

OFFICERS' PULSE

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COVERAGE.

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**AT A GLANCE
& IN DEPTH.**

Polity and Social Issues

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THE **PULSE** OF UPSC AT YOUR FINGER TIPS



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News @ a glance

POLITY

1) Disabled are entitled to same benefits of SC/ST quota

GS Paper 2 - Issues related to Disability, Reservation

What's in the news?

- The Supreme Court recently confirmed that persons suffering from disabilities are also socially backward and **entitled to the same benefits of relaxation as Scheduled Caste/Scheduled Tribe** candidates in public employment and education.

Constitutional provisions for SC/ST :

- **Article 15 (4)** empowers the State to make special provision for the advancement of the SCs and the STs. e.g. providing fee concession in admission to any educational institution, building hostels for SCs/STs.
- **Article 15 (5)** empowers the State to reserve seats for SCs and the STs in admission to educational institutions including private educational institutions, whether aided or unaided by the State. But minority educational institutions referred to in Article 30 (1) are excluded here.
- **Article 16 (4)** empowers the State to make provisions for the reservation of appointments or posts in favour of SCs/STs.
- **Article 46** - The State shall promote with special care the educational and economic interests of the weaker sections of the people, and in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation
- **Article 330** - It makes provision for Reservation of seats for Scheduled Castes and Scheduled Tribes in the House of the people, i. e. Lok Sabha. The seats are reserved as per the percentage of their population in the states and Union territories.

Initiatives for welfare of Disabled Persons

Rights of Person with Disabilities Act, 2016

- The Act replaces the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995. It fulfills the obligations to the **United National Convention on the Rights of Persons with Disabilities (UNCRPD), to which India is a signatory.**
- **Features:**
- Disability has been defined based on an evolving and dynamic concept.
- The types of disabilities have been increased from existing 7 to 21.
- The Central Government will have the power to add more types of disabilities.
- Every child with benchmark disability will get free education from **6 to 18 years of the age.**
- Additional benefits such as reservation in higher education (not less than 5%), government jobs (not less than 4 %), reservation in allocation of land, poverty alleviation schemes (5% allotment) etc. have been provided for persons with benchmark disabilities and those with high support needs.

- Composite Regional Centre (CRC) for Skill Development, Rehabilitation and Employment of Persons with Disabilities.
- **Deendayal Disabled Rehabilitation Scheme:** It creates an enabling environment to ensure equal opportunities, equity, social justice and empowerment of persons with disabilities.

Accessible India Campaign

About:

- **The Accessible India Campaign** was launched by the Department of Empowerment of Persons with Disabilities (DEPwD) as a nation-wide Campaign for achieving universal

accessibility for Persons with Disabilities (PwDs).

- The Accessible India Campaign comprises of the following key components:
- **Built Environment Accessibility:** The campaign aims to provide an accessible physical environment for everyone. To achieve this, measures need to be undertaken to eliminate obstacles and barriers to indoor and outdoor facilities including schools, medical facilities, and workplaces.
- **Transportation System Accessibility:** The campaign focuses on providing persons with disabilities an equal right to travel and use public and private transportation infrastructure with dignity and independence.
- **Information and Communication Eco-System Accessibility:** Access to information refers to all information. This can range from actions such as being able to read price tags, to physically enter a hall, to participate in an event, to read a pamphlet with healthcare information, to understand a train timetable, or to view webpages.
- The Accessible India Campaign aims to take measures to curb all societal barriers of infrastructure, and inaccessible formats that stand in the way of obtaining and utilizing information in daily life.

2) No postal ballot facility for voters above 65: EC

GS Paper 2 - Electoral Reforms in India

Why in News?

- The Election Commission of India (ECI) recently announced that the postal ballot facility for electors above the age of 65, would not be implemented in the upcoming Bihar Assembly elections.

Background:

- Recently, the ECI announced that people above the age of 65 years and those under home or institutional quarantine will be allowed to vote by postal ballots during the Bihar elections as they are at a higher risk of contracting Covid-19 infection.
- After the notification of the Law Ministry for the extension of postal ballots to electors over 65, but several political

parties had raised concerns over the decision.

- Political Parties argued that allowing those aged 65 and above to vote by postal ballot **violates secrecy in voting** as a large segment of the population is uneducated and they might seek assistance from others at numerous stages, ending up disclosing their preferred candidate.
- This also exposes them to administrative influence or influence by the Government or the ruling party.

- Election Commission said the option of postal ballots would be available to electors over 80 years of age, persons with disabilities, essential service workers and those infected with COVID-19 or suspected to be.

What is postal voting?

- In this facility, a voter can cast her vote remotely by recording her preference on the ballot paper and sending it back to the election officer before counting. A restricted set of voters can exercise postal voting

Who can avail this facility?

- **Members of the armed forces** like the Army, Navy and Air Force, **members of the armed police force** of a state (serving outside the state), **government employees posted outside India** and their spouses are entitled to vote only by post.
- **Voters under preventive detention** can also vote only by post.
- **Special voters** such as the President of India, Vice President, Governors, Union Cabinet ministers, Speaker of the House and **government officers on poll duty** also have the option to vote by post.
- **Absentee voters:** These are voters employed in essential services and unable to cast their vote due to their service conditions. Currently, these officials of the Delhi Metro Rail Corporation, Northern Railway (Passenger and Freight) Services and media persons.

How are votes recorded by post?

- Postal ballot papers for members of the Armed Forces are sent through their record offices.

- For members of the armed police force of a state (serving outside the state), government employees posted outside India and their spouses, the ballot paper can be sent through post or electronically.
- For remaining categories ballot papers can be delivered personally or through the post.
- The Returning Officer is supposed to print ballot papers within 24 hours of the last date of nomination withdrawal and dispatch them within a day.
- This is done so that the ballot papers reach the concerned voter well before the polling date and she has enough time to send it back before the counting day.

3) Rajya Sabha

Gs Paper 2- Parliament

About Rajya Sabha:

- Under the Constitution, the Parliament of India consists of three parts viz, the President, **the Council of States (Rajya Sabha)** and the House of the People (Lok Sabha). The Rajya Sabha is a permanent body and not subject to dissolution.
- However, one-third of its members retire every second year. Their seats are filled up by fresh elections and presidential nominations at the beginning of every third year.
- The retiring members are eligible for re-election and re-nomination any number of times.

Composition of Rajya Sabha

- **Article 80** of the Constitution lays down the maximum strength of Rajya Sabha as 250, out of which 12 members are nominated by the President and 238 are representatives of the States and of the two Union Territories.
- The representatives of the States and of the Union Territories in the Rajya Sabha are elected by the method of indirect election.
- The representatives of each State and two Union territories are elected by the elected members of the Legislative Assembly of that State and by the members of the Electoral College for that Union Territory, as the case may be, in accordance with the system of proportional representation by means of the single transferable vote.

- The **Electoral College** for the National Capital Territory of Delhi consists of the elected members of the Legislative Assembly of Delhi, and that for Puducherry consists of the elected members of the Puducherry Legislative Assembly.
- **Nominated Members:** The president nominates 12 members to the Rajya Sabha from people who have special knowledge or practical experience in art, literature, science and social service.
- The **Fourth Schedule** of the Constitution deals with the allocation of seats in the Rajya Sabha to the states and union territories.

Term of Office:

- The Constitution has not fixed the term of office of members of the Rajya Sabha and left it to the Parliament. Accordingly, the Parliament in the Representation of the People Act (1951) provided that the term of office of a member of the Rajya Sabha shall be six years.

Presiding Officer:

- The presiding officer of the Rajya Sabha is known as the Chairman. The vice-president of India is the ex-officio Chairman of the Rajya Sabha.
- During any period when the Vice-president acts as President or discharges the functions of the President, he does not perform the duties of the office of the Chairman of Rajya Sabha.

Special Powers of Rajya Sabha

- The Rajya Sabha has been given few exclusive or special powers :
- **Article 249:** It can authorise the Parliament to make a law on a subject enumerated in the State List.
- **Article 312:** It can authorise the Parliament to create new All-India Services common to both the Centre and states.
- **Article 67:** It alone can initiate a move for the removal of the vice president i.e a resolution for the removal of the vice-president can be introduced only in the Rajya Sabha.
- To endorse Emergency under **Article 352** for a limited period **when the Lok Sabha remains dissolved.**

Why in News?

- Newly elected 61 members of the Rajya Sabha will be administered oath, and for the first time, the ceremony will be done inside the House chamber when Parliament is not in session. Oath-taking by the new members planned earlier had to be deferred in view of concerns expressed due to Covid-19 pandemic.

4) Section 144

Gs Paper 2- Governance

About Section 144

- Section 144 CrPC, a law retained from the colonial era, empowers a district magistrate, a sub-divisional magistrate / executive magistrate specially empowered by the state government in this behalf to issue orders to prevent and address urgent cases of apprehended danger or nuisance.
- In emergency cases, the magistrate can pass these orders without prior notice to the individual against whom the order is directed.
- It is imposed in urgent cases of nuisance or apprehended danger of some event that has the potential to cause trouble or damage to human life or property.
- Section 144 of CrPC generally prohibits public gathering.
- Section 144 has also been used in the past to impose restrictions as a means to prevent protests that can lead to unrest or riots.
- It is also used in several states in recent times, to control the spread of Coronavirus.

Powers under this Provision:

- The magistrate can direct any person to abstain from a certain act or to take a certain order with respect to certain property in his possession or under his management.
- This usually includes restrictions on movement, carrying arms and from assembling unlawfully.

- It is generally believed that assembly of three or more people is prohibited under Section 144. However, it can be used to restrict even a single individual.
- This is likely to prevent, or tends to prevent, obstruction, annoyance or injury to any person lawfully employed, or danger to human life, health or safety, or a disturbance of the public tranquility, or a riot.

Communications blockades

- The rules for suspending telecommunication services, which include voice, mobile internet, SMS, landline, fixed broadband, etc, are the Temporary Suspension of Telecom Services (Public Emergency or Public Safety) Rules, 2017.
- These Rules derive their powers from the Indian Telegraph Act of 1885, Section 5(2) of which talks about interception of messages in the “interests of the sovereignty and integrity of India”.
- Section 144 CrPC has often been used to clamp down on telecommunication services and order Internet shutdowns.

Duration of Section 144 order

- No order under Section 144 shall remain in force for more than two months but the state government can extend the validity for two months and maximum up to six months. It can be withdrawn at any point of time if the situation becomes normal.

Concerns related to Section 144

- The term cases of apprehended danger or nuisance are too broad and wide enough to give absolute power to a magistrate.
- The immediate remedy against such an order is a revision application to the magistrate himself.
- An aggrieved individual can approach the High Court by filing a writ petition (article 226) if his fundamental rights are at stake.

Why in News?

- In the wake of rising COVID-19 cases, Section 144 was imposed in a few cities.

ENVIRONMENT

1) Assam keelback

About

- The snake species is endemic (found only in that specific region) to **Northeast India**. The Assam keelback is so far known only to inhabit Sivasagar in Upper Assam and Poba in Assam-Arunachal border.
- First known as *Hebius pealii*, this snake was named after Edward Peal, a British tea planter who first collected two specimens of this snake from upper Assam, 129 years ago.



Abor hills



- The Abor Hills is a region of **Arunachal Pradesh**, near the border with China.
- The hills are bordered by the Mishmi Hills and Miri Hills, and drained by the Dibang River, a tributary of the Brahmaputra.

Wildlife Institute of India

- Wildlife Institute of India (WII) is an internationally acclaimed Institution, which offers training programs, academic courses and advisory in wildlife research and management.
- It was established in 1982, It is an **autonomous institution** of the Ministry of Environment, Forest and Climate Change.
- The Institute is actively engaged in research across the breadth of the country on biodiversity related issues.

Abor Expedition

- It is scientific exploration to identify the species in abor hills conducted between 1911 and 1912.

Why in the news?

- The Assam keelback snake was rediscovered after 129 years in 2018 by a team from **Wildlife Institute of India (WII)** near a reserve forest on the Assam-Arunachal Pradesh border.
- This snake species was found when a retracing exercise of the Abor expedition happened in 2018.

2) Woolly whitefly and its Indigenous biological solution

About Woolly whitefly



- The woolly whitefly (*Aleurothrixus floccosus*) is a **pest** (a destructive insect or other animal that attacks crops, food, livestock, etc) that is invasive (tending to spread very quickly and harmful) and polyphagous (creature that feeds on various kinds of food).

