of State governments and cities had planned to open various types of community clinics in rural and urban areas. But this was derailed.
  - The funding should be used to revive all these proposals.

### Small Grant but a Big Opportunity for Local Bodies- Conclusion

- The 15<sup>th</sup> FC health grant has the potential to create a health ecosystem which can serve as a much-awaited springboard to mainstream health in the work of rural and urban local bodies. The Indian health-care system must utilize this opportunity.

## SDG Urban Index and Dashboard 2021-22

### Context

- Recently, the NITI Aayog has launched the first edition of the SDG Urban Index and Dashboard 2021-22.

### Key Findings

- **Top Performers:** Shimla, Coimbatore, Chandigarh, Thiruvananthapuram and Kochi have topped the NITI Aayog's Sustainable Development Goals Urban India Index 2021-22.
- **Worst Performers:** Dhanbad, Meerut, Itanagar, Guwahati and Patna are the worst performers in the NITI Aayog's first SDG Urban Index.

### Key Points

- **About:** SDG Urban Index and Dashboard has been developed by the NITI Aayog in collaboration with GIZ and BMZ under the umbrella of Indo-German Development Cooperation.
- **Objective:** SDG Urban Index aims at localizing the sustainable development goals (SDGs) and instituting robust SDG progress monitoring systems at the national, state/UT, and local levels.
- **Ranking of Urban Areas:** SDG Urban Index and Dashboard 2021-22 ranks 56 urban areas on 77 SDG indicators across 46 targets of the SDG framework.
  - Out of 56 urban areas ranked in the index, 44 are with population of above one million. 12 are state capitals with a population of less than a million.

- While for some indicators, "urban area" implies ULBs, in other cases, it refers to all urban areas within a district collectively.
- **Ranking Scale:** In **SDG Urban Index and Dashboard**, for each SDG, the urban areas are ranked on a scale of 0-100.
  - A score of 100 implies that the urban area has achieved the targets set for 2030;
  - A score of 0 implies that it is the farthest from achieving the targets among the selected urban areas.
- **Categorization:**
  - **Aspirants Category:** The areas with ranking between 0 and 49 have been ranked as aspirants.
  - **Performer Category:** Urban Areas with 50-64 are termed as performers.
  - **Front-runners:** Urban areas with 65-99 are called front-runners and
  - **Achievers Category:** Urban areas with perfect score (100) are called achievers. However, not a single area has a perfect score in the SDG Urban Index and Dashboard 2021-22.

### Key Significance

- SDG Urban Index and Dashboard will further strengthen SDG localization and institute robust SDG monitoring at the city level.
  - SDG Urban Index and Dashboard highlights the strengths and gaps of ULB-level data, monitoring and reporting systems.
- Tools used in the SDG Urban index and dashboard will contribute to the creation of an ecosystem in which all stakeholders will be equipped to adopt and implement data-driven decision making.

## Public Affairs Index 2021

### Context

- Recently, the Public Affairs Centre (PAC) released the findings of the sixth edition of Public Affairs Index (PAI).

### Key Points

- **About:** Public Affairs Index is an annual report published by the Public Affairs Centre (PAC).
  - Public Affairs Centre is a Not-for-Profit Organization (NPO) based in Bengaluru (Karnataka).
- **PAI 2021** ranks the States and Union Territories on the basis of their performance in the Sub-national governance for the overarching sustainable development pillars of Equity, Growth and Sustainability.
  - There are 43 indicators that construct these 3 pillars and they aim to capture all the important human development aspects.

- **Criteria:**
  - Public Affairs Index (PAI) measures governance performance of states in the context of sustainable development defined by equity, growth and sustainability pillars.
- **Additional Features of PAI 2021:**
  - **Public Affairs Index (PAI) 2021** also features analysis of five Centre-sponsored schemes that aid in key development parameters of health, education and livelihoods. These are-
    1. Mahatma Gandhi Rural Employment Guarantee Scheme,
    2. National Health Mission,
    3. Integrated Child Development Services,
    4. Samagra Siksha Abhiyan, and
    5. Midday Meal Scheme
- **Public Affairs Index (PAI) 2021** includes ranking of the states on the basis of their performance during the COVID-19 pandemic.
  - This is in addition to Delta Analysis measuring year-on-year performance and Cluster Analysis of states.

#### Key Findings

- **Top performers:** Kerala, Tamil Nadu and Telangana occupy the top three spots due to their consistent performance across both pillars.
  - **Two Pillars-** COVID-19 Response Index and year-on-year performance and Cluster Analysis of states.
- Karnataka dropped three places to be adjudged seventh in the Public Affairs Index (PAI) 2021.
- **MGNAREGA Implementation:** Kerala topped in this category. Karnataka was ranked fourth in among states.
- **Mid-Day Meal Scheme (MDMS) Implementation:** Goa topped in this category while Karnataka ranked seventh.
- **Samagra Shiksha Abhiyan (SmSA) Implementation:** Chhattisgarh topped in this category with a score of 0.907.
- **National Health Mission (NHM) Implementation:** Kerala (1.499) topped in this category.
- **Integrated Child Development Services (ICDS) scheme:** Odisha topped in this category.
- **Covid-19 response index:** Kerala, Tamil Nadu and Andhra Pradesh were top three states in this category. Karnataka ranked fifth.
  - This index subsumed preparedness and containment.

## NITI Aayog: 11 Measures to Improve School Education

#### Context

- NITI Aayog has recently suggested **11 measures to improve the country's school education** system, for effective implementation of National Education Policy, 2020.

#### Key points

- The suggestions largely were related to **improving the learning outcomes**.
- The recommendations were released as part of a report Systemic Transformation of School Education.
- They are based on findings of NITI Aayog's **Sustainable Action for Transforming Human Capital (SATH-Education)** initiative.
- The steps undertaken by these states under SATH initiative resulted in an average **20% improvement in the education system** in the past few years.
- The report highlighted that though Right to Education Act has ensured over 96% enrolment of students in age group 6-10 years, **learning outcomes did not reflect the improved quality** of education.

#### Measures

- School education, especially, the preschool level, should be **more inclusive**. In our school-level learning process, no one should be left behind or have disadvantage.
- The report proposed interventions in five key areas:
  - focus on academic reforms,
  - strengthening human capacity,
  - strengthening administrative systems, driving accountability and
  - creating a shared vision for change.
- States should prepare a **Learning Outcome Framework (LOF)** to resolve the gap between learning outcome and the GER issue.
- The report also highlighted the **need to simplify the assessment** process and the need for learning enhancement programmes.
- States need to **implement remediation** in campaign mode for 4-5 years to bring all children to grade-level.

#### About SATH-E

- Project SATH-E, 'Sustainable Action for Transforming Human Capital-Education', was **launched in 2017** to identify and build **three 'role model' States** for the school education sector.
- After an elaborate selection process, **Jharkhand, Odisha and Madhya Pradesh** were chosen.
- The first phase of SATH-E was completed in March 2020.

### Few of the achievements

- **Learning enhancement** programme/remedial teaching with workbook support for approximately 2.3 crore students implemented.
- **Academic monitoring** of schools and students streamlined, with nearly 1.5 lakh inspections carried out every month.
- **Comprehensive rewards** and recognition programmes, including external certifications, initiated.
- **Assessment reforms**, including spot testing and learning tracking formats, introduced.
- Multiple rounds of **teacher training** undertaken.
- In Madhya Pradesh, 30% of the students moved from lower-level foundational literacy, numeracy learning cohorts to the highest learning level for grades 3–8 in two years of the ‘**Dakshata Unnayan**’ learning enhancement programme.
- In Odisha, average improvement of 10–15% observed in learning outcomes due to the ‘**Ujjwal-Utthan**’ learning enhancement programme.
- In Jharkhand, 12% improvement across most competencies was recorded through the ‘**Gyan Setu**’ learning enhancement programme.
- With the onset of the Covid-19 pandemic, SATH-E adapted itself as ‘**Digi-SATH**’ to provide undeterred support via digital mediums.
- Under the Digi-SATH initiative, MP’s ‘**Hamara Ghar Hamara Vidyalaya**’ and ‘**Digi-LEP**’ (or ‘Digital Learning Enhancement Programme’), Odisha’s ‘**Shiksha Sanjog**’ and ‘**Shiksha Sampark**’, and Jharkhand’s ‘**Hamara Doordarshan Hamara Vidyalaya**’ have been providing online education and teacher training.

### Post-Mortem Rules in India: New Protocol for Post-Mortem Procedure

#### Context

- Recently, Ministry of Health and Family Welfare has notified new protocol for Post-Mortem or autopsy procedure.

#### Key points

- Changes have been made in the post-mortem protocols to allow for the **procedure to be conducted after sunset** to promote ease of living by reducing burden imposed due to compliance to government processes.
- Apart from friends and relatives of the deceased, this new procedure **also promotes organ donation** and transplant as organs can be harvested in the stipulated time window after the procedure.

- In view of the **rapid advancement and improvement in technology**, especially availability of required lighting and infrastructure required for post-mortem, performing night time post-mortem in hospitals is now feasible.
- The protocol stipulates that post-mortem for organ donation be taken up on priority and be conducted even after sunset at the hospitals which have the infrastructure for conducting such post-mortem on a regular basis.
- It is also to be ensured by the facility that **video recording of post-mortem** shall be done for all post-mortem conducted in the night, to rule out any suspicion and preserved for future reference for Legal purposes.
- However, cases under categories such as homicide, suicide, rape, decomposed bodies, suspected foul play should **not be subjected for post-mortem** during night time unless there is a law-and-order situation.

#### Post mortem meaning

- This Latin phrase literally means ‘after death’. A post mortem examination is a medical examination carried out on the body after death. It is also called an autopsy (which means ‘to see for oneself’).

#### Reasons for post mortem procedure

- A number of things that may be determined from an autopsy are:
  - Establish decedent's identity.
  - Establish the cause of death.
  - Determine the mechanism of death.
  - Confirm the manner of death.
  - Confirm medical history.
  - Separate complicating medical factors.
  - Rule out disease or factors harmful to public health.
  - Facilitate adequate photography of wounds, if required.
  - Correlate wounding and object producing the wounds.
  - Determine time interval between wounds received and death.
  - Establish sequence of events.
  - Retrieve an article involved in mode of death, such as a bullet.
  - Obtain and examine trace evidence such as hairs, stains, and seminal fluid.
  - Obtain specimens for toxicology.
  - Establish order of death in situations where more than one family member has been killed.
  - To document all injuries in order to answer any future questions that is unknown at the time of the autopsy.

## New Farm Laws Repealed: PM Modi Repealed Farm Bills 2020

### Context

- Recently, the Prime Minister of India announced to repeal the three contentious farm bills that were enacted on September 17, 2020.
- The government also asked the protesting farmers to end their protest against the new farm laws 2020 as government has repealed the new farm laws.

### Key Developments

- **Background:** New Farm Acts 2020 were enacted by the Parliament last year which was followed by protests by farmers from across the nation, mainly from Punjab and Haryana in the borders of the national capital and in different parts of North India.
  - The protests began on last year, when farmers marched towards the national capital demanding a complete repeal of the legislation, as part of a “Dilli Chalo” campaign.
- **About farm laws:** The three farm bills enacted by the parliament are-
  - The Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020;
  - Essential Commodities (Amendment) Act, 2020; and
  - Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020.

### The Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020- Key Features

- **Trade of farmers’ produce:** The Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 allows intra-state and inter-state trade of farmers’ produce outside-
  - The physical premises of market yards run by market committees formed under the state APMC Acts and
  - Other markets notified under the state APMC Acts.
- **Electronic trading:** It also permits the electronic trading of scheduled farmers’ produce (agricultural produce regulated under any state APMC Act) in the specified trade area.

- **Market fee abolished:** The farm law also prohibits state governments from levying any market fee, cess or levy on farmers, traders, and electronic trading platforms for the trade of farmers’ produce conducted in an ‘outside trade area’.

### Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020.

- **Provision for Contract farming:** It creates a national framework for contract farming which provides a legal framework for farmers to enter into written contracts with companies and produce for them.
- **Pricing of farming produce:** In an agreement, the price of farming produce should be mentioned.
  - Prices that are subjected to variation, a guaranteed price for the produce and a clear reference for any additional amount above the guaranteed price must be specified in the agreement.
  - Also, the process of price determination must be mentioned in the agreement.
- **Mechanism for Dispute Settlement:** For the settlement of the disputes, an agreement of farming must provide a conciliation board as well as a conciliation process.
  - Provision for Fair and balanced representation of parties in the Board should be there to the agreement.

### Essential Commodities (Amendment) Act, 2020

- **Deregulation:** Essential Commodities (Amendment) Act provided for exclusion of certain food items like cereals, pulses, oilseeds, edible oils, onions and potatoes from the list of essential commodities.
  - It was also expected to deregulate the production, storage, movement and distribution of these food commodities.
- **Promotion of business activity:** This farm Act allowed agribusinesses to stock food articles and remove the government’s ability to impose restrictions arbitrarily.
- **Stockholding limits:** This farm bill removed stockholding limits on such items except under “extraordinary circumstances”.
  - The central government was allowed to regulate the supply during war, famine, extraordinary price rise and natural calamity of grave nature

## National Sports Awards 2021: Sports and Adventure Awards 2021 and List of Winners

### Context

- Recently, the President of India presented the National Sports award 2021 (also named as the Sports and Adventure Awards 2021) at a function held at Rashtrapati Bhavan.
  - Major Dhyan Chand Khel Ratna Award 2021 were given to 12 Sports persons
  - 35 Sports persons received Arjuna Awards for outstanding performance in Sports and Games 2021.

### Key Points

- About:** National Sports Awards are given by ministry of sports every year to recognize and reward excellence in sports.
- Selection Process:** The Selection Committee headed by a former Judge of Supreme Court considers nominations received each year for National Sports Awards.
  - Other members include members from eminent sportspersons and persons having experience in sports journalism & sports administrator etc.

### National Sports Awards – Categories

National Sports Awards are given under following six categories. The are-

- Major Dhyan Chand Khel Ratna Awards:** It is given for the spectacular and most outstanding performance in the field of sports by a sportsperson over a period of previous four years.
- Dronacharya Awards:** It is given to coaches for doing outstanding and meritorious work on a consistent basis and enabling sportspersons to excel in international events.
- Arjuna Awards:** It is given for good performance over a period of previous four years and showing qualities of leadership, sportsmanship and a sense of discipline.
- Dhyan Chand Awards:** It is given to honour sportspersons who have contributed to sports by their performance and continue to contribute to promotion of sports event after their retirement.
- Rashtriya Khel Protsahan Puruskar:** It is given to corporate entities (both in private and public sector), sports control boards, NGOs including sports bodies at the State and National level who have played a visible role in the area of sports promotion and development.
- Maulana Abul Kalam Azad Trophy:** Overall top performing university in inter-university tournaments is given Maulana Abul Kalam Azad (MAKA) Trophy.

## National Sports Awards 2021- Winners in Various Categories

### i. Major Dhyan Chand Khel Ratna Award 2021

S. No.	Name of the Sportsperson	Discipline
1.	Neeraj Chopra	Athletics
2.	Ravi Kumar	Wrestling
3.	LovlinaBorgohain	Boxing
4.	Sreejesh P.R	Hockey
5.	AvaniLekhara	Para Shooting
6.	SumitAntil	Para Athletics
7.	Pramod Bhagat	Para Badminton
8.	Krishna Nagar	Para Badminton
9.	Manish Narwal	Para Shooting
10.	Mithali Raj	Cricket
11.	Sunil Chhetri	Football
12.	Manpreet Singh	Hockey

### (ii) Arjuna Awards for outstanding performance in Sports and Games 2021

S. No.	Name of the Sportsperson	Discipline
1.	Arpinder Singh	Athletics
2.	Simranjit Kaur	Boxing
3.	Shikhar Dhawan	Cricket
4.	Bhavani Devi ChadalavadaAnandhaSundhar araman	Fencing
5.	Monika	Hockey
6.	Vandana Katariya	Hockey
7.	Sandeep Narwal	Kabaddi
8.	HimaniUttamParab	Mallakhamb
9.	Abhishek Verma	Shooting
10.	Ankita Raina	Tennis
11.	Deepak Punia	Wrestling
12.	Dilpreet Singh	Hockey
13.	Harman Preet Singh	Hockey
14.	Rupinder Pal Singh	Hockey

S. No.	Name of the Sportsperson	Discipline
15.	Surender Kumar	Hockey
16.	Amit Rohidas	Hockey
17.	Birendra Lakra	Hockey
18.	Sumit	Hockey
19.	Nilakanta Sharma	Hockey
20.	Hardik Singh	Hockey
21.	Vivek Sagar Prasad	Hockey
22.	Gurjant Singh	Hockey
23.	Mandeep Singh	Hockey
24.	Shamsher Singh	Hockey
25.	Lalit Kumar Upadhyay	Hockey
26.	Varun Kumar	Hockey
27.	Simranjeet Singh	Hockey
28.	Yogesh Kathuniya	Para Athletics
29.	Nishad Kumar	Para Athletics
30.	Praveen Kumar	Para Athletics
31.	Suhash Yathiraj	Para Badminton
32.	Singhraj Adhana	Para Shooting
33.	Bhavina Patel	Para Table Tennis
34.	Harvinder Singh	Para Archery
35.	Sharad Kumar	Para Athletics

**(iii) Dronacharya Award for outstanding coaches in Sports and Games 2021**

**A. Life-Time Category:**

S. No.	Name of the Coach	Discipline
1.	T. P. Ouseph	Athletics
2.	Sarkar Talwar	Cricket
3.	Sarpal Singh	Hockey
4.	Ashan Kumar	Kabaddi
5.	Tapan Kumar Panigrahi	Swimming

**B. Regular Category:**

S. No.	Name of the Coach	Discipline
1.	Radhakrishnan Nair P	Athletics
2.	Sandhya Gurung	Boxing
3.	Pritam Siwach	Hockey
4.	Jai Prakash Nautiyal	Para Shooting
5.	Subramanian Raman	Table Tennis

**(iv) Dhyan Chand Award for Lifetime achievement in Sports and Games 2021**

S.No.	Name	Discipline
1.	Lekha K.C.	Boxing
2.	Abhijeet Kunte	Chess
3.	Davinder Singh Garcha	Hockey
4.	Vikas Kumar	Kabaddi
5.	Sajjan Singh	Wrestling

**(v) Rashtriya Khel Protsahan Puruskar 2021**

S. No.	Category	Entity recommended for Rashtriya Khel Protsahan Puraskar, 2021
1.	Identification and Nurturing of Budding and Young Talent	Manav Rachna Educational Institution
2.	Encouragement to sports through Corporate Social Responsibility	Indian Oil Corporation Limited

**(vi) Maulana Abul Kalam Azad (MAKA) Trophy 2021: Panjab University - Chandigarh**

**National Pharmaceutical Pricing Authority (NPPA)**

**Context**

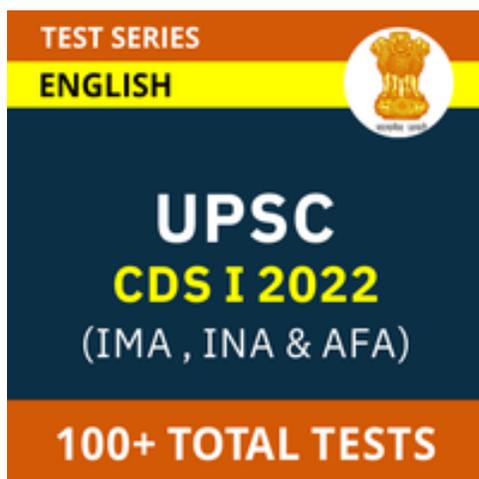
- National Pharmaceutical Pricing Authority (NPPA) is organizing a webinar as part of activities to commemorate the occasion of 75th anniversary of Indian independence during the year-long 'Azadi Ka Amrit Mahotsav'.
- Theme: "Affordability and Innovation: Ensuring Quality Drugs for All".

### Key Points

- **About NPPA:** National Pharmaceutical Pricing Authority (NPPA) was constituted through a Government of India Resolution in 1997.
  - **NPPA Headquarter:** New Delhi, India.
- **Mandate of NPPA:** National Pharmaceutical Pricing Authority (NPPA) act as an independent Regulator for pricing of drugs and to ensure availability and accessibility of medicines at affordable prices.
- **Parent Ministry:** National Pharmaceutical Pricing Authority (NPPA) works as an attached office of the Department of Pharmaceuticals (DoP), Ministry of Chemicals & Fertilizers.

### Key Functions

- The NPPA fixes price of drugs on National List of Essential Medicines (NLEM) under schedule-I of Drug Price Control Orders (DPCO).
- The NPPA is responsible for implementing and enforcing the provisions of the Drugs Price Control Order (DPCO), (1995/2013) in accordance with the powers delegated to it.
- The NPPA monitors the availability of drugs, identify shortages, if any, and take remedial steps accordingly.
- **National Pharmaceutical Pricing Authority (NPPA) also** render advice to the Central Government on changes/revisions in the drug policy.
- The NPPA also collects/maintains data on production, exports and imports, market share of individual companies, the profitability of companies etc. for bulk drugs and formulations.
- It is also entrusted with rendering assistance to the Central Government in parliamentary matters relating to drug pricing.



### MPLAD Scheme

#### Context

- Recently, the Union Cabinet restored the Members of Parliament Local Area Development Scheme (MPLADS), citing the country's economic recovery.
- MPLAD Scheme was suspended in April 2020 subsuming the funds for the scheme in the consolidated fund of India.
- The scheme was suspended for two financial years (2020-21 and 2021-22) but the Government announced a partial rollback. The MPs will get ₹2 crore instead of the annual approved ₹5 crore.

#### Key Points

- **About:** The MPLAD scheme was started in 1993 to enable Members of Parliament (MPs) to build durable asset in their respective constituencies.
- **Key Objective:** to enable MPs to recommend works of developmental nature with emphasis on the creation of durable community assets in the areas of drinking water, primary education, public health, sanitation and roads, etc. primarily in their Constituencies.
- **Parent Ministry:** MPLAD scheme is a Central Sector Scheme and is being implemented by the Ministry of Statistics & Program Implementation (MoSPI) since 1994.
  - Previously, MPLAD Scheme was under the control of the Ministry of Rural Development and Planning and transferred to the MoSPI in 1994.
- **Funding:** Under MPLAD scheme, every MP (including nominated) is entitled to spend Rs 5 crore annually.

#### Implementation and Usage of the MPLADS Fund

- **Implementation of Projects under MPLAD Scheme:**
  - **Lok Sabha MPs:** They have to recommend the district authorities projects in their Lok Sabha constituencies.
  - **Rajya Sabha MPs:** They have to spend it in the state that has elected them to the House.
  - **Nominated Members of both the Rajya Sabha and Lok Sabha:** They can recommend works anywhere in the country.
- 'Guidelines on Members of Parliament Local Area Development Scheme (MPLADS)' published by the Ministry of Statistics and Programme Implementation in June 2016 states that
  - **The MPLAD funds can also be used for implementation of the schemes such as-**
    - Swachh Bharat Abhiyan,

- Accessible India Campaign (Sugamya Bharat Abhiyan),
- Conservation of water through rain water harvesting and
- Sansad Aadarsh Gram Yojana, etc.

### Vande Bharat Mission and Operation Samudra Setu

#### Context

- Recently, the government released data about the success of Vande Bharat Mission. It shows that as on 31.10.2021, more than 2,17,000 flights have been operated under Vande Bharat Mission and over 1.83 crore passengers have been facilitated.
- Vande Bharat Mission (VBM) is one of the largest evacuation missions of civilians by a country.

#### Key Points

- **About:** During the global Covid-19 pandemic, the Government of India has undertaken the Vande Bharat Mission to repatriate Indian nationals and also to facilitate travel of passengers between India and various parts of the world.
- **Key Objective:** Vande Bharat Mission aimed to bring back Indian Nationals to India who got stuck in a foreign country due to Covid-19 lockdowns.
- **Implementing Ministry:** Vande Bharat Mission is being implemented by the Ministry of Civil Aviation in collaboration with Air India and its subsidiary Air India Express.
- **Funding:** The operations under Vande Bharat Mission were commercial operations by the airlines and air fares were paid by passengers.
  - The Ministry of Civil Aviation has not provided any subsidy/grant for the Vande Bharat Mission.

#### Operation Samudra Setu

- **About:** Operation Samudra Setu is a program of Indian navy to counter impact of Covid-19. Operation Samudra Setu has been conducted in two parts- Operation Samudra Setu-I and Operation Samudra Setu-II.
- **Operation Samudra Setu-I:** It was launched in May 2020 along with Vande Bharat Mission with an aim to bring back stranded Indian citizens from abroad during COVID-19.
  - Under Operation Samudra Setu-I, Indian Navy successfully brought back 3,992 Indians to home safely.
- **Operation Samudra Setu-II:** It was launched by Indian Navy in May 2021 with an aim to aid in fulfilling oxygen requirements of the country.
  - Under the Operation Samudra Setu-II, warships had been deployed by Indian Navy to carry liquid oxygen filled cryogenic containers.

### Vamsadhara River Water Dispute

#### Context

- Chief Minister of Andhra Pradesh is scheduled to meet with his Odisha counterpart. This has raised hopes of finding a permanent solution to two vexed issues bothering the neighbouring States –
  1. Vamsadhara Phase-II project in Srikakulam district and
  2. The dispute over the jurisdiction of Kotia villages in Vizianagaram district.

#### Story so far

- **Andhra Pradesh Demands:** It wants to build the Neradi bridge across the **Vamsadhara** river. But this will be possible only after Odisha's consent.
- **Odisha's Concerns:**
  - The flood flow canal (at Katragada, Andhra Pradesh) taking off from the river Vamsadhara, would result in drying up the existing river bed and consequent shifting of the river affecting the groundwater table.
  - It also raised the issue of scientific assessment of available water in Vamsadhara at Katragada and Gotta Barrage, Andhra Pradesh and the basis for sharing the available water.
- **Verdict of Vamsadhara River Water Dispute Tribunal:** The tribunal recently permitted Andhra Pradesh to go ahead with construction of the Neradi barrage on Vamsadhara river.

#### Present Issue

- Though the Vamsadhara Water Disputes Tribunal has passed orders in favour of Andhra Pradesh on the Phase-II project, acquisition of land within the jurisdiction of Odisha for the construction of Neradi barrage is yet to be made.
  - About 106 acres of land has to be acquired for the construction of the barrage, the foundation stone for which had been laid in 1962.
- The Andhra Pradesh government is reportedly prepared to pay compensation for the submerged lands and rehabilitation of the displaced people in Rayagada and Gajapati districts.

#### Vamsadhara River – Key Points

- **About:** Vamsadhara River is an east-flowing river and flows through Odisha and Andhra Pradesh before joining the Bay of Bengal.
- **Origin:** Vamsadhara River originates in Kalahandi district of Odisha.
- **Course of the River:** It originates in Odisha and then flows along its boundary with Andhra Pradesh and finally joins the Bay of Bengal at Kalingapatnam, Andhra Pradesh.
  - The total catchment area of the river basin is about 10,830 square kilometres.

## Strengthening Vaccine Trust – Consolidating Vaccine Confidence

### Context

- In India, about 78% of the adult population has received one dose and more than 36% has received both doses.
- This shows that India has found its footing in its campaign to vaccinate citizens against COVID-19.
- **Vaccine Acceptance:** Recent evidence also indicates that acceptance of COVID-19 vaccines in India is among the highest in the world.

### Associated Concerns

- **Misinformation about vaccines:** can erode vaccine confidence among people.
  - **For example,** in 2017-2019, false rumours about the measles-rubella vaccine spread through social media and led to a spike in vaccine refusals in some areas.
- **Low enthusiasm for vaccination:** enthusiasm to get vaccinated could wane, especially when covid-19 cases are very low.
- **Other causes for vaccine hesitancy:** People can avoid vaccination due to following reasons-
  - If they are against all vaccines.
  - Misinformation and concerns about Vaccine efficacy, especially when vaccines have been developed over a short period of time.
  - Mis-information from a trusted family member or friend about the ingredients of the vaccine.

### Way Forward

- **Ensure vaccination of all:** even small pockets of unvaccinated individuals can threaten the success of an immunisation campaign.
  - This is especially true for a highly transmissible virus like the Delta variant of SARS-CoV-2.
- **Consolidating Vaccine Confidence:** Conversations around vaccination should stem from a place of respect, empathy and understanding and should avoid disparaging language.
  - This helps build trust — the key to vaccine confidence.
- **Countering Mis-information:** Providing data from a trusted source, like government agencies or academic institutions, can help correct misperceptions about vaccines.
  - In addition, when speaking with peers about misinformation, it helps to acknowledge that it is sometimes difficult in the current context to know what is true and what is not.

- **Framing vaccination as the default normative behaviour:** this can help encourage those who have doubt.
  - we should ask our friends and family, “Teeka lagwaya, na?” or “You’ve been vaccinated, right?”
- **Importance of messenger:** People often listen to someone who is respected and share same background, community and area. For example,
  - A sarpanch or a highly respected individual got vaccinated and encouraged others to do so as well.
  - Doctors and health workers are also often trusted sources of information about health decisions.
  - Actors and sportspersons are also powerful spokespersons.
- **Learning from Polio Campaign:** In 2014, India was declared polio free. It used the simple campaign, ‘Do boond zindagi ki’ or ‘Two drops of life’. It was hopeful and appealed to Indians.
  - The ongoing campaign to vaccinate India requires similar energy.
- **Following a Multi-disciplinary Approach:** creatives and public health experts must work closely together to bolster vaccine confidence.
  - Bollywood is uniquely positioned to tap into the Indian psyche through effective storytelling.
  - This is important because not everyone connects in the same way with facts and figures.

## Smart Policing Index 2021

### Context

- Recently, Indian Police Foundation (IPF) has released the Smart Policing Survey 2021 to gauge public perceptions about the quality of policing in India and the level of public trust in the police.

### Key points

- The Survey is an Index of Public Perceptions & Citizen Satisfaction.
- IPF has identified six competency-based dimensions and three values-based dimensions of trust for compiling the Smart Policing Index 2021.
- Thus, the survey is comprised two sets of indicators of SMART policing as dimensions of public trust in policing:
  - one set to gauge perceptions about core professional competencies and the other,
  - to assess the perceived adherence to core values and ethical principles.

### Six competency-based dimensions

- Perception index of police sensitivity;
- Perception index of strict and good behaviour;
- Perception index of accessibility;
- Perception index of police responsiveness;
- Perception index of helpful and friendly policing;
- Perception index of technology adoption.

### Three Values Based Indicators

- Perception index of integrity and corruption-free services;
- Perception index of fair, unbiased and lawful policing;
- Perception index of police accountability.

### Key findings

- The survey did not provide for a formal ranking of citizens' satisfaction this year.
- The SMART scores are set on a scale of 1 to 10 and the scores indicates the levels of citizen satisfaction, a score of 10 being the highest level of satisfaction.
- The half-full glass: Around 67% of the citizens believe that the police are doing their job well and strongly support the police, despite police being continuously attacked for insufficient sensitivity, declining public confidence and growing concerns about the quality of policing.
- The levels of popular satisfaction with the quality of policing were highest in Andhra Pradesh, Telangana, Assam, Kerala, Sikkim, Mizoram and Gujarat.

### About SMART Policing Vision

- SMART Policing idea was first envisioned and introduced by our Prime Minister at the Conference of DGPs of State and Central Police Organizations, held at Guwahati, in the year 2014.
- It envisages systemic changes to transform Indian Police to be:
  - S- Strict and Sensitive,
  - M- Modern and Mobile,
  - Alert and Accountable,
  - R- Reliable and Responsive,
  - T- Techno-savvy and Trained.
- The SMART policing strategy combines the following elements:
  - Development of physical infrastructure,
  - Technology adoption,
  - Focus on the critical soft skills and attitudes,
  - Deep commitment to the values of professional excellence and service to the people.

### Suspension of MPs from Parliament

#### Context

- Recently, 12 Opposition MPs have been suspended from Rajya Sabha for the rest of the Winter Session for disruptions in Rajya Sabha during the Monsoon Session.
- The reason for their suspension was "their unprecedented acts of misconduct, contemptuous, unruly and violent behaviour and intentional attacks on security personnel" in the House.

#### Code of Conduct for MPs

- **Parliamentary Rulebook:** MPs are required to adhere to certain rules of parliamentary etiquette. Lok Sabha rulebook (similar to Rajya Sabha also specifies certain code of conducts for MPs like-
  - MPs are not to interrupt the speech of others, maintain silence and not obstruct proceedings by hissing or making running commentaries during debates.
  - Members should not shout slogans, display placards, tear up documents in protest, and play a cassette or a tape recorder in the House.

#### Powers of the Presiding Officer

- To conduct the proceedings smoothly, the rulebook of respective Houses gives certain, similar powers to the presiding officers of both Houses.
- **Rule 255 of Rajya Sabha Rulebook:** It says, "the Chairman may direct any member whose conduct is in his opinion grossly disorderly to withdraw immediately from the Council and any member so ordered to withdraw shall do so forthwith and shall absent himself during the remainder of the day's meeting."
  - Rule 256 provides for 'Suspension of Member'; whereas Rule 255 provides for lesser punishment.
- **Rule 256 of Rajya Sabha Rulebook:** It allows for suspension "for a period not exceeding the remainder of the session".
  - The Chairman of R.S used this to suspend 12 MPs.
- **Rule 374A of Lok Sabha Rulebook:** It was added in 2001 which empowers the Speaker of Lok Sabha to automatically suspend an MP for a maximum of five days for disrupting the business of the House.
  - In 2015, Speaker Sumitra Mahajan used this rule for suspending 25 Congress MPs.
  - This power is not available to the Chairman of the Rajya Sabha.

• **Powers of Chairman and Speaker**

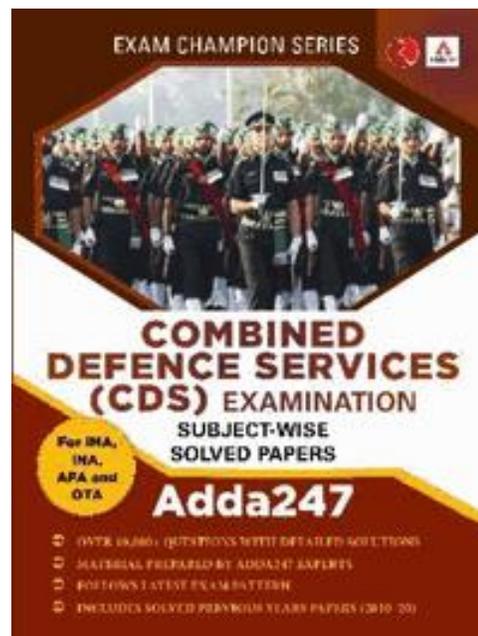
- **Similarity:** Like the Speaker in Lok Sabha, the Chairman of Rajya Sabha is empowered under Rule Number 255 of its Rule Book to “direct any Member whose conduct is in his opinion grossly disorderly to withdraw immediately” from the House.
- **Dissimilarity:** Unlike the Speaker of Lok Sabha, the Rajya Sabha Chairman does not have the power to suspend a member.

**Procedure to Suspend an MP of Rajya Sabha**

• **Suspension procedure:**

- Chairman of the Rajya Sabha may “name a member who disregards the authority of the Chair or abuses the rules of the Council by persistently and willfully obstructing” business.
- In such a situation, the House may adopt a motion suspending the Member from the service of the House for a period not exceeding the remainder of the session.

- **Termination of Suspension:** The House may terminate the suspension of a member by passing another motion



# International Relations

## 5th World Congress on Disaster Management

### Context

- The fifth World Congress on Disaster Management was organised from November 24-27, 2021 at the IIT Delhi campus with the overarching theme of **“Technology, Finance and Capacity for Building Resilience to Disasters in the Contexts of Covid-19”**.

### About World Congress on Disaster Management

- WCDM is a unique initiative of **DMICS** (Disaster Management Initiatives and Convergence Society) to bring researchers, policy makers and practitioners from around the world in the same platform to discuss various challenging issues of disaster risk management.
- WCDM has emerged as the largest global conference on disaster management **outside the UN system**.
- Four editions of WCDM have been held so far. The **first WCDM took place in 2008** in the Hitech city of Hyderabad.