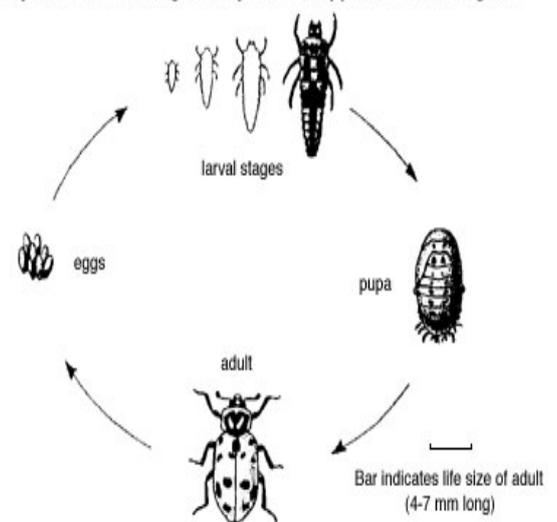
- Adult woolly whiteflies may live as long as 24 days. It is found across the warmer parts of the world.
- Woolly whiteflies suck phloem sap, causing leaves to wilt and drop when populations are large.
- Their infection reduces photosynthesis, resulting in decreased fruit size. It has been found to attack some 20 plant families in India, exhibiting a strong preference for guava.
- This insect has spread from the Caribbean islands to India through transportation of infested seedlings.

Ladybird beetles and Green Lacewing



- (figure 1) Lady beetles, ladybugs, or ladybird beetles are among the most visible and best known beneficial predatory insects.
- Most lady beetles are beneficial as both adults and larvae, feeding primarily on aphids. They also feed on mites, small insects, and insect eggs.

Life cycle of the convergent lady beetle, *Hippodamia convergens*



- (figure 2) Green lacewings are an often under-appreciated group of beneficial insects. As with lady beetles, these natural enemies are important predators of many types of soft bodied insects and insect eggs.
- The adults feed mostly on nectar, pollen, and honeydew but with some species the adults will feed on insects.

Why in the news?

- Entomologists found Lady bird and Green lacewing bugs feeding on woolly whitefly in a guava orchard near Coimbatore.
- In the growing period, these bugs fed on the woolly whiteflies during the active grub stage for 10-12 days, devouring more of the flies as they grew.
- It is found that a tiny predator can eat 200-300 woolly whiteflies throughout its growing stage.
- According to the Indian Council of Agricultural Research (ICAR), Indian crops get 30-35% damage due to pests annually.
- Finding like this will **help farmers to improve techniques on management of pests.**

ECONOMY

1) Consumer Price Index (CPI)

About CPI

- It is an index which measures the weighted average of prices of a basket of consumer goods and services such as transportation, food and medical care.
- It is calculated by measuring price changes for each item in the **predetermined basket of goods and services** and averaging them.
- It is released by the **Central Statistical Organisation (CSO)** under the Ministry of Statistics and Program Implementation.
- The base year used to calculate CPI in India is **2011-2012**.
- Under the flexible inflation targeting (FIT) framework, RBI aims to contain CPI based inflation **within 4 percent with a band of (+/-) 2 percent**.

Why in News?

- According to the latest official data, the Consumer Price Index quickened to 6.09% in June, mainly on account of higher prices of food items.
- Retail inflation measure by CPI was 3.18% in June 2019.

2) Inverted duty structure

What is it?

- Inverted duty structure is a situation where **import duty on finished goods is low compared to the import duty on raw materials** that are used in the production of such finished goods.
- For example, suppose the tariff on the import of tyres is 10% and the tariff on the imports of natural rubber which is used in the production of tyres is 20%; this is a case of inverted duty structure.

How it affects domestic industry?

- When the import duty on raw materials is high, it will be more difficult to produce the concerned goods domestically at a competitive price. Several industries depend on imported raw materials and components.
- High tax on the raw materials compels them to raise prices. On the other hand, foreign finished goods will be coming at a reduced price because of low tax advantage. In conclusion, **manufactured**

goods by the domestic industry become uncompetitive against imported finished goods.

- The disadvantage of the inverted duty structure increases with the increased use of imported raw materials. An inverted duty structure **discourages domestic value addition**.

Why in News?

- The Union Finance Ministry said that reducing GST on hand sanitisers and similar products from 18% would lead to an inverted duty structure and put domestic manufacturers at a disadvantage vis-à-vis importers.
- The Ministry added that **lower GST rates helped imports by making them cheaper**, that this was against the policy on Atma-nirbhar Bharat and consumers would also eventually not benefit from lower rates if domestic manufacturing suffered due to an inverted duty structure.
- **Note:** Under the GST regime, Import of goods and services will be treated as inter-state supplies and IGST will be levied (in addition to Basic Customs Duty).

2) Broad-based Trade and Investment Agreement

About BTIA

- **India and the European Union (EU)** have been negotiating a free trade agreement (FTA), officially called a Broad-based Trade and Investment Agreement (BTIA) since 2007 but have not been able to conclude it because of differences in some important areas.

Issues with BTIA

- The key differences arise over the **movement of professionals**. India is demanding greater and liberal market access for its service professionals.
- India is also seeking **data secure nation status** by the EU. India is currently not among the nations considered data secure by the EU.
- On the other hand, the EU is demanding **significant duty cuts** in automobiles, wines, spirits and dairy products, and a strong intellectual property regime.

'Data Secure Nation' status

- The lack of 'Data Secure Nation' status from EU prevents flow of sensitive data, such as patient information for telemedicine, to India.
- The existing data protection laws in the EU (known as **General Data Protection Regulation (GDPR)**) allow such information to only flow into a country that has been designated as being data secure.
- The matter is particularly crucial as it will have a bearing on Indian IT companies wanting market access.

Why in News?

- Recently, Prime Minister Narendra Modi held talks with officials from the EU via video-conferencing.

Key takeaways

- To revive talks on the BTIA that have been suspended since 2013, the two sides announced a "high level dialogue" between Commerce Minister Piyush Goyal and E.U. Trade Commissioner Phil Hogan to try and take the agreement forward.
- The two sides issued a **five-year roadmap for the India-E.U. strategic partnership, a civil nuclear research and development cooperation agreement between EURATOM and the Department of Atomic Energy**, a declaration on "resource efficiency and circular economy" to exchange best practices in a range of areas and the renewal of their science and technology agreement for another five years.

Significance of BTIA

- Trade with India formed under 3% of the E.U.'s global trade, which is far below what was expected of the relationship.
- Conversely, the E.U. is **India's largest trading partner and investor**, and accounts for 11% of India's global trade, while India is the E.U.'s ninth biggest trading partner.

3) Wholesale Price Index

About WPI

- Wholesale Price Index measures and tracks the changes in the price of goods in the stages before the retail level. It provides estimates of inflation at the wholesale transaction level for the economy as a whole.

- It is released by the **Office of Economic Adviser, Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry**.
- The base year is **2011-2012**.
- The index basket consists of commodities under 3 main categories in decreasing order of weightage: **Manufactured products, Primary Articles and Fuel and Power**.

Why in News?

- According to the latest WPI data, Prices in the wholesale market fell for the third straight month, declining 1.81% in June.
- Inflation in May and April was (-) 3.21% and (-) 1.57%, respectively.

4) Participatory Notes

What are P-Notes?

- P-Notes or Participatory Notes are Instruments issued by a registered foreign institutional investor to an overseas investor **who wishes to invest in Indian stock markets without registering themselves** with the market regulator, the Securities and Exchange Board of India (SEBI).

What are the government & regulatory concerns?

- The primary reason why P-Notes are worrying is because of the **anonymous nature of the instrument** as these investors could be beyond the reach of Indian regulators.
- Further, there is a view that it is being used in **money laundering** with wealthy Indians, like the promoters of companies, using it to bring back unaccounted funds and to manipulate their stock prices.

What has SEBI done to regulate P-Notes?

- SEBI has taken a number of steps to tighten rules on P-Notes.
- From January 2011, FIIs have had to follow **KYC norms and submit details of transactions**.
- In 2014, new rules on FIIs made it mandatory for those issuing P-Notes to submit a **monthly report** disclosing their portfolios.
- Also, Sebi has mandated that in addition to KYC, the **anti-money laundering rules (AML)** will also be applicable to P-Note holders.

- Sebi also issued norms on **transferability of P-Notes** between two foreign investors and increased the frequency of reporting by P-Note issuers.

Why in News?

- Investments through P-notes in the domestic capital market surged to Rs 62,138 crore till June-end, making it the third consecutive monthly rise.

5) National Pension System

What is National Pension System?

- National Pension System (NPS) is a pension cum investment scheme launched by Government of India to provide old age security to Citizens of India.
- It was launched in January 2004 for government employees. However, in 2009, it was **opened to all sections**.
- The scheme allows subscribers to contribute regularly in a pension account during their working life. On retirement, subscribers can withdraw a part of the corpus in a lumpsum and use the remaining corpus to buy an annuity to secure a regular income after retirement.

Who can join NPS?

- Any individual citizen of India (both resident and Non-resident) in the **age group of 18-65 years** can join NPS.

Can a Non Resident Indian (NRI) join NPS?

- Yes, an NRI can open an NPS account. Contributions made by NRI are subject to regulatory requirements as prescribed by RBI and FEMA from time to time.
- However, OCI (Overseas Citizens of India) and PIO (Person of Indian Origin) card holders and Hindu Undivided Families (HUFs) are not eligible for opening of NPS account.

Who manages the money invested in NPS?

- The Scheme is regulated by **Pension Fund Regulatory and Development Authority (PFRDA)**. National Pension System Trust (NPST) established by PFRDA is the registered owner of all assets under NPS.

Why in News?

- The uncertainties emerging out of the COVID-19 pandemic seem to have expedited enrolments in the National Pension System, as many private sector employees and employers were found to be seeking financial security, post retirement, through pension schemes.
- As per data released by the PFRDA, which administers the NPS, 1.03 lakh new individual subscribers were added in the first quarter of FY21, an increase of 30% from the same period last year.

INTERNATIONAL RELATIONS

1) Kuwait's draft expat bill

Background

- The Kuwait National Assembly (NA) is discussing several proposals to reduce the share of foreigners in the country's population, **which is now pegged at 70%**.
- There are many proposals under consideration, and one is to put **caps on the number of emigrants in the country**.
- In this, the plan is that **Indians should not exceed 15% of Kuwaiti citizens**, while Egyptians, Bangladeshis and Filipinos among others must not each exceed 10% of Kuwaitis.

Why has this proposal come up in the middle of a pandemic?

- Kuwaitis are a **minority** in Kuwait. Of the total population of 4.3 million, Kuwaitis are 1.3 million, which is **less than one third**.
- This has been a lingering concern in all **Gulf Cooperation Council (GCC) countries** — Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates — but the ongoing COVID-19 pandemic renewed the debate.
- In the past, high unemployment among the natives, economic crisis and demographic imbalance had triggered movement for nationalisation of the workforce. **Arab Spring** added a new concern of political stability among the regimes.
- COVID-19 exposed the huge concentration of certain populations among the expatriates, and the resulting imbalances.

What is the profile of the Indian community in Kuwait?

- There are **more Indians than Kuwaitis in Kuwait** — 1.45 million, according to one account. However, statistics available on the website of the Indian Embassy in Kuwait puts the number at above a million.
- If Indians cannot exceed 15% of Kuwaitis, the cap would be around **two lakh**.

- Also, Indians are the **largest expatriate community** in Kuwait and Egyptians are the second largest.
- In 2018, India received nearly **\$4.8 billion from Kuwait as remittances**.

What happens now?

- Around **eight million Indians work** in the GCC countries. Around 2.1 million of them are from one State — **Kerala**.
- Other major contributors to the Indian expatriate communities in GCC countries are Uttar Pradesh, Tamil Nadu, Bihar, West Bengal, Punjab and Rajasthan.
- A renewed push for nationalisation of jobs and diversification of expatriates is possible. However, the structure of the GCC economies makes any **dramatic change unlikely**.
- Nationalisation of government jobs can be achieved to a significant extent, but the private sector will continue to draw the majority of its workforce from abroad. The costs associated with hiring a citizen are too prohibitive for the private sector, which will leave the country if it is forced to.
- There is a **social stratification** in GCC countries that has natives at the top, followed by white professionals from the U.S. and Europe, immigrants from other Arab countries and then others including workers from India.
- There is a **division of labour among these classes** and that **cannot be changed in a hurry**. Replacement of Indian or Asian workers on a large scale is not possible, and native Arabs will not do certain categories of work.

Related information

About GCC

- The Gulf Cooperation Council is a political and economic alliance of six countries in the Arabian Peninsula: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.
- Established in 1981, the GCC promotes economic, security, cultural and social cooperation between the six states and holds a summit every year to discuss cooperation and regional affairs.



2) Chabahar port

About Chabahar port

- Chabahar port, which is being jointly developed by **India, Iran and Afghanistan**, is located in south Iran on the **Gulf of Oman**.
- Pakistan's **Gwadar port** is about 70 kilometers to the west along the coast.
- Afghanistan is connected to the chabahar port through its land border with Iran, and India via the sea.
- Thus, the port is readily accessible for all three countries and acts to facilitate trade among them.
- In 2003, India, Afghanistan and Iran, under the **North-South Transport Corridor framework**, signed the Chabahar port agreement, allowing all three countries to utilize the Chabahar port as a trade hub.
- The first phase of Chabahar port was inaugurated in December 2017.

Strategic significance of the Chabahar port

- It is an important pillar of Indian foreign policy aimed at finding shorter routes for its exports and imports, countering China's influence in the Indian Ocean

region, and circumventing Pakistan's Gwadar port.

- Chabahar is the only port outside of Pakistan that connects Afghanistan to the sea.
- The port will also connect India to Central Asian countries that are also major energy producers in the region.

Chabahar-Zahedan Railway project

- It was expected that in addition to the investment in Chabahar Port, India could also play a more crucial role in funding and constructing a strategic transit route from **Chabahar to Zahedan** along the Iran-Afghanistan border and from **Zahedan to Sarakhs** at the border with Turkmenistan.
- During the visit of Prime Minister Narendra Modi to Tehran in 2016 an agreement was inked with the Iranian President Hassan Rouhani and Afghanistan President Ashraf Ghani.
- Under the agreement, Indian Railways Construction Ltd (IRCON) had **promised assistance to the Chabahar-Zahedan railway line project besides financing worth \$1.6 billion**.
- The railway line project was a part of India's commitment to the **trilateral agreement with Afghanistan and Iran** to construct an alternate trade route to Afghanistan and Central Asia.

What is the issue?

- However, the project didn't take off as the United States imposed sanctions on Iran.
- The U.S. had provided a **sanctions waiver** for the Chabahar port and the rail line to Zahedan, but it has been difficult to find equipment suppliers and partners due to worries they could be targeted by the U.S.
- India has already **"zeroed out" its oil imports from Iran** due to U.S. sanctions.

Why in News?

- In a move that could hamper the relationships with India, Iran has decided to continue with the construction of a railway line from Chabahar port to Zahedan **without any support from India citing delay in funding as the reason**.
- Iran has taken the measure after four years since the project was finalised as part of a broader trilateral agreement.

- Last week, Iran government inaugurated the track-laying process for the 628 km Chabahar-Zahedan line, which will be extended to **Zaranj** across the border in Afghanistan.



How does it impact trade relations?

- India has been out of the project at a time when Iran is seeking to finalise a **25-year economic and security partnership with China**. The deal between Iran and China is worth \$400 billion.
- The deal can prove to be a pre-cursor to China's expansion in various sectors of Iran including banking, telecommunications, ports, railways and numerous other projects.
- In lieu of the deal, China will have access to heavily discounted supply of Iranian oil regularly for the next 25 years.
- Iran has remained a strategic partner for India, this deal comes as a blow for India's trade engagement with the country. Amid India's recent standoff with China, this would further worsen the relationship between the two neighboring countries.

What are the implications of the new agreement?

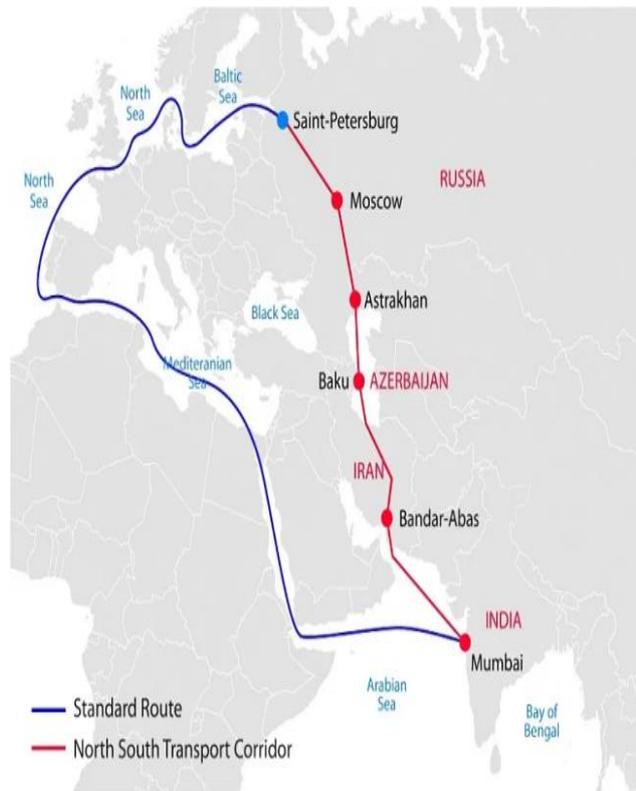
- At a time when the U.S. is targeting Iran and China through a host of economic measures, both are taking their partnership to a new level through the \$400-billion long-term agreement.
- It is a long-term strategic partnership agreement with energy, economic, logistical and military aspects.

- While for Iran, whose oil sales plummeted after President Donald Trump unilaterally pulled the U.S. out of the **Iran nuclear deal** in May 2018 and reimposed sanctions on the country, this agreement could be an economic lifeline, China could enhance its strategic influence in a region where the U.S. has built a strong presence since the Second World War.
- Iran has a very crucial place in **China's Belt and Road Initiative** (to improve connectivity, trade, communication, and cooperation between the countries of Eurasia). China always wanted to bring Iran on board. As the Americans pursued the **policy of 'maximum pressure'** against Iran and left Iran under extraordinary privation and deprivation, it is now open to the Chinese initiative.
- Refer Pulse #3 edition for details on Iran nuclear deal.

Related information

About North-South Transport Corridor (INSTC)

- INSTC is a land-and sea-based 7,200-km long network comprising rail, road and water routes that are aimed at reducing costs and travel time for freight transport in a bid to **boost trade between Russia, Iran, Central Asia, India and Europe**.
- It is a **joint initiative taken by India, Russia and Iran**.
- The 'Inter-Governmental Agreement on International "North-South" Transport Corridor' was signed by the three countries in St. Petersburg, Russia, in 2000.
- Since then, 11 more nations have joined the project: Armenia, Azerbaijan, Belarus, Bulgaria (observer status), Kazakhstan, Kyrgyzstan, Oman, Syria, Tajikistan, Turkey, and Ukraine.



3) Asian Development Bank

About ADB

- The Asian Development Bank (ADB) was founded in 1966 with the primary mission of fostering growth and cooperation among countries in the Asia-Pacific Region.
- It is headquartered in **Manila**, Philippines.
- At present, ADB comprises 68 members (including **India**)- of which 49 are from within Asia and the Pacific and 19 outside.
- The ADB was **modeled closely on the World Bank**, and has a similar weighted voting system where votes are distributed in proportion with members' capital subscriptions.
- The two largest shareholders of the ADB are the **US and Japan**.
- ADB is an official United Nations Observer.

Why in News?

- Election Commissioner Ashok Lavasa has been appointed as vice president for Private Sector Operations and Public-Private Partnerships at the Asian Development Bank.
- To take up the position he has to resign from his current job.

4) State of Food Security and Nutrition 2020

About the Report

- The State of Food Security and Nutrition in the World (SOFI) is an annual flagship report, **jointly prepared by** the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations International Children's Fund (UNICEF), the World Food Programme (WFP) and the World Health Organization (WHO).
- It reports on progress towards ending hunger, achieving food security and improving nutrition and to provide in-depth analysis on key challenges for achieving this goal in the context of the 2030 Agenda for Sustainable Development.

Why in News?

- The State of Food Security and Nutrition in the World 2020 report was released recently.

Highlights of the Report

- Between 8.3 crore and 13 crore people globally are likely to go hungry this year due to the economic recession triggered by COVID-19.
- Estimates drawn from data available till March 2020 show that almost 69 crore people went hungry in 2019 — up by 1 crore in 2018.
- The heads of the five agencies warn that “five years after the world committed to end hunger, food insecurity and all forms of malnutrition, we are still off track to achieve this objective by 2030.”

On the rise

- The report underlines, **hunger continues to be on the rise since 2014** and the global prevalence of undernourishment, or overall percentage of hungry people, is 8.9%.
- **Asia** remains home to the greatest number of undernourished (38 crore). Africa is second (25 crore), followed by Latin America and the Caribbean (4.8 crore).
- The report highlights that a **healthy diet costs more than ₹143 (or \$1.90/ day), which is the international poverty threshold**. The number of people globally

who can't afford a healthy diet is at 300 crore people, or more than the combined population of the two most populous countries in the world, i.e. China and India.

5) Muslim Brotherhood

What is the Muslim Brotherhood?

- The Muslim Brotherhood is a missionary movement founded in **Egypt** in 1928 by **Hassan al-Banna**, with offshoots throughout the Arab world.
- The movement initially aimed simply to spread Islamic morals and good works, but soon became involved in politics, particularly the fight to rid Egypt of British colonial control and cleanse it of all Western influence.
- One of the group's stated aims is to create a state ruled by Islamic law, or Sharia. Its most famous slogan, used worldwide, is: "Islam is the solution."
- It has faced years of pressure, especially in the wake of the 2011 Arab Spring uprisings, and has been outlawed as a "terrorist" group in Egypt and banned in several other countries.

Why in News?

- Jordan's top court has dissolved the country's branch of the Muslim Brotherhood.

6) 1267 sanctions committee

About the committee

- The 1267 sanctions committee of the UN, also known as the **ISIL (Da-esh) and Al Qaida sanctions committee**, oversees sanctions measures related to individuals, entities and groups.
- The committee can impose measures like asset freezes, travel bans and arms embargoes against designated individuals and entities.
- It is one of the 14 sanctions committees under the UN. Sanctions committees comprise all 15 members of the Security Council, and each committee is chaired by a non-permanent member on a rotational basis.
- All these sanctions committees (including the 1267 sanctions committee) undertake decisions by **consensus**. This

requirement effectively gives a veto to all 15 members of the committee.

Why in News?

- The UN Security Council's 1267 ISIL and Al-Qaeda Sanctions Committee added the Tehreek-e-Taliban Pakistan (TTP) terror group's leader Noor Wali Mehsud for participating in the financing, planning and perpetrating acts on behalf of and in support of entities associated with al-Qaeda.
- The inclusion subjects the Pakistani national to an assets freeze, travel ban and arms embargo.

7) ECOSOC

About ECOSOC

- The United Nations Economic and Social Council (ECOSOC) is **one of the six principal organs of the United Nations**.
- It is responsible for the direction and coordination of the economic, social, humanitarian, and cultural activities carried out by the UN.
- ECOSOC was established by the UN Charter (1945), which was amended in 1965 and 1974 to increase the number of members from 18 to 54. ECOSOC membership is based on **geographic representation**.
- ECOSOC is responsible for promoting higher standards of living, full employment, and economic and social progress; identifying solutions to international economic, social and health problems; facilitating international cultural and educational cooperation; and encouraging universal respect for human rights and fundamental freedoms.

Why in News?

- Recently, Prime Minister Narendra Modi participated at a high-level dialogue of the U.N.'s Economic and Social Council on the subject 'Multilateralism after COVID-19: What kind of UN do we need at the 75th Anniversary?'
- Outlining India's fight against the COVID-19 pandemic, Mr. Modi said that India has extended assistance to more than 150 countries, and helped set up a **SAARC (South Asian Association for Regional Cooperation) COVID-19 emergency fund** in the South Asian neighbourhood.

- He added that only reformed multilateralism with a reformed United

Nations at its centre can meet the aspirations of humanity.

SCIENCE AND TECHNOLOGY

1) NATGRID and CCTNS

GS 3: E-governance, Security forces and agencies

What is NATGRID?