### Key points

- The 5<sup>th</sup> WCDM was hosted by the Union Defence Minister, Rajnath Singh.
- The union minister asserted that time and again India has proved itself to be **“first responder”** in the Indian Ocean Region (IOR).
- The COVID-19 pandemic has reaffirmed the “centrality of multilateralism” in our interconnected world for the matters of international security and disaster management.

### India: The First Responder

- India has a unique position in the IOR, which is complemented by a capable armed force.
- These factors enable India to contribute significantly in **Humanitarian Aid and Disaster Relief (HADR)** situations.
- Some of the HADR missions in the IOR undertaken by India in recent years
  - Operation Rahat in Yemen in 2015,
  - Cyclone in Sri Lanka in 2016;
  - Earthquake in Indonesia in 2019;
  - Cyclone Idai in Mozambique and
  - Flooding and landslips in Madagascar in January 2020
- India is also conducting regular exercises to deepen the HADR co-operation and co-ordination among the neighbours and friendly countries.
- Proactive approach: Initiatives like **SAGAR** (Security and Growth for All in the Region), Coalition for Disaster Resilient Infrastructure (**CDRI**)

### Way forward

- The **impact of COVID-19 pandemic** on the 2030 Sustainable Development Goals (SDG) agenda must be assessed comprehensively and the lessons learnt should be incorporated in global and national strategies for the implementation of the SDGs (Sustainable Development Goals).
- The benefits of **cutting-edge technologies** emerging in the fields of space, communication, bio-engineering, bio-medics and Artificial Intelligence should be shared with all, along with funding initiatives for capacity development for better application and use of these technologies in the local contexts.

## BASIC countries at Glasgow Summit (CoP 26) of UNFCCC

### Context

- Recently, the Indian Union Minister for Environment, Forest and Climate Change, delivered the statement on behalf of the BASIC group of countries at COP 26 of the UN Climate Change Conference at Glasgow.
- He said that developing countries must be accorded time, policy space and support to transition towards a low emissions future.

### Key Demands

- Finalization of the Paris Agreement Rulebook:** The rulebook must be concluded at COP26 of the UNFCCC which has already been delayed by a year due to coronavirus.
  - Rulebook will set Paris Agreement in motion by laying out the tools and processes to enable it is implemented fairly and properly.
  - Countries had agreed to develop and finalise the Paris Rulebook at COP24 in Poland in 2018.
- Principles of Equity and Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC):** Finalization of the Paris Agreement Rulebook will help in effective implementation of the CBDR-RC by countries.
- On climate finance and adaptation:** COP26 must aim for higher global ambition on climate finance and adaptation as well.
- Demand from Developed countries:** BASIC group asked developed world to mobilise \$100 billion annually as climate finance support to developing countries to meet their existing obligations towards carbon emissions.

- Developed countries have failed to meet the \$100 billion goal per year of support to developing countries each and every year since 2009.
- Developed countries continue to present the 2009 goal as the ceiling of their ambition all the way to 2025.
- COP 26 must also recognition of the Parties' differing historical responsibilities and the developmental challenges faced by developing countries, compounded by the pandemic.

### Key Points

- **About:** The BASIC countries are a grouping of Brazil, South Africa, India and China.
  - The BASIC group was formed as the result of an agreement signed by the four countries on November 28, 2009.
- **Mandate:** BASIC is one of several groups of nations working together to fight climate change and carry out negotiations within the UNFCCC.
- **Common Interests:** BASIC nations have a broadly common position on reducing greenhouse gas emissions and raising the massive funds that are needed to fight climate change.
  - The BASIC countries constituted one of the parties in the Copenhagen Accord reached with the US-led grouping; the Accord, was, however, not legally binding.
- **Significance:** BASIC countries together have one-third of the world's geographical area and nearly 40% of the world's population.

## The Editorial Analysis- Breaking the Ice

### Context

- Recently, the U.S. Trade Representative held bilateral meetings with Indian Commerce and Industry Minister and relaunched the U.S.-India Trade Policy Forum (TPF).

### Associated issues in India-US relations

- **There were setbacks in India US relations, including-**
  - Raised import tariffs and
  - The withdrawal of benefits to Indian exporters under the U.S.'s Generalized System of Preferences (GSP)
  - These setbacks have triggered retaliatory trade barbs from India
- Recently elected Joe Biden administration shut the door on new trade pacts and became cold to restoring the GSP status.

- U.S. Trade Representative said that GSP restoration could be considered, while nudging India to set targets for tariff reductions and easing market access across sectors.
- **Regulatory Hurdles:** Indian pharmaceutical companies face delays in U.S. regulatory inspections of their pharma units.
- **Unmet Trade Potential:** Indo-U.S. trade never really lives up to its potential and India's unpredictable regulatory shifts, tariff- and non-tariff barriers also creates issues.

### Key Points

- **About:** U.S.-India Trade Policy Forum statement also outlines the sectors and goods and services that need quick attention.
  - Last U.S.-India Trade Policy Forum (TPF) was convened four years back.
- **Importance of India for the USA:**
  - The U.S looks at India as a key partner in rebuilding critical supply chains in a post-pandemic world seeking to cut its dependence on China.
  - This is clear from the USA's desire for integration in areas such as health, medical devices and pharma.
  - India's pharma exports account for 40% of the U.S.'s generic drugs supply and the USA has assured India that

### Way Forward

- While America's stance on India's proposal on IPR waivers for the COVID-19 vaccine and medicines will be watched at the upcoming WTO ministerial, India must seize this fresh initiative with the U.S. to cement its place in the new supply chains being envisaged.
- India must pro-actively steer away from the protectionism that is leading the globalised world adrift.

## Delhi Declaration on Afghanistan

### Context

- Recently, National Security Advisers of eight regional countries—India, Iran, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan and Uzbekistan— discussed the evolving situation in Afghanistan and have issued Delhi Declaration.

### Key points

- Delhi declaration reflects the shared interest of the participants in not letting Afghanistan relapse into the terrorist hub that it had become when the Taliban ruled from 1996 to 2001.

- The sides paid special attention to the current political situation in Afghanistan and threats arising from terrorism, radicalisation and drug trafficking as well as the need for humanitarian assistance.

#### Delhi Declaration: Key takeaways

- The countries reiterated strong support for a peaceful, secure and stable Afghanistan while emphasizing the respect for sovereignty, unity and territorial integrity and non-interference in its internal affairs.
- The participating countries expressed deep concern over the suffering of the people of Afghanistan arising from the security situation in Afghanistan and condemned the terrorist attacks in Kunduz, Kandahar and Kabul.
- They emphasised that Afghanistan's territory should not be used for sheltering, training, planning or financing any terrorist acts.
- They condemned in the strongest terms all terrorist activities and reaffirmed their firm commitment to combat terrorism in all its forms and manifestations, including its financing, the dismantling of terrorist infrastructure and countering radicalization, to ensure that Afghanistan would never become a safe haven for global terrorism.
- They called for a collective cooperation against the menace of radicalization, extremism, separatism and drug trafficking in the region.
- They stressed the necessity of forming an open and truly inclusive government that represents the will of all the people of Afghanistan and has representation from all sections of their society, including major ethno-political forces in the country. Inclusion of all sections of the society in the administrative and political structure is imperative for the successful national reconciliation process in the country.
- They recalled the relevant UN Resolutions on Afghanistan, and noted that the United Nations has a central role to play in Afghanistan and that its continued presence in the country must be preserved.
- They emphasized the importance of ensuring that the fundamental rights of women, children and minority communities are not violated.
- They also expressed concern over the deteriorating socio-economic and humanitarian situation in Afghanistan, and underlined the need to provide urgent humanitarian assistance to the people of Afghanistan.

- They reiterated that humanitarian assistance should be provided in an unimpeded, direct and assured manner to Afghanistan and that the assistance is distributed within the country in a non-discriminatory manner across all sections of the Afghan society.

### The Editorial Analysis: Dynamism in India-U.S. ties

#### Context

- Recently, a congressional delegation (CODEL) led by U.S. Senator John Cornyn travelled to the Indo-Pacific Command countries, including the Philippines, Taiwan and India.
  - In New Delhi, the six-member delegation interacted with Prime Minister of India, External Affairs Minister, and representatives of the Dalai Lama.
- While there are regular interactions among officials at various levels and across sectors, as well as people-to-people engagement, there are no formal interactions between Members of Parliament in India and members of the U.S. Congress.

#### Associated issues

- **CAATSA (Countering America's Adversaries Through Sanctions Act):** CAATSA bars countries from procuring military weapons from Russia.
  - India faces the prospect of sanctions for procuring S-400 missiles from Russia.
- Lack of any formal institutional communication or interaction between MPs in India and members of the U.S. Congress.

#### Significance

- **Indo-Pacific Theatre:** Indo-Pacific is the largest military theater in the world, and India-US ties is invaluable for countering China's overreach.
- **India-U.S. comprehensive global strategic partnership:** The partnership will help both India and US in furthering their interests and countering Chinese aggression.
- **Significance of the U.S. Congress:** Many congress members favoured India getting the presidential waiver under the Countering America's Adversaries Through Sanctions Act (CAATSA).

#### Way Forward

- **Strengthening India-US relations:** increasing convergence of strategic interests between India and the U.S. must further be enhanced to promote global peace and stability.

- **Cooperate on Contemporary Global Issues:** Both India and USA should focus on enhancing the bilateral relationship and strengthening cooperation on contemporary global issues such as terrorism, climate change and reliable chains for critical technologies.
- **Institutionalize the interaction between MPs in India and Members of the U.S. Congress:** members of the U.S. Congress play an important role in determining foreign policy.
  - This is important as legislative interactions inject dynamism in bilateral relations.
  - **Establishing India-US Parliamentary Exchange:** as declared at the joint statement of the 2+2 Dialogue in 2019 to facilitate reciprocal visits by Parliamentarians of the two countries.
  - India can take it forward through the Indian Parliamentary Group, which acts as a link between the Indian Parliament and the various Parliaments of the world.
- **Parliamentary Friendship Groups:** At present, there are eight Parliamentary Friendship Groups of India's including Japan, Russia, China and the European Union.
  - This mechanism should also be established between India and the U.S.A.

### Conclusion

- In 2022, when Parliament celebrates its 70th year, a formal arrangement with the U.S Congress can institutionalize this unique relationship between representatives of the U.S. and India.

## Ganga Connect Exhibition at Glasgow Amidst COP-26

### Context

- Recently, Union Environment Minister Inaugurated the Ganga Connect Exhibition at Glasgow Amidst COP-26 of the United Nations Climate Change Conference.
- Ganga Connect Exhibition to also be held In Cardiff, Birmingham, Oxford & London.

### Key Points

- **About:** Ganga Connect is a global exhibition that will showcase multiple facets of the river basin and connect with interested parties.
  - The Ganga Connect exhibition showcased by National Mission for Clean Ganga, c-Ganga, and the High Commission of India at the City of Glasgow College.

- **Objective:** The Ganga Connect exhibition is an attempt to showcase the level of development in the Ganga River basin to a global community of environmental stakeholders.
  - Global community of environmental stakeholders have gathered in Glasgow for the UN Conference of the Parties (COP-26) meeting.
- **Cities covered:** The Ganga Connect has started in Glasgow, and will run through various cities in UK including Cardiff, Birmingham, Oxford and will finally end in London in the last week of November.

### Key significance

- The Ganga Connect project is important from the point of view preserving and protecting Ganga and its ecosystem and creating widespread awareness about the river basin.
- The Ganga Connect exhibition offers a clear and deep understanding of the size, magnitude and complexity of the Ganga riverine ecosystem.
- The Ganga Connect project also puts a spotlight on the solutions, shares a status update and execution timeline,
- The Ganga Connect exhibition illustrates the deep spiritual and philosophical connect that Indians have with the river.
- It also enables engagement with interested parties and the diaspora who want to get involved in the rejuvenation, restoration and conservation of the river system.
- The exhibition is highlighting river Ganga as a major lab for global technology and the scientific community to develop cutting edge environmental solutions.
- Initiatives like these are a great way to attract innovators from around the world and learn from the international best practices.

## India France Strategic Agreement

### Context

- Recently, National Security Advisor (NSA) of both India and France met and resolved to expand the defence ties.

### Key points

- Both the countries agreed to strengthen **defence and security partnership** by enhancing intelligence and information sharing, bolstering capabilities, expanding military drills and pursuing new initiatives in maritime, space and cyber domains
- The two sides also discussed "the **continuing challenge of terrorism; and, emerging threats in maritime, cyber and space domains**".

### About India France Strategic Dialogue

- The India-France strategic dialogue is **held annually** with the two countries alternating as hosts.
- France has an **emphatic presence** in the Indian Ocean region.
  - Its overseas territories of **Reunion Island and Mayotte island** makes it a stakeholder in the region, which is fast developing into a theatre of geostrategic power-play.
- France has emerged as a **key partner in the Indian Ocean** in recent years.
  - Recently, India signed a logistics sharing agreement with France, which enables India and France to use each other's military facilities.
- **China is increasing its stake** in the Indian Ocean region with its presence in Bangladesh, Pakistan, Sri Lanka, Maldives and Djibouti.
  - India's agreement with France could act as a deterrent to the growing ambitions of China as the French Navy has permanent bases in Djibouti and Abu Dhabi besides in territories of Reunion Island and Mayotte in the Indian Ocean.
- India and France have **robust economic and strategic ties** for several decades. The bilateral bonding has strengthened in recent years with India deepening its military and defence ties with France.
- On economic front, the **French companies have been among the top investors** in India in the fields of renewable energy, defence, infrastructure and smart cities, and pharmaceuticals.

- A new joint call was taken on Circular economy including the themes such as Health Science and Waste to Wealth by the Department of Science and Technology, Department of Biotechnology and Swedish Vinnova during 2021-2022.
- ICMR India and Swedish FORTE have also agreed to launch the new call in 2021-2022 on broad themes viz., Public health, prevention, and health promotion Organization and provision of care for the elderly.
- In addition, The Department of Bio Technology is already engaged with Swedish Partners on Incubator Connect, Digital Health Care and Global Bio India programmes, enhancing the partnerships in the field of Bio Technology
- The Science and Technology cooperation between two countries forms the important component of the bilateral cooperation, which was initiated through the Indo-Swiss Inter-Governmental Agreement signed at Stockholm on 9th December 2005.
- This agreement has provisions for cooperation through. It includes exchange of scientists, graduate students, research workers, technologists, other specialists and scholars among others.

### India-Sweden Innovation Meet

#### Context

- Recently, 8th India-Sweden Innovation Day meet was held on the theme 'Accelerating India Sweden Green Transition'.

#### Key points

- India and Sweden cooperation in Energy Sector will go a long way in achieving the ultimate goal of fossil fuel free economy.
- Cooperation in the energy sector was identified as an important area during the visit of our Prime Minister to Stockholm in April 2018, as India is looking for technology solutions for clean energy.
- The meeting has identified several important themes for S&T cooperation such as Smart Cities, Clean Technologies, Digitalization including Internet of Things, Machine Learning, Circular economy etc.

### India- Israel Bilateral Innovation Agreement (BIA)

#### Context

- Recently, Defence Research and Development Organisation (DRDO) and Directorate of Defence Research and Development (DDR&D), Ministry of Defence, Israel have entered into a Bilateral Innovation Agreement (BIA).
- Bilateral Innovation Agreement (BIA) is a tangible demonstration of the growing Indo-Israeli technological cooperation.

#### Key Points

- **Funding:** The development efforts will be jointly funded by DRDO and DDR&D, Israel.
- **Key Objective:** Bilateral Innovation Agreement (BIA) aims to promote innovation and accelerated R&D in startups and MSMEs of both countries for the development of dual use technologies.
- **Focus Areas:** Under Bilateral Innovation Agreement, Startups & industry to bring out next generation technologies & products in areas such as Drones, Robotics & Artificial Intelligence.
  - **Other Focus areas-** Quantum technology, Photonics, Biosensing, Brain-Machine Interface, Energy Storage, Wearable Devices, Natural Language Processing, etc.

- **Benefits:** The technologies developed under BIA will be available to both countries for their domestic applications.
  - Products and technologies will be customised to meet unique requirements of both the countries.

### Defence Research and Development Organisation (DRDO)

- **Background:** DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).
- **About:** DRDO is the R&D wing of Ministry of Defence, Govt of India, with a vision to empower India with cutting-edge defence technologies.
- **Mission:** to achieve self-reliance in critical defence technologies and systems while equipping armed forces with state-of-the-art weapon systems and equipment in accordance with requirements laid down by the three Services.
- **Key Achievements:** DRDO's pursuit of self-reliance has resulted in the successful indigenous development and production of strategic systems and platforms such as-
  - Agni and Prithvi series of missiles;
  - Light combat aircraft, Tejas;
  - Multi-barrel rocket launcher, Pinaka;
  - Air defence system, Akash;
  - A wide range of radars and electronic warfare systems; etc.,

- Various working groups of the Trade Policy Forum (TPF) are expected to meet frequently and address issues of mutual concern in a mutually beneficial manner.
- **Objective:** to deliver tangible benefits to farmers and businesses of both countries by resolving outstanding market access issues.
- **Mutual market access: India-US Trade Policy Forum** has decided to forge an agreement to-
  - facilitate U.S. market access for mangoes, grapes, and pomegranates, pomegranate arils from India, and
  - ensure access to the Indian market to cherries, pork/pork products and alfalfa hay for animal feed from the United States.
- **Totalisation Agreement:** Both sides at India-US Trade Policy Forum agreed on the significance of negotiating a Social Security Totalization Agreement in the interest of workers from both sides.
  - **Totalisation Agreement** proposed under **India-US Trade Policy Forum** would allow workers from both countries to move their retirement savings.
  - Lack of Totalisation Agreement particularly affects Indian IT workers in the U.S. who lose billions of dollars in statutory U.S. social security contributions that they cannot repatriate home.
- **Collaboration on Multilateral forums: India-US Trade Policy Forum** discussed collaboration and constructive engagement in various multilateral trade bodies including the WTO and the G20.
  - The collaboration aims for achieving a shared vision of a transparent, rules-based global trading system among market economies and democracies.
  - India-US Trade Policy Forum also decided to find mutually agreed solutions on outstanding WTO disputes between the two countries.
- **Ethanol supply:** At India-U.S. Trade Policy Forum, the U.S. indicated an interest in supplying ethanol to India for its goal of 20% ethanol blending with petrol by 2025.
- **On health:** the two sides at India-U.S. Trade Policy Forum decided to partner with allies in developing a secure pharmaceutical manufacturing base and de-risk global supply chains in such critical sectors like health.
- **On services:** the India-U.S. Trade Policy Forum discussed ways in which legal, nursing and accountancy services can facilitate growth in trade and investment.
  - The India-U.S. Trade Policy Forum also sought to work together on electronic payment services and the digital economy.

## India-US Trade Policy Forum

### Context

- Recently, the U.S-India Trade Policy Forum (also known as the Trade Policy Forum) was held after a gap of four years.
- The 12<sup>th</sup> U.S-India Trade Policy Forum was co-chaired by the Indian Commerce and Industry, and U.S. Trade Representative.
- The U.S-India Trade Policy Forum resolved to take economic ties between the two countries to the 'next high level' and exchanged views on 'potential targeted tariff reductions'.

### Key Outcomes

- At India-US Trade Policy Forum, they decided to activate working groups of the Trade Policy Forum (TPF) on agriculture, non-agriculture goods, services, investment, and intellectual property.

- **On visa policy:** the India-U.S. Trade Policy Forum decided to continue engaging on visa issues to facilitate the movement of professionals, skilled workers, experts, and scientific personnel.

### Infrastructure for Resilient Island States' Initiative

#### Context

- Recently, the Prime Minister of India launched **the Initiative for the Resilient Island States (IRIS)** for developing infrastructure of small island nations at the COP26 of UNFCCC at Glasgow.

#### Key Points

- **About:** The Infrastructure for Resilient Island State (IRIS) is an initiative under the Coalition for Disaster Resilient Infrastructure (CDRI).
  - The Infrastructure for Resilient Island State (IRIS) is the first major initiative by India under the Coalition for Disaster Resilient Infrastructure (CDRI).
- **Mandate:** The Infrastructure for Resilient Island State (IRIS) aims to create disaster resilient infrastructure that can minimize human and economic loss of the small island countries during various disasters.
- **Funding:** Australia, India and the UK have committed an initial funding of \$10 million under the Infrastructure for Resilient Island State (IRIS). More countries like Japan are expected to join it.
- **Timely Information:** ISRO will build a special data window for the Small Island Developing States (SIDS) to provide them timely information about cyclones, coral-reef monitoring, coast-line monitoring etc. through satellite.

#### Small Island Developing States (SIDS)

- **About:** Small Island Developing States (SIDS) are a group of 38 UN Member States and 20 Non-UN Members/Associate Members of UN regional commissions.
- **Prone to Disasters:** They are most vulnerable to climate change induced calamities.
  - Small Island Developing States (SIDS) are up against their common enemy that is climate change and resultant disasters.
  - Small Island Developing States (SIDS) face unique social, economic, and environmental vulnerabilities.
  - Vulnerable small island states are in the frontline of loss and damage that is caused by global warming.

- **UN Global Assessment Report (2017):** SIDS countries account for two-thirds of the countries in the world that suffer the highest relative losses due to disasters.

### International Law Commission

#### Context

- Recently, Professor **Bimal Patel** is elected as the current member of International Law Commission from India for a 5-year term.
- He garnered 163 votes in the UN General Assembly out of 192 members present and voting, **topping the Asia-Pacific group** that included candidates from China, South Korea and Japan.

#### International Law Commission: About ILC

- The International Law Commission was established by the General Assembly, in 1947, to undertake the mandate of the Assembly.
- It was established to initiate studies and make recommendations for the purpose of **encouraging the progressive development** of international law and its codification.
- Due to the ongoing COVID-19 Pandemic, the General Assembly, on 12 August 2020, decided to postpone the seventy-second session of the ILC to 2021.

#### ILC History

- The **Hague Peace Conferences** of 1899 and 1907 reached agreement on several important conventions and thus greatly stimulated the movement in favour of codifying international law.
- The **Second Peace Conference of 1907** proposed that some two years before the probable date of the Third Peace Conference, a preparatory committee should be established "with the tasks of collecting the various proposals to be submitted to the conference, of ascertaining what subjects are ripe for embodiment in an international regulation, and of preparing a programme which the Governments should decide upon in sufficient time to enable it to be carefully examined by the countries interested.
- **Committee of Seventeen**, which recommended the creation of the Commission, had suggested similarity between the International Court of Justice and the Commission with regard to the method of election.
- The General Assembly, however, rejected the suggestion for a system of election jointly by the General Assembly and by the Security Council since the Court was a special case which should not serve as a precedent for the appointment of the Commission and the work of codifying international law was entrusted to the General Assembly under Article 13 of the Charter of the United Nations.

- Instead, it decided that candidates should be nominated exclusively by the Governments of States Members of the United Nations and that the election should be by the General Assembly alone (article 3).
- Each Member State may nominate a maximum of four candidates, of whom only two may be nationals of the nominating State

## Sydney Dialogue

### Context

- Recently, Prime Minister of India delivered keynote address at The Sydney Dialogue. At Sydney Dialogue, he spoke on India's technology evolution and revolution.
  - The PM's Sydney Dialogue address was preceded by introductory remarks by the Australian Prime Minister, Mr. Scott Morrison.

### Key Highlights of the Speech

- At the Sydney Dialogue, he noted recognition for India's central role in the Indo Pacific region and in the emerging digital world.
- Noting the benefits of digital age at the Sydney Dialogue, he said that the world also faces new risks and new forms of conflicts across diverse threats from sea-bed to cyber to space.
- At the Sydney dialogue, PM said that the biggest strength of democracy is openness. At the same time, we should not allow a few vested interests to misuse this openness.
- **India's Digital Revolution:** At Sydney dialogue, PM said that, as a democracy and a digital leader, India is ready to work with partners for shared prosperity and security.
  - India's digital revolution is rooted in our democracy, our demography, and the scale of our economy.
  - It is powered by enterprise and innovation of our youth. We are turning the challenges of the past into an opportunity to take a leap into the future.
- **Significant developments taking place in India:**
  - India is investing in developing indigenous capabilities in telecom technology such as 5G and 6G.
  - India is one of the leading nations in artificial intelligence and machine learning, especially in human-centred and ethical use of artificial intelligence.
  - India is developing strong capabilities in Cloud platforms and cloud computing.

### Five Important Transitions taking Place in India

At the Sydney Dialogue, the Prime Minister of India highlighted five transitions that are taking place in India. They are-

1. The world's most extensive public information infrastructure being built in India.
1. Over 1.3 billion Indians have a unique digital identity, six hundred thousand villages will soon be connected with broadband and the world's most efficient payment infrastructure, the UPI.
2. Use of digital technology for governance, inclusion, empowerment, connectivity, delivery of benefits and welfare.
3. India has the world's third largest and fastest growing Startup Eco-system.
4. India's industry and services sectors, even agriculture, are undergoing massive digital transformation.
5. There is a large effort to prepare India for the future

### Key Points

- **About Sydney Dialogue:** The Sydney Dialogue is an annual summit of cyber and critical technologies to discuss the fallout of the digital domain on the law and order situation in the world.
  - It is hosted by the Australian Strategic Policy Institute- an independent, non-partisan think tank that produces expert and timely advice for Australian and global leaders.
- **Sydney Dialogue 2021:** Sydney Dialogue 2021 is a world first summit for emerging, critical and cyber technologies.
  - The inaugural Sydney Dialogue summit was hosted virtually from Sydney, Australia on 17-19 November 2021.

## UNESCO Creative Cities Network

### Context

- Recently, UNESCO has **designated 49 cities, including Srinagar**, under UNESCO's network of creative cities in recognition of their commitment to placing culture and creativity at the heart of their development and to sharing knowledge and good practices.

### Key points

- Srinagar has been designated as a creative city of **craft and folk arts**.

### UNESCO CCN in India

- Chennai and Varanasi - UNESCO Cities of music;
- Jaipur and Srinagar- UNESCO city of crafts and folk arts;

- Mumbai - UNESCO city of film; and
- Hyderabad - UNESCO City of gastronomy.

The Network covers seven creative fields:

- Crafts and Folk Arts,
- Media Arts,
- Film,
- Design,
- Gastronomy,
- Literature, and
- Music

### About UNESCO Creative Cities Network

- The UNESCO Creative Cities Network (UCCN) was **created in 2004** to promote cooperation with and among cities that have identified creativity as a strategic factor for **sustainable urban development**.
- The 246 cities which currently make up this network work together towards a common objective of placing **creativity and cultural industries at the heart of their development** plans at the local level and cooperating actively at the international level.
- By joining the Network, cities commit to sharing their best practices and developing partnerships involving the public and private sectors as well as civil society in order to:
  - **strengthen** the creation, production, distribution and dissemination of cultural activities, goods and services;
  - **develop** hubs of creativity and innovation and broaden opportunities for creators and professionals in the cultural sector;
  - **improve** access to and participation in cultural life, in particular for marginalized or vulnerable groups and individuals;
  - fully **integrate** culture and creativity into sustainable development plans.

## UN Report on Internal Migration

### Context

- Recently, United Nations High Commissioner for Refugees (UNHCR) has released a new report on internal migration titled Mid-Year Trends Report 2021.

### Key points

- According to the report, **around 50% people were internally displaced** across 33 countries due to conflict and violence in the first six months of 2021.
- The number this year is nearly **5% more than the number reported** at the end of 2020.

- The report also revealed that the trend of rising forced displacement continued into 2021, which resulted largely from internal displacement.
- Around **40 lakh new displacements** were reported by 18 countries — 50 per cent more than the people displaced during the same period in the previous year.
- Much of the **new internal displacement were in Africa**, including in the Democratic Republic of the Congo, Ethiopia, Central African Republic, South Sudan, Nigeria, Mozambique and Burkina Faso.
- The lethal mix of **conflict, COVID-19, poverty, food insecurity and the climate emergency** has compounded the humanitarian plight of the displaced, most of whom are hosted in developing regions.

### Reasons for displacement

- **Conflict** continued in Mozambique's northern province, uprooting over 120,000 people.
- A **crisis of governance and instability** in the rural areas of Burkina Faso impacted its civilians, fuelling the fastest growing internal displacement crisis.
- **Internal and cross-border mobility** in the East and Horn of Africa contributed to around 6.5 million internally displaced persons (IDP).
- **Violence** in Myanmar and Afghanistan also forced 217,000 and 318,500 people from their homes.
- In Yemen, April's **heavy rains and flooding** affected 7,000 people, 75% of whom were IDPs living in sub-standard conditions.
- In Mozambique, UNHCR supported the government in developing a policy and strategy on displacement management that addresses all causes and phases of displacement, from prevention through to durable solutions.

## US joins India-led International Solar Alliance

### Context

- Recently, the United States of America has become the 101st member country to join the India-led International Solar Alliance (ISA).
- The USA inclusion in the International Solar Alliance will catalyse global energy transition through a solar-led approach.

### Key Significance

- US participation will help in more rapid deployment of solar globally and it will be particularly important for developing countries.
- It will strengthen the ISA and propel future action on providing a clean source of energy to the world.

- **Promoting other Nations to join International Solar Alliance:** As it demonstrates that nations across the world are recognising the economic and climate mitigating value of solar.
  - Also, this recognizes energy source's potential as a catalyst for global energy transition.

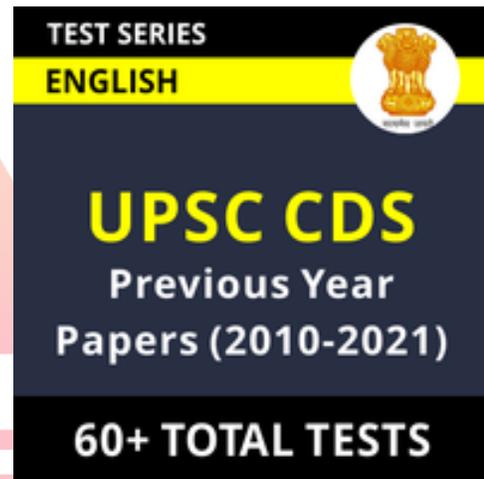
#### International Solar Alliance- Key Points

- **Background:** The International Solar Alliance (ISA) was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs.
- **Foundation:** The International Solar Alliance (ISA) was co-founded by India and France during the 2015 climate change conference in Paris.
  - **Headquarter:** Gurugram, India.
- **About:** ISA is an intergovernmental treaty-based organization. It has been conceived as be an action-oriented, member-driven, collaborative platform-
  - For increased deployment of solar energy technologies to enhance energy security and sustainable development, and
  - To improve access to energy in developing member countries.

#### International Solar Alliance- Key Interest and Objectives

- To collectively address key common challenges to scale up solar energy applications in line with their needs;
- To mobilize investments of more than USD 1000 billion by 2030;

- To take coordinated action through program and activities launched on a voluntary basis, aimed at better harmonization, aggregation of demand, risk and resources, for promoting solar finance, solar technologies, innovation, R&D, capacity building etc.;
- Reduce the cost of finance to increase investments in solar energy in member countries by promoting innovative financial mechanisms and mobilizing finance from Institutions;
- Scale up applications of solar technologies in member countries, and
- Facilitate collaborative research and development (R&D) activities in solar energy technologies among member countries.
- Promote a common cyber platform for networking, cooperation and exchange of ideas among member countries.



# Economy

## 5 Years of Demonetisation

### Context

- November 8, 2021 marked **five years of demonetisation** in India. On this day in 2016, our Prime Minister declared that currency notes of ₹500 and ₹1000 would cease to be legal tender. A process that is called demonetisation.

### 5 indicators to show what has changed after 5 years of demonetisation

- Cash flow in the system:** Circulation of cash in the economy touched all-time high of Rs 28.3 trillion on October this year.
- Digital transactions:** Digital transactions that include UPI, PhonePay, Paytm, among other merchants have also witnessed an all-time high.
- UPI Transactions:** UPI transactions have been increased from just 0.29 million in Nov 2016 to 4.2 billion now.
- Value of UPI transactions:** UPI has also recorded highest transaction of \$103 billion last month.
- Currency in circulation:** Currency in the economy is growing with the nominal GDP growth.

### What has demonetisation achieved?

- A Harvard University working paper finds that demonetization led to a **permanent increase** in the use of digital transactions, especially among the young.
- COVID 19:** Less cash in the economy has allowed people to order essential items during home isolation and made payment through online medium using various apps.
- Increase in online transactions, and GST have led to **formalisation of the economy**.
- The number and value of **ITRs and employees** in formal sector rose after demonetisation.
- If informal economy shrank, black money would have come down too.

### However, demonetisation has often been criticised as a failed decision due to following reasons

- Killing **black money** was the prime target of demonetisation. However, according to the RBI data, almost the entire chunk of money (more than 99 per cent) that was invalidated came to the banking system.
- Fake notes:** In 2016, 6.32 lakh counterfeit pieces were seized across the country. In the next four years, a total of 18.87 lakh pieces of fake notes have been seized across the country in various denominations, according to the RBI data.

- Demonetisation lowered the growth** rate of economic activity by at least 2 percentage points in the quarter of demonetization.
- The worst impacted were segments that relied on high-volume cash transaction, such as **organized and unorganized retail**.
- An IMF report states that the disruption caused by cash shortages **dampened consumer and business sentiments**, leading to a decline in high-frequency consumption and production indicators, such as sales of two-wheelers and cement output, respectively.

## All India Survey on Domestic Workers

### Context

- Recently, the Union Minister for Labour and Employment flagged off the first ever All India Survey on Domestic workers in India.

### Key Points

- About All India Survey on Domestic Workers:** The first All India Survey on Domestic workers is being conducted by Labour Bureau, Labour and Employment Ministry.
  - The first all India Survey on Domestic Workers is expected to be completed in a year.
- Coverage All India Survey on Domestic Workers:** All India Survey on Domestic Workers survey would cover 37 States and Union Territories, covering 1.5 lakh households in 742 districts.
- Key Objectives:** All India Survey on Domestic Workers have following key objectives-
  - All India Survey on Domestic Workers aimed at estimating the proportion of domestic workers at the national-level and in the States;
  - All India Survey on Domestic Workers also aims to find out the proportion of domestic workers who live-in/live-out, engaged in informal employment and migrant/non-migrant;
  - All India Survey on Domestic Workers is expected to find out wages of such informal workers; and other socio-economic factors.
- The questionnaire of the All-India Survey on Domestic Workers would include details about-**
  - The size of the household,
  - Religion,
  - Social group,
  - Monthly consumption expenditure
  - The nature of the dwelling unit and
  - Information about the domestic workers including their age, social group, migrant status, duration of work and type of remuneration, would be collected as well

### Significance

- **Inclusion of domestic help:** The All-India Survey on Domestic Workers survey would include details of the number of households with live-in/live-out domestic workers and the average number of workers engaged by various kinds of households.
- **Estimation of Covid-19 Impact:** The impact of the COVID-19 pandemic on wages would also be a part of the All-India Survey on Domestic Workers survey.
- **Help in Governance:** All India Survey on Domestic Workers would also help government and other policy makers towards evidence-based, data-driven policy formulation.
- **Official Data on Informal Sector:** Though domestic workers were a significant part of the total informal sector employment, there was a lack of data on the employment conditions.

### Broad-Based Trade and Investment Agreement (BTIA)

#### Context

- Recently, India and UK have decided to hold regular interactions **for re-initiation of bilateral trade and investment agreements (BTIA).**

#### Key points

- The interactions include a bilateral regulatory dialogue and an **India-EU Multilateral Dialogue** to explore further possibilities of cooperation.
- Both the countries have a **shared belief in the rules-based** bilateral and multilateral trading systems.
- Both have convinced that **deepening bilateral trade** relations should support, rather than undermine, the multilateral route.
- Even though bilateral trade and investment have risen dramatically, there are reasons to conclude that current levels are **still below potential.**
- Against this backdrop, attempts have been made to revive the India-EU Broad-based Trade and Investment Agreement (BTIA).

#### About BTIA

- Negotiations under BTIA have **started in 2007.**
- The **talks covered** trade in goods, trade in services, investment, sanitary and phytosanitary measures, technical barriers to trade, trade remedies, rules of origin, customs and trade facilitation, competition, trade defence, government procurement, dispute settlement, intellectual property rights and geographical indications, and sustainable development.
- However, it **stalled since 2013** due to divergence of views on crucial issues.

### BTIA issues

- **EU was demanding market access** and higher levels of tariff concessions in automobiles, wines and spirits, as well as government procurement.
- Apart from these, **policies of both the countries did not converge** on issues like intellectual property rights, data security, services, agricultural exports, chemicals, dairy and fishery, registration of electronic products, and certification of telecom network elements.
- **EU had different qualifications** and professional standards.
- The **arrest and trial of Italian marines** in India led to a backlash in the EU.
- The **ban on Indian Alphonso** mangoes and four other vegetables due to the finding of pests invited a strong reaction from India.
- All these issues led to the **deterioration of bilateral relations** in the last decade and indirectly impacted the revival of trade talks.
- The differences that arose during the trade and investment talks were too wide to be overcome **without a political push** from the higher level.

#### Way forward

If successfully concluded, BTIA has the **potential to bring real substance** to the India-EU Strategic Partnership.

### Digital Payment Gateway

#### Context

- Recently, Ministry of Electronics & IT has launched **Digital Payment Gateway** to make the internet accessible to everyone.

#### Key points

- It has been launched by **National Internet Exchange of India (NIXI)**, a not-for-profit Company under the aegis of the Ministry of Electronics and Information Technology (MeitY).
- To **facilitate its customers** and partners, NIXI has gone digital by enabling digital payments across its three business units by integrating payment gateways on all its customer-facing websites for ease of use.
- NIXI has been contributing to the **Digital India Mission** by helping the Internet Infrastructure to be self-reliant, robust and secure.
- This initiative of our own payment gateway will ensure **more digital independence** and transparency in NIXI's own ecosystem.
- NIXI has partnered with **PayU and NSDL** to offer the Payment gateway services.

### NIXI payment gateway partners

- **PayU:** PayU is India's leading payment gateways which provides payment gateway solutions to online businesses and serves more than 4,50,000+ merchants with over 100+ payment methods.
- **NSDL:** NSDL is one of the largest Depositories in the World and has established a state-of-the-art infrastructure that handles most of the securities held and settled in dematerialized form in the Indian capital market. They also provide secure and seamless payment gateway services to businesses.

### What is a payment gateway?

- A payment gateway is the **technology that captures and transfers payment data** from the customer to the acquirer and then transfers the payment acceptance or decline back to the customer.
- A payment gateway keeps the **payments ecosystem rolling smoothly**, as it enables online payments for consumers and businesses.
- It acts as an **interface between a merchant's website and its acquirer**.
- It **encrypts sensitive credit card details**, and ensures that information is passed securely from the customer to the acquiring bank, via the merchant.

## GN Bajpai Committee Report

### Context

- GN Bajpai headed committee has recommended that the Insolvency and Bankruptcy Board of India (IBBI) should come up with a standardised framework to assess the success of the five-year-old law and improve its implementation.

### Key points

- The framework should comprise of **real-time data bank, with data on time, cost and recovery rates** together with macroeconomic indicators.
- The committee emphasised that **resolution of the distressed asset remains the first objective** of the Insolvency and Bankruptcy Code (IBC), followed by promotion of entrepreneurship, availability of credit and balancing the interests of stakeholders.
- The committee has recommended that **reliable real-time data** is essential to assess the performance of the insolvency process.
- Also, it suggested that the IBBI should consider **including quantitative data** on cost indicators such as resolution professional's fees, asset storage and preservation costs in its quarterly updates in line with international best practices.

- It said **use of indicators** such as number of new companies registered, credit supply to stressed sectors such as real estate, construction and metals, change in the cost of capital, particularly for stressed sectors, the status of non-performing loans, employment trends, size of the corporate bond market and investment ratio for the related sectors.
- The group also recommended a **national dashboard of insolvency** data by using the existing data sources to the extent possible.

### Insolvency and Bankruptcy Code

- Insolvency and Bankruptcy Code, 2016 (IBC) is the bankruptcy law of India which seeks to **consolidate the existing framework** by creating a single law for insolvency and bankruptcy.
- The bankruptcy code is a **one stop solution** for resolving insolvencies which previously was a long process that did not offer an economically viable arrangement.
- The code aims to **protect the interests of small investors** and make the process of doing business less cumbersome.

### Key features

- **Insolvency resolution:** For companies, the process will have to be completed in 180 days, which may be extended by 90 days, if a majority of the creditors agree.
  - For start-ups (other than partnership firms), small companies and other companies (with asset less than Rs. 1 crore), resolution process would be completed within 90 days of initiation of request which may be extended by 45 days.
- **Insolvency regulator:** The Code establishes the Insolvency and Bankruptcy Board of India, to oversee the insolvency proceedings in the country and regulate the entities registered under it.
  - The Board will have 10 members, including representatives from the Ministries of Finance and Law, and the Reserve Bank of India.
- **Insolvency professionals:** The insolvency process will be managed by licensed professionals. These professionals will also control the assets of the debtor during the insolvency process.
- **Bankruptcy and Insolvency Adjudicator:** The Code proposes two separate tribunals to oversee the process of insolvency resolution, for individuals and companies:
  - the National Company Law Tribunal for Companies and Limited Liability Partnership firms; and
  - the Debt Recovery Tribunal for individuals and partnerships.

## India rejects WTO draft on fishery subsidy

### Context

- India has rejected the WTO draft text on curbing fishery subsidies as it was not responsive to the demands of the developing nations.

### Key points

- India has rejected the draft for not adequately addressing its concerns on food security and livelihood of small fishers while including provisions that could help advanced countries perpetuate their huge doles for long-distance fishing.

### India's claim

- India is in favour of stopping IUU (illegal, unreported, unregulated) fishing and supporting sustainable fishing by checking harmful subsidies.
- However, the text is tilted heavily towards advanced fishing nations letting them maintain their subsidies for high-sea fishing.
- At the same time developing countries are denied adequate carve-outs that could hurt both livelihood and food security interests.
- India provides annual fishery subsidies of around \$277 million while advanced fishing nations like China provide subsidies estimated at \$7.2 billion, the EU at \$3.8 billion, the US at \$3.4 billion and Korea at \$3.1 billion.
- Attempts are also being made to bring together like-minded countries sharing same concerns and similar stand as India.

### 3 categories

- In the on-going talks on curbing fishery subsidies, negotiations are taking place under three categories — IUU, over-fished (where stock is already declared as overfished) and over-fishing and over-capacity.
- The current text suggests that if a country can demonstrate conservation and management measures, it can continue fishing anywhere.
- As the standards are set by advanced fishing countries, it is easy for them to follow. Developing nations, on the other hand, may not be in a position to immediately show those standards.

### Suggestions from India

- Advanced nations are engaged in distant water fishing beyond their Exclusive Economic Zone (EEZ) of 200 nautical miles, and are responsible for two-third of fisheries subsidies, which mostly goes to fuel. So, India suggested that advanced nations should stop such subsidies for 25 years.

- That left out space will be optimally utilised by developing countries and LDCs, to develop capacities and have policy space for meeting their food security needs.
- This proposal has been totally ignored in the WTO text.
- India had also sought carve-outs without disciplining commitments for fishing within territorial waters stretching up to 12 nautical miles as mostly marginal fishers operate in this zone who are too small to keep records and require all possible government support.
- However, the text gives a carve-out for territorial fishers only in the area of over-fishing and over-capacity, while giving just a two-year transition period for IUU fishing.
- For fishing within the EEZ (12 to 200 nautical miles), India had sought relief for seven years to put in place the required devices for appropriate management of fishing activities, but the draft does not provide for it.

## International Tourism Mart

### Context

- The Ministry of Tourism, Government of India, in association with the North Eastern States is organising the 9th "International Tourism Mart" (ITM) for the North East Region at Kohima, Nagaland.
  - The 8th edition of International Tourism Mart was held at Imphal, Manipur in 2019.
- Presentation by State Governments and discussions on several aspects of tourism and unique tourism products in the North East Region and their potential is part of the International Tourism Mart.

### Key Points

- About:** International Tourism Mart is annual even organized by the Union Tourism Ministry in collaboration with North-eastern states.
  - The International Tourism Marts are organised in the North Eastern States on rotation basis.
  - Nagaland is hosting **International Tourism Mart** for the first time (9<sup>th</sup> Edition).
  - The earlier editions of **International Tourism Mart** have been held in Guwahati (Assam), Tawang (Arunachal Pradesh), Shillong (Meghalaya), Gangtok (Sikkim), Agartala (Tripura), and Imphal (Manipur).
- Participation:** International Tourism Mart provides a platform for participation of tourism business fraternity and entrepreneurs from the 8 North Eastern States.

- **Objective:** International Tourism Mart aims to highlight the tourism potential of the north-eastern region in the domestic and international markets.

### Significance

- International Tourism Mart highlights the tourism potential of the north-east region in the domestic and international markets.
- The delegation at International Tourism Mart includes students from across the country as part of a study tour under Ek Bharat Shreshtha Bharat.
- International Tourism Mart will provide platform for States to showcase their products to international buyers, opinion makers and bloggers and attract more tourists to their respective states.

## Investor Charter

### Context

- SEBI has unveiled investor charter, and laid down certain dos and don'ts of investing in Indian securities market.

### Key points

- Investor Charter was first proposed in **Union Budget 2021-22** to protect investors from misselling of financial products.
- This charter includes the **rights and responsibilities** of investors, and **dos and don'ts** of investing in the securities market.
- The charter has been published to protect the interests of investors by enabling them to understand the risks involved and invest in a fair, transparent, secure market, and to get services in a timely and efficient manner.
- It will also ensure that SEBI-registered intermediaries/ regulated entities adhere to their investor charters, including the **grievance redressal mechanism**.

### Investor's rights

- Get **fair and equitable** treatment.
- Expect redressal of investor grievances filed in **SCORES** (Sebi Complaints Redress System) in a timebound manner.
- Get **quality services** from SEBI-recognised market infrastructure institutions and SEBI-registered intermediaries/ regulated entities/ asset management companies.

### Investor's responsibilities

- Deal with **SEBI-recognised market** infrastructure institutions and SEBI-registered intermediaries/ regulated entities only.

- **Update their contact details** such as address, mobile number, email id, nomination and other KYC details in case of any changes.
- **Ensure grievances** are taken up by concerned entities within a stipulated period of time.
- Ensure that their accounts are **operated only for their own benefit**.

### Dos for investors:

- Read and **understand documents** carefully before investing.
- Know about **investor grievance-redressal mechanism**.
- **Know the risks** involved before investing.
- **Keep track of account** statements and bring to notice of concerned stock exchange/ intermediary/ AMC any discrepancy that may be noted.
- **Know about various fees**, charges, margins, premiums, etc., involved in the transactions.
- Preserve relevant transaction-related documents.

### Don'ts for investors:

- **Don't make payments in cash** while making any investment in the securities market, beyond the prescribed limit.
- **Don't share critical information** such as account details and passwords with anyone.

## Jute Packaging Material Act: New Reservations Approved

### Context

- Recently, **Ministry of Textiles** has approved reservation norms for mandatory use of jute in packaging for the jute year 2021-22.

### Key points

- The mandatory packaging norms approved for Jute Year 2021-22 **provide for 100% reservation** of the foodgrains and **20% of sugar** to be compulsorily packed in jute bags.
- The reservation norms in present proposal would **further the interest of domestic production of raw jute** and jute packaging material in India, thereby, making India self-reliant in consonance with Aatmanirbhar Bharat.
- Reservation for packaging in jute packaging material consumed around **66.57% of the raw jute produced** in the country.
- It will **help protect the environment** because jute is natural, biodegradable, renewable & reusable fibre and hence fulfils all sustainability parameters.

### About Jute Packaging Material Act, 1987

- The reservation norms under the Jute Packaging Material Act (JPM Act) provide for direct employment to **3.7 lakh workers and 40 lakh farmers** in the Jute Sector.
- JPM Act, 1987 **protects the interest of jute farmers**, workers and persons engaged in jute goods' production.
- 75% of the total production of the Jute Industry is Jute Sacking Bags of which **90% is supplied to the Food Corporation of India (FCI)** and State Procurement Agencies (SPAs) and remaining is exported/sold directly.
- Government purchases jute sacking bags worth approximately **Rs. 8,000 Cr. every year**, for packing of foodgrains, hence ensures guaranteed market for the produce of jute farmers and workers.
- **Average production of jute sacking bags** is about 30 lakhs bales (9 lakh MT) and government is committed to ensure complete take off of the sacking production of the jute bags in order to protect the interest of jute farmers, workers and persons engaged in the jute industry.

## Mineral Conservation and Development (Amendment) Rules, 2021

### Context

- Recently, Ministry of Mines has notified the Mineral Conservation and Development (Amendment) Rules, 2021 to amend the Mineral Conservation and Development Rules, 2017.

### Key points

- The MCDR (Mineral Conservation and Development Rules) have been framed under **Mines and Minerals (Development and Regulation) Act, 1957** to provide rules regarding conservation of minerals, systematic and scientific mining, development of the mineral in the country and for the **protection of environment**.

### Amendment Rules

#### Use of drones

- Rules prescribed that **all mining related plans** shall be prepared by combination of Digital Global Positioning System (DGPS) or by **drone survey** as may be specified by Indian Bureau of Mines (IBM).
- The amended rules provide for submission of **digital images of mining area** by lessees and Letter of Intent holders.

- Lessees having annual **excavation plan of 1 million tonne** or more or having leased area of 50 hectare or more are required to submit drone survey images of leased area and up to 100 meters outside the lease boundary every year.
- This step will not only improve mine planning practices, security and safety in the mines but also ensure better supervision of mining operations.
- It requires submission of satellite images obtained from **CARTOSAT-2 satellite**.

#### Power to penalise

- Power of taking action against incomplete or wrong or false information is given to **IBM, in addition to State Govt.**

#### Provision for small miners

- It allows engagement of a **part-time mining engineer** or a part-time geologist for category 'A' mines having leased area below 25 hectares.
  - This will ease compliance burden for small miners.

#### Mining degree

- In order to **increase employment opportunity**, diploma in mining and mine surveying granted by duly recognized institute along with a second-class certificate of competency issued by the Director General of Mines Safety is added in qualification for full time Mining Engineer.

#### Penal provisions

- **Penalty provisions** in the rules have been rationalized. Amendment in the rules categorized the violations of the rules under the following major heads:
  - **Major Violations:** Penalty of imprisonment, fine or both.
  - **Minor Violations:** Penalty reduced. Penalty of only fine for such violations prescribed.
  - Violation of other rules has been decriminalized. These rules did not cast any significant obligation on the concession holder or any other person. Thus, violation of 24 rules has been decriminalized.

#### Financial assurance

- Amount of financial assurance increased to **five lakh rupees for Category 'A' mines** and **three lakh rupees for Category 'B' mines** from existing three and two lakh rupees, respectively.

## Purvanchal Expressway

### Context

- Purvanchal Express Update: Recently, the PM inaugurated 341-km Purvanchal Expressway, **one of the biggest completed** infrastructure projects by the Uttar Pradesh government.

### Key points

- **Cost of the project:** The cost is estimated to be around Rs 22,500 crore, and has been billed as the “carrier of development” to the underdeveloped Purvanchal region.
- **Length of the expressway:** The expressway starts from Chandsarai village located on the Lucknow-Sultanpur Road and ends at Haidaria village on National Highway 31 in Ghazipur district.
  - It is currently a six-lane wide highway and can be expanded to eight-lane in the future.
- **Time reduction:** The 341-kilometer-long expressway will reduce the travel time between Lucknow to Buxar in Bihar from seven hours to nearly four hours.
  - Once it is opened to the public, the travel time from Lucknow to Ghazipur will be reduced from 6 hours to 3.5 hours.
- **It establishes a direct link** between the NCR and eastern Uttar Pradesh till almost the Bihar border.
  - The Yamuna Expressway connects Noida to Agra while the Lucknow-Agra Expressway goes up to the state capital.
  - The Purvanchal Expressway will end about 18 km from the UP-Bihar border.
- **Economic boost:** Constructed at an estimated cost of about Rs 22,500 crore, the Purvanchal Expressway is going to give a boost to the economic development of eastern parts of Uttar Pradesh, especially the districts of Lucknow, Barabanki, Amethi, Ayodhya, Sultanpur, Ambedkar Nagar, Azamgarh, Mau and Ghazipur, a statement released by the government said.
- **Constructions on the highway:** There are 18 flyovers, seven railway over-bridges, seven long bridges, 104 minor bridges, 13 interchanges and 271 underpasses on the highway that covers the districts of Lucknow, Barabanki, Amethi, Ayodhya, Sultanpur, Ambedkar Nagar, Azamgarh, Mau and Ghazipur.
- **Land banks:** The government has developed land banks along the expressway and the Uttar Pradesh Expressways Industrial Development Authority has been authorised to develop industrial hubs along the highway.

## RBI Working Group Report on Digital Lending

### Context

- The RBI Working Group on digital lending headed by Shri Jayant Kumar Dash, Executive Director, RBI, has submitted its report, which focusses on enhancing customer protection and making the digital lending ecosystem safe and sound while encouraging innovation.

### Key points

- The Working Group (WG) was set up in the backdrop of business conduct and customer protection concerns arising out of the spurt in digital lending activities.
- The RBI Working Group has made recommendations on legal and regulatory framework, technology and financial consumer protection.
- Overall, the report seeks to safeguard consumers from unregulated digital lenders who have the potential to exploit borrowers with unfair or predatory terms.

### Why needed?

- The report is an attempt to address the concerns arising out of the spurt in digital lending activities and malpractices by certain digital lending apps.
- The recommendations aim at ensuring that customers borrow from only verified and authentic mediums.
- While the fin-tech industry had formed the Digital Lenders Association of India (DLAI) and had laid down a code of conduct to be followed to ensure self-regulation, clear guidelines from RBI were needed to help eliminate fraud apps.

### Key recommendations

- The working group recommended setting up a nodal agency, which will primarily verify the technological credentials of lenders in the digital lending ecosystem.
- It also recommended the constitution of a Self-Regulatory Organisation (SRO) covering these participants.
  - SRO would aim to differentiate the good digital lenders from the bad ones.
- The group has also recommended a public register of verified apps to be maintained.
  - As per findings of the working group, 600 of the 1,100 loan apps (around 50%) on Indian app stores were illegal.
- The WG also recommended that balance sheet lending through these apps should be restricted to entities regulated and authorised by RBI.

- Also, all loan servicing, repayments, etc. should be executed directly in a bank account of the balance sheet lender and disbursements should always be made into the bank account of the borrower.
  - The aim is to ensure that the transaction is happening through regulated entities. It goes directly to the borrower and from borrower it comes directly to the regulated entity when repaid.

#### Way forward

- Once approved, these differentiating and clear recommendations will help will eliminate loan sharks and curb unfair practices by a few that is impacting the rest of the industry.

### Revised framework of PCA

#### Context

- Recently, RBI has announced a revised **Prompt Corrective Action (PCA)** framework for banks to enable supervisory intervention at an “**appropriate time**” and also act as a tool for effective **market discipline**.

#### Revised provisions

- The revised PCA framework will be applicable from **January 1, 2022**.
- Under the revised framework, **return on assets as a parameter has been excluded** which may trigger action under the framework.
- **Payments banks and small finance banks (SFBs) have also been removed** from the list of lenders where prompt corrective action can be initiated.
- Under the revised PCA framework, indicators to be tracked for capital, asset quality and leverage would be **CRAR/ common equity tier I ratio, net NPA ratio and tier I leverage ratio**, respectively.
- In governance related actions, the **RBI can supersede** the board under Banking Regulation Act, 1949.

#### PCA will apply to?

- The framework will **apply to all banks** operating in India, including foreign banks operating through branches or subsidiaries based on breach of risk thresholds of identified indicators.

#### When shall a bank come under PCA?

- A bank will generally be placed under PCA framework based on the **audited annual financial results** and the ongoing supervisory assessment made by the RBI.

#### About PCA

- The PCA framework was first introduced in **December 2002** as a structured **early intervention mechanism**.
- These regulations were later revised in April 2017.
- RBI uses PCA framework to **rein in banks** that have breached certain regulatory thresholds in bad loans and capital adequacy.
- **PCA entails curbs** on high-risk lending, setting aside more money on provisions and restrictions on management salary.

### Technical Textiles in India

#### Context

- Recently, Union Minister for textile said that India should aim to target 5 times increase in export of Technical Textiles in the next 3 years.
- Centre is expected to support PLIs for Textile Sector in States supporting development and offering affordable infrastructure for Textile Manufacturing like cheap land and power.

#### Key Points

- **About:** Technical textiles are defined as textile materials and products used primarily for their technical performance and functional properties rather than their aesthetic or decorative characteristics.
  - Other terms used for defining technical textiles include industrial textiles, functional textiles, performance textiles, engineering textiles, invisible textiles and hi-tech textiles.
- **Use:** Technical textiles are used individually or as a component/part of another product.
  - Technical textiles are used individually to satisfy specific functions such as fire-retardant fabric for uniforms of firemen and coated fabric to be used as awnings.
  - As a component or part of another product, they are used to enhance the strength, performance or other functional properties of that product.
- **Key characteristics:** Technical textiles are preferred due to following features
  - Health & safety;
  - Cost effectiveness;
  - Durability;
  - High strength;
  - Light weight;
  - Versatility;
  - Customization;
  - User friendliness;
  - Eco friendliness;
  - Logistical convenience, etc.

### Technical Textiles in India - Potential

- **Contribution in Indian Economy:** Technical textile accounts for approximately 13% of India's total textile and apparel market and contributes to India's GDP at 0.7%.
  - There is a huge potential to fulfil a large demand gap as the consumption of technical textiles in India is still only at 5-10% against 30-70% in some of the advanced countries.
- **National Technical Textiles Mission:** It has been set up with an aim to ensure-
  - An average growth rate of 15-20% to increase the domestic market size of technical textiles to \$ 40-50 Bn by the year 2024
  - This is to be achieved through market development, market promotion, international technical collaborations, investment promotions and Make in India initiative.
- **Global Potential:** The demand for technical textiles was pegged at \$ 165 Bn in the year 2018 and is expected to grow up to \$ 220 Bn by 2025, at a CAGR of 4% from 2018-25.

### Types of technical textiles

- Depending on the product characteristics, functional requirements and end-use applications the highly diversified range of technical textile are grouped into 12 segments. These are-
  1. **AGROTECH (AGRO TEXTILES):** For example- Bird Protection Nets, Monofil Nets, Fruit Covers, Weed Control Fabric, etc.
  2. **BUILDTECH (CONSTRUCTION TEXTILES):** For example- Scaffolding Nets, Hoardings / Signages, Architectural Membranes,
  3. **CLOTHTECH (CLOTHING TEXTILES):** For example- Sewing threads, Shoe laces, Interlining, Zip Fasteners, etc.
  4. **GEOTECH (GEO TEXTILES):** For example- Construction of roads, River Canal and coastal work, Sports field construction, etc.
  5. **HOMETECH (HOME TEXTILES):** For example- Carpet Backing Cloth, Stuffed toys, HVAC filters, Mattresses and pillows, etc.
  6. **INDUTECH (INDUSTRIAL TEXTILES):** For example- DECATISING CLOTH, CONVEYOR BELTS, Printed Circuit Board, Ropes and Cordages, Composites, Industrial Brushes, etc.
  7. **MEDITECH (MEDICAL TEXTILES):** For example- Baby Diapers, Incontinence Diapers, Surgical Disposables, Surgical Dressing Material, etc.

8. **MOBILTECH (AUTOMOTIVE TEXTILES):** For example- Nylon tyre cord, Seat belt webbing, Car upholstery/ Seat cover fabrics, Automotive Airbags, Helmets, Railways seat cover fabric, etc.
9. **PACKTECH (PACKAGING TEXTILES):** For example- Polyolefin Woven Sacks, Flexible Intermediate Bulk Containers (FIBC), Wrapping Fabric, etc.
10. **PROTECH (PROTECTIVE TEXTILES):** For example- Industrial Gloves, High altitude clothing, Chemical Protective Clothing (CPC), etc.
11. **SPORTECH (SPORTS TEXTILES):** For example- Parachute Fabrics, Sports Shoe Components, Sleeping Bags, Artificial turf, etc.
12. **OEKOTECH:** For example- Recycling, Waste disposal, environment protection, etc.

### Tight Oil/Shale Gas

#### Context

- Recently, Cairn Oil & Gas has announced that it is collaborating with US-based Halliburton to start shale exploration in the **Lower Barmer Hill formation**, Rajasthan.

#### What is Shale oil?

- Tight oil is a type of oil found in **impermeable shale and limestone rock deposits**.
- Also known as "shale oil," tight oil is processed into gasoline, diesel, and jet fuels—just like conventional oil—but is extracted using **hydraulic fracturing**, or "fracking."

#### Shale/Tight Oil Vs Conventional Oil

- The key difference between shale oil and conventional crude is that the former is found in smaller batches, and **deeper than conventional crude deposits**.
- The shale gas extraction requires creation of fractures in oil and gas rich shale to release hydrocarbons through a process called hydraulic fracking.

#### Shale Gas production

- **Russia and the US** are among the largest shale oil producers in the world.
- The shale gas production in US, however, has played a key role in turning the country from an importer of crude to a **net exporter in 2019**.

### Shale Gas production India

- As of now, there is **no large-scale commercial production** of shale oil and gas in India.
- In 2013, ONGC (Oil and Natural Gas Corporation) started exploration.
- ONGC's assessed shale oil at the **Cambay basin in Gujarat and the Krishna Godavari basin** in Andhra Pradesh.
- ONGC concluded that "the quantity of oil flow observed in these basins" did not indicate "commerciality" and that the general characteristics of Indian shales are **quite different from North American ones**.

### Shale Gas production challenges

- ONGC has reduced investments over the past few years after only getting **limited success** in shale exploration efforts.
- The technology to collect and market the natural gas is available, but rather than installing the necessary infrastructure, **companies often burn excess gas** at the well site, selling just the liquid fossil fuels.
- Known as flaring, this process substantially **increases the global warming** emissions associated with shale oil (flaring is so extensive in some areas that North Dakota's flaring sites can be seen from space).
- **Fugitive methane emissions**—which occur when natural gas is leaked or vented—are another avoidable climate change contributor.
- Tight oil has significant impact on **water, air, and noise pollution** around drilling sites, and the **risk of oil spills** by the trucks, trains, and pipes that transport extracted shale oil to refineries.

### UNWTO recognizes Pochampally village as World's one of the best Tourism Villages

#### Context

- Recently, Telangana's Pochampally village was selected as one of the Best Tourism Villages by United Nations World Tourism Organisation (UNWTO).
- The prestigious award will be given on the occasion of the 24th session of the UNWTO General Assembly on 2nd December 2021 in Madrid, Spain.

#### The Best Tourism Villages initiative by UNWTO

- **About:** The Best Tourism Villages by UNWTO Pilot initiative aims to award those villages which are outstanding examples of rural destinations and showcase good practices in line with its specified nine evaluation areas.

- It also aims to support villages to enhance their rural tourism potential through training and access to opportunities for improvement.
- **India and Best Tourism Villages initiative:** The Ministry of Tourism recommended three villages for the UNWTO Best Tourism Village entry from India. These were-
  1. **Kongthong in Meghalaya,**
  2. **Ladhpura Khas, Madhya Pradesh and**
  3. **Pochampally in Telangana:** Pochampally village was awarded by UNWTO.

#### Key Points

- **About Pochampally Village:** Pochampally, located 50 Kms from Hyderabad, is a town in Nalgonda district of Telangana.
- **Pochampally Sarees:** Pochampally is often referred to as the Silk City of India for the exquisite Pochampally sarees that are woven through a unique style called Ikat.
  - **GI Status for Pochampally Sarees:** This unique style, Pochampally silk sarees (Ikat), received a Geographical Indicator (GI Status) in 2004.
- **Process of Making Pochampally Sarees:** Ikat involves the process of wrapping (or tying) and dyeing sections of bundled yarn to a predetermined colour pattern before they are woven.
  - The dye penetrates into exposed sections while the wrapped section remains undyed. This pattern formed by the yarn in this process is woven into fabric.
  - Ikat is a Malaysian, Indonesian word which means "Tie and Dye".
- **Significance of Pochampally Village:**
  - In 2015, to recognise the diversity of weaving techniques and our rich handloom tradition, PM inaugurated **the first National Handloom Day on August 7**.
  - **National Handloom Day:** It celebrated every year as a tribute to the formal proclamation of the Swadeshi Movement that was made in a meeting at the Calcutta Town hall on the same day in 1905.
- **Bhoodan Pochampally:** Pochampally is also known as Bhoodan Pochampally to commemorate the Bhoodan Movement that was launched by Acharya Vinobha Bhave from this village on April 18th, 1951.
  - Currently a two room Vinobha Bhave Mandir exists within the village which was earlier the place where Vinobha Bhave resided during his visit to the village.

### Steps taken by the Government

- The Ministry of Tourism has drafted a Rural Tourism Policy which will not only promote tourism within our villages but also revitalise local arts and crafts and promote rural economy.
- Rural Tourism Policy will help redevelop and rebuild our villages and rural life and the residents of the villages will also get an opportunity to engage and interact with people from outside.
- Pochampally's unique weaving styles and patterns have also received special focus through the Prime Minister's mantra of Vocal 4 Local as a part of Atmanirbhar Bharat.

### United Nations World Tourism Organisation (UNWTO)

- **About UNWTO:** UNWTO is the United Nations Specialised Agency responsible for the promotion of responsible, sustainable and universally accessible tourism.
  - United Nations World Tourism Organisation (UNWTO) was established in 1975.
  - **UNWTO Headquarter:** UNWTO Headquarter is situated at Madrid, Spain.
- **Key Mandate of UNWTO:** UNWTO encourages the implementation of the Global Code of Ethics for Tourism, with an aim to maximize tourism's socio-economic contribution while minimizing its possible negative impacts.

### Impact of US inflation on India

#### Context

- Recently, retail inflation in US had spiked to 6.2%. On Friday, India's National Statistical Office (NSO) data showed that retail inflation rose to 4.5 per cent for the same month.
- A high inflation rate erodes the purchasing power of people. Since the poor have less money to withstand fast-rising prices, high inflation hurts them the hardest.

#### Why is US inflation a matter of concern?

- While India may not find an increase of 6% a very sharp increase, it is a matter of concern for US as the US Central Bank targets an inflation rate of just 2%.
- Retail inflation in the US has been rising sharply almost every passing month since May 2020.

### What has caused the inflation surge in the US?

- Inflation typically takes place due to supply and demand factors and in the US, both these factors are responsible for the spike.
- Thanks to a rapid rollout of the Covid-19 vaccination drive, the US economy posted a sharp recovery. Part of the inflationary spike came from the unexpectedly fast recovery from COVID-19 owing to the rapid rollout of vaccination drive.
- This recovery was further fuelled by billions of dollars pumped by the government to not only provide relief to consumers and those who lost their jobs, but also to stimulate demand.
- The pace of economic recovery has been much faster than the supply chain recovery, and this has worsened the mismatch between demand and supply, thus triggering a sustained price rise.

### Is this a US-specific phenomenon?

- No. While the US has seen the sharpest increase in prices, inflation has surprised policymakers across most of the major economies, including Germany, China or Japan.
- In Japan, for example, according to Bloomberg, the producer price index is at a 40-year high.

### What is happening in India?

- India is one of those rare major economies where high inflation predates the pandemic.
- Retail inflation had frequently been above the comfort zone of the Reserve Bank of India (RBI) — between 2 per cent and 6 per cent — for an extended period since late 2019.
- The pandemic did make matters worse because of supply constraints even when in India demand has not yet recovered to pre-Covid levels.

### How does this impact happen?

- When prices increase globally, it will lead to higher imported inflation, which will further increase our current account deficit.
- High inflation in the advanced economies, especially the US, will likely force their central banks, to abandon their loose monetary policy.
- A tight money policy by the Fed and the rest would imply higher interest rates.
- That will affect the Indian economy in two broad ways.
  - One, Indian firms trying to raise money outside India will find it costlier to do so.
  - Two, the RBI will have to align its monetary policy at home by raising interest rates domestically.

## Social Issues

### Accidental Deaths and suicides in India report: NCRB

#### Context

- According to the recently released Accidental deaths and suicides in India report by NCRB, **India lost more people to suicide than Covid-19 in 2020.**

#### Key points

##### Suicide in states

- Among the states, **Maharashtra recorded the highest** number of suicides across the country in 2020.
- These five states—Maharashtra, Tamil Nadu, Madhya Pradesh, West Bengal and Karnataka—together accounted for 50.1% of the total suicides

##### Suicides in various section of society

- India lost more than 1.5 lakh people due to suicides and close to 1.5 lakh people (According to Ministry of Health) due to COVID last year.
- According to the NCRB data, **daily wage workers made up the largest share** of total suicides—around one-fourth of total suicides, however, in most of the cases the reason of suicide was illness.
- More than **12,000 students died by suicide** accounting for over 8 per cent of total deaths.
- In terms of gender, **more men killed themselves**, accounting for nearly 71 per cent of total suicides.

##### Agriculture suicides

- Agriculture witnessed higher number of suicides than in 2019 with the share of suicides among **agricultural labourers increasing by 18%**.
- The number of suicides among **farmers and cultivators have declined** in 2020 as compared to 2019.

##### Train accidents

- More than 13,000 train accidents** across the country have killed nearly 12,000 railway passengers in 2020.
- However, train accidents **reduced significantly** in 2020 as compared to 2019.
- On an average, **32 people lost their lives every day** in these accidents in 2020.
- The report also shows that around **70 per cent of the railway accidents** last year took place as passengers either fell off the train or came in the way while crossing the railway track.
- Maharashtra ranks first and Uttar Pradesh second, both in terms of the number of accidents as well as deaths.

### Road Accidents

- Due to the **restrictions induced by the pandemic**, the number of accidents has gone down throughout the country. An overall **18.9% decline** has been reported in the country while the overall decline among states is 18.8% and among UTs, it is 21.6%.
- As per the **UN Decade of Action for Road Safety targets**, fatalities were brought down to half of what they were in 2011.
- At 48%, **Chandigarh saw biggest dip** in road crashes.

### Global Nutrition Report 2021

#### Context

- According to the recently released Global Nutrition Report 2021 (GNR, 2021), India has made no progress on anaemia and childhood wasting.

#### About Global Nutrition Report

- The Global Nutrition Report was conceived after commencement of the first **Nutrition for Growth Initiative Summit (N4G)** in 2013.
- The Global Nutrition Report is the world's leading independent assessment of the state of global nutrition.
- The Global Nutrition Report is a **multi-stakeholder initiative**, consisting of a Stakeholder Group, Independent Expert Group and Report Secretariat.
- Vision:** A world free from malnutrition in all its forms.

#### Global Nutrition Report 2021: Key findings

- The world **off track to meet five out of six** global maternal, infant and young children nutrition (MIYCN) targets, on stunting, wasting, low birth weight, anaemia and childhood overweight.
  - Globally, 149.2 million children under 5 years of age are stunted, 45.4 million are wasted and 38.9 million are overweight.
  - Over 40% of all men and women (2.2 billion people) are now overweight or obese.
- The world is also off track for meeting all **diet-related non-communicable disease (NCD)** targets, on salt intake, raised blood pressure, adult obesity and diabetes.
- Key global targets and systematic monitoring exclude diet, despite its health and environmental impacts.
  - No global targets are set to address micronutrient** deficiencies (with the exception of anaemia), despite their importance for health and development.

- There is also **no specific target that captures malnutrition** among children and adolescents.
- **COVID-19:** An additional 155 million people are being pushed into extreme poverty globally due to pandemic.
- **Obesity:** No country in the world is 'on course' to achieve the target for obesity.