- NATGRID (or **National Intelligence Grid**) is an **attached office under the Ministry of Home Affairs**, Government of India.
- It is being set up to track any terror suspect and prevent terrorist attacks with real time data.
- The NATGRID will enable multiple security and intelligence agencies to access a database related to immigration entry and exit, banking and telephone details, among others, from a common platform.
- The project, initially started in **2009**, is an **online database** for collating scattered pieces of information and putting them together on one platform.
- The NATGRID **links intelligence and investigation agencies**.
- At least 10 Central government agencies, such as the Intelligence Bureau, Research and Analysis Wing and others will have access to the data on the secured platform.
- The 10 user agencies will be linked independently with certain databases which will be procured from 21 providing organisations including telecom, tax records, bank, immigration etc. to generate intelligence inputs.
- The **data recovery centre** of the NATGRID has been constructed **in Bengaluru** and its **headquarters** is nearing completion in **Delhi**.
- The project aims to go live by December 31, 2020.

Why in News?

- The National Intelligence Grid (NATGRID) has signed a memorandum of understanding with the National Crime Records Bureau (NCRB) to access the centralised online database on FIRs and stolen vehicles.
- The MoU will give NATGRID access to the **Crime and Criminal Tracking Network and Systems (CCTNS) database**.

- All State police are mandated to file First Information Reports (FIR) in the CCTNS.

What is CCTNS?

- **Crime and Criminal Tracking Network & Systems (CCTNS)** is a **Mission Mode Project** under the **National e-Governance Plan (NeGP)** of Govt. of India.
- CCTNS aims at creating a comprehensive and integrated system for enhancing the **efficiency and effective policing** at all levels and especially at the Police Station level through adoption of principles of e-Governance.
- It is a **nationwide networked infrastructure** for evolution of **IT-enabled state-of-the-art tracking systems** around "investigation of crime and detection of criminals" in real time, which is a critical requirement in the context of the present day internal security scenario.
- The scope of CCTNS spans all States and Union Territories and covers all Police Stations (15,000+ in number) and all Higher Police Offices (6,000+ in number) in the country.

2) TNF-related apoptosis-inducing ligand (TRAIL)

GS 3: Science and Technology

About

- In the field of cell biology, TNF-related apoptosis-inducing ligand (TRAIL), is a protein functioning as a ligand that induces the process of **cell death** called **apoptosis**.

- **Tumor necrosis factor (TNF)**: One of multiple proteins capable of inducing **necrosis (death) of tumor cells** that possess a wide range of proinflammatory actions.
- TRAIL is a **cytokine (proteins for cell signaling)** that is produced and secreted by most normal tissue cells.
- It causes apoptosis primarily in tumor cells, by binding to certain death receptors.
- It has triggered many preclinical cancer treatment studies the world over.

- While the anti-tumour activity of TRAIL in preclinical studies had been strong, in clinical trials, the results were so far unsatisfactory as cancer cells, when exposed long-term, seem to acquire resistance against TRAIL.
- The next round of research has been to find chemicals that can reverse resistance and increase sensitivity of cancer cells to TRAIL.

Why in News?

- Researchers from the Indian Institute of Technology-Madras have shown that the active compound from the common household spice **turmeric — curcumin** — can enhance cancer cell death.
- They found that non-toxic concentrations of curcumin can significantly increase the efficiency of TRAIL-induced cell death.
- Curcumin is known to inhibit carcinogenesis and induce apoptosis in various cancer cells.

3) First indigenous Pneumonia vaccine

GS 3: Science and Technology

What is Pneumonia?

- Pneumonia is an infection that **inflames the air sacs in one or both lungs**.
- The air sacs may fill with fluid or pus (purulent material), causing cough with phlegm or pus, fever, chills, and difficulty breathing.
- A variety of organisms, including **bacteria, viruses and fungi**, can cause pneumonia.
- Pneumonia can range in seriousness from mild to life-threatening.
- It is most serious for infants and young children, people older than age 65, and people with health problems or weakened immune systems.
- **Vaccines** are available to prevent some types of pneumonia and the flu.

Why in News?

- The **Drug Controller General of India (DCGI)** has approved the **first fully indigenously developed conjugate vaccine for pneumonia** developed by the Serum Institute of India Pvt. Ltd, Pune.

More about the vaccine

- This **Pneumococcal Polysaccharide Conjugate Vaccine** is used for active

immunisation against invasive disease and pneumonia caused by "**streptococcus pneumonia**" (bacteria) in infants.

- The vaccine is administered intramuscularly.

About DCGI

- Drugs Controller General of India is a department of the Central Drugs Standard Control Organisation (CDSCO).
- DCGI is responsible for approval of licenses of specified categories of Drugs such as blood and blood products, I. V. Fluids, Vaccine and Sera. About CDSCO

4) Cryptocurrency and Blockchain

GS 3: Awareness in the fields of Science and Technology, Cyber security

What is a Cryptocurrency?

- A cryptocurrency is a **digital or virtual currency** that is secured by **cryptography**, which makes it nearly impossible to counterfeit or double-spend.
- "Crypto" refers to the various encryption algorithms and cryptographic techniques that safeguard these digital assets.
- Many cryptocurrencies are decentralized networks based on **blockchain technology**—a distributed ledger enforced by a disparate network of computers.
- The first blockchain-based cryptocurrency was **Bitcoin**, which still remains the most popular and most valuable.
- Some of the competing cryptocurrencies are **Litecoin, Peercoin, Namecoin, Ethereum, Dash, Monero, ZCash, Cardano** and **EOS**.

Advantages

- A defining feature of cryptocurrencies is that they are generally **not issued by any central authority**, rendering them theoretically **immune to government interference or manipulation**.
- Cryptocurrencies hold the promise of making it easier to transfer funds directly between two parties, without the need for a trusted third party like a bank or credit card company.

- These transfers are instead **secured by the use of public keys and private keys**.
- In modern cryptocurrency systems, a user's "wallet," or account address, has a public key, while the private key is known only to the owner and is used to sign transactions.
- Fund transfers are completed with **minimal processing fees**, compared to that of banks.

Disadvantages

- The semi-anonymous nature of cryptocurrency transactions makes them **well-suited for a host of illegal activities**, such as money laundering and tax evasion.
- Market prices for Cryptocurrencies are based on supply and demand; the rate at which a cryptocurrency can be exchanged for another currency **can fluctuate widely**, since the design of many Cryptocurrencies ensures a high degree of scarcity.
- There is concern that Cryptocurrencies like Bitcoin are **not rooted in any material goods**.

What is cryptocurrency mining?

- Cryptocurrency mining, or cryptomining, is a process in which transactions for various forms of cryptocurrency are verified and added to the blockchain digital ledger.
- Each time a cryptocurrency transaction is made, a **cryptocurrency miner** is responsible for ensuring the authenticity of information and updating the blockchain with the transaction.
- The mining process itself involves competing with other cryptominers to solve complicated mathematical problems with cryptographic hash functions that are associated with a block containing the transaction data.
- The first cryptocurrency miner to crack the code is rewarded by being able to authorize the transaction, and in return for the service provided, cryptominers earn small amounts of cryptocurrency of their own.
- In order to be competitive with other cryptominers, though, a cryptocurrency

miner needs a computer with **specialized hardware**.

India's stance on Cryptocurrency

- The Reserve Bank of India had virtually **banned** cryptocurrency trading in India as in a circular issued on April 6, 2018.
- The RBI directed that all entities regulated by it shall not deal in virtual currencies or provide services for facilitating any person or entity in dealing with or settling those.
- However, the **Supreme Court later struck down** the curb on cryptocurrency trade in India terming it illegal.
- The Internet and Mobile Association of India, representing various cryptocurrency exchanges, had argued that trading in cryptocurrencies in the absence of a law banning those was a "legitimate" business activity under the Constitution.
- There is currently ongoing debate on how cryptocurrencies are to be treated, whether as a currency or as a trading asset.

What is Blockchain?

- A blockchain is a **distributed database**, meaning that the storage devices for the database are **not all connected to a common processor**.
- It maintains a **growing list of ordered records**, called blocks.
- Each block has a timestamp and a link to a previous block.
- Users can only edit the parts of the blockchain that they "own" by possessing the **private keys** necessary to write to the file.
- Cryptography ensures that everyone's copy of the distributed blockchain is kept in sync.
- The concept was introduced in **2008 by Satoshi Nakamoto**, and then implemented for the first time in 2009 as part of the **digital bitcoin currency**; the blockchain serves as the public ledger for all bitcoin transactions.

Why in News?

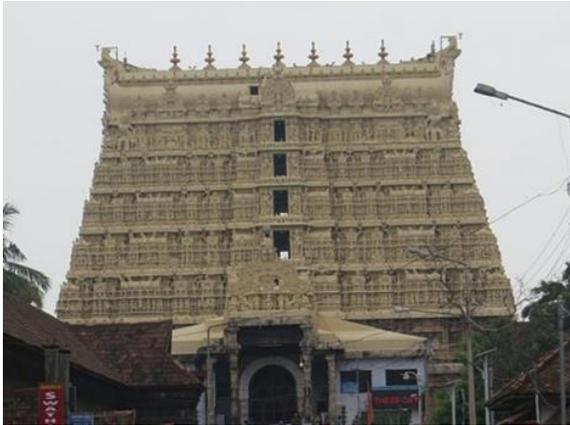
- A series of high-profile Twitter accounts were hacked recently and were used to dupe other users to transfer digital currency, bitcoins to the hackers' account.

ART & CULTURE

1) Sree Padmanabhaswamy Temple, Thiruvananthapuram

GS 1: Indian culture, Architecture

About



- Sree Padmanabhaswamy Temple, dedicated to **Lord Vishnu**, is located inside the East Fort in **Thiruvananthapuram, Kerala**.
- This temple is a **blend of the Kerala and Dravidian styles of architecture**.
- It is believed to be the **world's richest temple**.
- The history of Sree Padmanabhaswamy Temple dates back to the **8th century**.
- The presiding deity of this temple is **Lord Vishnu**, reclining on **Anantha, the hooded Serpent**.
- It is one of the 108 sacred Vishnu temples or **Divya Desams** in India.
- Divya Desams are the holiest abodes of Lord Vishnu that are mentioned in the works of the Tamil Azhwars.
- The temple interiors are adorned by beautiful **paintings and murals**.
- **Marthanda Varma**, noted among Travancore kings, did a major renovation to the temple in the 18th century and it resulted in the present day structure of the temple.

Azhwars

- Azhwars or Alvars are the **Vaishnavite poet saints** who lived between 5th and 10th Century CE.
- The azhwars are twelve in number: 11 men and 1 woman, and they belonged to various castes, by birth.
- They rendered great service to the **Bhakti Movement** writing, composing and

singing the **Naalayira Divya Prabhandham** (4000 divine verses) in **Tamil**.

The treasure

- There are a total of six vaults located below the temple.
- Since 2011, the process of opening the temple vaults has led to the discovery of treasures of gold artefacts and diamonds.
- While five vaults were opened of the six, vault B was not opened.
- The royal family had claimed that a mythical curse is associated with the opening of vault B or '**Kallara**'.

Why in News?

- The Supreme Court upheld the right of the Travancore royal family to manage the property of deity at Sree Padmanabhaswamy Temple in Thiruvananthapuram.
- The court said that, as per customary law, the **shebait rights** (right to manage the financial affairs of the deity) survive with the members of the family even after the death of the last ruler.
- The judgement reversed the 2011 Kerala High Court's ruling.

Is the temple the property of the royal family?

- No. The character of the temple was always recognised as a **public institution governed by a statute**.
- The argument of the royal family is that the temple management would vest with them for perpetuity, as per custom.

Secularism and social justice

- Despite being a secular country that separates religion from the affairs of the state, Hindu temples, its assets are governed through **statutory laws and boards heavily controlled by state governments**.
- This system came into being mainly through the development of a legal framework to outlaw untouchability by treating temples as public land; it has resulted in many legal battles.

2) Hagia Sophia

GS 1: History of the world

Brief history of Hagia Sophia



- The construction of this iconic structure in **Istanbul** started in **532 AD** during the reign of **Justinian I**, the ruler of the **Byzantine Empire**, when the city was known as **Constantinople**.
- The structure was originally built to become the **seat of the Patriarch of the Eastern Orthodox Church** and remained so for approximately 900 years.
- In **1453**, when Constantinople fell to **Sultan Mehmet II's Ottoman forces**, the Hagia Sophia was ransacked by the invading forces and **turned into a mosque** shortly after.
- The structure of the monument was then subjected to several changes where **Orthodox symbols were removed and minarets were added to the exterior of the structure**.
- For five centuries, it was a jewel in the Ottoman Sultan's crown.

- **Mustafa Kemal Atatürk**, the founding father of modern Turkey, converted the building into a **museum** in 1935 as part of his **secularisation drive**.
- Ever since, it has been one of Turkey's most visited monuments as well as a **symbol of Christian-Muslim co-existence**.
- It is also called **Church of the Holy Wisdom** or **Church of the Divine Wisdom** and **Ayasofya** in Turkish.
- It is also a component of a **UNESCO World Heritage site** called the **Historic Areas of Istanbul** (designated 1985).

Why in News?



- Turkey's highest court recently allowed for the conversion of the nearly 1,500 year-old Hagia Sophia from a museum into a mosque.

HEALTH

1) COVID-19 airborne transmission

What is airborne transmission?

- Airborne transmission is defined as the **spread of an infectious agent caused by the dissemination of droplet nuclei** (aerosols) that remain infectious when suspended in air over long distances and time.
- Airborne transmission of SARS-CoV-2 can occur during **medical procedures** that generate aerosols (“aerosol generating procedures”).
- WHO, together with the scientific community, has been actively discussing and evaluating whether SARS-CoV-2 may also spread through aerosols in the absence of aerosol generating procedures, particularly in **indoor settings with poor ventilation**.

Mechanism of transmission through aerosols

- Possible mechanisms of SARS-CoV-2 transmission through aerosols suggest that
 - a number of respiratory droplets generate **microscopic aerosols** (<5 µm) by evaporating, and
- Normal **breathing and talking results in exhaled aerosols**.
- Thus, a susceptible person could inhale aerosols, and could become infected if the aerosols contain the **virus in sufficient quantities** to cause infection within the recipient.
- However, the proportion of exhaled droplet nuclei or of respiratory droplets that evaporate to generate aerosols, and the infectious dose of viable SARS-CoV-2 required to cause infection in another person are not known, but it has been studied for other respiratory viruses.

What are aerosols? How different are they from respiratory droplets?

- Aerosol is a term used to broadly refer to **particles suspended in the air**; they could include fine dust, mist, or smoke.
- In the context of transmission of viruses, as in this case, aerosols are read as micro droplets, much **smaller (5 microns or**

less) than respiratory droplets, and take a **longer time to drop to the floor**.

- They will be expelled by people breathing, laughing or singing, as against respiratory droplets that are expelled with forceful acts such as sneezing or coughing.
- As they remain suspended in the air for longer, an individual who is COVID-19 positive is likely to infect people standing even at a distance of **1-2 m** in a small, poorly ventilated room which poses the risk that people sharing such environments can potentially inhale these viruses, resulting in infection and disease.

Why in the news?

- 239 scientists from 32 countries signed an open letter addressed to the World Health Organisation that said **COVID-19 is also transmitted via aerosols**.
- However, WHO waits for **more robust evidence** on the principle of aerosol transmission

Way forward:

- Provide **sufficient and effective ventilation** as far as possible in public buildings, schools and hospitals
- **Avoid overcrowding** in public buildings and transportation systems
- Supplement general ventilation with **airborne infection controls** such as local exhaust, high efficiency air filtration, and germicidal ultraviolet lights.

2) Steep decline in Maternal Mortality Ratio (MMR)

What is maternal mortality?

- As per the **World Health Organization**, maternal death is the **death of a woman while pregnant or within 42 days** of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management.
- Maternal mortality in a region is a measure of reproductive health of women in the area.
- One of the key indicators of maternal mortality is the MMR.

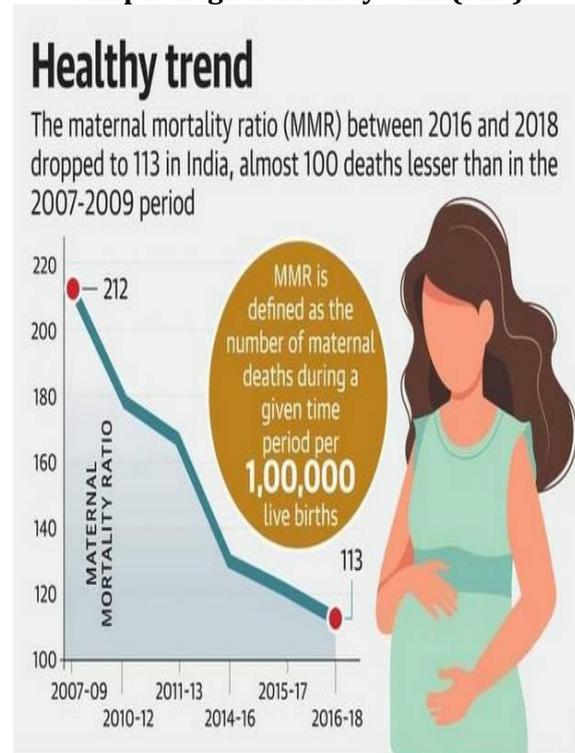
What is MMR?

- The maternal mortality ratio (MMR) is defined as the **number of maternal**

deaths during a given time period per 100,000 live births during the same time period.

Why in the news?

- The Maternal Mortality Ratio in India has **declined to 113** in 2016-18 from 122 in 2015-17 and 130 in 2014-2016, according to the special bulletin on Maternal Mortality in India 2016-18, released by the **Office of the Registrar General's Sample Registration System (SRS)**.



Significance of decline:

- The target **3.1 of Sustainable Development Goals (SDG)** set by the United Nations aims to reduce the global maternal mortality ratio to less than **70 per 1,00,000 live births**.

MMR of various states:

- The MMR of various States includes Assam (215), Bihar (149), Madhya Pradesh (173), Chhattisgarh (159), Odisha (150), Rajasthan (164), Uttar Pradesh (197) and Uttarakhand (99).
- The **southern States registered a lower MMR** — Andhra Pradesh (65), Telangana (63), Karnataka (92), Kerala (43) and Tamil Nadu (60).

PIB ANALYSIS

1) Pradhan Mantri Fasal Bima Yojana

Gs Paper 2 - Government Policies and Interventions

About Pradhan Mantri Fasal Bima Yojana (PMFBY)

- PMFBY launched in 2016, provides a comprehensive insurance cover against crop damage or loss arising out of unforeseen events thus helping in stabilising the income of the farmers and encouraging them for adoption of innovative practices and to ensure flow of credit to the agriculture sector.
- The scheme is administered by the **Ministry of Agriculture and Farmers' Welfare**.

Crops covered:

- Oilseed crops; all food crops; Annual commercial/horticultural crops

Eligibility criteria :

- Initially, the scheme was mandatory for the farmers who have borrowed institutional loans from banks, and it is optional for the farmers who have not availed institutional credit.

Premium :

- There will be a uniform premium of 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops. For annual commercial and horticultural crops, the premium to be paid by farmers will be 5%.
- The difference between premium and the rate of Insurance charges payable by farmers shall be shared equally by the Centre and State.

Coverage :

- It aims at covering the losses suffered by farmers such as pre- sowing losses, post-harvest losses due to cyclonic rains and losses due to unseasonal rainfall in India. It also covers losses due to localized calamities such as inundation, hailstorm and landslide risks.
- **Exclusions :** The losses arising out of war and nuclear risks, malicious damage and other preventable risks are not covered under this scheme.

- The scheme is implemented by empanelled general insurance companies. The funds for the scheme come from the **Krishi Kalyan Kosh**.
- Krishi Kalyan Kosh (farmers' welfare fund) is an emergency fund to support farmers when they incur losses due to low rates of produce, crop damage due to natural disasters, and to assist them when there is a delay in payment of minimum support price (MSP) by the Centre.

Recent changes

- Recently, the Union Cabinet approved the revamp of the Pradhan Mantri Fasal Bima Yojana and the Restructured Weather Based Crop Insurance Scheme to enable quick and accurate yield estimation thus leading to faster claims settlement.

Restructured Weather Based Crop Insurance Scheme (RWBCIS)

- The RWBCIS was launched in 2016 to mitigate the hardship of the insured farmers against the likelihood of financial loss on account of anticipated crop loss resulting from adverse weather conditions relating to rainfall, temperature, wind, humidity etc.
- The scheme uses weather parameters as **"proxy" for crop yields** in compensating the cultivators for deemed crop losses. Pay-out structures are developed to the extent of losses deemed to have been suffered using the weather triggers.
- The scheme is optional for the farmers who have borrowed institutional loans from banks, and who have not availed institutional credit.
- The scheme is being administered by the **Ministry of Agriculture and Farmers' Welfare**.
- The enrolment in the two schemes **has been made voluntary for all farmers, including those with existing crop loans**.
- The Centre **has reduced its share of the premium subsidy** under PMFBY/RWBCIS from the current 50% to 25% in irrigated areas and 30% for unirrigated areas from the kharif season

of 2020. Districts having 50 per cent or more irrigated area will be considered as irrigated area/district.

- Central share in premium subsidy is increased to 90 per cent for north eastern states from the existing sharing pattern of 50:50 under both the schemes.
- Technology solutions like Smart Sampling Technique (SST) to be adopted during assessment exercises.
- The Centre has given states/UTs the **option to select any number of additional risk covers/features** like prevented sowing, localised calamity, mid-season adversity, and post-harvest losses. Earlier, these risk covers were mandatory.

Why in News?

- Union Minister for Finance & Corporate Affairs chaired a meeting to review the implementation of Pradhan Mantri Fasal Bima Yojana.

2) PRAGYATA Guidelines on Digital Education

Gs Paper 2- Education

Background:

- COVID-19 pandemic has led to secure disruptions in normal life, including closure of schools.
- It has impacted over 240 million children of the country who are enrolled in schools. Extended school closures may cause loss of learning.
- To mitigate the impact of the pandemic, schools will not only have to remodel and reimagine the way teaching and learning have happened so far, but will also need to introduce a suitable method of delivering quality education through a healthy mix of schooling at home and schooling at school.

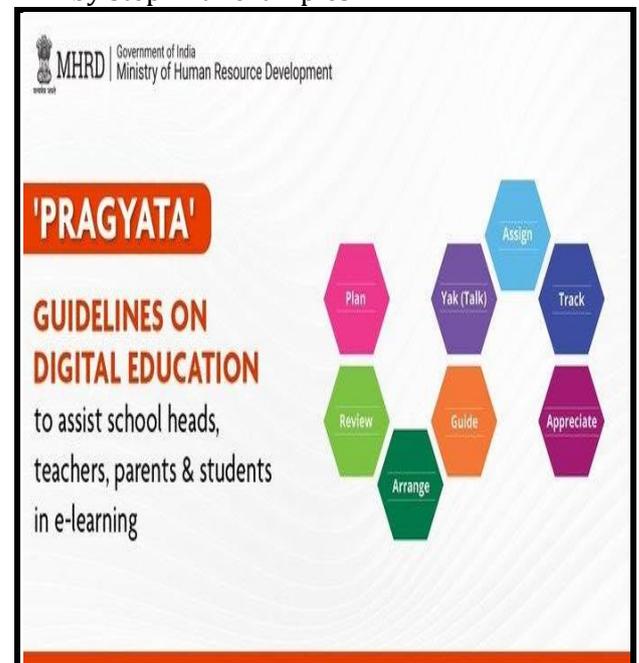
What's in the news?

- The Ministry of Human Resource Development (MHRD) has released **PRAGYATA guidelines for digital education**.
- These guidelines, prepared by the **National Council of Educational Research and Training (NCERT)**, are only **advisory** in nature, and State governments have been asked to build on

them and formulate their own rules, based on local needs.

About PRAGYATA guidelines:

- It is developed from the **perspective of learners, with a focus on online/blended/digital education for students** who are presently at home due to lockdown.
- These guidelines on Digital/ Online Education provide a roadmap or pointers for carrying forward online education to enhance the quality of education.
- The guidelines will be relevant and useful for a diverse set of stakeholders including **school heads, teachers, parents, teacher educators and students**.
- The guidelines stress upon the use of an alternative academic calendar of NCERT, for both, learners having access to digital devices and learners having limited or no access.
- The PRAGYATA guidelines include eight steps of online/ digital learning that is, **Plan- Review- Arrange- Guide- Yak (talk)- Assign- Track- Appreciate**. These steps guide the planning and implementation of digital education step by step with examples.