### Global Nutrition Report 2021: India-related findings

- **Anaemia:** 53% of Indian women in the age group 15-49 years are anaemic, while in 2016, 52.6 per cent of Indian women were anaemic.
  - This signifies that there has been a rise in anaemic Indian women since 2016.
- **Affected children:** Where in Asia, around 9% of the children are affected, in India, more than 17% of Indian children under 5 years of age are affected.
- The report says that India is 'off-course' in meeting 7 of the 13 global nutrition targets.
  - These include sodium intake, raised blood pressure (both men and women), obesity (both men and women) and diabetes (both men and women).
- **Obesity:** Around 6.2 per cent of adult women and 3.5 per cent of adult men are living with obesity in the country.
- **Stunting:** According to the report, India is among 53 countries 'on course' to meet the target for stunting. But over 34 per cent of children under 5 years of age are still affected, it added.
- **Overweight:** The country is also among 105 countries that are 'on course' to meet the target for 'childhood overweight'.
- Some 58 per cent of infants in the age group 0-5 months are exclusively breastfed in India.
- **Low birth weight:** India does not have adequate data on prevalence of 'low birth weight'.

### Health Insurance for India's Missing Middle

#### Context

- NITI Aayog has recently released a report titled, '**Health Insurance for India's Missing Middle**' where it has reported that **40 crore 'missing middle'** has no financial protection for health.

#### 'Missing middle' meaning

- The 'missing middle' is a **broad category which lacks** health insurance, positioned between the deprived poorer sections, and the relatively well-off organized sector.

- The **deprived and poor sections receive Government subsidized** health insurance, while the relatively **well-off in the organized sector of the economy are covered** under social health insurance, or private voluntary insurance.
- The missing middle refers to the **non-poor segments** of the population who remain prone to catastrophic, and even impoverishing health expenditure, despite the financial capacity to pay for contributory health insurance.
- The missing middle constitutes the **self-employed (agriculture and non-agriculture)** in rural areas, and a broad array of occupations – informal, semi-formal, and formal – in urban areas.

#### Key findings

- **Low Government expenditure** on health has constrained the capacity and quality of healthcare services in the public sector.
- **At least 30% of the population**, or 40 crore individuals – called the missing middle in this report – are devoid of any financial protection for health.
- In the **absence of a low-cost health** insurance product, the missing middle remains uncovered despite the ability to pay nominal premiums.

#### Challenges in increasing insurance penetration

- **Awareness:** Consumer education of health insurance, especially amongst the missing middle, is important to increase its uptake.
- **Identification:** Targeting the missing middle segment will require a different outreach strategy which distinctly focuses on this population.
- **Affordability:** The missing middle population is highly price sensitive. Lowering the costs of the product, where feasible, will be important to ensure affordable prices and high demand.

#### Recommendations

- The report has **recommended three models** for increasing the health insurance coverage in the country.
- The **first model** focuses on increasing consumer awareness of health insurance,
- The **second model** is about "developing a modified, standardized health insurance product" like '**Arogya Sanjeevani**', a standardised health insurance product launched by the Insurance Regulatory Development Authority of India (IRDAI) in April 2020.
  - A "slightly modified version" of the standardised Arogya Sanjeevani insurance product will help increase the uptake amongst the missing middle.

- The **third model** expands government subsidized health insurance through the PMJAY scheme to a wider set of beneficiaries.
  - This model can be utilized for segments of the missing middle which remain uncovered, due to limited ability to pay for the voluntary contributory models outlined above.
  - This is the only model out of three proposed which has fiscal implications for the Government.
  - Though this model assures coverage of the poorer segments on the missing middle population, premature expansion of PMJAY can overburden the scheme

- **National Toll-free Helpline (8448440632)** for a country wide outreach to students from school, universities and colleges.
- **Handbook on Psychosocial Support: Enriching Life skills and Wellbeing of Students**
- **Webinars, audio-visual resources including videos, posters, flyers, comics, and short films** with focus on convergence of resources from other Ministries/Departments on physical and creative well-being which are essential parts of mental well-being.

### Manodarpan Initiative

#### Context

- Recently 'Manodarpan', initiative has been taken by the government, covering a wide range of activities to provide psychosocial support to students, teachers and families for Mental Health and Emotional Wellbeing during the COVID outbreak and beyond.

#### Key Points

- **About:** Manodarpan Initiative is a part of various initiatives taken by the government to ensure mental wellness of the students and associated people like teachers and families, especially during COVI-19 pandemic.
- **Parent Ministry:** Manodarpan Initiative is being implemented by the Ministry of Education.
- **Working Group:** A Working Group, having experts from the fields of education, mental health and psychosocial issues as its members, has been set up. It aims
  - To monitor and promote the mental health issues and concerns of students and
  - To facilitate providing of support to address the mental health and psychosocial aspects during and after COVID-19, through counselling services, online resources and helpline.

#### Key Features

- **Advisory Guidelines** for students, teachers and faculty of School systems and Universities along with families.
- **Web page** on Ministry of Education website carrying advisory, practical tips, posters, videos, do's and don'ts for psychosocial support, FAQs and online query system.
- **National level database and directory** of counsellors at School and University levels.

### Millets in mid-Day Meal Scheme

#### Context

- Recently, Union Government has urged the states to explore the possibility of **introducing millets in the mid-day meal scheme.**

#### Key points

- Mid-Day meal scheme has been recently renamed as **PM POSHAN.**
- Millets or nutri-cereals, includes **Jowar, Bajra, and Ragi.**

#### Reason for such decision

- They are rich in **minerals and B-complex vitamins**, as well as proteins and antioxidants, making them an ideal choice for improving the nutritional outcome of children.
- However, despite such benefits, **consumption of millets remains low** due to lack of awareness and availability.
- As per **National Family Health Survey-IV**, 38 per cent of children under five years of age are stunted and 59 per cent of children are suffering from anaemia.
- Among one of the series of initiatives, to **reduce malnutrition** and anaemia, the Government is laying emphasis on consumption of millets.
- NITI Aayog has also been advocating the need to introduce millets in the mid-day meal programme, moving away from rice and wheat.
- Moreover, in 2019, **NITI Aayog had released a report** showing the benefits of millets based on a study among adolescents in four Karnataka schools.

#### About PM-POSHAN

- **24 lakh students** receiving pre-primary education at government and government-aided schools will also be brought under the ambit of the scheme from next year.
- PM POSHAN has been launched for an initial period of **five years (2021-22 to 2025-26)**. The Centre will bear Rs 54,061 crore of the total estimated cost of Rs 1.3 lakh crore;
- PM POSHAN **does not propose any hike in the honorarium** of cooks and workers;

### About Mid-Day Meal Scheme

- Under MDM, which was **first launched in 1995**, hot cooked food is provided to student from Classes 1 to 5.
- In 2017, the scheme was expanded to include students from **classes 1 to 8**.
- Primary (1-5) and upper primary (6-8) schoolchildren are currently entitled to **100 grams and 150 grams of food grains** per working day each, to ensure a minimum of 700 calories;
- **Tamil Nadu** is considered the pioneer in introducing mid-day meals in government schools.

### National Achievement Survey (NAS) 2021

#### Context

- The Government of India has been implementing a rolling programme of sample based National Achievement Survey (NAS) aimed at classes III, V, VIII and X with a cycle period of three years.
- The last National Achievement Survey (NAS) was held in 2017 for assessing the competencies developed by the children at the grade levels III, V and VIII.

#### National Achievement Survey (NAS)

- **About:** National Achievement Survey (NAS) is a nationally representative large-scale survey of students' learning undertaken by the Ministry of Education, Government of India.
  - **National Achievement Survey (NAS) is conducted every three years.**
- **Significance:** NAS gives a system level reflection on effectiveness of school education.
  - Findings help compare the performance across spectrum and across population in order to find the desirable direction for improvements.



### Key Points

- **About:** National Achievement Survey-2021 is scheduled on 12th November 2021. This year it also includes samples from class X.
- **Conducting Authority:** The National Achievement Survey-2021 would be conducted by the Central Board of Secondary Education (CBSE) as Assessment Administrator.
- **Scope:** The National Achievement Survey-2021 would be conducted for Grade 3, 5, 8 and 10 students of State Govt. schools, Govt. Aided schools, Private Unaided recognized schools and Central Government schools.
- **Mandate:** NAS 2021 intends to provide information of what India's students know and can do in key grades and subjects at national, state, district and school type.
- **Criteria for the Sampling of Schools:** Selection of sampled schools is based on UDISE+2019-20 data. Therefore, the States, Districts used for drawing of the samples for NAS 2021 is exactly as per the UDISE+2019-20.
- **Assessment Framework:**
  - It has been developed by the National Council of Educational Research and Training (NCERT) for gauging the competencies attained by the students vis-a-vis learning outcomes.
  - The Survey includes the background variables to correlate student's performance in different learning outcomes vis-a-vis contextual variables.

### Expected Benefits/Outcomes

- **Diagnosis of the Problem:** NAS 2021 aims to help diagnose learning gaps of students and determine interventions required in education policies, teaching practices and learning.
- **Capacity building:** NAS findings help in capacity building for teachers, officials involved in the delivery of education.
- **Information repository:** NAS 2021 would be a rich repository of evidences and data points furthering the scope of research and development.

### NAS-2021 Portal

- **About:** NAS-2021 Portal has been developed by NIC as a dynamic platform in consultation with the NCERT, CBSE, UNICEF, DDG (Stats) and NITI Aayog under the overall guidance of Ministry of Education, Government of India.
- **Key Function:** NAS 2021 Portal would be a sustainable educational management information system for-
  - Helping in smooth conduct of NAS-2021 and
  - Future decision-making based on data analytics.

- **Significance:** It provides role-based functionality and dashboard for managing the resources, activity and event monitoring, capacity building, reporting & documentation, post NAS analytical report in the customized formats.

## National Multidimensional Poverty Index

### Context

- Recently, **NITI Aayog** has released the **National Multidimensional Poverty Index** Baseline Report with collaboration from Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP).

### Key points

- This baseline report of India's first ever national MPI measure is based on **the National Family Health Survey-4 (NFHS-4) 2015-16**.
- The national MPI measure has been constructed by utilising **twelve key components** which cover areas such as health and nutrition, education and standard of living.
- The **Alkire-Foster Methodology:** The AF methodology is a general framework for measuring multidimensional poverty that identifies people as poor or not poor based on a dual-cutoff counting method. National MPI uses this methodology.
- The national MPI model retains the **ten indicators** of the global MPI model.
- India's MPI has three equally weighted dimensions - health, education, and standard of living - which are represented by twelve indicators.
- National Multidimensional Poverty Index: Baseline Report based on NFHS-4 (2015-16) is a contribution towards measuring progress towards **target 1.2 of the Sustainable Development Goals (SDGs)** which aims at reducing "at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions.
- National Multidimensional Poverty Index report presents an in-depth analysis of the headcount ratio and intensity of multidimensional poverty at the national, State/UT, and district levels.

### Key findings

- The report finds that **Bihar has the highest proportion** of people who are multidimensionally poor.
  - More than half of the people (52%) in Bihar are categorised as multidimensionally poor.
- Bihar is **followed by Jharkhand** and Uttar Pradesh.

- Bihar also has the highest number of malnourished people followed by Jharkhand, Madhya Pradesh, Uttar Pradesh, and Chhattisgarh.
- **Kerala, Goa, and Sikkim have the lowest percentage** of population being multidimensionally poor.
- **Poorest UTs:** Dadra and Nagar Haveli, Jammu & Kashmir, and Ladakh, Daman & Diu and Chandigarh.
  - The proportion of poor in Puducherry at 1.72 per cent is the lowest among the Union Territories.

### Poverty measurement in India

- Earlier, the method has been to specify a **minimum income (or expenditure)** required to purchase a basket of goods and services to meet basic needs.
- This conventional method required defining a poverty line first, which the **C Rangarajan committee** had estimated in 2014 to be Rs 972 a month per person in rural areas and Rs 1,407 a month per person in urban areas, at 2011-12 prices.

## Nationwide Rollout of Pneumococcal Conjugate Vaccine

### Context

- Recently, Ministry of Health and Family Welfare has launched Nationwide expansion of **Pneumococcal Conjugate Vaccine (PCV)** under the **Universal Immunization Programme (UIP)**.

### Key points

- It was launched as a part of **Azadi ka Amrit Mahotsav**.
- It is for the first time in the country that PCV will be available **for universal use**.
- The nationwide rollout of PCV will **reduce child mortality** by around 60 percent.
- The ministry has also released **Communication package** (IEC material) on PCV to create mass awareness.
- The objective of the vaccine is to save the lives of the children and it would be possible when a successful awareness campaign will be conducted across the country.

### About Pneumonia

- Pneumococcal disease refers to any illness caused by **pneumococcal bacteria**.
- These bacteria can cause many types of illnesses, including pneumonia, which is an infection of the lungs.
- Pneumococcal bacteria are one of the most common causes of pneumonia.
- **Pneumonia, caused by pneumococcus**, is the most common cause of severe pneumonia in children.

- In India around 16 percent of deaths in Children occur due to pneumonia.

#### About UIP

- Universal Immunization Programme (UIP) is **one of the largest public health programmes** targeting close to 26.7 million newborns and 29 million pregnant women annually.
- Under UIP, immunization is being provided free of cost against 12 vaccine preventable diseases:
- **Nationally against 10 diseases** - Diphtheria, Pertussis, Tetanus, Polio, Measles, Rubella, severe form of Childhood Tuberculosis, Rotavirus diarrhea, Hepatitis B and Meningitis & Pneumonia caused by Haemophilus Influenzae type B.
- **Sub-nationally against 2 diseases** - Pneumococcal Pneumonia and Japanese Encephalitis; of which Pneumococcal Conjugate vaccine is nationally expanded today, while JE vaccine is provided only in endemic districts.

### NFHS-5 Phase II Findings

#### Context

Recently, Ministry of Health and Family Welfare has released the findings of **National Family Health Survey (NFHS-5)**.

#### Key points

- The States and UTs which were surveyed in the Phase-II: Arunachal Pradesh, Chandigarh, Chhattisgarh, Haryana, Jharkhand, Madhya Pradesh, NCT of Delhi, Odisha, Puducherry, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and Uttarakhand.
- The findings of NFHS-5 in respect of 22 States & UTs covered in Phase-I were released in December, 2020.
- The all-India level factsheet released includes information on **131 key indicators**.
- Many indicators of NFHS-5 are similar to NFHS-4 carried out in 2015-16 to make possible comparisons over time.
- However, NFHS-5 includes some new focal areas, such as, pre-school education, expanded domains of child immunization, components of micro-nutrients to children, frequency of alcohol and tobacco use, among others.

#### Key findings

##### Total Fertility Rates

- TFR is an average number of children per women.
- The Total Fertility Rates (TFR) **declined from 2.2 to 2.0** at the national level and all 14 States/UT's ranging from 1.4 in Chandigarh to 2.4 in Uttar Pradesh.

- All Phase-II States have achieved replacement level of fertility (2.1) except Madhya Pradesh, Rajasthan, Jharkhand and Uttar Pradesh.

##### Immunization

- Full immunization drive among children aged 12-23 months has recorded substantial improvement from 62 per cent to **76 per cent at all-India level**.
- 11 out of 14 States/UTs has more than three-fourth of children aged 12-23 months with fully immunization and it is highest (90%) for Odisha.
- **Mission Indradhanush**, launched in 2015, has played a key role in expanding the coverage of full immunization by 10% from NFHS-4 to NFHS-5 data.

##### Institutional births

- Institutional births have increased substantially from 79 per cent to **89 percent at all-India Level**.
- Institutional delivery is **100 per cent in Puducherry and Tamil Nadu** and more than 90 per cent in 7 States/UTs out of 12 Phase II States/UTs.

##### Stunting, wasting, underweight

- Child Nutrition indicators shows a slight improvement at all-India level.
- **Stunting** has declined from 38 per cent to 36 per cent.
- **Wasting** has declined from 21 per cent to 19 per cent.
- **Underweight** has children from 36 per cent to 32 percent at all India level.
- In all phase-II States/UTs situation has improved in respect of child nutrition but the change is not significant as drastic changes in respect of these indicators are unlikely in short span period.

##### Anaemia

- **More than half of the children and women** (including pregnant women) are anaemic in all the phase-II States/UTs and all-India level compared to NFHS4.

##### Breastfeeding

- Exclusive breastfeeding to children under age 6 months has shown an improvement in all-India level from 55 percent in 2015-16 to **64 per cent in 2019-21**.
- All the phase-II States/UTs are also showing a considerable progress.

##### Women operating bank accounts

- Significant progress has been recorded between NFHS-4 and NFHS-5 in regard to women operating bank accounts.
- The number has increased from 53 percent to **79 percent at all-India level**.
- **More than 70 per cent** of women in every state and UTs in the second phase have operational bank accounts.

## NIPUN Bharat Scheme

### Context

- Recently, the Union Minister of Education in a written reply in the Lok Sabha laid down various key details about NIPUN Bharat Scheme.
  - NIPUN Full form:** National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat).

### Key points

- About:** NIPUN Bharat Scheme was launched by the government with an aim to achieve universal foundational literacy and numeracy in primary classes.
  - NIPUN Bharat Scheme was launched by Department of School Education and Literacy under the aegis of Centrally Sponsored Scheme of Samagra Shiksha.
- Implementing Ministry:** The Department of School Education and Literacy, Ministry of Education is responsible for implementing NIPUN Bharat scheme.

### Key Guidelines

- The NIPUN Bharat Mission Guidelines lays down priorities and actionable agendas for States and UTs to achieve the goal of proficiency in foundational literacy and numeracy for every child by grade 3.
- NIPUN Bharat Mission guidelines also include-
  - The codification of development goals and learning outcomes for age 3 to 9 years and
  - Lakshya or Targets for Foundational Literacy and Numeracy starting from Balvatikato Grade III.

### Assessment Domain

As per the NIPUN Bharat implementation guidelines, assessment during the foundational learning can be broadly categorized into two major areas, namely:

- School Based Assessment (SBA) through qualitative observation based on performance of the child in a multitude of experiences and activities.**
  - Various tools and techniques like anecdotal records, checklist, portfolio, and interactions (through a holistic 360-degree assessment with teacher, peers, family and friends) have been recommended to be used for assessment.
  - Thus, the teachers at the foundational stage need to observe children as they play, work on their task, perform or interact among themselves, to assess children's interests and learning.

- Large-scale standardised assessment for assessment of the processes and functioning of the educational systems (such as NAS, SAS, and Third-Party Assessments).**

- The assessment tools commonly used in conducting large scale assessment studies are multiple choice questions (MCQ) and constructed responses are usually avoided to bring in objectivity in the process.
- These assessments are a mechanism to gauge how well learning is happening in their state, districts, and blocks. In this regard, the National Achievement Survey (NAS) 2021 has been carried out for assessing learning outcome of children in Grade III.

### Additional Information- NISHTHA 3.0

- National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA 3.0):** It is a specialized scheme for the foundational literacy and numeracy covering about 25 lakh teachers at the primary level across all states and UTs.

## Nutrition Smart Villages

### Context

- As part of Azadi Ka Amrit Mahotsav, to commemorate the 75th year of Independence of India a programme on "Nutrition Smart Village" will be initiated to **strengthen the Poshan Abhiyan.**

### Key points

- This new initiative aims to reach out to **75 villages across India** through the network of All India Coordinated Research Project on Women in Agriculture (AICRP-WIA) which is in operation at 13 centres in 12 States of India.
- The initiative has been undertaken in line with the Prime Minister's call to all the academicians, agricultural scientists and all the institutions to adopt and transform 75 villages.
- Under the initiative, a total of 75 villages will be adopted by AICRP centres and ICAR-CIWA, for which the AICRP centres will adopt 5 villages each with the remaining to be adopted by ICAR-CIWA with an aim to develop 75 Nutri-Smart villages.
- The **objectives of the initiative** are promoting nutritional awareness, education and behavioural change in rural areas involving farm women and school children, harnessing traditional knowledge through the local recipe to overcome malnutrition and implementing nutrition-sensitive agriculture through homestead agriculture and Nutri-garden.

- To achieve the goal of Malnutrition free villages, **intensive awareness campaigns** and field activities will be undertaken for focusing on the concept of Nutri-village / Nutri-food / Nutri-diet/ Nutri-thali etc. for strengthening the Poshan Abhiyan.
- Awareness among the women farmers will also be created about their **legal rights** in all walks of life. The products/tools/technologies developed by AICRP centres will be evaluated through multi-location trials.

### Steps taken so far to combat malnutrition

- The Ministry of Consumer Affairs, Food and Public Distribution launched a centrally sponsored pilot scheme in 2019-20 on '**Fortification of Rice and its Distribution under PDS**' for a period of **three years**.
- The pilot scheme focuses on 15 districts in 15 states – Andhra Pradesh, Kerala, Karnataka, Maharashtra, Odisha, Gujarat, Uttar Pradesh, Assam, Tamil Nadu, Telangana, Punjab, Chhattisgarh, Jharkhand, Uttarakhand and Madhya Pradesh.
- **Six states**, including Maharashtra and Gujarat, have started distributing fortified rice as part of the pilot scheme, with approximately 2.03 LMT of fortified rice being distributed till June 2021.
- Four more states are expected to start by September 2021.
- The Food Ministry says that from April 1, 2022, **250 high-burden districts** are proposed to be covered under the rice fortification scheme.

## PMAY-G

### Context

- Recently, PM transferred the 1st instalment of PMAY-G to more than 1.47 lakh beneficiaries of Tripura.

### About PMAY-G

- In pursuance to the goal - Housing for all by 2022, the rural housing scheme Indira Awas Yojana has been revamped to Pradhan Mantri Awas Yojana – Gramin and approved during March 2016.
- Under the scheme, financial assistance is provided for construction of pucca house to all houseless and households living in dilapidated houses.
- The scheme would be implemented in rural areas throughout India except Delhi and Chandigarh. The cost of houses would be shared between Centre and States.

### PMAY-G objective

- To provide pucca house to all who are houseless and living in dilapidated houses in rural areas by 2022.

### PMAY-G Funding Pattern

- Under PMAY, the cost of unit assistance is to be shared between Central and State Governments in the ratio 60:40 in plain areas and 90:10 for North Eastern and hilly states.
- The unit assistance given to beneficiaries under the programme is Rs 1,20,000 in plain areas and to Rs 1,30,000 in hilly states/difficult areas /Integrated Action Plan (IAP) for Selected Tribal and Backward Districts. Presently the NE States, States of HP, J&K and Uttarakhand and all 82 LWE districts are identified as difficult and hilly areas.
- The unit size is 25 sq.m including a dedicated area for hygienic cooking.
- The beneficiary is entitled to 90 days of unskilled labour from MGNREGA.
- The beneficiary would be facilitated to avail loan of up to Rs.70,000/- for construction of the house which is optional.
- Funds will be transferred electronically directly to the account of the beneficiary.

### Target Group

- Identification of beneficiaries eligible for assistance and their prioritisation to be done using information from Socio Economic and Caste Census (SECC) ensuring total transparency and objectivity.

## Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)

### Context

- Cabinet has recently approved the extension of Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY) for another four months from December 2021 to March 2022.

### About Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)

- PMGKAY is a scheme by **Ministry of Consumer Affairs, Food & Public Distribution**.
- It is a scheme as part of **Atmanirbhar Bharat** to supply free food grains to migrants and poor.
- Government of India announced the '**Pradhan Mantri Garib Kalyan Package** (PMGKP) in 2020 to ameliorate the hardships faced by the poor due to economic disruptions caused by the Covid-19 in the country.
- This package inter-alia comprises the implementation of "Pradhan Mantri Garib Kalyan Anna Yojana (PM-GKAY)", through which additional **free-of-cost food grains** (Rice/Wheat) at the scale of **5 Kg per person per month** are being provided to about 81 Crore beneficiaries covered under National Food Security Act, 2013 (NFSA), so that poor and vulnerable families/beneficiaries are able to access food-grains easily without facing any financial distress.

**PMGKAY: All phases**

- **Phase-I and Phase-II** of this scheme was operational from April to June, 2020 and July to November, 2020 respectively.
- **Phase-III** of the scheme was operational from May to June, 2021.
- **Phase-IV** of the scheme was operational for July-November, 2021
- **Phase-V** of the scheme will be operational by December 2021 to March 2022.

**PMGKAY: Phase V**

- The total outgo in terms of food-grains for PMGKAY Phase V is likely to be about **163 LMT**.
- The estimated additional food subsidy will entail around **Rs. 53000 Crore**.
- Overall, the government will be incurring an expenditure of nearly **Rs.2.60 lakh Crore** in PMGKAY Phase I- V.

**PMGKAY eligibility**

- Families belonging to **the Below Poverty Line** - Antyodaya Anna Yojana (AAY) and Priority Households (PHH) categories will be eligible for the scheme.
- PHH are to be identified by State Governments/Union Territory Administrations as per criteria evolved by them. AAY families are to be identified by States/UTs as per the criteria prescribed by the Central Government:
- **Households headed by widows** or terminally ill persons or disabled persons or persons aged 60 years or more with no assured means of subsistence or societal support.
- Widows or terminally ill persons or disabled persons or persons aged 60 years or more or single women or single men with no family or societal support or assured means of subsistence.
- **All primitive tribal households.**
- **Landless agriculture labourers**, marginal farmers, rural artisans/craftsmen such as potters, tanners, weavers, blacksmiths, carpenters, slum dwellers, and persons earning their livelihood on daily basis in the informal sector like porters, coolies, rickshaw pullers, hand cart pullers, fruit and flower sellers, snake charmers, rag pickers, cobblers, destitutes and other similar categories in both rural and urban areas.
- All eligible Below Poverty Line families of HIV positive persons.

**Spotlight Initiative: Impact Report 2020-21**

**Context**

- Recently, Spotlight Initiative’s impact report for 2020-21 was released where it was reported that despite COVID-19 lockdowns and restrictions, some 650,000 women and girls were provided with gender-based violence services.

**Key findings**

**Positive findings**

- More than 1000 local and grassroots women’s rights organizations reported having greater influence and agency to work on eliminating violence against women and girls.
- The percentage of national budgets dedicated to ending gender-based violence increased by 32%.
- The number of perpetrators convicted of gender-based violence increased by 22% as compared to the previous year.
- 84 laws and policies have been signed or strengthened across 17 countries.
- 1 million young people joined in- and out-of-school programmes.
- 880,000 32% men and boys were educated on positive masculinity, respectful family relationships, non-violent conflict resolution and parenting.
- 65 million people were reached through 80 locally tailored behaviour change multimedia campaigns in more than 15 languages.

**Negative findings**

- The COVID-19 global pandemic made 2020 an incomparable year. With national lockdowns and mobility restrictions, and health and support services closed or limited, violence against women and girls escalated at a staggering rate.
- Despite global concern and growing evidence of the situation’s severity, the crisis of male violence against women and girls has deepened.
- COVID-19 continues to devastate communities across the globe, and women’s rights have significantly regressed.
- Women have been the hardest hit by unemployment, forced into poverty, and widely bear the increased toll of unpaid care responsibilities – all of which increase vulnerabilities to greater violence and exploitation.
- In the past year, as life has shifted increasingly online, so too has violence, harassment and abuse.
- Girls who marry and stop going to school typically live with fewer opportunities and can face greater risks of domestic violence and health problems – including maternal mortality – feeding a dangerous cycle of oppression, harm and poverty for future generations.

### About Spotlight Initiative

- Spotlight Initiative is a joint collaboration of the European Union and the United Nations (UN Women) since 2017 to empower, promote, and protect the rights of women and girls worldwide.
- The Spotlight Initiative is a EUR 500 million programme that deploys targeted, large-scale investments in Africa, Asia, the Caribbean, Latin America, and the Pacific.
- It aims to end all forms of violence against women and girls by 2030.

## The Editorial Analysis- In Pursuit of Social Justice

### Context

- Recently, the Tamil Nadu government launched an educational program named 'Illam Thedi Kalvi (Education at the Doorsteps) scheme'.

### Impact of COVID-19 Pandemic of Learning

- **Technology Gap:** The lockdown disempowered children from the marginalized sections as they did not have access to technology-driven pedagogical methods as the privileged did.
  - Many who find online teaching convenient and safe fail to recognize this class bias.
- **Economic Disparity:** The expensive nature of online teaching pushed a large number of underprivileged children out of the education system.
- **Deepening Structural Asymmetrical:** The lockdown accentuated the asymmetrical structure of the school system.
- **Unavailability of Various government incentives:** Many govt. incentives including free textbooks, free uniforms, free bicycles and nutritious mid-day meals, were unavailable to children of vulnerable sections during the lockdown.

### Illam Thedi Kalvi Scheme

- **About 'Illam Thedi Kalvi' scheme:** T.N government launched 'Illam Thedi Kalvi' scheme to bridge the pandemic-induced gap in learning among school children.
  - The lockdown disempowered children from the marginalised sections as they did not have access to technology-driven pedagogical methods as the privileged did.
- **Key Objective:** 'Illam Thedi Kalvi' scheme aims to achieve social justice by providing various incentives like free textbooks, free uniforms, and nutritious mid-day meals which were unavailable to children of vulnerable sections during the lockdown.

- **Implementation:** It will be implemented by volunteers first in 12 districts. It will be launched in other districts when the results from the 12 districts are positive.
  - Some 68,000 of the 86,000 volunteers are women.
  - This will help in allaying fears about the safety of female students and encourage them to participate in the program.
  - The volunteers will teach an estimated 34.05 lakh children in the 5-13 age group in 93,000 neighbourhoods for 60 to 90 minutes between 5 p.m. and 7 p.m.
  - Volunteers who have completed Class 12 will impart lessons for children of Classes 1-5 and graduates will teach children from Classes 6-8.

### Illam Thedi Kalvi (Education at the Doorsteps) Scheme- Key Significance

- It is commendable that experienced teachers and civic and education department officials will be monitoring the progress of the students at the district and block levels.
- By providing a concrete role to school management committees and community development activists, the program is turning learning into a social engagement.
- When young volunteers impart lessons creatively in an unconventional atmosphere, the possibility of better learning outcomes is higher.
  - This also gives children an opportunity to develop a critical understanding of their social reality.
  - This will enhance their self-respect and help them probe the reasons for oppression and injustice.



# Environment & Biodiversity

## Adaptation Gap Report 2021

### Context

- UN Environment Programme (UNEP) has released a new report titled, "**Adaptation Gap Report 2021: The Gathering Storm**" where it has **called for urgent efforts** to increase the financing and implementation of actions designed to adapt to the growing impacts of climate change.

### Key points

- The report has found that while policies and planning are growing for climate change adaptation, **financing and implementation are still far behind** where they need to be.
- As the world looks to step up efforts to cut greenhouse gas emissions – **efforts that are still not anywhere strong** enough.

### Key findings

Financing of adaptation remains weak

- The report finds that the **costs of adaptation are likely in the higher end** of an estimated USD 140-300 billion per year by 2030 and USD 280-500 billion per year by 2050 for developing countries only.

COVID-19 opportunity being missed

- Fewer than one-third of 66 countries** studied had explicitly funded COVID-19 measures to address climate risks as of June 2021.
- At the same time, the heightened cost of servicing debt, combined with decreased government revenues, may **hamper future government spending** on adaptation, particularly in developing countries.

Some progress in planning and implementation

- Around 79 per cent of countries** have adopted at least one national-level adaptation planning instrument, such as a plan, strategy, policy or law.
- This is an **increase of seven per cent since 2020**.

### More action needed

- The world **needs to scale up public adaptation** finance through direct investment and by overcoming barriers to private sector involvement.
- The report also found that **governments should use the fiscal recovery** from the pandemic to prioritize interventions that achieve both economic growth and climate change resilience.

## Air Quality Index (AQI)- A report by the Expert Sub-committee

### Context

- A day after Deepavali, the Air Quality Index (AQI) in Delhi, Faridabad, Noida, Gurugram and Ghaziabad shot to over 450 or at the highest level of pollution severity called 'severe.'

### Expert sub-committee report

- Key Findings:** The expert sub-committee blamed "Sudden unforeseeable low winds" (and not the fire crackers or stubble burning) as the key cause for the noxious air quality.
  - This expert sub-committee is tasked with recommending pollution control measures under the Graded Response Action Plan (GRAP).
- Associated Concerns:** It chose to ignore a scientific report from the Central Pollution Control Board (CPCB) and the India Meteorological Department (IMD).
  - CPCB and IMD report explicitly holds "...crackers, biomass burning and unfavourable weather conditions that brought AQI to severe."

### Associated Impact

- Authority of the Sub-committee:** According to the provisions of the GRAP, 'severe' air quality can prompt the sub-committee to order-
  - A halt on inbound trucks to Delhi or
  - Odd-even restrictions on cars as well as
  - closure of brick kilns, stone crushers.
- Steps taken by the sub-committee:** It has recommended that-
  - Government and private offices and other establishments reduce vehicle usage by at least 30% (by working from home, carpooling, etc.) and
  - Pollution control implementing agencies to step up their efforts.

### Key Points

- About AQI:** Air Quality Index (AQI) is a metric that is used for measuring air quality of particular area.
- Objective:** Air Quality Index was launched in 2014 with outline '**One Number - One Color -One Description**' for the common man to judge the air quality within his vicinity.
- Development of Air Quality Index (AQI):** It has been developed by the Central Pollution Control Board (CPCB) with the help of IIT-Kanpur and other experts in the field.

- **Pollutants Monitored by AQI:** Air Quality Index (AQI) monitors following eight major air pollutants in the atmosphere namely-
  1. Particulate Matter (PM10)
  2. Particulate Matter (PM2.5)
  3. Nitrogen Dioxide (NO2)
  4. Sulphur Dioxide (SO2)
  5. Carbon Monoxide (CO)
  6. Ozone (O3)
  7. Ammonia (NH3)
  8. Lead (Pb)
- **Categorization of Pollution Level:** Air Quality Index measure air quality an area in terms of six categories:
  - Good
  - Satisfactory
  - Moderately Polluted
  - Poor
  - Very Poor and
  - Severe

**Categorization based on One Number-One Color - One Description**

- Weightage of Pollutants is decided as per their impact on the environment and subsequently on human health.
- Under AQI, a composite number is prepared and a single colour is given for the quality of air on a particular day.
- This is to ensure that common people understand the level of pollution in their vicinity and associated health impact.

Colour	Level of Health Concern	AQI Values
Green	Good	0 to 50
Yellow	Moderate	51 to 100
Orange	Unhealthy for sensitive groups	101 to 150
Red	Unhealthy	151 to 200
Purple	Very Unhealthy	201 to 300
Maroon	Hazardous	301 to 500

**Amazon Rainforest Deforestation: The Story so far**

**Context**

- Recently, Brazil's National Institute of Space Research has released a report where it stated that the rate of deforestation in the Amazon rainforest was at its worst in 15 years.

**Key points**

- According to the report, Amazon—the world's largest rainforest—had lost more than 5,000 square miles of tree cover, comparable to about the size of the U.S. state of Connecticut, from August 2020 to July 2021.
- Satellite data also indicated that deforestation increased by about 22% from the previous year.
- It was also the first time on record that the country has reported a fourth consecutive year of rising deforestation rates.
- Notably, since Mr. Bolsonaro became president in 2019, the country has lost a forest area bigger than Belgium.

**COP 26: Brazil's commitment**

- At the recently concluded COP 26 in Glasgow, Brazil joined over 100 countries in a promise to end deforestation, to reverse its reputation as an environmental offender.
- Under the plan, Brazil committed to reduce deforestation in the Amazon by 15 percent by next year.
- Brazil has pledged this month to end illegal deforestation in eight years.
  - Though ambitious, it is not impossible because earlier too, Brazil has reduced deforestation by 80% from 2004 and 2012.

**Amazon rainforest significance**

- The Amazon rainforest is 10 million years old.
- Amazon is home to 390 billion trees, and the vast river basin reigns over South America and is an unrivalled nest of biodiversity.
- The flora and fauna are so diverse that biologists find a new species every other day.