- The guidelines outlines suggestions for administrators, school heads, teachers, parents and students on the following areas:

1) Need assessment

- 2) Concerns while planning online and digital education like duration, screen time, inclusiveness, balanced online and offline activities etc level wise
- 3) Modalities of intervention including resource curation, level wise delivery etc.
- 4) Physical, mental health and wellbeing during digital education
- 5) Cyber safety and ethical practices including precautions and measures for maintaining cyber safety
- 6) Collaboration and convergence with various initiatives

National Initiatives for Digital Education: PM e-Vidya Program

- PM eVIDYA envisions to unify all efforts related to digital/ online/on-air education, benefitting nearly 25 crore school going children across the country. The initiative includes:
 - **DIKSHA-** The nation's digital infrastructure for states/UTs for providing QR coded Energized Textbooks for all grades, MOOCs courses, and quality e-content for school education for students, teachers (One Nation, One Digital Platform)
 - **SWAYAM PRABHA-** One earmarked TV channel per class from 1 to 12 (One Class, One Channel)
 - **SWAYAM-** Online courses in MOOCs format for Open school or NIOS
 - **On Air-** Extensive use of Radio, Community radio and CBSE Podcast - Shiksha Vani
 - Special e-content for visually and hearing impaired: **Developed on Digitally Accessible Information System (DAISY)** and in sign language on NIOS website/YouTube
 - Online Coaching: ITPAL for IITJEE/NEET preparation

Way Forward:

- While digital or online education cannot replace classroom learning, it has some advantages. It allows flexible and personalized learning at the speed of the learner and one can continuously augment and expand content through digital means.
- The rapid increase in internet penetration and various government initiatives such as the Digital India campaign have created

a conducive environment for moving towards digital education.

- This shall be complemented by the recent launch of **PM e-Vidya** by the Ministry of Human Resource Development (MHRD), a national campaign which will unify all efforts related to digital/online/on-air education.

3) ATL App Development Module GS Paper 2- Government Policies and Interventions

What's in the news?

- Atal Innovation Mission (AIM) has launched the 'ATL App Development Module' for school children all across the country.
- This has been done in order to encourage the Indian Mobile App Development innovation ecosystem, in line with the ambition of Atma Nirbhar Abhiyan.

News in Detail:

- It has been launched in collaboration with Indian homegrown startup **Plezmo** and the online course is **completely free**.
- It has 6 project-based learning modules and online mentoring sessions through which young innovators can learn to build mobile Apps in **various Indian languages** and showcase their talent.
- **Periodic Teacher Training sessions** will be conducted on the AIM App Development course to build capacities and acumen for App Development within school teachers.
- This would be one of the largest App learning and development initiatives at a school level in any country under which young innovators can learn to build mobile Apps in various Indian languages and showcase their talent.
- It will help to integrate the **Atal Tinkering Lab innovations** with mobile apps enhancing the usability and reach of the innovations.

About Atal Innovation Mission

- The Atal Innovation Mission (AIM) is a flagship initiative set up by the **NITI Aayog** to promote innovation and entrepreneurship across the length and breadth of the country.
- AIM's objectives are to create and promote an ecosystem of innovation and

entrepreneurship across the country at school, university, research institutions, MSME and industry levels.

Functions

- The Atal Innovation Mission has following two core functions:
- **Entrepreneurship promotion** through Self-Employment and Talent Utilization, wherein innovators would be supported and mentored to become successful entrepreneurs.
- **Innovation promotion:** to provide a platform where innovative ideas are generated.

The major initiatives of AIM are:

- **Atal Tinkering Labs**-Creating problem solving mindset across schools in India.
- **Atal Incubation Centers**-Fostering world class startups and adding a new dimension to the incubator model.
- **Atal New India Challenges**-Fostering product innovations and aligning them to the needs of various sectors/ministries.
- **Mentor India Campaign**- A national Mentor network in collaboration with the public sector, corporates and institutions, to support all the initiatives of the mission.
- **Atal Community Innovation Center**- To stimulate community centric innovation and ideas in the unserved /underserved regions of the country including Tier 2 and Tier 3 cities.
- **ARISE**-To stimulate innovation and research in the MSME industry.

4) ASPIRE Portal

GS Paper 2- Government Policies and Interventions

Why in News?

- ICAT is developing a technology platform for the automotive industry called ASPIRE - **Automotive Solutions Portal for Industry, Research and Education.**

About International Centre for Automotive Technology

- ICAT is a leading world class automotive testing, certification and R&D service provider under the aegis of NATRiP (National Automotive Testing and R&D Infrastructure Project), Government of

India.

About ASPIRE Portal:

- The Portal is being developed in line with the initiative by the Department of Heavy Industry (DHI) under the Ministry of Heavy Industries & Public Enterprises.
- The key objective of this portal is to facilitate the Indian Automotive Industry to become self-reliant by assisting in innovation and adoption of global technological advancements by bringing together the stakeholders from various associated avenues.
- The activities that will be promoted here would include R&D, hosting challenges for technology development and also conducting market research and technology surveys for identifying the trends in the Indian auto industry.
- The e-portal will aim to bring together the automotive OEMs, Tier 1, Tier 2 and Tier 3 companies, R&D institutions and academia on matters involving technology advancements.

5) Chattogram Port

GS Paper 2 - India and its Neighbourhood

Why in News?

- The Union Minister of Shipping flagged off the first trial movement of a container ship carrying steel and pulses from Kolkata port to Bangladesh's Chattogram port.
- This has been done under the Agreement on use of Chattogram and Mongla Ports for movement of India's transit cargo through Bangladesh.

Significance:

- This is the first time after 1965 that Bangladesh is allowing its ports to be used as a transit for cargo movement from any part of India to northeastern states.

Key Highlights:

- The trial run is an outcome of discussions between the two countries at the highest level during the visit of Bangladesh Prime Minister to India in October 2019.
- The standard operating procedure (SOP) on use of Chittagong and Mongla ports of Bangladesh was finalized in 2019 during this visit.

- India and Bangladesh have enhanced cooperation in shipping and inland water trade in recent years, under the Protocol on Inland Water Transit and Trade, in addition to the six existing Ports of Call, five more in each country have been added.

Advantages :

- It will provide a shorter route to connect India's north-east region through Bangladesh.
- It will increase economic activities, employment and will bring prosperity in India as well as Bangladesh.
- Job creation, investment in the logistical sector, enhanced business services and revenue generation are advantages that will accrue to Bangladesh.

6) NISHTHA Programme

Gs Paper 2- Education

About:

- National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) is a capacity building programme for "Improving Quality of School Education through Integrated Teacher Training".
- The basic objective of this massive training programme is to motivate and equip teachers to encourage and foster critical thinking in students.
- The initiative is first of its kind wherein standardized training modules are developed at national level for all States and UTs.

Background:

- Initially, the NISHTHA programme was launched in 2019 through face-to-face mode to improve learning outcomes at the elementary level in the country.

- Covid-19 pandemic situation has affected the conduct of this programme in face-to-face mode.
- Therefore, NISHTHA has been customized for online mode to be conducted through Digital Infrastructure for Knowledge Sharing (DIKSHA) and NISHTHA portals.

About Digital Infrastructure for Knowledge Sharing Portal

- DIKSHA portal provides a digital platform for teachers giving them an opportunity to learn and train themselves and connect with the teacher community. It was launched by the Ministry of Human Resource Development.
- It is built considering the whole teacher's life cycle - from the time student teachers enrol in Teacher Education Institutes (TEIs) to after they retire as teachers.
- It also provides access to NCERT textbooks and lessons, following the regular school curriculum.
- States, government bodies and even private organisations, can integrate DIKSHA into their respective teacher initiatives based on their goals, needs and capabilities.

Implementation:

- The functionaries (at the state, district, block level) will be trained in an integrated manner on learning outcomes, school based assessment, learner – centred pedagogy, new initiatives in education, addressing diverse needs of children through multiple pedagogies, etc.
- It is being organized by constituting National Resource Groups (NRGs) and State Resource Groups (SRGs) at the National and the State level who will be training 42 lakh teachers subsequently.

News in Depth

AIR NEWS

1) NISHTHA

What is it?

- **National Mission to improve Learning Outcomes at the Elementary level-** NISHTHA is a national initiative for school heads and teachers' holistic advancement.
- It was launched by the **Ministry of Human Resource Development.**
- The basic objective of the training programme is to **build the capacities of around 42 lakh participants** covering all teachers and heads of schools at the elementary level in all Government

schools, faculty members of State Councils of Educational Research and Training (SCERTs), District Institutes of Education and Training (DIETs) as well as Block Resource Coordinators and Cluster Resource Coordinators in all States and UTs.

What's in the news?

- The Ministry of Human Resource Development has launched the first on-line NISHTHA programme for one thousand 200 Key Resources Persons of Andhra Pradesh.

THE HINDU EDITORIALS

1) Sure Power- On India's solar strategy

GS paper 2- Government Policies and interventions for development

Gs paper 3- Environment, Environmental pollution.

Context:

- Prime Minister Narendra Modi's stated resolve to tap the energy of the sun to substantially power the economy and everyday life is to be welcomed, because it could help chart a green deal for the future.
- He called for greater reliance on solar power, for energy and as a path for self-reliant industrialisation.

Sharp deficit of the target

- India's installed base of the solar power source is about 35 gigawatts (GW), and its projected addition of capacity until 2024 to be of the order of 50 GW in a COVID-19 affected future.
- There could be a sharp deficit against the goals set five years ago for the Paris Agreement on climate, of installing 100 GW of solar power by 2022.

Challenges ahead

- The idea of building a domestic solar manufacturing industry that delivers increasing volumes of quality photovoltaic cells, modules and associated equipment is little difficult in the long run.
- Combined with low domestic cell manufacturing capacity at 3.1 GW last year, and heavy reliance on China, high ambition must now be supported by aggressive official policy.

Model before us

- The Chinese story is one of a steady rise from insignificant manufacturing capability in the 1990s, to virtual dominance through
- active government support in identifying and acquiring top technologies globally
- importing critical raw materials such as polysilicon
- acquiring solar manufacturers abroad
- investing in third countries with ready capability.

- treating the domestic market with great importance while promoting exports.

Way forward:

Plan a green deal

- India should utilise the opportunity to plan a green deal, on the lines of what the European Union has committed itself to, that future growth and employment should align itself to environmental and sustainability objectives, particularly in energy production, away from dirty fuels such as coal.

Strategic sector

- Solar energy should be made a strategic sector, giving it as much importance as defence.

Show leadership

- As the architect of the International Solar Alliance, which attracted about 120 nations at its launch, India needs to show leadership to advance the manufacture and absorption of solar photovoltaic infrastructure in low- and middle-income countries.

Policy supported by states

- Integrated policies fully supported by States are required.
- Industry must get help to set up facilities and avail low cost financing both important elements in China's rise and be able to invest in intellectual property.

Innovative deployment

- A forward-looking programme should also look at emerging trends in deploying solar innovatively which include newer technologies such as aesthetic photovoltaic window and roof tiles for buildings, multi-role urban structures, and greater use of residential and commercial buildings to deploy more panels.

Conclusion:

- Rapid progress requires a **strategic shift to aid competitive domestic manufacturing.**

About International Solar Alliance

- International Solar Alliance (ISA) is an **Indian initiative** that was **launched by the Prime Minister of India and the President of France** on 30th November 2015 in Paris, France on the side-lines of the **Conference of the Parties (COP-21)**.
- It is a coalition of **solar resource rich countries** lying fully or partially between the Tropic of Cancer and the Tropic of Capricorn to specifically address energy needs by harnessing solar energy.
- The Alliance aims to provide a platform for prospective member countries to collaborate and **address the identified gaps** through a common agreed approach.
- ISA has been envisioned as a dedicated platform that aims to contribute towards the common goal of increasing **utilization and promote solar energy** and solar applications in the prospective member countries to help the world transform to a low-carbon and greener society.
- The ISA Framework Agreement has a total of 14 articles. There are **no targets or legal obligations imposed on member-countries**.
- Members take coordinated actions through Programmes and activities launched on a voluntary basis, aimed at better harmonizing and aggregating demand for, inter alia, solar finance, solar technologies, innovation, research and development, and capacity building.
- UN member countries which are located beyond the Tropics can join the ISA as **"Partner Countries"**, with the exception of voting rights.
- Organizations that have potential to help the ISA achieve its objectives including regional intergovernmental economic integration organizations constituted by sovereign states at least one of which is a member of the ISA can join the ISA as a "Partner Organization".
- The United Nations including its organs can join the ISA as "Strategic Partners".