**Amazon rainforest deforestation causes**

- Five decades ago, Brazil incentivized millions of its people to colonize the Amazon.
  - In 1964, Brazil's military dictatorship took power and decreed that "empty" jungle was a security risk.
  - The Government created the National Institute of Colonization and Agrarian Reform (INCRA) to conquer the forest and make it an agricultural stronghold.
  - In the early 1970s, the government ran television ads for a new mecca of cheap land—and freedom.
- Brazil's present President, Jair Bolsonaro is blamed for the following reasons:
  - He backed the colonists' approach with respect to Amazon
  - He sacked key environmental officials and slashed enforcement.

- The message of the President was that the Amazon is open for business.
- As a result of this, since his inauguration in January, the rate of deforestation has soared by as much as 92%.

#### Amazon rainforest deforestation effects

- Scientists warn that decades of human activity and a changing climate has brought the jungle near a “tipping point.”
- Experts also warn that the water cycle will soon become irreversibly broken, locking in a trend of declining rainfall and longer dry seasons that began decades ago.
- At least half of the shrinking forest will give way to savanna.
- With as much as 17% of the forest lost already, scientists believe that the tipping point will be reached at 20% to 25% of deforestation even if climate change is tamed.
- If global temperatures rise by 4°C, much of the central, eastern and southern Amazon will certainly become barren scrubland.
- If things continue as they are now, the Amazon might not exist at all within a few generations, with dire consequences for all life on earth.
- If the Amazon is destroyed, it will be impossible to control global warming.

### Climate Change Performance Index

#### Context

- Recently, Germanwatch has released the **Climate Change Performance Index 2022** where it has Monitoring Climate Mitigation Efforts of 60 Countries plus the EU – covering 92% of the Global Greenhouse Gas Emissions.

#### Key points

- It is published **annually since 2005**.
- It aims to **enhance transparency** in international climate politics and enables comparison of climate protection efforts and progress made by individual countries.
- The countries’ commitments under the Paris Agreement are still insufficient: to limit **global warming to a maximum of 1.5°C** a **more ambitious** climate action is urgently needed.
- The CCPI is an important tool to promote the reallocation of investments by providing crucial information on climate change for **Environmental, Social and Governance (ESG)** ratings for finance actors.

#### Key results

- **No country performs** well enough in all index categories to achieve an overall very high rating in the CCPI. Therefore, once again, the top three places in the overall ranking remain empty.
- **Denmark is the highest ranked** country in CCPI 2022, but it does not perform well enough to achieve an overall very high rating.

#### G20 performance

- With the United Kingdom (7th), **India (10th)**, Germany (13th), and France (17th), four G20 countries are among the high-performing countries in CCPI 2022.
- The G20 are responsible for about **75% of the world’s greenhouse gas emissions**.
- **Saudi Arabia is the worst-performing** country among the G20, ranked 63rd.

#### COVID-19 and GHG emission

- The COVID-19 pandemic triggered a sharp, globally unrepresented **5.4% drop in CO2 emissions**.
- The International Energy Agency estimated, for the period of January–July 2021, CO2 emissions would rise 4.8%. CO2 emissions in 2021 will in fact near the **record high from 2019**.
- Among the newly included countries in this year’s CCPI, only **Philippines performs high** in GHG emission category.

#### Renewable energy

- As the energy sector greatly contributes to a country’s greenhouse gas emissions, the results of the Renewable Energy rating indicate substantial room for improvement in mitigating emissions by accelerating deployment of renewable energy.
- **Norway is the first country**, receiving a very high rating in this category.

#### India report

- **India has retained its spot in the top 10** best performing countries for the third year in a row.
- **India’s performance was rated high** in the GHG Emissions, Energy Use, and Climate Policy categories, and medium in Renewable Energy.
- The subcontinent is **already on track** to meet its 2030 emissions target.
- Although, **India receives an overall high performance**, the experts argue that the country should set an explicit net zero target for 2050.

## Climate Equity Monitor

### Context

- India welcomed the launch of the website “Climate Equity Monitor” on global climate policy.
- Climate Equity Monitor focuses on equity and climate action from a data and evidence-based perspective.
- Climate Equity Monitor will encourage a vigorous discussion on this crucial issue and engage experts from all countries.

### Key Points

- **About:** Climate Equity Monitor provides an online dashboard for assessing, at the international level-
  - Equity in climate action,
  - Inequalities in emissions, energy and resource consumption across the world, and
  - Ongoing climate policies of several countries.
- **Development:** Climate Equity Monitor has been conceptualized and developed by independent researchers from India. Agencies involved are-
  - **The Climate Change Group** at the M.S Swaminathan Research Foundation (MSSRF), Chennai, and
  - **The Natural Sciences and Engineering department** at the National Institute of Advanced Studies (NIAS) Bengaluru.
- **Key Mandate:** Climate Equity Monitor aims to monitor the performance of Annex-I Parties under the UNFCCC (developed countries).
  - **The monitoring will be** based on the foundational principles of the Climate Convention- equity and the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC).
  - The performance and policies of the **Non-Annex-I Parties (developing countries)** will be also provided for comparison.

### Significance

- **Equitable sharing of the global carbon budget:** will progressively appear on the Climate Equity Monitor website that is the fundamental equity principle for assessments.
  - Existing “tracking” websites on climate policies are based in the global North and routinely do not address the crucial aspects of equity and differentiation.
- **Awareness generation: Climate Equity Monitor** strives to build awareness, especially among the public of the global South, that climate action is a global collective action problem.

- **Changing the Narrative: Climate Equity Monitor intends** to debunk the narrative provided by many developed countries, and global non-government organizations.
  - **They** focus attention continually on what developing countries must do, constantly demanding greater commitment and action from them.
- **Climate Equity Monitor** website is expected to be a valuable tool for-
  - Policy makers, public institutions, researchers, academics, students, and the general public from developing countries.
  - It will help them to keep equity and climate justice considerations clearly in view in their perspective.

## Commission for Air Quality Management in NCR and Adjoining Areas

### Context

- Recently, the Commission for Air Quality Management in NCR and Adjoining Areas (CAQM) convened a crucial meeting on an emergent basis today in wake of deteriorating air quality of the Delhi-NCR region.
- The Commission for Air Quality Management in NCR and Adjoining Areas has also identified 5 different areas contributing to the prevailing adverse air quality of Delhi-NCR. They are-
  1. Paddy stubble burning incidences;
  2. Dust from Construction and Demolition (C&D) activities;
  3. Dust from roads and open areas;
  4. Vehicular Pollution; and
  5. Industrial Pollution

### Key Points

- **About:** The Commission for Air Quality Management (CAQM) is a statutory body formed under the Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act 2021.
  - Earlier, the commission was formed through promulgation of Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021.
  - The Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act 2021 also dissolved the Environment Pollution Prevention and Control Authority (EPCA) established in the NCR in 1998.

- **Mandate:** To ensure better coordination, research, identification and resolution of problems surrounding the air quality index and for matters connected therewith or incidental thereto.
- **Scope:** Adjoining areas have been defined as areas in the states of Haryana, Punjab, Rajasthan, and Uttar Pradesh adjoining the NCR where any source of pollution may cause adverse impact on air quality in the NCR.
- **Composition:** The Commission for Air Quality Management in NCR and Adjoining Areas will consist of:
  1. A Chairperson,
  2. An officer of the rank of a Joint Secretary as the member-secretary and Chief Coordinating Officer,
  3. A currently serving or former Joint Secretary from the central government as a full-time member,
  4. Three independent technical members with expertise related to air pollution, and
  5. Three members from non-government organisations.
- **The Commission will also include ex-officio members:**
  - From the central government and concerned state governments, and
  - Technical members from CPCB, Indian Space Research Organisation, and NITI Aayog.
  - May also appoint representatives of certain ministries.
- **Tenure:** The Chairperson and members of the Commission will have a tenure of three years or till the age of seventy years, whichever is earlier.
- **Selection Committee for appointment:** will be constituted by the central government for recommending appointments of members of the Commission. The Committee will include-
  - **Chairperson-** Minister in charge of the Ministry of Environment, Forest and Climate Change.
  - **Members of the Committee will include-**
    - Minister of Commerce and Industry,
    - Minister of Road Transport and Highways,
    - Minister of Science and Technology, and
    - Cabinet Secretary.
- **Sub-Committees:** The Commission for Air Quality Management in NCR and Adjoining Areas is required to form sub-committees on-
  - Monitoring and identification headed by a Member of the Commission.
  - Safeguarding and enforcement headed by the Chairperson of the Commission and
  - Research and development headed by a technical member of the commission.

### Key Functions

- Co-ordinating actions taken under the Ordinance by concerned state governments (Delhi, Haryana, Punjab, Rajasthan, and Uttar Pradesh),
- Planning and executing plans to prevent and control air pollution in the NCR,
- Providing a framework for identification of air pollutants,
- Conducting research and development through networking with technical institutions,
- Training and creating a special workforce to deal with issues related to air pollution, and
- Preparing various action plans such as increasing plantation and addressing stubble burning.

### Key Powers

- Restricting activities influencing air quality,
- Investigating and conducting research related to environmental pollution impacting air quality,
- Preparing codes and guidelines to prevent and control air pollution, and
- Issuing directions on matters including inspections, or regulation which will be binding on the concerned person or authority.
- The Commission for Air Quality Management in NCR and Adjoining Areas may impose and collect environment compensation from farmers causing pollution by stubble burning.
  - This compensation will be prescribed by the central government.

## COP 26: Key Takeaways

### Context

- Recently, **COP 26 was held at Glaslow, UK** where countries have pledged commitments to decrease carbon footprint in the world.

### Key points

- CoP26 aims to keep alive a receding target of **capping global warming at 1.5 degrees Celsius** above pre-industrial levels to avert damages from the intensified heatwaves, droughts, storms, floods and coastal damage that climate change is already causing.

### Slashing methane emission

- Leaders have pledged to **stop deforestation** by the end of the decade and slash emissions of the potent greenhouse gas methane to help slow climate change.
- Nearly 90 countries have joined a **U.S.-and EU-led effort** to slash emissions of methane 30% by 2030 from 2020 levels.

- The **Global Methane Pledge**, first announced in September, now covers emissions from two-thirds of the global economy
- **Non-signatory includes China, Russia and India** while Australia have decided not to back the pledge.

#### Why methane?

- **Methane is more short-lived** in the atmosphere than carbon dioxide but it is 80 times more potent in warming the earth.
- Methane is estimated to have accounted for **30% of global warming** since pre-industrial times, so cutting methane emission is one of the most effective ways of slowing climate change.

#### Saving forests

- **More than 100 national leaders pledged** to halt and reverse deforestation and land degradation by the end of the decade, underpinned by \$19 billion in public and private funds to invest in protecting and restoring forests.
- The agreement expands a commitment made by 40 countries as part of the **2014 New York Declaration of Forests**.
- Under the agreement, **12 countries pledged to provide \$12 billion** of public funding between 2021 and 2025 for developing countries to restore degraded land and tackle wildfires.
- Private sector investors have also pledged to stop investing in activities linked to deforestation such as cattle, palm oil and soybean farming and pulp production.
- Brazil, which has cleared vast swathes of the Amazon rainforest, did make a new commitment on Monday to cut its **greenhouse gas emissions by 50% by 2030**, compared with a previous pledge of 43%.



#### Why forests

- WRI's **Global Forest Watch** revealed that in 2020, the **world lost 258,000 sq km of forest** — an area larger than the United Kingdom.
- WWF estimates **that 27 football fields** of forest are lost every minute.

### COP 26: Sustainable Agriculture

#### Context

- Recently at the COP26 meeting, 27 countries, including India, have laid out new commitments to make farming more sustainable and less polluting.

#### Key points

- The '**Sustainable Agriculture Policy Action Agenda** for the Transition to Sustainable Agriculture and Global Action Agenda for Innovation in Agriculture' was among the highlight action pledges to be clinched by the participating countries at the COP26 of the UNFCCC.
- The countries have committed to invest in the science needed for sustainable agriculture and for protecting food supplies against climate change, laid out in **two 'Action Agendas'**.
- UK has announced funding of £500m to support the implementation of the **Forest, Agriculture and Commodity Trade (FACT) Roadmap** that was launched during the World Leaders Summit.
  - Here 28 countries are working together to protect forests while promoting development and trade.

#### National commitments aligned with this agenda

- Brazil's plan to scale its **ABC+ low carbon farming programme** to 72m hectares, saving 1 billion tonnes of emissions by 2030
- Germany's plans to lower emissions from land use by **25m tonnes by 2030**
- The UK's aim to engage **75% of farmers** in low carbon practices by 2030.

#### Agricultural reform and innovation

- A new global initiative launched to reach **100 million farmers** at the centre of food systems transformation with net zero and nature positive innovations by 2030.
- The **Policy Action Agenda** for the Transition to Sustainable Agriculture sets out pathways and actions that countries can take to repurpose public policies and support to food and agriculture, to deliver these outcomes and enable a just rural transition<sup>1</sup>.

- New UK funding of £38.5m over 2 years to the CGIAR, the world's leading agricultural science and innovation organisation.
  - The CGIAR was formerly called the **Consultative Group on International Agricultural Research**.
  - It aims to **create and scale new crops** and technologies yielding climate, nature, health, gender and economic impact.
- A new UK initiative to transform climate-resilient food systems through research and innovation.
  - The **Gilbert Initiative** will coordinate investments in evidence generation, technology development and delivery to support a food system that by 2030 feeds 9 billion people with nutritious, safe foods.

### Sustainable production and consumption

- Sainsbury's, on behalf of the big 5 UK supermarkets, will commit to **halving the environmental impact** of the average UK shopping basket by 2030 through a new partnership with WWF called basket measures.

### Ocean protection

- The UK announced a £6m investment in the **World Bank's PROBLUE** as part of its Blue Planet Fund, supporting the development of the blue economy to act as a key driver of growth in small island developing states (SIDS) and coastal least developed countries.
- The **Ocean Risk and Resilience Action Alliance**, a multi-sector collaboration designed to drive investment into coastal natural, hosted a roundtable that saw commitments towards the partnership's target to secure at least \$20m USD.

## Frothing in Yamuna River

### Context

- Recently, a layer of froth was once again seen floating over parts of the Yamuna River, causing a sense of worry for the city dwellers.

### What is a froth?

- The froth is a **sign of a polluted river**.
- The **release of untreated or poorly treated effluents**, including sewage from those parts of the city that are not connected to the sewerage network and industrial waste, could lead to frothing.
- **Surfactants and phosphates** from detergents in households and industrial laundry find their way into the river, as all the sewage is not treated.

### Reasons of frothing

- During October-November, Yamuna is in a **lean phase** and the water **flow is less**.
- Due to this, **pollutants are not getting diluted**.
- Moreover, the turbulence at the barrage near Okhla (in New Delhi) **generates foam** from the phosphates.

### Yamuna Frothing: Who's responsible?

- According to Delhi Jal Board, the phenomenon has **little to do with the DJB** itself.
- The frothing is **seen only near Kalindi Kunj**, downstream of the Okhla barrage.
- If the sewage from Delhi was to blame, the frothing would have been seen across the entire stretch of the river, after the Wazirabad barrage, since drains begin emptying into the river from there.
- Around **155 MGD of water reaches the Okhla barrage** with all sorts of waste, industrial discharge, chemicals and detergents.
  - Of this, 105 MGD is released by the **Haryana** government into the Yamuna through the Najafgarh drain.
  - The remaining 50 MGD is released by the **UP** government.
  - The **water falls from a height**, so the untreated waste turns into foam.

### Steps taken till now

- In June 2021, the DPCC (Delhi Pollution Control Committee) **banned the sale, storage and transportation** of soaps and detergents not conforming to the quality standards set by the Bureau of Indian Standards (BIS).
- The fifth report of the NGT-appointed Yamuna Monitoring Committee notes that though BIS **standards for detergents have been improved**, it is not clear whether these standards were actually be enforced.
- **Samples are being collected from the river** near the Okhla barrage to check phosphate levels.
- DJB is implementing **Interceptor Sewer Project** (to treat the sewage being emptied into river via drains) and upgrading the technology of STPs.

## Global Resilience Index Initiative

### Context

- Recently, Global Resilience Index Initiative (GRII) was launched at COP26 by a coalition of ten global organizations.

### Key Points

- **About:** Global Resilience Index Initiative aims to build a universal model for assessing resilience to climate risks.
- Global Resilience Index Initiative (GRII) will provide a globally consistent model for the assessment of resilience across all sectors and geographies.
- **Objective:** The coalition wants to achieve two immediate goals.
  1. They want to provide global open reference risk data developed using insurance risk modelling principles.
  2. They want to provide shared standards and facilities applicable to a wide range of uses: Corporate climate risk disclosure, national adaptation planning and reporting, and the planning of pre-arranged humanitarian finance.
- **Funding: Global Resilience Index Initiative (GRII)** has been initiated with partial funding and in-kind contributions from the insurance sector and partner institutions.
- **Organizations Involved:** GRII partners and supporters are:
  1. Coalition for Disaster Resilient Infrastructure (CDRI)
  2. Coalition for Climate Resilient Investment (CCRI)
  3. Fathom
  4. GEM Foundation
  5. Insurance Development Forum (IDF)
  6. Oasis Loss Modelling Framework
  7. UK Centre for Greening Finance and Investment (CGFI)
  8. United Nations office for Disaster Risk Reduction (UNDRR)
  9. University of Oxford
  10. Willis Towers Watson

### Key Benefits

- Global Resilience Index Initiative will help countries focus on national adaptation investments.
- Global Resilience Index Initiative will provide high-level metrics “across the built environment, infrastructure, agriculture and societal exposures”.
- The outcomes of this risk analysis will help close the insurance protection gap and direct investment and aid to where they are needed the most.
- **Global Resilience Index Initiative** will also address the data emergency that is contributing to the climate crisis.
  - Systems and economies resilient to climate disruption can save millions of lives and livelihoods.

## COP26 Glasgow Summit of UNFCCC- India's Commitments

### Context

- The Prime Minister of India while addressing the COP 26 of the UNFCCC summit at Glasgow, Britain, highlighted India's commitments in fight against climate change.
- Until now, India was the only major emitter that hadn't committed to a timeline to achieve net zero, or a year by which it would ensure its net carbon dioxide emissions would be zero.

### Associated Challenges

- **Lack of Financial support by Developed Countries:** They have failed to meet their commitment of providing 100 billion dollar each year to developing countries in their fight against climate change.
- **Poor focus on Adaptation:** there hasn't been as much focus on climate adaptation as much as mitigation and this is harming developing countries' interests.
  - Developing countries are the worst victim of climate change and due to lack of focus on climate change adaptation, their people are suffering the most.
- Climate change has resulted in changes in cropping patterns, along with frequent floods.
  - To counter this, we need to make agriculture resilient to these shocks.

### Key Commitments made by India

- **India's Target by 2030:**
  - India will ensure 50% of its energy will be sourced from renewable energy sources.
  - India will reduce its carbon emissions until 2030 by a billion tonnes.
  - India will also reduce its emissions intensity per unit of GDP by less than 45%.
  - India would also install 500 Gigawatt of renewable energy by 2030, a 50 GW increase from its existing targets.
- **India's Target by 2070:** India will aim to achieve net zero emissions latest by 2070.
  - This is in contrast to India's run-up to the COP where it had strongly resisted demands by developed countries to take on net zero targets.
- **Impact on India:** Taking on net zero targets, requires a sharp shift to clean energy sources that several experts have opined, will impose a steep cost on India.

### India's demands

- **On climate Finance:** India demanded that rich developed countries must provide at least \$1 trillion in climate finance to assist developing countries and those most vulnerable.
  - This should ensure spirit of climate justice on the part of developed countries.
- **Principles of Equity and Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC)** and recognition of the very different national circumstances of countries must be respected.
- **Adopt Sustainable mod of Living:** sustainable modes of living being practised in certain traditional communities should be made part of school curricula.
  - The lessons from India's efforts at adaptation in programs such as Jal Jeevan mission, Swach Bharat mission and mission ujwala should be popularized globally.

### Significance of making the State Butterfly

- **Promote Eco-tourism:** It will help in boosting butterfly tourism in Arunachal Pradesh and hence resulting in more employment for the local people.
- **Conservation of the Kaiser-i-Hind Butterfly:** State butterfly tag can translate into its habitat conservation and help Kaiser-i-Hind Butterfly species from extinction.

### Additional Information

- The Cabinet also adopted the **Pakke Tiger Reserve 2047 declaration on climate change-resilient and responsive Arunachal Pradesh** aimed at lowering emissions and sustainable development.
- **Pakke Tiger Reserve:** Pakke Tiger Reserve is located in the East Kameng district of Arunachal Pradesh and also known as Pakhui Tiger Reserve.
  - Pakke Tiger Reserve is known for amazing sightings of four species of famous Hornbill birds.

### Kaiser-i-Hind Butterfly

#### Context

- Recently, the State Cabinet headed by Chief Minister of Arunachal Pradesh approved Kaiser-i-Hind Butterfly as the State butterfly.

#### Key Points

- **About:** Kaiser-i-Hind literally means Emperor of India. Kaiser-i-Hind Butterfly butterfly have a 90-120 mm wingspan.
  - With its shimmering greens, bright yellows and delicate blacks, this rare butterfly is a visual delight.
  - **Scientific name:** Scientific name of the Kaiser-i-Hind butterfly is 'Teinopalpus imperialis'.
- **Habitation:**
  - **In India:** Kaiser-i-Hind Butterfly is found in six States along the eastern Himalayas at elevations from 6,000-10,000 feet in well-wooded terrain.
  - **World:** Kaiser-i-Hind Butterfly also flutters in Nepal, Bhutan, Myanmar, Laos, Vietnam and southern China.
- **Threats to Survival:** Kaiser-i-Hind Butterfly is hunted for supply to butterfly collectors.
  - In Arunachal Pradesh, Kaiser-i-Hind Butterfly is confined to very few pockets and could become extinct if not conserved.
- **Legal Protection:** the Kaiser-i-Hind is protected under Schedule II of Wildlife (Protection) Act, 1972.

### Killing of Elephants in India

#### Context

- According to the Union Ministry of Environment, Forest and Climate Change, a whopping 1,160 elephants were killed in the country due to reasons other than natural causes in the past 10 years up to December 31, 2020.

#### Key Findings

- **Causes of Elephant Deaths:** While electrocution claimed the lives of 741 elephants, train hits led to the death of 186 pachyderms, followed by poaching - 169, and poisoning - 64.
- **State-wise elephant deaths due to Electrocution:** Karnataka and Odisha lost 133 elephants each due to electrocution during the period and Assam reported 129 deaths.
- **State-wise elephant deaths due to train hits:** Among elephant casualties due to train hits, Assam stood first with 62 deaths, followed by West Bengal at 57.
- **State-wise elephant deaths due to poaching:** A total of 169 mammals were killed by poachers in the 10 years and Odisha reported the highest - 49 deaths, followed by Kerala 23.
- **State-wise elephant deaths due to Poisoning:** Assam reported the highest number of elephants poisoned - 32, and Odisha stood second with 15 deaths.

## Elephants Population

- **Region-wise Population of Elephants in India:**
  - The southern region comprising Tamil Nadu, Kerala, Karnataka, Andaman and Nicobar Islands, Andhra Pradesh and Maharashtra accounted for the highest population 14,612 elephants.
  - The north-east region comprising Arunachal Pradesh, Assam, Meghalaya, Tripura, Nagaland, the north region of West Bengal, Manipur and Mizoram stood second with 10,139 elephants.
- **State-wise Distribution Of elephants in India:** Karnataka - 6,049, Assam - 5,719, Kerala - 5,706, and Tamil Nadu - 2,761 were the top four States that had the highest number of elephants.

## Steps taken by Government

- **Permanent Coordination Committee:** has been constituted between the Ministry of Railways and the MoEFCC for preventing elephant deaths due to train hits.
- **Critical elephant habitats:** are notified as 'elephant reserve' for focus and synergy in elephant conservation and to reduce conflict.
  - A total of 30 elephant reserves have been established in 14 major elephant States.
- **Provision of Compensation:** compensation is provided to local communities for loss of property and life caused by wild elephants with the aim to reduce man-elephant conflict and to avoid retaliatory killing of elephants.
- **Guidelines for the management of human-elephant conflict, 2017:** It had been issued by the Ministry and elephant range States had been requested to implement the same.
- **'Project Elephant' scheme:** provides financial and technical assistance were provided to elephant range States to protect elephants, their habitat and corridors to address issues of man-elephant conflict and welfare of captive elephants.

## Mineral Conservation and Development (Amendment) Rules, 2021

### Context

- Recently, Ministry of Mines has notified the Mineral Conservation and Development (Amendment) Rules, 2021 to amend the Mineral Conservation and Development Rules, 2017.

### Key points

- The MCDR (Mineral Conservation and Development Rules) have been framed under **Mines and Minerals (Development and Regulation) Act, 1957** to provide rules regarding conservation of minerals, systematic and scientific mining, development of the mineral in the country and for the **protection of environment**.

## Amendment Rules

### Use of drones

- Rules prescribed that that **all mining related plans** shall be prepared by combination of Digital Global Positioning System (DGPS) or by **drone survey** as may be specified by Indian Bureau of Mines (IBM).
- The amended rules provide for submission of **digital images of mining area** by lessees and Letter of Intent holders.
  - Lessees having annual **excavation plan of 1 million tonne** or more or having leased area of 50 hectare or more are required to submit drone survey images of leased area and up to 100 meters outside the lease boundary every year.
  - This step will not only improve mine planning practices, security and safety in the mines but also ensure better supervision of mining operations.
- It requires submission of satellite images obtained from **CARTOSAT-2 satellite**.

### Power to penalise

- Power of taking action against incomplete or wrong or false information is given to **IBM, in addition to State Govt.**

### Provision for small miners

- It allows engagement of a **part-time mining engineer** or a part-time geologist for category 'A' mines having leased area below 25 hectares.
  - This will ease compliance burden for small miners.

### Mining degree

- In order to **increase employment opportunity**, diploma in mining and mine surveying granted by duly recognized institute along with a second-class certificate of competency issued by the Director General of Mines Safety is added in qualification for full time Mining Engineer.

### Penal provisions

- **Penalty provisions** in the rules have been rationalized. Amendment in the rules categorized the violations of the rules under the following major heads:
  - **Major Violations:** Penalty of imprisonment, fine or both.
  - **Minor Violations:** Penalty reduced. Penalty of only fine for such violations prescribed.
  - Violation of other rules has been decriminalized. These rules did not cast any significant obligation on the concession holder or any other person. Thus, violation of 24 rules has been decriminalized.

Financial assurance

- Amount of financial assurance increased to **five lakh rupees for Category 'A' mines** and **three lakh rupees for Category 'B' mines** from existing three and two lakh rupees, respectively.

### Mission Samudrayan

**Context**

- Recently, Ministry of Earth Science has launched **India's first and unique manned** ocean Mission Samudrayan at Chennai.

**Key points**

- With the launch of this mission., India joins the elite club of nations such as USA, Russia, Japan, France and China to have such underwater vehicles for carrying out subsea activities.
- The niche technology shall facilitate MoES in carrying out deep ocean **exploration of the non-living resources** such as polymetallic manganese nodules, gas hydrates, hydro-thermal sulphides and cobalt crusts, located at a depth between 1000 and 5500 meters.

**MATSYA 6000**

- Sea trials of 500 metre rated shallow water version of the manned submersible are expected to take place in the last quarter of 2022 and the MATSYA 6000, the **deep water manned submersible** will be ready for trials by the **second quarter of 2024**.
- The preliminary design of the manned submersible MATSYA 6000 is completed and realization of vehicle is started with various organization including ISRO, IITM and DRDO roped-in to support the development.
- The **advancing technologies** in metallurgy, energy storage, underwater navigation and manufacturing facilities provides opportunity for developing more efficient, reliable and safe manned submersible.

**Underwater vehicles use**

- The underwater vehicles are essential for carrying out **subsea activities** such as high-resolution bathymetry, biodiversity assessment, geo-scientific observation, search activities, salvage operation and engineering support.
- Even though unmanned underwater vehicles have improved manoeuvring and excellent vision systems resembling direct observation, manned submersible provides a feel of direct physical presence for researchers and has better intervention capability.

**Fendouzhe**

- With the advancing subsea technologies, the recent Fendouzhe manned submersible developed by China in 2020 has touched **~11000m water depths**.

**Deep Ocean Mission**

- MoES-NIOT is indigenously developing a **manned submersible** with a depth capability of 6000 meters under the aegis of Deep Ocean Mission.
- **Deep Ocean Mission** is a mission mode project to support the Blue Economy Initiatives of the Government of India.

**Components**

- Development of Technologies for Deep Sea Mining, and Manned Submersible
- Development of Ocean Climate Change Advisory Services
- Technological innovations for exploration and conservation of deep-sea biodiversity
- Deep Ocean Survey and Exploration
- Energy and freshwater from the Ocean
- Advanced Marine Station for Ocean Biology

### Swachh Survekshan 2021- Swachh Survekshan Awards 2021 Declared

**Context**

- Recently, the President of India felicitated the Swachh Survekshan Awards 2021 at the 'Swachh Amrit Mahotsav' hosted as part of Swachh Bharat Mission-Urban 2.0 by Ministry of Housing & Urban Affairs (MoHUA).
- The **Swachh Survekshan** awards are given to recognize the good work done for Swachhata by towns/ cities, States and Union Territories under various initiatives of the Swachh Bharat Mission (Urban).

**Key Points**

- **About Swachh Survekshan Awards: Swachh Survekshan** awards are given annually for cleanliness, hygiene and sanitation by the Ministry of Housing & Urban Affairs (MoHUA) under various initiatives of the Swachh Bharat Mission (Urban).
- **Participation:** Swachh Survekshan 2021 survey was carried out in 4,320 cities over 28 days, where feedback from 4.2 crore people was recorded.
  - **Swachh Survekshan 2021** saw also saw an unprecedented number of citizens' feedback – over 5 crores, compared to 1.87 cores last year.
  - **Swachh Survekshan 2021** has also helped identify over 6,000 innovations and best practices in sanitation and waste management from across the urban India.

- **Objectives of the Swachh Survekshan Awards:** The Swachh Survekshan awards are given to recognize the good work done for Swachhata (cleanliness, hygiene and sanitation) by towns/cities, States and Union Territories.

### Key Findings of the Swachh Survekshan Awards 2021

- **More than 1 lakh population category:** Indore was awarded the title of India's Cleanest City under Swachh Survekshan 2021, followed by Surat and Vijayawada.
  - Indore was awarded cleanest city of the India for the fifth consecutive year.
- **Population category of 'less than 1 lakh':** Vita, Lonavala and Sasvad, all from Maharashtra, bagged the first, second and third positions respectively in the Swachh Survekshan Awards 2021.
- **Best Ganga Town:** Varanasi won the title of the 'Best Ganga Town' in the Swachh Survekshan Awards 2021.
- **Cleanest Cantonment:** Ahmedabad Cantonment won the title of 'India's Cleanest Cantonment', followed by Meerut Cantonment and Delhi Cantonment in the Swachh Survekshan Awards 2021.
- **'Fastest Mover' Category:** Hoshangabad (Madhya Pradesh) emerged as the 'Fastest Mover City' (in the 'more than 1 lakh population' category) with a jump of 274 ranks from 361st position in the 2020 rankings to the 87th position this year in the Swachh Survekshan 2021.
- **Cleanest State:**
  - **'More than 100 Urban Local Bodies' Category:** Chhattisgarh, for the third consecutive year emerged as the 'Cleanest State' the Swachh Survekshan 2021.
  - **'Less than 100 Urban Local Bodies' Category:** Jharkhand, for the second time, won the Cleanest State award in the Swachh Survekshan Awards 2021.
  - Karnataka and Mizoram became the 'Fastest Mover States' in the big (more than 100 ULBs) and small (less than 100 ULBs) state category respectively in the Swachh Survekshan 2021.
- **Prerak Daaur Samman:** five cities – Indore, Surat, Navi Mumbai, New Delhi Municipal Council and Tirupati were categorized as 'Divya' (Platinum) under Swachh Survekshan 2021.
  - Prerak Daaur Samman was included as a new performance category under Swachh Survekshan 2021.

- Prerak Daaur Samman has a total of five subcategories namely Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze) and Aarohi (Aspiring).

### Supreme Court allows legal sand mining in Rajasthan

#### Context

- Recently, Supreme Court has approved for implementation most of the recommendations made by a Central Empowered Committee (CEC), and has cleared the way for the resumption of legal mining of riverbed sand in the state after a gap of four years

#### Key points

- The Court had directed the CEC last year to submit a report on issues related to sand mining faced by traders, consumers, transporters, the government, and to suggest measures to stop illegal sand mining.
- Legally mined riverbed sand has been scarce in Rajasthan after Supreme Court in 2017 restrained all the 82 sand mining leases in the state from carrying out mining activities in the absence of environmental clearances and a scientific replenishment study.
- CEC recommended that river sand mining in Rajasthan is permitted to be conducted after obtaining all statutory clearances and payment of dues and applicable taxes.
- The court has also approved another recommendation of the CEC — the termination of khatedari leases (sand mining leases on agricultural land) which are located within 5 km from the river bed.
- The apex court directed the CEC to follow the directions given by the NGT in respect of imposition of penalty/determining scale of compensation for illegal mining and the provisions of the 2020 Sand Mining Guidelines and determine the penalty/compensation afresh and submit a report within eight weeks.

#### Significance

- There is a huge demand-supply gap. Illegal mining has been taking place since the last four years and in absence of legal mining there is a mafia which is operating.
- Legal mining will also lead to the state earning huge revenue in the form of royalty and the law-and-order situation will tremendously improve.
- Legal mining will lead to the consumers getting the sand at reasonable prices as opposed to what is happening now. The state has to comply with all environmental standards.

## Season of Floods- Urban Floods in Tamil Nadu

### Context

- The ongoing spell of heavy rain in Chennai, Tamil Nadu has again exposed the vulnerability of the city, a coastal metropolis with a flat terrain, to floods.
- It again raises questions about the Government's preparedness to deal with the northeast monsoon.

### Associated Issues

- **Repeated Flooding:** Despite storm water drains and waterways running to about 700 km being cleared in the last four months, no tangible improvement was seen in the problem of inundation.
- **No significant improvement and learning from 2015 flooding:** Though there is no significant rainfall in these past few days, many parts of the city is inundated with the floods.
- **Issue of Poor Drainage:** In a large urban setting such as Chennai, drainage problems are created due to-
  - Shrinking open space,
  - the gap between the coverage of the drains and that of sewer lines,
  - Ageing drains and sewer networks in core areas of the city, and
  - Encroachments or obstructions hampering the free flow of water.

### Way Forward

- **Maintaining the Rivers and other water bodies:** The city is blessed with a few rivers such as the Cooum and the Adyar, apart from a number of canals including the Buckingham Canal.
  - All these waterbodies, if properly maintained, can be very effective flood carriers, sparing several residential localities from inundation.
- **Find long-term solution:** Determination to find long-term solution to the urban flooding problem should not waned during the non-monsoon periods.
- **Role of Common People:** The people residing in the city too should be responsible enough in ensuring that the waterbodies and drains are not turned into dumps.

### Conclusion

The State Government, which is executing a couple of integrated storm water drain projects, should look for durable solutions to the city's long-standing woes and executing them in a short span of time.

## Northeast Green Summit 2021

### Context

- Silchar, Assam is gearing up for holding sixth Northeast Green Summit (2021) beginning, from November 16, 2021.

### Key Points

- **About Northeast Green Summit:** The Northeast Green Summit was initiated in 2016 by a not-for-profit organization Vibgyor N.E. Foundation.
- **Key Objective:** to raise awareness and empower people with the knowledge of the rich and diverse natural habitat, bio-diversity and cultural heritage that the North Eastern region of India is bestowed with.

### Key Details

- **Theme:** The focus area of the sixth Northeast Green summit is 'Greening after Covid: Regional Cooperation, Innovation & Entrepreneurship'.
- **Key Agenda of the Summit:** the sixth Northeast Green summit will discuss following major topics among others-
  - Sustainable development and conservation strategies for the Northeast and its contiguous biodiversity zones,
  - A round table of forest ministers of the region, besides green art and green music events.
- **Participation:** Union Minister of State for Environment is expected to attend the summit, along with delegates from Bangladesh, Bhutan and Myanmar
- **Other Details:**
  - Several stalls showcasing sustainable products from across the northeastern region will be part of the summit (organised by Vibgyor NE Foundation and supported UNEP).
  - **Green cyclothion:** It is being organised to create awareness among the public about the rapidly-depleting resources.

### Vibgyor N.E. Foundation

- **About:** Vibgyor N.E. Foundation is a registered not-for-profit organization based at Guwahati.
- **Mandate:** It specialises in green issues of Northeast India and works closely with various UN organizations, ministries and various Northeastern state governments in this sector.
- **Key Initiative:** Along with its associates, the Foundation organizes the annual Northeast Green Summit, the only such annual conclave of the region.

## National Coal Gasification Mission

### Context

- Recently, Ministry of Coal has prepared a blueprint for the 'National Coal Gasification Mission' to encourage investments in coal sector.

### Key points

- The Ministry has proposed 15% methanol-blending target with petrol to encourage investments in the sector.
- The Ministry also proposes massive tax waivers to incentivise coal gasification, which can lead to eco-friendly alternate utility of the fuel.
  - According to the blueprint, such waivers will not entail any revenue loss as it is proposed only on incremental coal use only for gasification.
- Last year, our Prime Minister had said that Rs 20,000 crore will be invested in coal gasification projects by 2030 to utilise 100 million tonnes of coal.

### Coal gasification: Why needed

- Most of India's known coal deposits are non-recoverable as they are deep, scattered and covered by forests.
- Underground coal gasification could help extract this plentiful reserve.

### Coal gasification process

- Coal can be gasified to turn it into a cleaner syngas or synthesis gas which constitutes the basic building block of the chemical industry.
  - Syngas: A mixture of hydrogen and carbon monoxide.
- Syngas can then be converted into a wide range of products such as methanol and olefins of which India is at present a net importer.
- The syngas technology allows conversion of non-mineable coal/lignite into combustible gases through in situ gasification of the material.

### Methanol importance

- Domestic production of methanol from coal is seen to help in import substitution and ensure steady supplies at a less volatile price range.
- Almost 90% of domestic methanol requirement is met through imports.
- According to the experts, a typical gasification facility needs about \$2 billion of investment and can produce between 1 and 2 MT of methanol a year and it is estimated that 5-6 MT of coal would be required to produce 2 MT of methanol.

## Time for action- G-20 Summit in Rome

### Context

- Recently, the leaders of the G20 met in Rome, Italy for the first in-person meeting in two years after COVID-19 Pandemic.

### Key Points

- G-20 Leaders discussed the biggest issues facing the global community today, including-**
  - COVID-19 pandemic,
  - Climate change,
  - A major tax agreement, and
  - Steps to address concerns regarding global economic growth and stability.

### On Covid-19

- The focus was on vaccine production and distribution with assurances of support to WHO's target of-
  - Vaccinating 40% or more of the global population against COVID-19 by 2021, and
  - Vaccination of at least 70% by mid-2022.
- Cooperation among G-20 countries** to overcome supply and financing constraints. This is expected to boost the supply of vaccines in developing countries.

### On climate change

- G20 leaders recommitted their nations to providing \$100 billion a year toward adaptation, mitigation, and green technologies, focusing on the needs of developing countries.
  - G20 leaders committed to limiting global warming to 1.5° C and identified sustainable and responsible consumption and production as "critical enablers".

### On post-covid economic recovery

- Issues:** Post covid-9, countries are facing the rising inflation, spiking energy prices, and alarming supply chain bottlenecks, etc.
- G20** leaders affirm that national stimulus policies would not be removed prematurely.
  - it would remain a challenge to walk the tightrope between preserving financial stability and fiscal sustainability.

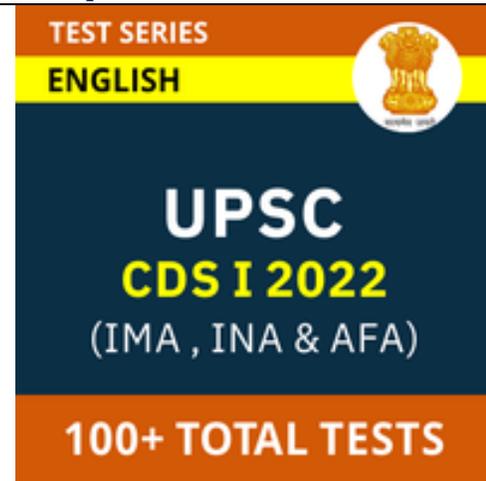
### Global tax agreement

- G20 leadership agreed to slap multinationals with a minimum 15% tax to create "a more stable and fairer international tax system".
- Impact:** This would impact the tech titans of Silicon Valley, as this initiative would make it harder for such companies to benefit from locating themselves in relatively lower-tax jurisdictions.

- **Background:** This OECD-led reform enjoys the support of 136 countries, which account for more than 90% of global GDP, and is likely to enter into force in 2023 or after.
- **Associated challenge:** Nations such as the U.S. are divided on whether to approve this proposal domestically, and unless there is unanimity amongst the discussants, the initiative risks facing implementation delays.

**Conclusion**

- The G20 meeting has come at a critical moment for the global political economy. If it results in timely, effective, coordinated action across major nations, hope for recovery will remain afloat.



## Science & Technology

### Star College Mentorship Program: First-ever Mentorship Program for Young Innovators

#### Context

- Recently, the Union Minister of State for Science & Technology launched the first-ever Mentorship Programme for Young Innovators to mark the 75th Year of India's independence.

#### Key Points

- About:** Star College Mentorship Program is a pan India Scheme that envisages Star College in every district of the country supported by the Department of Biotechnology.
  - DBT-Star College Mentorship Programme will help towards the concept of networking, hand holding and outreach.
- Parent Ministry:** Star College Mentorship Program is under Department of Bio-technology, Ministry of Science and Technology.
- Key Objective:** to promote scientific temper among the masses, particularly youngsters, by strengthening scientific research and innovation efforts in the country.

#### Key Features

- Star College Mentorship Program envisages-**
  - Organizing workshops, meetings per month;
  - Handhold at colleges particularly in the rural areas or lesser endowed areas and
  - Conduct outreach activities with government schools.
- Categorization of the scheme into urban and rural categories:** This has ensured a level playing field for applicants hailing from rural and urban areas of the country.

#### Expected Benefits

- Star College Mentorship Program will enable newer colleges which have begun their journey under the scheme to come up as per the mandate of the scheme.
- Promote Science Courses in the Country:** The Star Status Colleges will help in promoting UG Science Courses throughout the country.
  - This is to be done by mentoring the newer colleges through hand-holding and peer learning and bringing them under the aegis of Star College Scheme.

### Star College Scheme- Key Points

- About:** The Star College Scheme was initiated by DBT in 2008 to support colleges and universities offering undergraduate education to improve science teaching across the country.
- Mandate:** This Scheme was launched for improving critical thinking and encouraging 'hands on' experimental science at undergraduate level in basic science subjects.
- Key Features:** The scheme was initiated envisioning that it shall encourage more students to take up higher education in science.
  - Through this scheme the Department identifies colleges with potential for excellence and provides support for developing infrastructure for academics and laboratory activities.
  - This support is in turn expected to invigorate teaching and provide unique exposure of students to experimental science.
  - The scheme also supports training of faculty and laboratory staff, lectures by eminent scientists, visits to research institutes and industry etc.
- Performance:** Starting with a meagre 30 colleges in 2008, this pan India scheme has supported science departments in more than 300 colleges all over the country till date.
  - More than 1.5 lakh students were supported in the last five years and
  - Comprehensive support is also provided to colleges participating in the Star College Scheme.

### Other Human Resource-related Schemes

- Star College Scheme,
- Skill Vigyan Programme (Skill Development Programme) in Biotechnology,
- Biotech Industrial Training Programme and
- Doctoral & post-doctoral and Re-entry Schemes & Fellowships

### Digital India Land Record Modernisation Programme

#### Context

- Recently, Ministry of Rural Development has inaugurated 'Bhumi Samvaad' - National Workshop on Digital India Land Record Modernisation Programme (DILRMP) at India Habitat Centre.

**Key points**

- States have been suggested to learn and adopt the best practices of other states in the field of land management, land acquisition and infrastructure projects.
- MoRD has also launched National Generic Document Registration System (NGDRS) portal and Dashboard.

**Unique Land Parcel Identification Numbers (ULPIN)**

- It is just like the Aadhar Number of land parcels.
- Under this, a unique ID based on Geo-coordinates of the parcels is generated and assigned to the plots.
- This has been introduced to share the computerized digital land record data among different States/Sectors and a uniform system of assigning a unique ID to the land parcel across the country.
- So far it has already been implemented in 13 States and pilot tested in another 6 States.
- It has been decided to complete the process of assigning unique IDs to the land parcels in the entire country by the end of this financial year, (FY 2021-22).

**Development of National Generic Document Registration System (NGDRS)**

- NGDRS is an in-house advanced software application for the registration system developed by NIC.
- This software application is scalable, flexible, configurable and compatible with the state-specific needs in the country.
- It ensures transparency, accountability of the officials executing the documents and reduction in cost, time and number of visits and procedures required for the execution of the registration documents.
- So far, it has already been implemented in 12 States and pilot tested in 3 States covering more than 10 crore population.

**Digital India Land Record modernisation programme**

- In 2008, two Centrally Sponsored Schemes viz.: Computerisation of Land Records (CLR) & Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR) merged into a modified Scheme named Digital India Land Records Modernization Programme (DILRMP).

**Objective**

- The main aims of DILRMP are to usher in a system of updated land records, automated and automatic mutation, integration between textual and spatial records, inter-connectivity between revenue and registration, to replace the present deeds registration and presumptive title system with that of conclusive titling with title guarantee.

**Components**

The DILRMP has 3 major components

- Computerization of land record
- Survey/re-survey
- Computerization of Registration.

**Implementation**

- The State Governments/UT Administrations will implement the programme with financial and technical supports from the Dept. of Land Resources, Ministry of Rural Government, GoI.

**DILRMP benefits**

- Real-time land ownership records will be available to the citizen
- Since the records will be placed on the websites with proper security IDs, property owners will have free access to their records without any compromise in regard to confidentiality of the information
- Free accessibility to the records will reduce interface between the citizen and the Government functionaries, thereby reducing rent seeking and harassment.
- Public-private partnership (PPP) mode of service delivery will further reduce citizen interface with Govt. machinery, while adding to the convenience
- Abolition of stamp papers and payment of stamp duty and registration fees through banks, etc. will also reduce interface with the Registration machinery
- With the use of IT inter linkages; the time for obtaining RoRs, etc. will be drastically reduced
- The single-window service or the web-enabled "anytime-anywhere" access will save the citizen time and effort in obtaining RoRs, etc.
- Automatic and automated mutations will significantly reduce the scope of fraudulent property deals
- Conclusive titling will also significantly reduce litigation
- These records will be tamper-proof
- This method will permit e-linkages to credit facilities
- Market value information will be available on the website to the citizen
- Certificates based on land data (e.g., domicile, caste, income, etc.) will be available to the citizen through computers
- Information on eligibility for Government programs will be available, based on the data
- Issuance of land passbooks with relevant information will be facilitated

## ACROSS scheme

### Context

- The Cabinet Committee on Economic Affairs has recently approved the continuation of ACROSS scheme along with its eight sub-schemes to the next finance cycle of five years i.e., **2021-2026**.

### Key points

- ACROSS (**Atmosphere & Climate Research-Modelling Observing Systems & Services**) scheme is an atmospheric science program of Ministry of Earth Sciences (MoES) and addresses different aspects of weather and climate services.
- Each of these aspects is incorporated as eight sub-schemes under the umbrella scheme "ACROSS" and is implemented in an integrated manner through the aforesaid four institutes.
- The scheme is being implemented by the **Ministry of Earth Sciences** (MoES) through its units namely
  - India Meteorological Department (IMD);
  - National Centre for Medium Range Weather Forecasting (NCMRWF);
  - Indian Institute of Tropical Meteorology (IITM) and
  - Indian National Centre for Ocean Information Services (INCOIS).

### ACROSS scheme: Sub-missions

Monsoon Convection, Clouds, and Climate Change (MC4)

- The MC4 scheme was envisioned to **improve the observational database and climate models** for enhanced predictive understanding of monsoonal precipitation changes and their impacts in a warming environment.
- The overarching goal of MC4 is to describe better and quantify interactions among monsoon dynamics, clouds, aerosols, precipitation and water cycle in a changing climate.
- It will be accomplished by climate modelling and observational studies and would enable improved prediction of climatic variations and regional impacts over south Asia.

Sub programs of MC4

- Centre For Climate Change Research (CCCR) including virtual water centre
- Physics and Dynamics of Tropical Clouds (PDTC)
- Atmospheric Research Testbeds (ART) for process studies and National Climate Reference Network (NCRN)
- Metro Air Quality and Weather Service (MAQWS)

High Performance Computing System (HPCS)

- The existing HPCS resources of 6.8 petaflops (PF) commissioned in 2018 has resulted in improved short-medium scale forecasts with the usage of high-resolution models.
- For further enhancing weather and climate prediction, **high-resolution dynamical models** are required, which are highly computationally intensive.

Monsoon Mission (MM-II)

- The second phase of monsoon mission (MM-II), which began in September 2017, focuses on **predicting weather/climate extremes and development of climatic applications** based on monsoon forecasts, especially in the field of agriculture, hydrology and energy sector.
- In MM-II, focus has been given to high-resolution short-range predictions, predicting extremes, and using forecasts to develop applications for agriculture, hydrology, disaster management, energy sector, etc.
  - Ministry of Earth Sciences (MoES), Government of India, launched the National Monsoon Mission (NMM) in 2012 (now referred as Monsoon Mission, MM).

Atmospheric Observations Network

- The scheme Atmospheric Observations Network of IMD is a continuing scheme primarily encompassing ongoing programs in an integrated manner aimed at sustenance of **observational network**.

Weather & Climate Services

- The scheme Weather & Climate Services of IMD is a continuing Scheme primarily encompassing ongoing programs in an integrated manner aimed at providing efficient weather and climate services.
- IMD provides services to weather-sensitive sectors viz. agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.

Upgradation of Forecast System

- Upgradation of Forecast System is aimed at **improving the accuracy of weather forecasts** to bring it at par with the international standards which will help many sectors like army operations, air operation, agriculture, tourism, etc.

Commissioning of Polarimetric Doppler Weather Radars (DWRs)

- Induction of an **adequate number of DWRs in the network** would facilitate plugging the existing gaps in the meteorological observational network of radars, desirable for effective and efficient analysis and consequent forecasting.

- The availability of countrywide weather radar coverage and its integration, including overlapping regions of the proposed network would provide adequate warning in the event of approach of Cyclonic Storms, Monsoon Depressions, etc.

## Dengue- Causes, Symptoms, and Treatment

### Context

- According to a civic report, the Capital city of Delhi reported 1,171 cases of dengue and three deaths over the past week.
- While the fatality toll for the season has reached nine, the caseload stands at 2,708 — the highest since 2017.

### Key Points

- About Dengue Fever:** Dengue is a mosquito-borne tropical disease caused by the dengue virus (Genus Flavivirus).
- Transmission:** Dengue is transmitted by several species of mosquito within the genus Aedes, mainly by female Aedes aegypti.
- About Aedes aegypti:** Aedes is a day time feeder and can fly up to a limited distance of 400 meters. Dengue mosquitoes can't breed once the temperature falls below 16 degrees.
  - It is also responsible for the transmission of chikungunya, yellow fever and Zika infection.
- Seasonal Pattern:** Every year, from July to November, an upsurge in cases of dengue has been observed.
  - The disease has a seasonal pattern, i.e., the peak comes after monsoon and it is not uniformly distributed throughout the year.

### Tests used to detect dengue

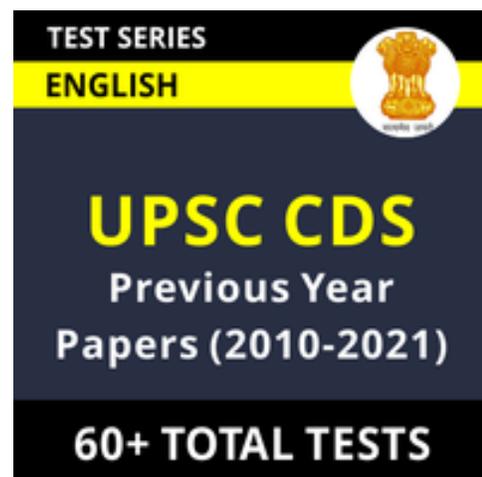
- ELISA Test:** IgM and IgG test for dengue antibodies detected in an initial blood sample, meaning that it is likely that the person became infected with dengue virus within recent weeks.
  - This test is normally done after 3-7 days of fever.
  - IgM and IgG antibodies test and NS1 antigen test. Both are done through ELISA kits and hence are popularly known as Elisa test.
- NS1 Antigen test:** It is a test for dengue, which allows rapid detection on the first day of fever, before antibodies appear.

### Common Symptoms

- The onset of dengue fever** is usually a sudden rise in temperature lasting 2-7 days and commonly associated with headache, flushing, retro-orbital pain and/or rash, myalgia, weakness, rash and itching.
- Severe Dengue:** In extreme cases, the disease can develop into severe dengue (dengue hemorrhagic fever) that causes bleeding, low levels of blood platelets, and blood plasma leakage.

### Treatment

- Mild dengue infection:** It may be treated symptomatically. Fever and body aches are best treated with paracetamol.
  - Salicylates and other non-steroidal antiinflammatory drugs (NSAIDs) should be avoided as these may predispose to mucosal bleeds.
  - The patient should be encouraged to drink plenty of fluids.
- Severe Dengue Infection:** Patient should be admitted to hospital in the care of specialists when following symptoms appear-
  - Abdominal pain or persistent tenderness vomiting,
  - Fluid accumulation in pleural cavity, abdomen or subcutaneous tissues,
  - Mucosal bleeds,
  - Lethargy, restlessness or irritability,
  - Liver enlargement >2 cm,
  - Progressive increase in haematocrit with a concurrent decrease in platelet count.
- Home Remedy:** Home remedies popularly used to treat dengue fever are papaya leaves, drinking adequate water, neem leaves, basil leaves tea (tulsi), coriander leaves, pomegranate juice, wheatgrass juice.



## Global Innovation Summit 2021- First Global Innovation Summit of the Pharmaceuticals sector

### Context

- Recently, the Prime Minister of India inaugurated the first Global Innovation Summit of the Pharmaceuticals sector.

### Key Points

- About:** The first Global Innovation Summit 2021 on the pharmaceuticals sector is a distinctive initiative that is being organized by the Indian Pharmaceutical Association.
- Participation:** Global Innovation Summit 2021 is a two-day summit. Global Innovation Summit 2021 will have 12 sessions and see participation of over 40 national and international speakers.
  - Global Innovation Summit 2021 will see participation of leading members from domestic and global pharma Industries, officials, investors and researchers from reputed academic institutions.
- Objective:** Global Innovation Summit aims to bring together key Indian and international stakeholders from the government, industry, academia, investors, and researchers to discuss and strategise priorities to foster a thriving innovation ecosystem in the sector.

### Significance

- Global Innovation Summit 2021 on the pharmaceuticals sector will highlight opportunities in the Indian pharma industry that has a huge growth potential.
- Global Innovation Summit 2021 will see deliberation on a range of subjects, including the regulatory environment, funding for innovation, industry-academia collaboration, and innovation infrastructure.
- Global Innovation Summit the Pharmaceuticals sector will also highlight the fact that Indian Pharma Industry is a key driver of India's economic growth.

### Importance of Pharmaceutical Sector

- Role during Covid-19:** The Covid-19 pandemic has brought the importance of the healthcare sector into sharp focus. In this context, pharmaceuticals industry played an important role in reducing the loss of life and suffering of Indian and global citizens during the pandemic.

- Boosting Employment and Economy:** Indian pharmaceutical industry provides employment to nearly 3 million people, and generate a trade surplus of about thirteen billion dollars.
  - The Indian pharma industry has been a key driver of our economic growth.
  - The global trust earned by the Indian healthcare sector has led to India being called the "pharmacy of the world" in recent times.
- Foreign Direct Investment (FDI):** Since 2014, the Indian healthcare sector has attracted over 12 billion dollars in Foreign Direct Investment.

## India's 41st Scientific Expedition to Antarctica

### Context

- India has successfully launched the 41st Scientific Expedition to Antarctica with the arrival of the first batch of its contingent at the southern white continent.
- The first batch comprising of 23 scientists and support staff reached the Indian Antarctic station Maitri on last week.
- Four more batches shall be landing in Antarctica by air using DROMLAN facility and onboard chartered ice-class vessel MV VasilyGolovnin by mid-January 2022.

### Key Details

- Objective:** The 41st scientific expedition to Antarctica has two major programs.
  - The first program encompasses geological exploration of the Amery ice shelf at Bharati station. This will help explore the link between India and Antarctica in the past.
  - The second program involves reconnaissance surveys and preparatory work for drilling of 500 meters of ice core near Maitri.
- Importance:**
  - 41<sup>st</sup> Scientific Expedition to Antarctica will help in improving the understanding of Antarctic climate, westerly winds, sea-ice and greenhouse gases from a single climate archive for past 10,000 years.
  - The ice core drilling will be done in collaboration with the British Antarctic Survey and the Norwegian Polar Institute.
- 41<sup>st</sup> Scientific Expedition to Antarctica will replenish the annual supplies of food, fuel, provisions, and spares for operations and maintenance of life support systems at Maitri and Bharati.

### Indian Antarctic program

- **About:** The Indian Antarctic program began in 1981, and has completed 40 scientific expeditions till now.
- **Indian research stations in antarctica:** Under the Indian Antarctic program, India has built three permanent research base stations in Antarctica, named Dakshin Gangotri (1983), Maitri (1988) and Bharati (2012).
  - **First Indian research station in antarctica:** Dakshin Gangotri (1983) was the first Indian research station in antarctica.
  - **Present Status:** As of today, Maitri and Bharati are fully operational.
- **Implementing Agency:** The National Centre for Polar and Ocean Research (NCPOR), Goa manages the entire Indian Antarctic program.
  - The National Centre for Polar and Ocean Research (NCPOR) functions as an autonomous institute under the Ministry of Earth Sciences.

### Land Handed Over for the First LIGO Project in India

#### Context

- Maharashtra Government has handed over 225 hectares of land for the construction of LIGO, the first such facility in India.

#### Key points

- In 2016, the union government had given an 'in principle' approval to the LIGO-India mega science proposal for research on gravitational waves.
- The transfer of the land for the project had earlier been put on hold for some time because of the restrictions imposed due to COVID-19 pandemic.

#### About LIGO

- LIGO stands for "Laser Interferometer Gravitational-wave Observatory".
- It is the world's largest gravitational wave observatory and a marvel of precision engineering.
- LIGO consists of two widely-separated interferometers within the United States—one in Hanford, Washington and the other in Livingston, Louisiana—operated in unison to detect gravitational waves.
- LIGO currently consists of two interferometers, each with two 4 km (2.5 mile) long arms arranged in the shape of an "L". These instruments act as 'antennae' to detect gravitational waves.
  - They are called interferometers because they work by merging two or more sources of light to create an interference pattern, which can be measured and analysed.

- LIGO is blind: Unlike optical or radio telescopes, LIGO does not see electromagnetic radiation (e.g., visible light, radio waves, microwaves). It doesn't have to because gravitational waves are not part of the electromagnetic spectrum.
- LIGO isn't round and can't point to specific locations in space: Since LIGO doesn't need to collect light from stars, it doesn't need to be round or dish-shaped like optical telescope mirrors or radio telescope dishes.
- A single LIGO detector could not initially confirm gravitational waves on its own. To help electromagnetic observers find a possible light source associated with the detections, we must have multiple detectors – ideally 3 or more – to localize the signal in the sky.

#### About LIGO-India project

- LIGO-India project is to be built at an estimated Rs 1,200 crore, and will come up at Dudhala village in Hingoli district of Maharashtra.
- The observatory in India will be jointly funded by the Department of Atomic Energy (DAE) and Department of Science and Technology (DST).
- LIGO-India is a collaboration between the LIGO Laboratory (operated by Caltech and MIT) and three Institutes in India: The Raja Ramanna Center for Advanced Technology (RRCAT, in Indore), the Institute for Plasma Research (IPR in Ahmedabad), and the Inter-University Centre for Astronomy and Astrophysics (IUCAA, in Pune).

### O-SMART Scheme

#### Context

- Recently, the Cabinet Committee on Economic Affairs gave its approval for continuation of the umbrella scheme "Ocean Services, Modelling, Application, Resources and Technology (O-SMART)" for implementation during the period from 2021-26.

#### Key Points

- **About:** O-SMART Scheme was launched by the government in 2018. O-SMART Scheme encompasses oceanographic research activities and aims at setting up early warning weather systems.
  - **Parent Ministry:** O-SMART Scheme is being implemented by the Ministry of Earth Sciences.
- **Key Mandate:** O-SMART Scheme is being implemented with the objectives-
  - For providing forecast and services based on the continuous observation of our oceans,

- Development of technologies and exploratory surveys for sustainable harnessing of our oceanic resources (both living and non-living) and
- Promotion of front-ranking research in ocean sciences.

**Key Significance of extending scheme**

- **O-SMART Scheme** will augment the capacity building of India at the international-level in oceanographic field through extensive research and technology development activities.
- **O-SMART Scheme** will provide further comprehensive coverage by strengthening ongoing activities to delivering cutting edge technology which will be applicable for marine domain, understanding biodiversity towards conservation strategy, forecast & warning services etc in next five years.

**Sub-schemes under O-SMART**

- The Ocean Services, Modelling, Application, Resources and Technology (O-SMART) scheme comprises of the following sub-schemes:
  1. Ocean Technology
  2. Ocean Modelling and Advisory Services (OMAS)
  3. Ocean Observation Network (OON)
  4. Ocean Non-Living Resources
  5. Marine Living Resources and Ecology (MLRE)
  6. Coastal Research
  7. Operation and Maintenance of Research Vessels.
- **Implementation:** All of the sub-schemes of the O-SMART Scheme are being implemented by autonomous institutes of the Ministry of Earth Sciences. These institutions are-
  - National Institute of Ocean Technology (NIOT), Chennai;
  - Indian National Center for Ocean Information Services (INCOIS), Hyderabad;
  - National Centre for Polar and Ocean Research (NCPOR), Goa,
  - Center for Marine Living Resources and Ecology (CMLRE), Kochi; and
  - National Centre for Coastal Research (NCCR), Chennai as well as involving other national institutes.

**O-SMART: Key Objectives**

The objectives of O-SMART (Ocean Services, Modelling, Applications, Resources and Technology) scheme of Ministry of Earth Sciences (MoES), Govt. of India are-

- To generate and regularly update information on Marine Living Resources and their relationship with the physical environment in the Indian Exclusive Economic Zone (EEZ),

- To periodically monitor levels of sea water pollutants for health assessment of coastal waters of India, to develop shoreline change maps for assessment of coastal erosion due to natural and anthropogenic activities,
- To develop a wide range of state-of-the art ocean observation systems for acquisition of real-time data from the seas around India,
- To generate and disseminate a suite of user-oriented ocean information, advisories, warnings, data and data products for the benefit of society,
- To develop high resolution models for ocean forecast and reanalysis system,
- To develop algorithms for validation of satellite data for coastal research and to monitor changes in the coastal research,
- Acquisition of 2 Coastal Research Vessels (CRVs) as replacement of 2 old CRVs for coastal pollution monitoring, testing of various underwater components and technology demonstration,
- To develop technologies to tap the marine bio resources
- To develop technologies generating freshwater and energy from ocean,
- To develop underwater vehicles and technologies,
- Establishment of Ballast water treatment facility,
- To support operation and maintenance of 5 Research vessels for ocean survey/monitoring/technology demonstration programmes,
- Establishment of state-of-art sea front facility to cater to the testing and sea trial activities of ocean technology,
- To carryout exploration of Polymetallic Nodules (MPN) from water depth of 5500 m in site of 75000 sq.km allotted to India by United Nations in Central Indian Ocean Basin, to carryout investigations of gas hydrates,
- Exploration of polymetallic sulphides near Rodrigues Triple junction in 10000 sq. km of area allotted to India in International waters by International Seabed Authority/UN and,
- Submission of India's claim over continental shelf extending beyond the Exclusive Economic Zone supported by scientific data, and Topographic survey of EEZ of India.

## Omicron variant

### Context

- Recently, World Health Organization (WHO) has said Omicron, that a **heavily mutated coronavirus variant**, is likely to spread internationally and poses a very high risk of infection surges that could have “**severe consequences**” in some places.

### What is Omicron variant?

- A new variant of SARS-CoV-2, which is currently circulating in Botswana, South Africa and Hong Kong, has been classified as a ‘**variant of concern**’ by WHO. It has been named Omicron.

### About Omicron variant

- Early impressions are that this variant is possibly even **more transmissible** than the highly infectious Delta variant.
- Omicron variant has a **large number of mutations** compared to other prevalent variants circulating across the world.
- It includes **32 mutations in the spike protein**. Many of these mutations lie in the receptor-binding domain of the spike protein and thus may play an important role in recognition by antibodies generated due to a previous infection or by vaccines.
  - Spike protein** forms a key part of the protein required for binding to the human receptor proteins for entry into the cell.
- The variant was reported in **South Africa** and has been identified among travellers from South Africa apart from other countries in the region.

### Omicron variant symptoms

- The National Institute for Communicable Diseases (NICD) of South Africa has said that currently, “**no unusual symptoms**” have been reported following infection with the **B.1.1.529** or the Omicron variant.

### Does the variant result in vaccine breakthrough infections?

- Some of the individuals identified to be infected with omicron variant have been **vaccinated for COVID-19** and therefore the variant can indeed cause vaccine breakthrough infections.
- However, this should **not be of concern**, as the prevalent variants of concern including Delta have been shown to cause breakthrough infections.
- Nevertheless, whether the variant causes more breakthrough infections than Delta is not currently known.

### Omicron variant countries

- As of date, **nine countries** have confirmed the presence of Omicron. This includes South Africa, Botswana, England, Hong Kong, Australia, Italy, Israel, Czech Republic, and Belgium.

### Omicron variant in India

- India has a national programme on genomic surveillance (INSACOG) as well as focussed surveillance programmes in Kerala, Maharashtra, Delhi and Karnataka, apart from independent research programmes.
- In INSACOG’s latest Bulletin, **none of the sequenced samples** in India have the Omicron variant until date.

### How can we prepare for Omicron variant?

- For detection and tracking:** Enhanced surveillance and genome sequencing efforts are essential.
- For better understanding:** Rapid sharing of genome sequences of the virus will help in developing a better understanding of the variant.
- For control and prevention:** Apart from the above, existing public health and social measures need to be strengthened.
- Combating new variant:** Enhancing vaccination coverage across different regions along with access to testing, therapeutics and support will be essential for combating the new variant.
- Equitable access to vaccines** would be key to controlling the Omicron variant, and slowing down the emergence of any future variants

## Women in STEM

### Context

- Recently, **Ministry of Science & Technology** hosted the India-Israel Women in STEM conference to achieve gender parity in the field of Science, Technology, Engineering and Mathematics (STEM).

### Women in STEM – Benefits

- Greater women’s participation in the tech sector will **make women stronger and more influential**, giving a boost to their socio-economic situation in the society.
- S&T could become a **changemaker in society** by introducing flexible work times, and gender-neutral pays to enhance women participation in STEM.
- Increased women participation in tech fields is an **investment for the country’s advancement** in the future and joint conference like these could be a guiding platform in this direction.

### Issues

- There are areas in science which have seen remarkable progress in women participation; however, areas like Physics, Engineering and Mathematics need a **course correction**
- One of the major issues regarding women's participation in STEM fields is **gendered brain-drain in STEM**. UNESCO in 2019 reported this issue, which is also evident in the gender gap at higher studies in science, particularly at the doctorate and post-doctorate levels.

### Role of government

- Government needs to play a major role in **generating enablers** to allow greater women's participation like joint programmes that connect incubation centres in the two countries and setting up incubation centres just for women.

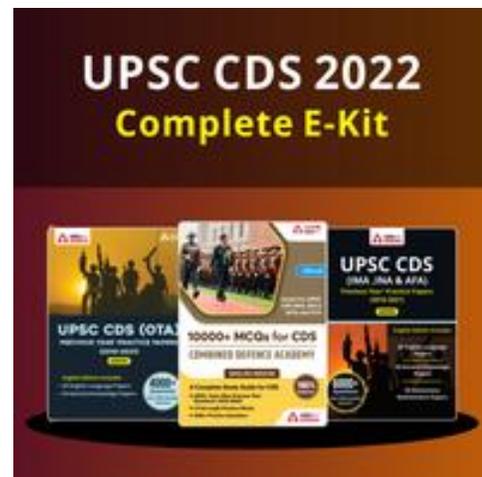
### Government steps to increase women in STEM

- **SERB-POWER** (Promoting Opportunities for Women in Exploratory Research)
  - The Scheme is aimed to mitigate gender disparity in science and engineering research funding in various S&T programs in Indian academic institutions and research and development (R&D) laboratories, address comparatively lower participation of women scientists in research activities and to identify and support competitive women researchers in the country.
- Knowledge Involvement in Research Advancement through Nurturing (**KIRAN**)
  - This scheme of DST had been instituted to encourage women scientists through various programmes in the field of Science and Technology (S&T).
  - 'Women Scientist Scheme (WOS)' under KIRAN provides career opportunities including fellowships to unemployed women scientists and technologists, especially those who had a break in career, for pursuing research in frontier areas of science and engineering.
- Consolidation of University Research through Innovation and Excellence in Women Universities (**CURIE**)
- This programme only women Universities are being supported for development of research infrastructure and creation of state-of-the-art research laboratories to enhance women's participation in S&T domain.

- Indo-US Fellowship for Women in STEMM (Science, Technology, Engineering, Mathematics & Medicine) encourages Indian women scientists and technologists to undertake international collaborative research in premier institutions in USA for duration of 3-6 months.
- **"Vigyan Jyoti"** Scheme encourages girl students of Class 9 to 12 to pursue education and career in S&T particularly in the areas where women are underrepresented.
- The **SERB Women Excellence Award** recognizes women Academy Awardees to expand their research horizon to higher levels.
- In addition, Department of Biotechnology (DBT) is also implementing **'Biotechnology Career Advancement and Re-orientation Programme (BioCARE)'** to encourage women scientists in Biotechnology research.
- **Women Entrepreneur's Quest (WEQ)** Programme was initiated by DST in partnership with Anita Borg Institute, USA for scouting and supporting Women Entrepreneurs in Technology. A total of 42 start-ups have been supported so far and 21 start-ups have grown to next level.
- **Women Start-up Program (WSP)** of DST in partnership with Goldman Sachs aims to support ambitious and innovative women entrepreneurs by enabling them to transform their idea into a business venture. WSP reached out to 6200 women across the country through Massive Open Online Course program.

### Way forward

- Government policy, support from family and work area and self-motivation could help enable women empowerment.



## Security

### JPC on Personal Data Protection (PDP) Bill 2019

#### Context

- Recently, the Joint Parliamentary Committee (JPC) adopted the draft report on the **Personal Data Protection (PDP) Bill 2019**, after almost two years of deliberations.

#### Key points

- JPC has retained the controversial exemption clause that allows the Government to keep any of its agencies outside the purview of the law with minor changes.
- The Bill was drafted after the **Justice K.S. Puttaswamy vs Union of India** case on privacy where Supreme Court ruled that 'Right to Privacy' is a fundamental right.