Structure of the ISA

- The ISA will have a two-tier structure – the **Assembly and the Secretariat**.
- Each member-country is represented in the Assembly, which meets annually at the Ministerial level at the seat of the ISA. The

Assembly may also meet under special circumstances.

- The Assembly makes all necessary decisions regarding the functioning of the ISA, including the selection of the Director General and approval of the operating budget.
- Each Member has one vote in the Assembly.
- Partner Countries, Partner Organizations, Strategic Partners, and Observers may participate without having the right to vote.
- As guided by the Framework Agreement of the ISA, the interests and objectives of the ISA are as follows:
 - 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 programmes 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.

About Paris Climate Agreement

- The Paris Agreement is a **legally binding** global climate change agreement, adopted at the Paris climate conference (COP21) in December 2015. The Agreement entered into force in 2016.
- The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century **well below 2 degrees Celsius above pre-industrial levels** and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- A key feature of the Paris Agreement has been the way the agreement reflects the principle of **'common but differentiated responsibilities'** (CBDR). This principle acknowledges the different capabilities and differing responsibilities of individual countries in addressing climate change.
- Under the Paris Agreement, developed countries are under obligation to mobilise

at least \$100 billion every year from the year 2020 in climate finance meant for the developing world. This amount has to be revised upwards after five years.

- The Paris Agreement requires all Parties to put forward their best efforts through **nationally determined contributions (NDCs)** and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts.

India's NDCs for Paris agreement

- To reduce the **emissions intensity of its GDP by 33 to 35 percent** by 2030 from 2005 levels.
- To achieve about **40 per cent** cumulative electric power installed capacity from **non-fossil fuel-based energy resources by 2030**, with the help of transfer of technology and low-cost international finance, including from the Green Climate Fund.
- To create an **additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent** through additional forest and tree cover by 2030.

2) Urban health care

Gs paper 2- Government policies and interventions for development; Issues related to social sector.

Pandemic- An Urban crisis

- The novel coronavirus pandemic has largely been an **urban crisis so far**, with **megacities** such as Delhi, Mumbai, Bengaluru and Chennai accounting for **most of the COVID-19 positive cases**.
- Indian cities are not only facing a public health crisis but also a larger emergency of **economic issues and livelihoods** with a high percentage of urban residents lost employment due to lockdown.

Policy attention:

- Over the last decade, cities have started receiving **more policy attention** from the government, with dedicated **national-level programmes on urban development**.
- For instance, the '**Smart Cities Mission**', a flagship programme completed five years, in June 2020.

- The Mission had sought to make 100 selected cities "smart", primarily through an "**Area-Based Development**" model under which a small portion of the city would be upgraded by retrofitting or redevelopment.

About Smart cities mission

- Under the Smart Cities Mission, each selected city would get **central assistance of Rs.100 crore** per year for five years.
- This Mission of building 100 smart cities intends to promote adoption of smart solutions for efficient use of available assets, resources and infrastructure with the objective of enhancing the quality of urban life and providing a clean and sustainable environment.
- Special emphasis will be given to participation of citizens in prioritizing and planning urban interventions.

Approach

- It will be implemented through an '**area based**' approach consisting of retrofitting, redevelopment, pan-city initiatives and development of new cities.
- Under **retrofitting**, deficiencies in an identified area will be addressed through necessary interventions
- **Redevelopment** enables reconstruction of already built-up area that is not amenable for any interventions, to make it smart
- **Pan-city components** could be interventions like Intelligent Transport Solutions that benefits all residents by reducing commuting time.

Focus

- Smart cities initiative, focus will be on core infrastructure services like:
 - 1) Adequate and clean Water supply,
 - 2) Sanitation and Solid Waste Management,
 - 3) Efficient Urban Mobility and Public Transportation,
 - 4) Affordable housing for the poor, power supply,
 - 5) robust IT connectivity,
 - 6) Governance, especially e-governance and citizen participation,
 - 7) safety and security of citizens,
 - 8) health and education and
 - 9) sustainable urban environment.

Implementation

- Smart City Action Plans will be implemented by **Special Purpose Vehicles**

(SPV) to be created for each city and state governments will ensure a steady stream of resources for SPVs.

Criticism of the mission:

Missed targets

- Many of the projects undertaken under the 'Smart Cities Mission' are **behind schedule**.
- According to the Ministry of Housing and Urban Affairs, of the 5,151 smart city projects across the 100 cities, while around 4,700 projects have been tendered, only **1,638 projects have been completed**.
- In terms of expenditure, of the total investment of ₹2 lakh crore, only projects worth ₹26,700 crore have been completed.

Less attention to public health

- 'Smart Cities Mission' has not given much attention to basic services such as public health.
- An analysis of the smart city projects under the Mission shows that only **69 of over 5,000 projects** undertaken under the Mission were for **health infrastructure**.
- These projects amount to just around **one percent of the total mission cost**.
- **Slip away from its objective**
- Health infrastructure though **not a core element of a "smart" city**, the 'Smart Cities Mission' aims to **improve the quality of life** of urban residents for which public health is necessary.

Significance of Public health:

- Public health is an **essential local government function** in India's constitutional scheme.
- As per the **12th Schedule** of the Constitution, introduced by the **74th Amendment**, "public health" is one of the 18 functions that are to be devolved to the **municipalities**.

What is the issue?

- Public health infrastructure of cities has often been neglected over the years and new programmes such as the 'Smart Cities Mission' have further driven **local governments away from their core responsibilities**.

Challenges in local governance:

- The COVID-19 crisis has exposed the weaknesses in the institutional and human capacity of **Indian cities** to handle a public health emergency.
- Financially and administratively **weak**
- Heavily **understaffed**.
- High level of **vacancy** of Accredited Social Health Activist (ASHA) workers

Way forward:

- **Decentralised** political and administrative systems with **strong local governments**
- High **investment** in local public health care
- **Promote programmes** that improve the livelihoods of urban vulnerable communities.
- Instead of Smart Cities Mission, programmes such as the **National Urban Livelihoods Mission** and **National Urban Health Mission** need to be strengthened.
- Introduction of a **national urban employment guarantee programme** that assures jobs for urban residents and strengthens the capacities of urban local bodies can be considered.

Precedents:

- **Kerala** has been running such an employment guarantee scheme since 2010 and States such as **Odisha, Himachal Pradesh and Jharkhand** have also recently launched similar initiatives in the wake of the COVID-19 crisis.

Conclusion:

- As Indian cities face an unprecedented challenge, it is important to get the **priorities of urban development right** and invest in programmes that improve the health and livelihoods of its residents.

3) Need to strengthen IMD

Gs paper 1- Important Geophysical phenomena, Changes in critical geographical features and their effects

About Indian Meteorological Organisation

- The India Meteorological Department (IMD) is an agency of the **Ministry of Earth Sciences** of the Government of India established in the year 1875.
- Its headquarters is situated in New Delhi.

- It is the principal agency responsible for meteorological observations, weather forecasting and seismology.

Major activities

- Provide current weather and forecast/ meteorological information for optimum operation of weather sensitive activities like agriculture, irrigation, shipping aviation, off-shore oil exploration etc.
- Warn against severe weather a phenomenon which affects life and property.
- Archive meteorological information for use in various activities.
- Detect and locate earthquakes and evaluate seismicity in different parts of the country for development projects.

Regional centres

- Indian Meteorological department fulfils the above objectives through its six Regional Centres at: New Delhi, Mumbai, Chennai, Nagpur, Kolkata and Guwahati.

Why in the news?

- As of the latest data available from the India Meteorological Department, rainfall during the season has been 14% more than what is usual for this period.

About Monsoon:

- A monsoon is a **seasonal change in the direction of the prevailing, or strongest, winds of a region.**
- **June** is the month when the monsoon begins its journey from two extremities of the country, One starting its journey **northwards from Kerala** and the other wing called the **Bay of Bengal branch** entering India from the southeast.
- Both branches eventually converge in the north and usually, this merging and strengthening of the monsoon currents over the mainland takes at least until **July 15.**

Significant happenings

- This year, the monsoon set in at a **textbook date of June 1** even after concerns that Cyclone Amphan that had ravaged West Bengal would delay the monsoon's entry into India from the Andaman Sea.
- The second factor was the **record pace at which the monsoon covered the country.**

Net result

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- **More rainy days in June** and a fairly even distribution across the country.

Still what is the issue?

- While good rains in June signal farmers to prepare the soil and sow kharif crop, the most important months are **July and August** which account for **two-thirds of the monsoon rain.**
- This is also the time the monsoon goes into so-called '**break**' conditions.
- Prolonged breaks, or an absence of rainfall, can even lead to **drought.**

Failures of IMD

- IMD announced a revision to the onset and withdrawal dates across several cities, according to which, the monsoon covered India's northern and western borders no later than July 8 as opposed to the previous historical date of July 15. This year, however, the **monsoon broke even this speed limit** and covered the country by June 25 at a pace that was unprecedented since 2013.
- In spite of significant improvements in data gathering and technological advancement, meteorological agencies **cannot yet reliably forecast the advent of a break** or how long it can last.

Way forward:

- **Short and medium range forecasts need to be strengthened** and effectively communicated to the people.

4) Enabling people to govern themselves

Gs paper 2 - Devolution of powers and finances

Context:

- **Governance systems at all levels**, i.e. global, national, and local, have **experienced stress** as a fallout of the COVID-19 pandemic.

Challenges in governance during COVID-19

Too many issues:

- The **complexity of handling breakdowns** in so many subsystems at the same time (in health care, logistics, business, finance, and administration) has overwhelmed governance.

Backfiring:

- **Solutions for one subsystem backfired on other subsystems.**

- For example, lockdowns to make it easier to manage the health crisis have made it harder to manage economic distress simultaneously.

Lost attention on other health issues

- The diversion of resources to focus on the threat to life posed by COVID-19 has increased **vulnerabilities to death from other diseases**, and even from malnutrition in many parts of India.

Fundamental flaw in governance institutions

- There is a **mismatch in the design of governance institutions** at the global level (and also in India) with the challenges they are required to manage.

Significance of global institutions

- Human civilization advances with the evolution of better institutions to manage public affairs. Institutions of global governance, such as the **United Nations** and the **World Trade Organization** were invented to enable human societies to produce **better outcomes for their citizens**.

What is needed to deal with issues associated with governance systems?

Consolidated approach

- The global challenges listed in the 17 Sustainable Development Goals (SDGs) of the United Nations, are systemic challenges **interconnected with each other** which means a good solution to one can create more problems for others. Hence an **integrated approach** is needed to address these challenges which are lacking.

Specific solutions with local fit

- Solutions must **fit the specific conditions** of each country, and of each locality within countries too, to fit the shape of the environment and the condition of society there.
- Solutions for environmental sustainability along with sustainable livelihoods cannot be the same in Kerala and Ladakh, or in Wisconsin and Tokyo.
- The knowledge of different experts about the environment, the society, and the economy must come together to fit realities on the ground.

Participatory approach

- For the local people to support the implementation of solutions, they must

believe the solution is the right one for them, and not a solution thrust upon them by outside experts.

- Therefore, they must be included in the creation of the solutions by letting them **actively contribute their knowledge and actively participate**.

Ensure local governance

- Governance of the people must be not only for the people. It must be by the people too.
- Government should **devolve power to citizens** in villages and towns in India for them to govern their own affairs

Famous people about local governance

- **Gandhiji and his economic advisers**, J.C. Kumarappa and others, developed their **solutions of local enterprises** through observations and experiments on the ground (and not in theoretical seminars in capital cities).
- **E.F. Schumacher** had proposed a new economics, founded on local enterprise, very consistent with Gandhi's ideas.
- **Elinor Ostrom**, the first woman to win the Nobel Prize in Economics, in 2009, had developed the **principles for self-governing communities** from research on the ground in many countries, including India.

Precedents

- States and countries in which local governance was **stronger** have done much better than others which is evident from some States in India, such as **Kerala** and some countries, such as **Vietnam and Taiwan**, able to handle the pandemic better than others.

Conclusion:

- The government has to **support and enable people to govern themselves**, to realise the vision of 'government of the people, for the people, by the people'.