#### Key recommendations

- JPC recommends to treat **all social media platforms as publishers** and they should be held accountable for the content they host.
- The committee also recommended that **no social media platforms** should be allowed to operate in India unless the parent company sets up an office in India.
- Data Localisation:** JPC also advocated for developing an alternate indigenous financial system, on the lines of Ripple (U.S.) and INSTEX (E.U.), for cross-border payments.
- JPC was of the opinion that a **dedicated lab for certification** of all digital devices should be setup in India.
- In case of cross-border transfer of data, a **mirror copy of sensitive and critical personal data** be mandatorily brought to India.

#### Criticism of the dissenters

- Creates two parallel universes: The Bill has been criticised for developing two sets of rules—one for the private sector where the provisions would apply with full rigour, and other for the government entities with too much exemptions and escape clauses.
- The Bill also does not provide adequate safeguards to protect the right to privacy.
- The draft Bill falls short of the standards set by the **Justice Srikrishna Committee** to build a legal framework based on the landmark judgment.

- The key divergences from the Justice Srikrishna Committee's draft Bill are in the **selection of the chairperson and members** of the Data Protection Authority (DPA) which shall protect the interests of data principals and the leeway provided to the Union government to exempt its agencies from the application of the Act.
- While the 2018 draft Bill allowed for judicial oversight, the 2019 Bill relies **entirely on members of the executive government** in the selection process for the DPA.
- The 2019 Bill adds "**public order**" as a reason to **exempt** an agency of the Government from the Act, besides only providing for those reasons to be recorded in writing.
  - The 2018 Bill that allowed for exemptions to be granted to state institutions from acquiring informed consent from data principals or to process data in the case of matters relating only to the "security of the state" and also called for a law to provide for "parliamentary oversight and judicial approval of non-consensual access to personal data".

#### Way forward

- The Bill should include those exemptions granted in writing should at least be **tabled in both Houses of Parliament**.
- The ground "**public order**" should be removed as it provides too much scope of misuse.
- It is now the task of Parliament to tighten the provisions further and bring them in conformance with the 2018 Bill.

### Border Roads Organisation: BRO gets Guinness recognition for building highest Motorable Road

#### Context

- Border Roads Organisation (BRO) received the Guinness World Records certificate for the achievement of constructing and black topping the world's highest motorable road at 19,024 feet at Umlingla Pass in Ladakh.
  - In a four-month long process undertaken by the Guinness World Records, five different surveyors verified the claim.

### World's highest motorable road in Ladakh - Key Points

- **Umlingla Pass Road:** The 52-kilometre long Chisumle to Demchok tarmac road passes through the 19,024 feet high Umlingla Pass- the world's highest Motorable Road.
- **Previous Record:** The Umlingla Pass road betters the previous **Guinness** record of a road in Bolivia, which connects volcano Uturuncu at 18,953 feet.
- In India, the Umlingla Pass road has been constructed at an altitude higher than the North and South Base Camps of Mount Everest which are at an altitude of 16,900 feet and 17,598 feet respectively.
- **Significance:** The BRO provided a black topped road to the important village of Demchok in Eastern Ladakh that will be a boon to the local population of the region as it will enhance the socio-economic conditions and promote tourism in Ladakh.

### Border Roads Organisation (BRO) - Key Points

- **BRO Founding:** BRO was formed on May 7, 1960, with a mission to maintain and develop the Indian remote areas of north and northeast situated near the borders.
  - BRO Raising day is observed on May 7, every year.
- **About:** Border Roads Organisation (BRO) is a modern and transnational construction organization that is committed to meeting the strategic requirements of the Indian armed forces.
  - Border Roads Organisation (BRO) plays an important role in upscaling infrastructural development in border areas.
- **Parent Ministry:** BRO was initially functioned under the Ministry of Road Transport and Highways. But since 2015, it is works under overall administrative control of the Ministry of Defence.
- **BRO Functionaries:** Officers from the Border Roads Engineering Service (BRES) and personnel from the General Reserve Engineer Force (BRO GREF) form the parent cadre of the BRO.
  - The Indian Army Pioneer Corps are attached to BRO task forces.
  - BRO is also included in the Order of Battle of the Armed Forces, ensuring their support at any time.

- Through this, UNESCO Member States recognizes that school-related violence is an infringement of children's right to education and to health and well-being.

### International Day against Violence and Bullying at School

- **About:** Each year first Thursday of November to be observed as the International Day against Violence and Bullying at School, including cyberbullying.
- **Aim:** to raise awareness among students, parents, members of the school community, education authorities and others about the problem of online violence and cyberbullying.

### Vulnerability of Children

- **Increasing Access to Internet:** In India, an estimated 71 million children aged 5-11 years access the Internet on the devices of their family members, constituting about 14% of the country's active Internet user base of over 500 million.
  - The two-thirds of Internet users in India are in the age group of 12-29 years.
- **Covid-19 Impact:** School closures as a response to the COVID-19 lockdowns have led to an unprecedented rise in unsupervised screen time for children and young people, which in turn exposed them to a greater risk of online violence.
  - According to various reports, cyberbullying has negative consequences on the education, health and well-being of children and young people.
- **UNESCO's report (2019):** It highlighted the extent of the problem, with almost one in three students worldwide reporting being bullied at least once in the preceding month.
- **Gender-based online violence:** A 2020 study by Plan International revealed that 58% of girls in the Asia-Pacific region reported online harassment.
  - Globally, of the girls who were harassed, 14% who self-identified as having a disability and 37% who identified themselves as from an ethnic minority said they get harassed because of it.
- **Impact on the mental health:** The impact of online sexual harassment could have long-term negative impacts on mental health and well-being.
  - Children who are frequently bullied are nearly three times more likely to feel left out at school than those who are not.
  - They are also twice more likely to miss out on school and have a higher tendency to leave formal education after finishing secondary school.

## Creating Safe Digital Spaces

### Context

- The UNESCO Member States have declared the first Thursday of November as the International Day against Violence and Bullying at School, including cyberbullying.

### Way Forward

- **Formulate gender-sensitive and targeted approaches:** that should respond to needs of learners who are most likely to be the victims of online violence.
- **Empowering and educating students and school administration to deal with different types of online violence:**
  - Provide children and young people with the knowledge and skills to identify online violence so that they can protect themselves from its different forms, whether perpetrated by peers or adults.
  - Teachers also play a critical role by teaching students about online safety, and thus supporting parental involvement.
- Ensure creation of safe digital spaces and addresses the nuances of security by preventing and countering cyberbullying.
- Department of School Education and Literacy has circulated exhaustive guidelines to raise children and parental awareness with an aim to prevent the adverse effect of online gaming and the psycho-emotional stress that children could be undergoing.
- **Establish confidential reporting and redress services:** This will build trust in the system and help victims in reporting the online harassment incidents.

### Conclusion

- We should encourage students, parents, schools, education authorities, members of the education community and its partners to take part in preventing online violence and promoting the safety and well-being of young people.

## Defence Acquisition Council (DAC)

### Context

- Recently, the Defence Acquisition Council cancelled a tender for procurement of naval guns from the U.S.
  - The DAC added the quantity to an existing upgraded Super Rapid Gun Mount (SRGM) being manufactured by Bharat Heavy Electricals Ltd. (BHEL).
    - This measure will result in a saving of ₹3,000 crore and also promote make-in-India.
- The council also accorded Acceptance of Necessity (AoN) for capital acquisition and modernisation proposals estimated at ₹7,965 crore.

### Key Points about Super Rapid Gun Mount (SRGM)

- SRGMs provide niche capabilities of engaging fast manoeuvring targets using guided munitions and range extensions and are to be fitted on the warships of the Navy.
- All of these proposals are under 'Make in India' with focus on design, development and manufacturing in India.

### Key Points

- **About DAC:** The Defence Acquisition Council (DAC), the highest decision-making body in the Defence Ministry. It was constituted for overall guidance of the defence procurement planning process.
  - The Defence Acquisition Council (DAC) is headed by the Minister of Defence.
- **Background:** The Defence Acquisition Council (DAC) was formed after the Group of Ministers recommendations on 'Reforming the National Security System', in 2001, post Kargil War (1999).
- **Mandate:** to ensure expeditious procurement of the approved requirements of the Armed Forces in terms of capabilities sought, and time frame prescribed, by optimally utilizing the allocated budgetary resources.
- **Key function:** The Defence Acquisition Council (DAC) is entrusted with deciding on new policies and capital acquisitions for-
  - The three services (Army, Navy and Air Force) and
  - The Indian Coast Guard.

### Organizational Structure

The composition of the DAC is as follows-

- **Defence Minister: Chairman**
- **Minister of State for Defence: Member**
- **Chief of Army Staff: Member**
- **Chief of Naval Staff: Member**
- **Chief of Air Staff: Member**
- **Defence Secretary: Member**
- **Secretary Defence Research & Development: Member**
- **Secretary Defence Production: Member**
- **Chief of Integrated Staff Committees HQ IDS: Member**
- **Director General (Acquisition): Member**
- **Dy. Chief of Integrated Defence: Staff Member Secretary**

## Indian Fisherman Shot Dead by Pakistan

### Context

- Recently, an Indian fisherman was killed and another injured in firing by the Pakistan Marine Security Agency (PMSA) near international waters in the Arabian Sea off the coast of Gujarat.

### India's Response

- Indian side has condemned and strongly protested the killing of the Maharashtra fisherman as being "unprovoked".
- Action Taken:** Local Police in India have booked 10 personnel on board two PMSA patrolling boats for murder, attempt to murder and under the Arms Act.
  - India has vowed to take on the case diplomatically with the Pakistan side.

### Pakistan's Response

- An official statement from the Pakistan said the vessel, named 'Jalpari', was only fired upon after it failed to heed repeated warnings made by the PMSA.
- Pakistan also accepted that leaving aside the fisherman who was killed and the other one who was injured, six others from the boat were taken into custody for questioning.

### Previous Instances

- February 2021:** Pakistani coast guards arrested 17 Indian fishermen and confiscated their boats for allegedly straying into the country's territorial waters.
- April 2020:** Pakistani Marines opened firing on two boats near the IMBL in the Arabian Sea off Gujarat in which one person was hurt.
- 2019:** the PMSA had sunk an Indian boat with seven fishers onboard. Six of them were rescued but one person was reported missing.
- 2015:** an Indian fisherman was killed in firing by the PMSA near the IMBL.

### Possible Reasons for Frequent Incidents

- Unclear demarcation international maritime border:** Such incidents happen when fishermen stray into the maritime borders of the neighbouring country while trawling the seas for fish.
- Lack of technical knowhow:** lack of access to GPS or accurate, up-to-date maps and inability to read them by fishermen, results in mis-understanding about the maritime borders.
- Desperation of fishermen:** If domestic waters prove unproductive, then the temptation to not return empty-handed often pushes fishermen to go just a little bit further, landing them in foreign waters.

### Issues Ahead

- Lack of Credible Judicial Recourse:** There is no straightforward, 'by the book' resolution in this case for the families of dead and others.
  - Lack of clarity about jurisdiction and mis-trust between Indian and Pakistan results in unacceptance of the order of the courts of other country.
- Role of International Court:** For an international court to step in, both parties have to agree for its jurisdiction which seems farfetched in India-Pakistan's case.

## INS Vela- Fourth Scorpene Class Submarine

### Context

- Recently, the Indian Navy took delivery of the fourth 'Scorpene' class submarine- INS Vela from Mazagon Dock Shipbuilders Limited (MDL).
- Previously, the shipyard had delivered three submarines of "Scorpene" class namely: Kalvari, Khanderi, and Karanj.

### Key Points

- Background:** The first INS Vela was first commissioned on August 31, 1973 in the Indian Naval Service and continued to serve for 37 years.
  - It was the country's oldest submarine when it was decommissioned on June 25, 2010
  - Present INS Vela, the fourth 'Scorpene' class submarine, was launched in May 2019.
- About:** INS Vela is the fourth 'Scorpene' class submarine under Project 75 for the Indian Navy. INS Vela is an attack submarine based on the Scorpene class.
  - It is a diesel-electric submarine and was named 'Vela' after erstwhile 'INS Vela'.

### Key Features

- State-of-art technology:** INS Vela is known to have advanced stealth and combat capabilities when it comes to engaging with the enemy. For example-
  - Advanced acoustic silencing techniques,
  - Low radiated noise levels,
  - Hydro-dynamically optimised shape and
  - Ability to launch a crippling attack on the enemy using precision-guided weapons
- Attacks can be carried out using both torpedoes as well as tube-launched anti-ship missiles at the same time, underwater or on surface.

### Project-75: Key Points

- **About:** Under Project 75, six Scorpene class submarines are to be constructed for Indian Navy by the Mazagon Dock Shipbuilders Limited (MDL).
  - Scorpene class submarines are the next-generation diesel submarines.
- **Present status of Six Scorpene class Submarines under Project 75:**
  - **INS Kalvar:** It was launched in October 2015 and was commissioned in December 2017 - five years behind schedule.
  - **INS Khanderi:** It was launched in January 2017 for trials and commissioned in September 2019.
  - **INS Karanj:** It was launched in January 2018 and commissioned on March 10, 2021.
  - **INS Vela:** was launched in May 2019 and inducted recently.
  - **INS Vagir:** It was launched in November 2020 and has commenced harbour trials. It is expected to go for its maiden surface sortie in December 2021.
  - **INS Vagsheer:** It is in the advanced stage of outfitting.
- **Promoting Atmanirbhar Bharat:** These Submarines are to be constructed under technology transfer from and in collaboration with Naval Group of France.

- **About Exercise SITMEX- 21:** Exercise SITMEX is being conducted since 2019 between India, Singapore and Thailand.
  - Exercise SITMEX- 21 is an annual maritime exercise.
- **Objective of Exercise SITMEX- 21:** Exercise SITMEX- 21 is being conducted with an aim to enhance mutual inter-operability and imbibing best practices between Indian Navy (IN), RSN and RTN.

### Associated Significance

- The SITMEX-21 exercise is being conducted as a 'non-contact, at sea only' exercise in view of COVID-19 restrictions and highlights growing synergy, coordination and cooperation in the maritime domain between the three friendly navies.
- The two days of maritime SITMEX-21 drills will witness the three navies engaged in a various tactical exercises including naval manoeuvres and surface warfare drills.
- Maritime Exercise SITMEX- 21 exercise is in line with India's SAGAR (Security and Growth for All in the Region) vision.
- SITMEX-21 will fortify the long-standing bond of friendship and further enhance the cooperation between the participating navies towards augmenting the overall maritime security in the region.

### Maritime Exercise SITMEX- 21

#### Context

- Indian Naval Ship (INS) Karmuk, an indigenously built Missile Corvette is participating in the 3rd edition of India, Singapore and Thailand Trilateral Maritime Exercise SITMEX – 21 in Andaman Sea.
- Republic of Singapore Navy (RSN) is being represented by RSS Tenacious, a Formidable Class Frigate and Royal Thai Navy (RTN) by His Majesty's Thailand Ship (HTMS) Thayanchon, a Khamrosin Class Anti-submarine Patrol Craft.

#### Key Points

- **Background:** The Prime Minister of India, at Shangri-La Dialogue in June 2018 announced the conduct of a trilateral naval exercise between India, Singapore and Thailand.
  - The maiden edition of SITMEX was hosted by IN off Port Blair in September 2019. RSN hosted the second edition of the exercise in November 2020.
  - The 2021 edition of the exercise is being hosted by RTN in Andaman Sea.

### Operation Sankalp

#### Context

- INS Trikand is currently deployed in the Persian Gulf and Gulf of Oman as part of Operation Sankalp.

#### Key Points

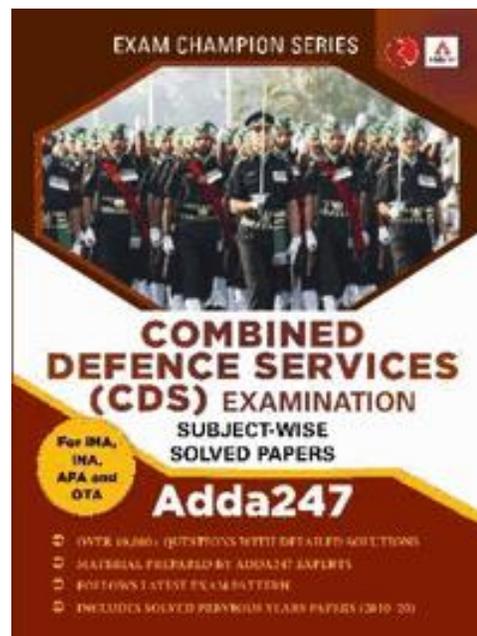
- **About Operation Sankalp:** in 2019, Operation Sankalp was started after there were explosions in oil tanker ships in the Gulf of Oman amid tensions between Iran and the US.
  - Since then, an Indian Navy ship with an integral helicopter embarked has been continuously deployed in the north-west Arabian Sea, Gulf of Oman and Persian
- **Mandate of Operation Sankalp:** Operation Sankalp is the Indian Navy's effort to maintain a frontline ship in the region to ensure safe and secure movement of trade, instill confidence in the maritime community and contribute to regional maritime security.
- **Significance of Operation Sankalp:** The Indian Navy's Operation Sankalp has provided safe passage to an average 16 Indian-flagged merchant vessels in the Gulf region everyday.

- **About INS Trikand:** INS Trikand is a state-of-the-art guided missile stealth frigate and is part of the Western Fleet that operates under the Flag Officer Commanding-in-Chief, Western Naval Command, based at Mumbai.

#### Need for Operation Sankalp

- **Energy Dependence:** India is dependent for about 85% of its demand for oil on imports.
  - Out of which, in 2019-2020, around 62% of India's oil imports valued at approximately \$66 billion came from the Gulf region.
- **Trade Dependence:** In 2019-20, India's exports and imports from the region stood at around \$51 billion and \$108.2 billion, respectively.
  - These constitute 8.1% and 11.4% of India's total exports and imports, respectively,
- **Security Concerns:** Operation Sankalp ensure safety of India's Mercantile Marine in the Persian Gulf and the Gulf of Oman.

- Operation Sankalp will also help India in building a strategic bilateral relationship and enhancing maritime security in the region.



## History, Art & Culture

### Bhasha Sangam Initiative

#### Context

- Recently, Union Education and Skill Development Minister launched the Bhasha Sangam Initiative for schools, Bhasha Sangam Mobile App and Ek Bharat Shreshtha Bharat Quiz App
  - Bhasha Sangam Initiative was launched to commemorate Rashtriya Ekta Diwas which is celebrated to mark the birth anniversary of Shri Sardar Vallabhbhai Patel.

#### Bhasha Sangam initiative

- About:** Bhasha Sangam is an initiative of the Ministry of Education under Ek Bharat Shreshtha Bharat, to teach basic sentences of everyday usage in 22 Indian languages.
- Aim:** To ensure that people should acquire basic conversational skills in an Indian language other than their mother tongue.
- Recent developments:** Government launched three sub-initiatives under **Bhasha Sangam scheme. They are-**
  - Bhasha Sangam initiative for Schools
  - Bhasha Sangam Mobile App
  - Ek Bharat Shreshtha Bharat (EBSB) Mobile Quiz

#### Bhasha Sangam initiative for Schools – Key Points

- About:** Bhasha Sangam initiative for Schools is an initiative for school children that is being made available on DIKSHA, ePathshala and through 22 booklets.
- Development:** Bhasha Sangam initiative for Schools is developed by NCERT.
- Objective:** Through this program of Bhasha Sangam learners in school will be able to get acquainted with all the languages-their scripts, pronunciation.

#### Bhasha Sangam Mobile App - Key Points

- About:** Bhasha Sangam Mobile App is an initiative of department of higher education and has been developed by a start-up called Multibhashi in collaboration with myGov.
- Description of App:** The Bhasha Sangam Mobile App initially has 100 sentences of every day usage in 22 Indian languages.
  - These sentences are available in both Roman script and in the script of the given language, and also in audio format. More sentences will be added to the list.

### Ek Bharat Shreshtha Bharat (EBSB) Mobile Quiz - Key Points

- About:** The quiz consists of over 10,000 questions on states of India and has been developed by Nazara Technologies through the Innovation Cell of this Ministry.
- EBSB Quiz game is targeted toward children and youngsters of Bharat for helping them learn more about our different regions, states, culture, national Heroes, monuments, traditions, tourist locations, languages, geography, history, topography.

### Civil Disobedience Campaign in Sudan

#### Context

- Recently, Civil disobedience campaign was launched by protesters in Sudan against military rule in the Sudan.
  - Earlier protesters called for a two-days of civil disobedience against last month's military takeover.

#### Background

- Earlier, local resistance committees and the Sudanese Professionals Association (SPA) led demonstrations in the uprising that toppled then-president Omar al-Bashir in April 2019.
- Sudan's Transitional Military Council (TMC) seized power in April after removing al-Bashir on the back of months-long protests against his three-decade rule.
- Since then, protest against military rule and demand for democracy in Sudan is continuing one or another form.

#### Key Points

- Recently, Sudanese pro-democracy groups launched two days of civil disobedience and strikes to protest last month's military coup.
- Participation appeared to be limited because of continuing interruptions to internet and phone connections.
- Security forces used tear gas to break up their sit-in at the education ministry building for Khartoum State staged to oppose any handover to military appointees.
  - Dozens of teachers carried banners reading "no, no to military rule" and demanded a transition to "full civilian rule" at a rally outside the Education Ministry in the capital Khartoum.

### Civil Disobedience

- **Definition:** Civil disobedience is the active, professed refusal of a citizen to obey certain laws, demands, orders or commands of a government, corporation or other authority, without resorting to violence or active measures of opposition.
  - its usual purpose is to force concessions from the government or occupying power.
- **Civil Disobedience Movement in India:** CDM in India was launched by Mahatma Gandhi against British Colonial Government in 1930. Gandhi jee broke the salt law by making salt at Dandi, Gujarat.
  - Since then, Citizens of many countries used the method of CDM against their oppressive authoritarian regimes and to bring democracy like institutions in their country.

### Janjatiya Gaurav Divas- Birth Anniversary of Birsa Munda

#### Context

- Recently, the Union Cabinet has approved declaration of 15th November as Janjatiya Gaurav Divas dedicated to the memory of brave tribal freedom fighters.
  - The date is the birth anniversary of Sri Birsa Munda who is revered as Bhagwan by tribal communities across the country.
  - Janjatiya Gaurav Divas will help coming generations know about their sacrifices about the country.
- In 2016, the Government of India has sanctioned 10 tribal freedom fighter museums across the country to promote awareness about tribal sacrifice.

#### Celebrating Tribal Contribution in Freedom Struggle

- India's freedom struggle was strengthened by several movements by tribal communities such as Santhals, Tamars, Kols, Bhils, Khasis and Mizos to name a few.
- The revolutionary movements and struggles organized by the tribal communities were marked by their immense courage and supreme sacrifice.
- Tribal movements in different regions of the country against the British colonial rule got linked with the national freedom struggle and inspired Indians all over the country.

### Janjatiya Gaurav Divas – Key Significance

- The declaration acknowledges the glorious history and cultural heritage of tribal communities.
- The day will be celebrated every year and would recognize the efforts of the tribals for preservation of cultural heritage and promotion of Indian values of valour, hospitality and national pride.
- Tribal Freedom Fighter Museum at Ranchi where Birsa Munda breathed his last will be inaugurated.

#### Role of Sri Birsa Munda

- **About Sri Birsa Munda:** He was borne on 15th November 1875 in a Munda tribe in the Chotanagpur Plateau area.
- **Against British Rule:** Birsa Munda fought bravely for the country against the exploitative system of the British colonial system and spearheaded movement against British oppression giving a call for 'Ulgulan' (Revolution).
- **Birsait Sect:** Birsa started the faith of 'Birsait' after knowing the efforts of the missionaries to convert tribals to Christianity.
  - he urged the Mundas to give up drinking liquor, clean their village, and stop believing in witchcraft and sorcery.
- **Birsa Munda Led Munda Rebellion:** Birsa Munda initiated the Munda Rebellion in the south of Ranchi in 1899-1900.
  - It was also known by the name of the 'Ulgulan' or the 'Great Tumult'.
  - **Objective:** To establish Munda Raj by driving out the British.
  - The Munda rebellion identified following reasons for the misery the Mundas-
    - Hindu landlords and moneylenders snatching the land of Munda tribes.
    - Conversion activities taken by Missionaries in Tribal Areas.
    - Exploitative land taxation system and policies of the British government.

### Raja Ram Mohan Roy- Indian Social Reformer

#### Raja Ram Mohan Roy

- Raja Ram Mohan Roy, a great scholar and an independent thinker, was a prominent Indian social reformer of 19<sup>th</sup> century modern India.
- Raja Ram Mohan Roy is also known as the 'Father of Indian Renaissance' for his contribution to socio-religious reforms of the contemporary Indian society.

### Key Points

- **Birth:** Raja Ram Mohan Roy was born in Radhanagar, Hooghly District of Bengal Presidency in May 1772.
  - Raja Ram Mohan Roy was born into an orthodox Bengali Hindu family.
- **Education:**
  - Raja Ram Mohan Roy attained higher education in Patna, Bihar where he studied Persian and Arabic.
  - **Learning various Language:** Raja Ram Mohan Roy had learnt Bangla, Persian, Arabic and Sanskrit along with Hindi and English.
- **Learning about Religions:** Raja Ram Mohan Roy moved to Varanasi and studied the Vedas, the Upanishads and Hindu philosophy deeply.
- Raja Ram Mohan Roy also acquired knowledge about Christianity and Islam as well.
- **Association with British Government: Raja Ram Mohan Roy worked** in the Revenue Department of the East India Company from 1809 to 1814.
  - **Raja Ram Mohan Roy** also worked as a personal Diwan to Woodforde and Digby.
- **Association with Educational Institutions:** Raja Ram Mohan Roy helped in establishing many educational institutions to educate Indians in Western scientific education in English. For example-
  - **Hindu College, (1817):** Raja Ram Mohan Roy helped David Hare's efforts to establish the Hindu College in 1817.
  - Raja Ram Mohan Roy's English school taught mechanics and Voltaire's philosophy. In 1822, Raja Ram Mohan Roy founded a school based on English education.
  - **Vedanta college (1825):** Vedanta Collage established by Raja Ram Mohan Roy, offered courses in both Indian learning and Western social and physical sciences.

### Literary Work

- Raja Ram Mohan Roy wrote a rational critique of Hindu idol worship at the age of sixteen.
- Raja Ram Mohan Roy translated the Vedas and five of the Upanishads into Bengali.
- **Important writings:** Raja Ram Mohan Roy wrote Tuhfat-ul-Muwahhiddin (a gift to deists) (1803), Gift to monotheists (1809), Kathopanishad (1816), Mundaka Upanishad (1917), Precepts of Jesus (1820), etc.

### Important Journals-

- **Samvad Kaumudi (1821) in Bengali:** It regularly denounced sati as barbaric act and against the tenets of Hinduism.
- **The Brahmanical Magazine (1821)**
- **Mirat-ul-Akhbar (a Persian language journal) 1822**

### Formation of Socio-religious organizations

- Raja Ram Mohan Roy is credited with the foundation socio-religious organizations that worked played key role in furthering socio-religious reforms of the contemporary Indian society of the time.
- Important organizations formed by Raja Ram Mohan Roy are- Atmiya Sabha (1814), Calcutta Unitarian Association (1821), Brahma Sabha (1828) (later in 1830, it became Brahma Samaj).
- Through these organizations, Raja Ram Mohan Roy ensured support of like minded and implemented his reform movement on the ground.

### Interesting Facts

- Rabindra Nath Tagore referred to Ram Mohan as 'a luminous star in the firmament of Indian history'.
- Raja Ram Mohan Roy was given the title 'Raja' by the Mughal Emperor, Akbar II whose grievances he presented before the British king.
  - Raja Ram Mohan Roy visited England as an ambassador of the Mughal king Akbar Shah II where he died in September 1833 in Bristol, England.

### Rashtriya Ekta Divas: Celebrating Birth Anniversary of Sardar Vallabh Bhai Patel

### Context

- The Country is celebrated Rashtriya Ekta Divas (National Unity Day) on 31<sup>st</sup> October to commemorate the birth anniversary of **Sardar Vallabhbhai Patel**.
- On this Occasion, the Prime Minister of India paid rich tribute to Sardar Patel who dedicate his life for the ideal of '**Ek Bharat Shreshth Bharat**'.
- The Prime Minister said that 'Ek Bharat' is a Bharat that gives equal opportunities to women, Dalits, deprived, tribal and forest dwellers.
  - 'Ek Bharat' is a Bharat where housing, electricity and water is within the reach of everyone without discrimination.

### Rashtriya Ekta Divas - Key Points

- **About:** Rashtriya Ekta Divas is being celebrated every year since 2014 with the aim to pay tribute to the 'Iron man of India' by remembering his extraordinary works for the country.
- **Statue of Unity:** Government constructed the Statue of Unity in Gujarat in 2018 to honour Sardar Vallabh Bhai Patel and his contribution towards ensuring National Unity.
  - **Statue of Unity is the tallest statue in the world.**
- **Significance:** Occasion of Rashtriya Ekta Divas provides an opportunity to re-affirm the inherent strength and resilience of the nation to withstand the threats to its unity, integrity and security.

### Sardar Vallabhbhai Patel - Key Points

- **Birth:** Sardar Vallabhbhai Patel was born on 31st October 1875 in Nadiad, Gujarat.
- **Key Contribution in freedom struggle:**
  - Elected as secretary of Gujarat sabha (congress wing in Gujarat) in 18917.
  - Supported and participated in Gandhi jee led Non-Cooperation Movement (NCM).
  - Led Bardoli Satyagraha in 1928 and successfully secured farmers interests. Women of Bardoli gave him the title of 'Sardar' which means 'a Chief or a Leader'.
  - Presided the Karachi Session of Indian National Congress in 1931 where the party deliberated its future path.

### Key Contribution after independence

- Sardar Vallabhbhai Patel was the first Home Minister and Deputy Prime Minister of India.
- **'Operation Polo':** was launched by Sardar patel to liberate and integrate Hyderabad in India in 1948.
  - This was done after the Nizam of Hyderabad entertained false hopes of either joining Pakistan or remaining independent.
- **Ensured integrity and unity of India:** Sardar Patel is praised for effectively uniting all 562 princely states in pre-independent India to build a united Republic of India.
  - He appealed to the people of India to live together by uniting in order to create Shresth Bharat (Foremost India).
- **Father of Indian Civil Services:** Sardar Patel is also remembered as the 'Patron saint of India's civil servants' as he established the modern all-India services system.



## Practice Questions for Prelims

**Q1.** Which among the following is incorrect about the revised Prompt Corrective Action (PCA) framework for banks to enable supervisory intervention at an “appropriate time-

1. The revised framework excludes return on assets as a parameter that may trigger action under the framework.
2. Now PCA can be invoked against Payments banks and small finance banks (SFBs) which were earlier excluded.

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

**Q2.** Consider the following statements

1. Ethiopia is a land-locked country in the Horn of Africa.
2. The Great rift valley passes approximately middle of Ethiopia
3. Tigray is a region of conflict between Ethiopia and Sudan

Which of the statements given above is/are correct?

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

**Q3.** Consider the following statements regarding Adi Shankaracharya

1. He propounded the philosophy of Advaita Vedanta,
2. Vivekachudamani, is a poetic work of Adi Shankara
3. Brahmasutrabhasyas written by Adi Shankara

Which of the statements given above is/are correct?

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

**Q4.** Consider the following statements regarding Kameng river

1. It is a transboundary river between Arunachal Pradesh and Assam
2. It has its source in an aeolian lake near the Nyegi Kangsang in the eastern Himalayas.
3. It flows through Pakke Tiger Reserve

Which of the statements given above is/are correct?

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

**Q5.** Consider the following statements regarding Indian Flapshell Turtles

1. The Indian flap shell turtle is a freshwater species of turtle
2. It is endangered species under IUCN red list.
3. It is schedule I species in Wildlife Protection Act, 1972

Which of the statements given above is/are correct?

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

**Q6.** Arrange the following mass extinction events in the chronological order they occurred

1. Ordovician mass extinction
2. Triassic mass extinction
3. Permian mass extinction

Select the correct code from below:

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

**Q7.** Consider the following statements regarding the latest - Status of Leopards, Co-predators, and Megaherbivores in India, 2018,

1. India’s official leopard count decreased to 36 percent from 2014-2018
2. The largest number of leopards has been estimated in Madhya Pradesh.
3. This report has been released by the Wildlife Institute of India

Which of the statements given above is/are correct?

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

**Q8.** Consider the following statements regarding leopard

1. It is listed as critically endangered on the IUCN Red List.
2. It is listed in Schedule I of the Indian Wildlife (Protection) Act, 1972. And appendix I of CITES

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

**Q9.** Srivilliputhur Grizzled Squirrel Wildlife Sanctuary recently seen in news is located in-

- (a) Tamilnadu                  (b) Karnataka  
(c) Kerala                        (d) Andhra Pradesh

**Q10.** Which among the following has recently released Adaptation Gap Report 2021?

- (a) World Wide Fund for nature (b) IUCN  
(c) UNEP (d) UNFCCC

**Q11.** Consider the following statements regarding The Vienna Classification (VCL)

1. It is an international classification of the figurative elements of historical Monuments and intangible heritage.
2. It is administered by UNESCO.

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

**Q12.** Consider the following statements regarding UNESCO Creative Cities Network (UCCN).

1. UNESCO has designated a total of 44 cities in India as part of the creative cities network.
2. Hyderabad is a UCCN city in the gastronomy category
3. Recently Srinagar city has been designated the first creative city in the field of Literature and Music

Which of the statements given above is/are correct?

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

**Q13.** Consider the following statements regarding Food Price Index (FPI)

1. It is released by the UN world food programme
2. It measures the monthly change in international prices of a basket of food commodities.

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

**Q14.** Consider the following statements

1. The President of India can summon a session of the Parliament at such a place as he/she thinks fit.
2. The Constitution of India provides for three sessions of the Parliament in a year, but it is not mandatory to conduct all three sessions.
3. There is no minimum number of days that the Parliament is required to meet in a year.

Which of the statements given above is/are correct?

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

**Q15.** Consider the following statements regarding Global Drug Policy Index,

1. This report is published by United Nations Office on Drugs and Crime
2. India has been ranked in the five lowest-ranking countries on humane and health-driven drug policies.

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

**Q16.** Consider the following statements

1. India ranks 2nd in terms of pharmaceutical production by volume
2. India is the largest provider of generic medicines globally
3. Presently, over 80% of the antiretroviral drugs used globally to combat AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical firms.

Which of the statements given above is/are correct?

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

**Q17.** Consider the following statements

1. India is a net exporter of technical textiles currently.
2. The quality council of India has been designated as the standards-setting authority for technical textiles products under the National Technical Textiles Mission (NTTM).

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

**Q18.** Consider the following statements

1. Padma Awards were first time instituted in the year 1954
2. The number of Bharat Ratna Awards is restricted to a maximum of five in a particular year.
3. All nominations received for Padma Awards as well as Bharat Ratna awards are placed before the Padma Awards Committee, which is constituted by the Minister of culture.

Which of the statements given above is/are correct?

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

**Q19.** Which among the following has recently released the LEADS (Logistics Ease Across Different States) 2021 report.?

- (a) Ministry of Statistics and Programme Implementation
- (b) Ministry of Road Transport and Highways
- (c) NITI Ayog
- (d) Ministry of Commerce & Industry

**Q20.** Chicago convention 1944 recently seen in the news, is related to-

- (a) Protection of Literary and Artistic Works
- (b) Sulphur emission standards for ships and marine vessels
- (c) Freedom of air space
- (d) Settlement Agreements Resulting from Mediation

**Q21.** The Thalweg principle sometimes seen in news is related to-

- (a) International law to define borders between the two countries through river bodies
- (b) Sulphur emission standards for ships and marine vessels
- (c) Freedom of air space
- (d) Settlement Agreements Resulting from Mediation

**Q22.** Consider the following statements regarding Global Resilience Index Initiative (GRII)

1. The core aim of this initiative is to prepare a common standard to be followed by countries for the resilience of Buildings and City infrastructure to the climate risks
2. This initiative is launched by the United Nations Office for Disaster Risk Reduction (UNDRR)

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

**Q23.** Consider the following statements regarding integrated theatre commands

1. The integrated theatre command is proposed as a unified command under which all the resources of the Army, the Navy, and the Air Force are pooled, depending on the threat perception.
2. The Strategic Forces Command looks after the country's nuclear stockpile and weaponry

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

**Q24.** Consider the following statements regarding the Yamuna

1. It is the largest tributary river of the Ganga and the longest tributary in India.
2. Chambal is the longest tributary of Yamuna.
3. Accumulation of phosphites leads to the toxic Froth in the Yamuna frequently

Which of the statements given above is/are correct?

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

**Q25.** Consider the following statements regarding Yuktdhara" Portal

1. It has been launched by the Ministry of Panchayati Taj.
2. It is a Geospatial Planning Portal for facilitating Gram Panchayat level planning of MGNREGA.

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

**Q26.** Recently in news, the Chumbi Valley is surrounded by which among the following?

- (a) Nepal, Bhutan, and Tibet
- (b) Bhutan, Sikkim, and Tibet
- (c) Bhutan, Arunachal Pradesh, and Tibet
- (d) Bhutan, Tibbet, and Ladakh

**Q27.** Consider the following statements

1. Airports Economic Regulatory Authority is a Statutory body.
2. Airports Economic Regulatory Authority regulates tariffs and fees charged to airports and passengers
3. Airports Economic Regulatory Authority has recently declared Kushinahr airport as a major airport

Which of the statements given above is/are correct?

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

**Q28.** Consider the following places in the news with respect to the country they belong

1. Khorasan Province: Syria
2. Diego Garcia: France
3. Mayotte island-UK

Which of the pair/s given above is/are correct?

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) None

**Q29.** Diamer-Bhasha Dam was recently seen in the news. It is located on-

- (a) Indus river (b) Chenab river  
(c) Jhelum river (d) Ganga river

**Q30.** Arrange the following from west to east-

1. Kajhar Creek
2. Kori Creek
3. Sir Creek

Select the correct code from below:

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

**Q31.** Consider the following statements regarding Maximum retail price

1. MRP applies only to commodities, not for services
2. The maximum retail price (MRP) that is printed on all packaged commodities that consumers purchase was introduced in 1990.
3. MRP is decided by the Department of Consumer affairs.
4. The guidelines for printing MRP on packages are mentioned under the Consumer protection act 1986.

Which of the statements given above is/are correct?

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

**Q32.** Consider the following statements regarding the Members of Parliament Local Area Development Scheme (MPLADS)

1. Funds are lapsable in nature hence MPs must spend their quota of the allocated fund in that particular year only.
2. MPLAD Scheme is a Centrally Sponsored Scheme being implemented by the was under the control of the Ministry of Rural Development.
3. MPs can allocate at least 15% and 7.5% of their funds to create assets in areas inhabited by Scheduled Castes (SCs) and Scheduled Tribes (STs) respectively.

Which of the statements given above is/are correct?

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

**Q33.** Which among the following is a part of the Char Dham highway project?

1. Kedarnath
2. Puri
3. Rameswaram
4. Yamunotri

Select the correct code from below:

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

**Q34.** Consider the following statements regarding Digital Payment Gateway

1. It has been recently launched by RBI.
2. The core aim of it to launch Digital Payment Gateway is to make the banking services accessible to the remotest unbanked areas of the country.

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

**Q35.** Recently Department of Telecom (DoT) has set December 2022 as the deadline for Internet service providers, ISPs to make changes to their network upgrade to the latest Internet protocol IPv6 instead of IPV4. Why?

1. IPv6 can connect a large number of IP addresses Than IPV4.
2. In the case of IPv6, end-to-end connection integrity is achievable.
3. It provides encryption and authentication

Which of the statements given above is/are correct?

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

**Q36.** Consider the following statements regarding the Vamsadhara River

1. It originates in eastern ghats.
2. It is an ephemeral river.
3. It flows through Telangana and Odisha

Which of the statements given above is/are incorrect?

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

**Q37.** Which among the following is the woman warrior who belonged to the Karnataka state and fought bravely against the Hyderali the ruler of the Mysore Kingdom?

- (a) Abbakka Rani (b) Onake Obavva  
(c) Keladi Chennamma (d) Kittur Chennamma





Adi Shankara is generally identified as the author of 116 works — among them the celebrated commentaries (bhashyas) on 10 Upanishads, the Brahmasutra and the Gita, and poetic works including Vivekachudamani, Maneesha Panchakam, and Saundaryalahiri. He also composed texts like Shankarasmrithi, which seeks to establish the social supremacy of Namboothiri Brahmins.

**S4. Ans.(c)**

**Sol.** It is not a transboundary river.

The Kameng River is a lifeline for many and has its source in a glacial lake (Not Aoleian lake) near the Nyegi Kangsang, one of the highest mountains in Arunachal Pradesh.

The tract of the protected area Pakke Wildlife Sanctuary and Pakke Tiger Reserve falls in the East Kameng district within the land area of Pakke river and Kameng river.

Recently Landslides caused by an earthquake of 3.4 magnitudes close to the border with China led to mass fish death in the Kameng river in Arunachal Pradesh.

Note that:

Aeolian lakes are lakes produced by wind action. When the low-lying land among the dunes in the desert is lower than the groundwater level, the water gathers there and forms the aeolian lake.

**S5. Ans.(c)**

**Sol.** The Indian flap shell turtle is a freshwater species of turtle and is found in many states. The “flap-shelled” name stems from the presence of femoral flaps located on the plastron. These flaps of skin cover the limbs when they retract into the shell.

The Indian flap shell turtle was placed in Appendix I of CITES in 1975 at the request of Bangladesh. The Indian flap shell turtle was removed from the endangered species list in 1983.

One of the Class 1 species of the water animal, is a non-bailable offense under the Wildlife Protection Act, 1972

**S6. Ans.(b)**

**Sol.** Before the Cretaceous mass extinction known for wiping out non-avian dinosaurs, the Earth had witnessed four other great mass extinctions. A paper published recently in the journal, Nature Geoscience, has come up with a new reason behind the first mass extinction, also known as the Late Ordovician mass extinction. The article notes that the cooling climate likely changed the ocean circulation pattern. This caused a disruption in the flow of oxygen-rich water from the shallow seas to deeper oceans, leading to a mass extinction of marine creatures. Some notable mass extinction are

1. The Devonian mass extinction (about 375 million years ago) wiped out about 75% of the world's species.
2. The Permian mass extinction (about 250 million years ago) also known as the Great Dying caused the extinction of over 95% of all species.
3. The Triassic mass extinction (200 million years ago) eliminated about 80% of Earth's species, including some dinosaurs.

Some researchers have pointed out that we are currently experiencing a sixth mass extinction as the result of human-induced climate change

**S7. Ans.(b)**

**Sol.** The Union Environment Ministry has recently released a new report titled- Status of Leopards, Co-predators, and Megaherbivores-2018. The report was released on July 29, 2021 — during World Tiger Day.

India's official leopard count has increased 63 percent from 2014-2018. There were 12,852 leopards in the country in 2018 (7,910 in 2014). The largest number of leopards have been estimated in Madhya Pradesh (3,421) followed by Karnataka (1,783) and Maharashtra (1,690).

**S8. Ans.(b)**

**Sol.** About Leopard:

Scientific Name- Panthera pardus.

Listed in Schedule I of the Indian Wildlife (Protection) Act, 1972.

Included in Appendix I of CITES.

Listed as vulnerable on the IUCN Red List.

**S9. Ans.(a)**

**Sol.** The Srivilliputhur Grizzled Squirrel Wildlife Sanctuary in Tamil Nadu has the highest leopard density (per 100 sq km), not just in the State but in the entire Western Ghats landscape. The population of leopards in the State is in the range of 828-908. The data is based on the final report on the 'Status of Leopards, Co-predators, and Megaherbivores in India - 2018', released by the Environment and Forests Ministry on Global Tiger Day 2021.

**S10. Ans.(c)**

**Sol.** UN Environment Programme (UNEP) has recently released a new report titled, “Adaptation Gap Report 2021: The Gathering Storm” where it has called for urgent efforts to increase the financing and implementation of actions designed to adapt to the growing impacts of climate change.

The report finds that the costs of adaptation are likely in the higher end of an estimated USD 140-300 billion per year by 2030 and USD 280-500 billion per year by 2050 for developing countries only

Source: <https://www.adda247.com/upsc-exam/adaptation-gap-report-2021/>

**S11. Ans.(d)**

**Sol.** The Vienna Classification (VCL) is an international classification system established in 1973 by the Vienna Agreement Establishing an International Classification of the Figurative Elements of Marks, and administered by the World Intellectual Property Organization (WIPO). Recently the Darjeeling Himalayan Railway (DHR) a designated UNESCO World Heritage Site, India has finally been registered the logos of the iconic ‘Toy Train’ internationally as its intellectual property.

**S12. Ans.(b)**

**Sol.** The UNESCO Creative Cities Network is a project launched by UNESCO in 2004 to “promote cooperation among cities which recognized creativity as a strategic factor in their urban development”

UNESCO designates the creative cities in seven fields — Craft, Folk Art, Media Arts, Film Design, Gastronomy, Literature, and Music. The Srinagar city has been designated the creative city in the field of Crafts and Folk Arts — the only second city in India in this category after Jaipur. While Mumbai has been honored in the film category, Chennai and Varanasi have been made part of UCCN for their music. Hyderabad is a UCCN city in the gastronomy category.

With the latest addition of Srinagar city, UNESCO has now designated a total of 49 cities as part of the creative cities network.

**S13. Ans.(b)**

**Sol.** Recently the UN Food and Agriculture Organisation has released data showing its world Food Price Index (FPI) averaging 133.2 points in October, the highest since July 2011.

The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities. It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups namely:

1. Cereal Price Index
2. Vegetable Oil Price Index
3. Dairy Price Index
4. Meat Price Index
5. Sugar Price Index

**S14. Ans.(a)**

**Sol.** Article 85(1) of the Constitution empowers the President to summon each House of Parliament to meet at such time and place as he thinks fit, but six months shall not intervene between its last sitting in one session and the date appointed for its first sitting in the next Session.

Please note, the Constitution does not specify when or for how many days Parliament should meet. The maximum gap between two sessions of Parliament cannot be more than six months. That means the Parliament should meet at least twice a year.

Besides, some specific conditions (like during emergency) certain time limits for summoning the Houses of Parliament. The President exercises the power to summon the Houses on the recommendation of the Prime Minister or the Cabinet. Normally, three Sessions, namely the Budget, Monsoon, and Winter Sessions, are held in a calendar year. The question of having more or less fixed dates for the commencement of the three Sessions was considered by the General Purpose Committee of the Lok Sabha at their sitting held on 22 April 1955, and they recommended the following time-table for the three Sessions:

Budget Session 1 February 7 May

Autumn Session 15 July 15 September

Winter Session 5 November or the fourth day after Diwali, whichever is later 22 December

The Cabinet agreed with these recommendations. The above timetable has not, however, been observed in practice.

**S15. Ans.(d)**

**Sol.** The inaugural Global Drug Policy Index was recently released by the Harm Reduction Consortium, which ranked the Norway, New Zealand, Portugal, the UK, and Australia as the five leading countries on humane and health-driven drug policies.

The five lowest-ranking countries are Brazil, Uganda, Indonesia, Kenya, and Mexico. India’s rank is 18 out of 30 countries.



**S16. Ans.(d)**

**Sol.** Globally, India ranks 3rd in terms of pharmaceutical production by volume and 14th by value.

Presently, over 80% of the antiretroviral drugs used globally to combat AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical firms. India is the 12th largest exporter of medical goods in the world. The country's pharmaceutical sector contributes 6.6% to the total merchandise exports.

Generic drugs account for 20% of the global export in terms of volume, making the country the largest provider of generic medicines globally.

**S17. Ans.(a)**

**Sol.** With a view to boost the technical textiles sector in the country, the Government has approved the proposal for the creation of the National Technical Textiles Mission (NTTM) for a period of 4 years (2020-21 to 2023-24) with an outlay of Rs.1480 crores. Under this Bureau of Indian Standards (BIS) the designated authority to formulate standards for technical textiles has developed standards for 377 technical textiles products.

In January 2019, the government issued 207 HSN Codes for technical textiles and in less than two years, India had become a net exporter of technical textiles.

The world market for technical textiles is \$250 billion and India's share is \$19 billion.

The biggest players are the U.S., West European countries, China and Japan.

**S18. Ans.(c)**

**Sol.** The Government of India instituted two civilian awards-Bharat Ratna & Padma Vibhushan in 1954. The latter had three classes namely Pahela Varg, Dusra Varg, and Tisra Varg. These were subsequently renamed as Padma Vibhushan, Padma Bhushan and Padma Shri vide Presidential Notification issued on January 8, 1955.

Bharat Ratna is the highest civilian award of the country. The recommendations for Bharat Ratna are made by the Prime Minister to the President of India. No formal recommendations for Bharat Ratna are necessary. The number of Bharat Ratna Awards is restricted to a maximum of three in a particular year. The government has conferred Bharat Ratna Award on 45 persons till date.

Padma Awards, which were instituted in the year 1954, is announced every year on the occasion of Republic Day except for brief interruption(s) during the years 1978 and 1979 and 1993 to 1997.

All nominations received for Padma Awards are placed before the Padma Awards Committee, which is constituted by the Prime Minister every year. The Padma Awards Committee is headed by the Cabinet Secretary and includes Home Secretary, Secretary to the President, and four to six eminent persons as members. The recommendations of the committee are submitted to the Prime Minister and the President of India for approval.

**S19. Ans.(d)**

**Sol.** The Minister of Commerce and Industry has recently released the Logistics Ease Across Different States Report 2021.

Gujarat ranks 1st for the third consecutive year in the logistics performance index. Gujarat was followed by Haryana, Punjab, Tamil Nadu, and Maharashtra.

Jammu and Kashmir topped the chart among the northeastern states and Himalayan Union territories while Delhi topped among the rest of the Union territories category.

**S20. Ans.(c)**

**Sol.** Recently, India has launched a direct flight between Srinagar and Sharjah (UAE) operated by budget airline GoFirst (formerly known as GoAir). The flight was to operate through Pakistani airspace. However, the flight was denied permission to enter Pakistan and the flight had to take a longer route to reach the destination. In return, India has accused Pakistan of violating the first freedom of the Chicago convention 1944

Freedom of Air:

The freedom of air means a country grants airlines of a particular country the privilege to use and/or land in another country's airspace. Freedom of air rule emanates from the Chicago Convention in 1944. The signatories to the convention decided to set rules that would act as fundamental building blocks to international commercial aviation. The convention provides Nine freedoms of air, but only the first five freedoms have been officially recognized by the International Civil Aviation Organisation (ICAO).

**S21. Ans.(a)**

**Sol.** The thalweg principle is the legal principle that if the boundary between two political entities is stated to be a waterway, without further description (e.g., a median line, right bank, eastern shore, low tide line, etc.), the boundary follows the thalweg of that watercourse. In particular, the boundary follows the center of the principal navigable channel of the waterway (which is presumably the deepest part). Recently, an Indian fisherman was killed and another injured in firing by the Pakistan Marine Security Agency (PMSA) near international waters in the Arabian Sea off the coast of Gujarat. This is the first such killing by the PMSA in the last six years though conflicts over fishing rights are not infrequent along the International Maritime Boundary Line between the two countries.

According to international law and the Thalweg principle, a boundary can only be fixed in the middle of the navigable channel, which meant that it has to be divided between Sindh and Kutch, and thereby India and Pakistan. India has used this para to consistently argue that the boundary needs to be fixed in the middle of the creek. Pakistan, however, claims that Sir Creek isn't navigable but India claims that since it's navigable in high tide, the boundary should be drawn from the mid-channel.

<https://www.adda247.com/upsc-exam/indian-fisherman-shot-dead-by-pakistan/>

**S22. Ans.(d)**

**Sol.** Ten global organizations with partial funding and in-kind contributions from the insurance sector and partner institutions have launched a Global Resilience Index Initiative (GRII) at COP26.

GRII will provide a globally consistent model for the assessment of resilience across all sectors and geographies. It is not limited to Building and city infrastructure only.

GRII will be a curated, open-source resource offering high-level metrics across the built environment, infrastructure, agriculture, and societal exposures with many potential applications in aggregated risk management worldwide.

Among the organizations that have come together to launch GRII are the United Nations Office for Disaster Risk Reduction (UNDRR), Insurance Development Forum (IDF), University of Oxford, Coalition for Disaster Resilient Infrastructure (CDRI), Coalition for Climate Resilient Investment (CCRI) and UK Centre for Greening Finance and Investment (CGFI) and British risk and insurance advisory company Willis Towers Watson.

**S23. Ans.(c)**

**Sol.** What are integrated theatre commands?

In the simplest words, it is a unified command under which all the resources of the Army, the Navy, and the Air Force are pooled, depending on the threat perception. The commands could be geographical — like looking at a border with a particular country — or thematic, as a command for all maritime threats.

India currently has 19 military commands with 17 of them service-oriented. While both the Army and the Air Force have seven commands each, the Navy has three. India also has a Tri-Service Command — Andaman and Nicobar Command — besides the Strategic Forces Command (SFC), which looks after the country's nuclear stockpile.

**S24. Ans.(d)**

**Sol.** The is the second-largest tributary river of the Ganga and the longest tributary in India. Originating from the Yamunotri from the Banderpooch peaks of the Lower Himalaya in Uttarakhand.

The Tons is the longest tributary of the Yamuna River.

Recently Yamuna River has reached a toxic level of frothing due to the discharge of industrial effluents.

The froth is a sign of a polluted river. Experts say the release of untreated or poorly treated effluents, including sewage from those parts of the city that are not connected to the sewerage network and industrial waste, could lead to frothing of Yamuna. Specifically, phosphates in the river form the froth.

**S25. Ans.(b)**

**Sol.** Yuktdhara: It is a Geospatial Planning Portal for facilitating Gram Panchayat level planning of MGNREGA. It is a new portal under 'Bhuvan'.

It is developed by the efforts of ISRO and the Ministry of Rural development

The platform will serve as a repository of assets (Geotags) created under various national rural development programs i.e. MGNREGA, Integrated Watershed Management Programme, Per Drop More Crop, and Rashtriya Krishi Vikas Yojana, etc.

**S26. Ans.(c)**

**Sol.** Chumbi Valley is a valley in the eastern Great Himalaya Range of the southern Tibet Autonomous Region, China. It is situated on a small south-pointing protuberance of territory between Bhutan (east) and Sikkim state, India (west).

**S27. Ans.(a)**

**Sol.** Airports Economic Regulatory Authority (AERA) is a regulatory agency under the Government of India to regulate tariff and other expenditures & fees for major airports. It is a statutory body constituted under the Airports Economic Regulatory Authority of India Act (AERA), 2008.

The Union Ministry of Civil Aviation declared the Srinagar airport as a “major airport” under the Airports Economic Regulatory Authority Act, 2008 (AERA).

“In exercise of the powers conferred by sub-section (i) of Section 2 of the Airports Economic Authority Act, 2008 (NO. 27 OF 2008), the central government hereby declares the airport of Srinagar as major airport,” reads the notification.

**S28. Ans.(d)**

**Sol.**

1. Khorasan Province: Afghanistan
  2. Diego Garcia: Mauritius
  3. Mayotte island-France
- France has its overseas territories of Reunion Island and Mayotte island in the Indian Pacific Ocean.
  - Khorasan province: IS-K – Islamic State Khorasan Province – is the regional affiliate of the Islamic State group. It is the most extreme and violent of all the jihadist militant groups in Afghanistan.
  - Diego Garcia: It is an island of British Indian Ocean Territory, an overseas territory of the United Kingdom. It is the largest of 60 small islands comprising the Chagos Archipelago. In 1965, Britain separated the Chagos Islands from Mauritius and set up a joint military base with the United States on Diego Garcia. Britain insists the islands belong to London and has renewed a lease agreement with the United States to use Diego Garcia until 2036.

The Chagos islands are an African archipelago with Diego Garcia as its largest island. In 2015, Mauritius took the U.K. to arbitration over its establishment of a marine protected area around the Chagos Archipelago. In February 2019, the ICJ issued an advisory opinion in favor of Mauritius, finding “the process of decolonization of Mauritius was not lawfully completed” when the country became independent in 1968. The ICJ determined that the U.K. “is under an obligation” to end its administration of the Chagos “as rapidly as possible.” In May 2019, the U.N. General Assembly resolution backed the ICJ finding and was striking that it “demands” the U.K. withdrawal within a deadline of six months, meaning November 2019. Based on these actions, the U.N. world map has been revised and no longer features the British Indian Ocean Territory, but shows the Chagos Archipelago under Mauritian sovereignty.

**S29. Ans.(a)**

**Sol.** Diemer-Bhasha Dam is a concreted-filled gravity dam, in the preliminary stages of construction, on the River Indus between Kohistan district in Khyber Pakhtunkhwa and Diemer district in Gilgit Baltistan, Pakistan administered Kashmir under the CPEC project. For the security of Chinese engineers and others are working in the Bhasha Dam, and the Pakistan Army has deployed the 340 Infantry Brigade of the 34 Special Security Division as the local Pakistanis unhappy with the Chinese soldiers and civilians working on the project are protesting it.

**S30. Ans.(c)**

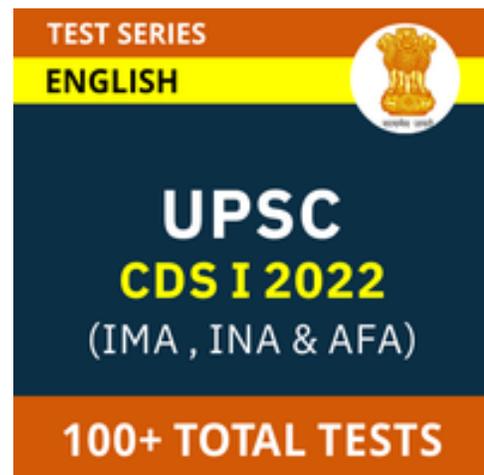
**S31. Ans.(b)**

**Sol.** The maximum retail price (MRP) that is printed on all packaged commodities that consumers purchase was introduced in 1990 by the Ministry of Civil Supplies, Department of Legal Metrology by an amendment to the Standards of Weights and Measures Act (Packaged Commodities’ Rules) (1976).

MRP is decided by the manufacturers. It was meant to prevent tax evasion and protect consumers from profiteering by retailers. Before the amendment, manufacturers could print either the maximum retail price (inclusive of all taxes) or the retail price (local taxes extra). When producers opted for the latter method, it was found that retailers often charged more than the locally applicable taxes. Thus, the amendment was made to introduce the compulsory printing of MRP on all packaged commodities.

MRP applies only to commodities and not services. The onus of checking whether products are being sold at a rate higher than the printed MRP lies with the state legal metrology department officials.

Under the Legal Metrology (Packaged Commodities), Rules 2011, all packed goods should carry certain essential information on the contents of the package, such as its weight or volume, the name, and address of the manufacturer, the date of manufacture, and in case of food packages, the best before date and, of course, the maximum retail price (MRP)



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100+ TOTAL TESTS

**S32. Ans.(c)**

**Sol.** MPLAD scheme is a Central Sector Scheme and is being implemented by the Ministry of Statistics & Program Implementation (MoSPI) since 1994. Under the MPLAD scheme, every MP (including nominated) is entitled to spend Rs 5 crore annually.

Recently the Union Cabinet has restored the Members of Parliament Local Area Development Scheme (MPLADS) that was suspended in April 2020. However, the MPs will get ₹2 crores instead of the annually approved ₹5 crores. MoSPI disburses funds to district authorities, not directly to MPs. Funds are non-lapsable in nature i.e. in case of non-release of the fund in a particular year it is carried forward to the next year. MPs need to recommend work worth at least 15% and 7.5% of their funds to create assets in areas inhabited by Scheduled Castes (SCs) and Scheduled Tribes (STs) respectively. Source: <https://www.adda247.com/upsc-exam/mplad-scheme/>

**S33. Ans.(b)**

**Sol.** Char Dham National Highway, is an under-construction two-lane (in each direction) express National Highway with a minimum width of 10 meters in Uttarakhand. It is also sometimes known as “Chota Char Dham”.

The strategic 900-km Char Dham highway project aims to provide all-weather connectivity to four towns -- Yamunotri, Gangotri, Kedarnath, and Badrinath -- in Uttarakhand.

Originally, the appellation Char Dham referred to a pilgrimage circuit encompassing four important temples—Puri, Rameswaram, Dwarka, and Badrinath—located roughly at the four cardinal points of the subcontinent. An archetypal All-India pilgrimage circuit, the formation of the original Char Dham is credited to the great 8th-century reformer and philosopher Shankaracharya (Adi Sankara).

**S34. Ans.(d)**

**Sol.** Recently, the national Internet Exchange of India (NIXI), a not-for-profit Company under the aegis of the Ministry of Electronics & IT has launched Digital Payment Gateway to make the internet accessible to everyone. To facilitate its customers and partners, NIXI has gone digital by enabling digital payments across its three business units by integrating payment gateways on all its customer-facing websites for ease of use.

NIXI provides Internet technology to Indian citizens through Internet exchanges through which Internet data is traded among Internet service providers (ISPs) and between ISPs and CDNs. Selling, managing, and operating all.IN country code domains. Selling, managing, and operating Internet protocol (IPv4/IPv6) as authorized by APNIC, Australia

<https://www.adda247.com/upsc-exam/digital-payment-gateway/>

**S35. Ans.(d)**

**Sol.** Currently, the population of the world is 7.6 billion. Every user is having more than one device connected with the internet, and private companies also rely on the internet. IPv4 produces 4 billion addresses, which are not enough for each device connected to the internet on a planet.

The main difference between IPv4 and IPv6 is the address size of IP addresses. The IPv4 is a 32-bit address, whereas IPv6 is a 128-bit hexadecimal address which means IPv6 provides a large address space to connect more devices. It generates 340 undecillion unique addresses.

Moreover, It provides encryption and authentication to the network.

In the case of IPv6, end-to-end connection integrity is achievable which is not possible with IPV4.

IPv6 is also multicasting, which provides efficient network operations.

**S36. Ans.(a)**

**Sol.** Vamsadhara River is an east-flowing river that originates in the Kalahandi district of Odisha in eastern ghats and flows through Odisha and Andhra Pradesh before joining the Bay of Bengal. at Kalingapatnam, Andhra Pradesh.

**S37. Ans.(b)**

**Sol.** Onake Obavva died fighting the troops of Hyder Ali, a ruler of the Mysore Kingdom and father of Tipu Sultan when he invaded the Chitradurga Fort, which was ruled by Madakari Nayaka in the 18th century.

Obavva is considered to be the epitome of Kannada pride and celebrated along with other women warriors of Karnataka state like Abbakka Rani (first Tuluva Queen of Ullal in coastal Karnataka who fought the Portuguese), Keladi Chennamma (the queen of the Keladi Kingdom who is known for fighting against Mughal emperor Aurangzeb), and Kittur Chennamma (Queen of Kittur known for the 1824 revolt against the British East India Company).

**S38. Ans.(c)**

**Sol.** Article 165 of the Indian Constitution is related to the office of Advocate General of State. He is the highest law officer of the state. The governor appoints the advocate general of state on the advice of the council of ministers of the state.

The term of office of the advocate general is not fixed by the Constitution. Further, the Constitution does not contain the procedure and grounds for his removal. He holds office during the pleasure of the governor. This means that he may be removed by the governor at any time.

**S39. Ans.(b)**

**Sol.** The Chief Secretary in a State is appointed by the Governor of that State.

In the union territories are governed by Administrators, Chief Secretaries are absent.

the appointment of the Chief Secretary is an executive action of the Chief Minister, it is taken in the name of the Governor of the State.

**S40. Ans.(c)**

**Sol.** The 17th edition of the Climate Change Performance Index, compiled by Germanwatch, the New Climate Institute, and the Climate Action Network, was released recently.

The CCPI assesses countries' performance in four categories: "GHG Emissions" (40% of overall score). "Renewable Energy" (20% of overall score). "Energy Use" (20% of overall score). "Climate Policy" (20% of overall score).

The first three ranks of the overall rankings were kept empty because no country had performed well enough in all index categories to achieve an overall very high rating. The first three ranks in the greenhouse gas emissions category, too, were kept empty.

In the overall rankings, India is at number 10 with a score of 69.22. It is a high performer except in the renewable energy category, in which it is ranked "medium". The report says that India is benefiting from its relatively low per-capita emissions.

**S41. Ans.(d)**

**Sol.** This initiative aims to reach out to 75 villages across India through the network of All India Coordinated Research Project on Women in Agriculture (AICRP-WIA). The initiative has been undertaken in line with the Prime Minister's call to all the academicians, agricultural scientists, and all the institutions to adopt and transform 75 villages under Azadi ka Amrit Mahotsav. Under the

initiative, a total of 75 villages will be adopted by AICRP centers and ICAR-CIWA, for which the AICRP centers will adopt 5 villages each with the remaining to be adopted by ICAR-CIWA with an aim to develop 75 Nutri-Smart villages. The objectives of the initiative are promoting nutritional awareness, education, and behavioral change in rural areas involving farm women and school children, harnessing traditional knowledge through the local recipe to overcome malnutrition, and implementing nutrition-sensitive agriculture through homestead agriculture and Nutri-garden.

Additional Info:

Saansad Adarsh Gram Yojana :

The Saansad Adarsh Gram Yojana was launched for the development of model villages. Under the Yojana, Members of Parliament (MPs) will be responsible for developing the socio-economic and physical infrastructure by adopting three villages each by 2019, and a total of eight villages each by 2024.

<https://www.adda247.com/upsc-exam/nutrition-smart-villages/>

**S42. Ans.(a)**

**Sol.** The term 'De-notified Tribes' stands for all those communities which were once notified under the Criminal Tribes Acts, enforced by the Criminal Tribes Act of 1871 British Raj between 1871 and 1947. These Acts were repealed by the Independent Indian Government in 1952, and these communities were "De-Notified". A few of these communities which were listed as de-notified were also nomadic.

Some De-notified Communities are provided quota under the Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Classes (OBC) categories but many are still left out.

In May 2018, the National Commission for Denotified Nomadic and Semi-Nomadic Tribes, chaired by Bhiku Ramji Idate submitted its report on Denotified, Nomadic, and Semi-Nomadic Tribes DNT, NT, SNT.

As per the report prepared by Bhiku Ramji Idate, over 260 extremely marginalized communities have never been identified or included in any of the reserved categories. It recommended the government should provide strong legal protections and constitutional safeguards, including the extension of the Protection of Atrocities Act to the NT/ DNT/ SNT communities by creating a separate Third schedule as Scheduled De-notified, Nomadic, and Semi-Nomadic Tribes.

**S43. Ans.(b)**

**Sol.** The International Solar Alliance (ISA) was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs. Countries that do not fall within the Tropics can join the alliance and enjoy all benefits as other members, with the exception of voting rights.

ISA is building a solar project pipeline of nearly 5 GW installed capacity in order to achieve a vision of interconnected global grids, which was jointly launched as the "Green Grids Initiative – One Sun One World One Grid" during the world leaders' summit of COP26 in Glasgow.

Recently USA has formally joined ISA recently.

Currently, China and Pakistan are not Part of ISA.

<https://www.adda247.com/upsc-exam/us-joins-india-led-international-solar-alliance/>

**S44. Ans.(b)**

**Sol.** The Good Governance Index (GGI) was first time launched by the Ministry of Personnel, Public Grievances & Pensions to determine the status of governance in the country in 2019.

Recently, the Union Minister of Personnel, Public Grievances, and Pensions announced that it will help the Government of Uttar Pradesh in developing a District Good Governance Index.

District Good Governance Index, first for any State, will be developed on the lines of the National Good Governance Index for improving the efficiency of Governance across Districts

Source: <https://www.adda247.com/upsc-exam/district-good-governance-index/>

**S45. Ans.(c)**

**Sol.** Daylight saving time is the practice of advancing clocks (typically by one hour) during warmer months so that darkness falls at a later clock time. The typical implementation of DST is to set clocks forward by one hour in the spring ("spring forward") and set clocks back by one hour in autumn ("fall back") to return to standard time. As a result, there is one 23-hour day in late winter or early spring and one 25-hour day in the autumn.

Recently USA senators have recently proposed the Sunshine Protection Act, which would make daylight saving time permanent.

Dairy farmers are concerned with this because their cows are sensitive to the timing of milking, so delivering milk earlier disrupts their systems. It can eventually affect the supply chains associated with the Dairy industry.

**S46. Ans.(b)**

**Sol.** DART is a planetary defense-driven test of technologies for preventing an impact on Earth by a hazardous asteroid. DART will be the first demonstration of the kinetic impactor technique to change the motion of an asteroid in space.

DART is a spacecraft designed to impact an asteroid as a test of the technology. DART's target asteroid is NOT a threat to Earth. This asteroid system is a perfect testing ground to see if intentionally crashing a spacecraft into an asteroid is an effective way to change its course, should an Earth-threatening asteroid be discovered in the future.

The target of the spacecraft is a small moonlet called Dimorphos (Greek for "two forms"). It is about 160-meter in diameter and the spacecraft is expected to collide when it is 11 million kilometers away from Earth. Dimorphos orbits a larger asteroid named Didymos (Greek for "twin") which has a diameter of 780 meters. The asteroid and the moonlet do not pose any threat to Earth and the mission is to test the new technology to be prepared in case an asteroid heads towards Earth in the future

Source: <https://www.adda247.com/upsc-exam/nasas-dart-mission/>

**S47. Ans.(a)**

**Sol.** The U.S. Air Force Brigadier General Robert Spalding has recently announced the Digital Atlantic Charter initiative, a public-private effort focused on safeguarding democracies worldwide.

It is created in the spirit of the Atlantic Charter and following the recent AUKUS trilateral security partnership between Australia, the U.K., and the U.S.

It aims to safeguard critical infrastructure and that of other democracies by protecting data and privacy, as well as terrestrial and satellite communications.

It is being launched in the light of incidents of threats to infrastructure seen in recent attacks, including the Colonial Pipeline, the closures of banks and the national postal service in New Zealand, the partial shutdown of India's electric grid, and a ransomware incident that forced the cancellation of classes at a Washington D.C. university.

**S48. Ans.(a)**

**Sol.** The Asia-Pacific Economic Cooperation is an inter-governmental forum for 21 member economies in the Pacific Rim that promotes free trade throughout the Asia-Pacific region.

APEC currently has 21 members. However, the criterion for membership is that the member is a separate economy, rather than a state. As a result, APEC uses the term member economies rather than member countries to refer to its members.

India is not part of APEC.

**S49. Ans.(c)**

**Sol.** Context: Reserve Bank of India (RBI) Shaktikanta Das has sounded alarm on cryptocurrencies, cautioning investors on the potential pitfalls of digital currency.

The government had constituted an Inter-Ministerial Committee (IMC) on 2 November 2017 under the Chairmanship of Subhash Chandra Garg, for studying issues related to virtual currencies and to propose specific action to be taken in this matter

SC Garg Committee recommendations (2019):

Ban anybody who mines, hold, transact or deal with cryptocurrencies in any form. It recommends a jail term of one to 10 years for exchange or trading in digital currency. It proposed a monetary penalty of up to three times the loss caused to the exchequer or gains made by the cryptocurrency user whichever is higher. However, the panel said that the government should keep an open mind on the potential issuance of cryptocurrencies by the Reserve Bank of India.

**S50. Ans.(b)**

**Sol.** The government constituted commissions for Denotified tribes, DNTs in 2005 to identify issues related to these communities and prepare state-wise lists of different castes of DNTs. The Renke Commission, which submitted its report in 2008, highlighted that 50 percent of DNTs lacked any kind of documents and 98 percent were landless.

The report brought to light various challenges that the communities faced, especially with regard to access to caste certificates, health care, and school enrolment.

Following the June 2008 Balkrishna Renke Commission report, for the first time, two schemes were implemented starting 2014-15, namely pre- and post-matric scholarships and construction of hostels for DNT students. However, significant recommendations remained unimplemented.