5) China's post COVID aggression is reshaping Asia

Gs paper 2- Bilateral relations; Effect of policies includes India's interest

Context:

- China surrounded itself with various **geopolitical confrontations** with a

growing array of its neighbours which shows its aggression.

Catalyst for change

- Chinese aggressiveness is accelerating **long-standing debates** about the underlying costs of **reliance on China** and spurring support for **closer coordination between other Indo-Pacific** partners which is evident from
- The Indian, Japanese, Malaysian, and Australian governments have all taken concrete steps to **reduce their economic exposure** to Beijing, spanning investment, manufacturing, and technology.
- India and Australia recently signed a new **military logistics agreement** in the “virtual summit” and a similar agreement between Delhi and Tokyo may follow.
- The **Quadrilateral Dialogue** between Australia, India, Japan, and the United States is growing stronger and even expanding.
- **Association of Southeast Asian Nations (ASEAN)** Foreign Ministers issued one of their strongest statements on the South China Sea, insisting that maritime disputes must be resolved in accordance with the UN Law of the Sea treaty.

Asian multilateralism- Born out of crisis

- Asian multilateralism has often been born out of crises which mean that the **seriousness of purpose came only with the shock of the terrible alternatives**. For instance,
- The **Chiang Mai Initiative**, a financial swap mechanism between China, Japan, South Korea, and Southeast Asia, emerged in the aftermath of the late **1990s financial crisis**.
- **ASEAN**, was created in 1967 but did not convene its first heads of state meeting until Southeast Asian leaders were shocked into action by the **fall of Saigon in 1976**.

America and geopolitics

- Likewise, **COVID-19 crisis** may be **remaking the geopolitics of the Indo-Pacific**.
- The ongoing crisis resulted in **openings for Trump administration** which it has long sought:
 - a. more **credible multilateral coordination** among allies,

- b. pushback against online disinformation, and
 - c. the desire to **better integrate like-minded economies** and supply chains.
- 2) At the same time, the crisis also raises questions about the **durability of American leadership** since it continues to make unforced errors that create distance with U.S. allies and partners.
- a. For example, the administration’s **suspension of various worker visas** is a move that will almost certainly have serious **repercussions in India**.

What the U.S. needs to do

- To improve, the U.S. needs to make two major shifts.

Support regional efforts

- U.S. policy needs to start **supporting regional efforts to build a less China-centric future** for the Indo-Pacific.
- U.S. leadership would be far more effective if it worked with Indo-Pacific partners on the issues that they prioritise and provided them significant space for independent action.

Learn from mistakes

- While China certainly has the power to coerce, it is often **China’s own overreach** by pushing too hard on its neighbours that hardens the relationship with other Asian nations.
- The US should **avoid repeating China’s mistakes** and offer a clear alternative to China’s diplomacy.

U.S. versus China

- Across the Indo-Pacific, the **desire for U.S. leadership remains strong**, with the U.S. still viewed more favourably than China.
- Also the U.S. continues to express widespread support for America’s alliances and partnerships.
- US and Asian partners have a unique **chance to build more equal and capable regional partnerships** and institutions in the long recovery ahead.

Way forward:

- **Pan-Asian solidarity that opposes all forms of authoritarianism** is needed of the hour.
- Asian countries should use the opportunity and continue strengthening their own regional networks, which will

challenge and complicate the views of those in both Washington and Beijing.

6) India should believe in the EU

Gs paper 2- Bilateral relations;

Regional and global groupings and agreement

Context:

- The **power of any aspiring global player** depends on the **number and quality of its bilateral and multilateral relationships**. In this context, let us discuss the significance of India-EU relations.

About European Union

- The European Union (EU) is a unique **economic and political union** between 27 European countries.
- The **United Kingdom**, which had been a founding member of the EU, left the organization in 2020.
- The EU was created by the **Maastricht Treaty**, which entered into force on November 1, 1993. The treaty was designed to enhance European political and economic integration by creating a single currency (the euro), a unified foreign and security policy, and common citizenship rights and by advancing cooperation in the areas of immigration, asylum, and judicial affairs.
- Additionally, the **Treaty of Lisbon**, enacted in 2009, gave the EU more broad powers that included being authorized to sign international treaties, increase border patrol, and other security and enforcement provisions.
- EU's headquarters is currently located in Brussels, Belgium.
- Currently, the euro is the official currency of 19 out of 27 EU member countries which together constitute the **Eurozone**, officially called the **euro area**.

Commonness

- The EU and India have much in common.
 - Both aim to enhance **strategic autonomy** and their global standing.
 - **Diversifying strategic value chains**
 - Urgent need to **address climate change**.

India-EU relations

- The EU is **India's largest trading partner**, accounting for €80 billion worth of trade in goods in 2019 or 11.1% of total Indian trade.
- The EU is the **second-largest destination for Indian exports** (over 14% of the total) after the USA.
- India is the EU's **10th largest trading partner**, accounting for **1.9% of EU total trade** in goods in 2019
- The EU's share in foreign investment inflows to India more than doubled from 8% to 18% in the last decade, making the **EU the first foreign investor in India**.
- India and the EU are in the process of negotiating a **bilateral Broad-based Trade and Investment Agreement (BTIA)** since 2007.

Significance of India-EU relations

- In geopolitical terms, while India finds itself facing powerful **rivals like China**, to capitalise on its geopolitical leverage in the Indo-pacific region, **stronger cooperation with like-minded, democratic powers is needed**.
- Enhanced business cooperation can help both the EU and India diversify their strategic value chains and **reduce economic dependency** notably on China.

Measures to enhance relationship

- **Address mutual trust deficit**
- Addressing the mutual trust deficit would make India succeed in **attracting EU investment** that might be moving out of China.
- **Facilitating people's mobility and connectivity** is a good way to improve mutual understanding and create opportunities for innovation and growth.
- **Fast track stagnating Free Trade Agreement (FTA) negotiations**.
- A new study from the European Parliament assesses the potential **impact of an EU-India trade agreement** at between €8 billion and €8.5 billion gains from increased trade for both sides.
- Enhanced coordination on the provision of global public goods, such as environmental standards results in additional potential gains.
- **Climate change collaboration**
- Through its **new industrial strategy, the Green Deal**, EU is building on its

ambitious target to render the continent **carbon-emission neutral by 2050**.

- The EU and India should succeed in transforming into carbon-neutral economies by 2050 by adhering to their respective targets by collaboration.
- **Reforming multilateral institutions**
- The EU and India must join forces to **promote sustainable reform of multilateral institutions**, with the World Trade Organization (WTO) first in line.

Conclusion:

- A strong partnership would help both the EU and India become global decision-makers.

7) For equal treatment: On upholding rights of the disabled

- *Gs paper 2- Welfare schemes for vulnerable sections; Government Policies and intervention for development.*

Context

- The Supreme Court recently upheld that the relaxations given to SC/ST extends to the disabled persons.

About the case:

- The **petitioner Aryan Raj** who is intellectually challenged to the extent of 50 percent had applied for a diploma course in Fine Art for physically/mentally challenged students.
- He filed a **writ petition** challenging certain provisions of the prospectus issued by a college contending that there must be **bifurcation of the total available seats** between **physically challenged** students and **mentally/intellectually challenged** students.
- He also prayed that an intellectually/mentally challenged student should be **exempted from taking the aptitude test** as the college insisted that disabled persons too need to meet the general qualifying standard of 40% in the aptitude test, whereas SC/ST candidates were given a relaxation to 35%.

About the Supreme Court Judgement:

- The Supreme court observed that as the **Scheduled Castes/ Scheduled Tribes**

candidates require **35 percent** to pass in the aptitude test, the **same shall apply** so far as the disabled are concerned in future.

- It pointed to the judgement of the **Delhi High Court in Anamol Bhandari** (minor) through his father/Natural Guardian v. Delhi Technological University in 2012 which insisted that
 - People suffering from disabilities are also **socially backward**.
 - They are **entitled to the same benefits as given to the Scheduled Castes/Scheduled Tribes candidates**.
- *(In the 2012 case before the High Court, a university had allowed a 10% concession in the minimum eligibility requirement for SC/ST candidates, and 5% concession for disabled applicants. The High Court ruled against this differential treatment, terming it discriminatory)*

Significance of the judgement:

- In holding that people suffering from disability are entitled to the same benefits and relaxations as candidates belonging to the Scheduled Castes, the Supreme Court has **recognised the laborious efforts of the disabled** in accessing education or employment, regardless of their social status.
- The larger principle behind the judgement was that without imparting proper education to those suffering from disabilities, there cannot be any **meaningful enforcement of their rights**.

Criticism of the judgement

- By eliminating the distinction between the disabled and the Scheduled Castes and Scheduled Tribes the court attempted to **equate physical or mental disability with the social disability** and untouchability suffered by marginalised sections for centuries.
- For instance, the social background of disabled persons from a traditionally privileged community may give them an advantage over those suffering from historical social disability.

Status of the disabled

- The Delhi High Court had cited the abysmally **low literacy and employment rates** among persons with disabilities.

- The 2001 Census put the **illiteracy rate** among the disabled at **51%** which was much higher than the general population figure.
- Also there was similar evidence of their **inadequate representation in employment** too.

Conclusion:

- It is vital that **Rights of Persons with Disabilities Act, 2016** (*which sought to address low literacy and employment rates by raising the quota for the disabled from 3% to 5% and envisaging incentives for the private sector to hire them*) is fully **given effect** so that this significant segment of the population is not left out of social and economic advancement.

About Rights of Persons with Disabilities Act, 2016

- The Act replaces the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 which came into force during December 2016.
- It fulfills the obligations to the United National Convention on the Rights of Persons with Disabilities (UNCRPD), to which India is a signatory.

Salient features of the Act

- **Disabilities covered**
- Disability has been defined based on an evolving and dynamic concept.
- The types of disabilities have been increased from existing 7 to 21 and the Central Government will have the power to add more types of disabilities.
- Persons with "benchmark disabilities" are defined as those certified to have at least 40 per cent of the 21 disabilities.
- **Rights and entitlements**
- Responsibility has been cast upon the appropriate governments to take effective measures to ensure that the persons with disabilities enjoy their rights equally with others.
- Reservation in higher education (not less than 5%),
- Government jobs (not less than 4 %),
- Reservation in allocation of land, poverty alleviation schemes (5% allotment) etc.
- have been provided for persons with benchmark disabilities and those with high support needs.

- Government funded educational institutions as well as the government recognized institutions will have to provide inclusive education to the children with disabilities.

Guardianship

- The Act provides for grant of guardianship by District Court under which there will be joint decision – making between the guardian and the persons with disabilities.

Establishment of Authorities

- Broad based Central & State Advisory Boards on Disability are to be set up to serve as apex policy making bodies at the Central and State level.
- The Office of Chief Commissioner of Persons with Disabilities and the office of State Commissioners of Disabilities has been strengthened.
- The Chief Commissioner for Persons with Disabilities and the State Commissioners will act as regulatory bodies and Grievance Redressal agencies and also monitor implementation of the Act.
- The National and State Fund will be created to provide financial support to the persons with disabilities.

Penalties for offences

- The Act provides for penalties for offences committed against persons with disabilities and also violation of the provisions of the new law.

United National Convention on the Rights of Persons with Disabilities (UNCRPD)

- The Convention on the Rights of Persons with Disabilities was **adopted on 13 December 2006** at the United Nations Headquarters in New York and entered into force on 3 May 2008.
- The Convention is intended as a **human rights instrument** with an explicit, social development dimension.
- It adopts a **broad categorization of persons with disabilities** and reaffirms that all persons with all types of disabilities must **enjoy all human rights** and fundamental freedoms.
- It clarifies and qualifies how all categories of rights apply to persons with disabilities and identifies areas where adaptations have to be made for persons with disabilities to effectively exercise their rights and areas where their rights have

been violated, and where protection of rights must be reinforced.

8) University examination guidelines

Gs paper 2- Issues related to social sector; Statutory, regulatory and quasi judicial bodies.

Context:

- The University Grants Commission's (UGC) guidelines of July 6, 2020 on conducting **final-year examinations** for university students have created a storm.

What does the guideline say?

- The guidelines state that performance in examinations is necessary for "**reflection of competence, performance and credibility that is necessary for global acceptability**".
- The guidelines state that the decision has been taken keeping in view the future of the students — jobs and higher education.

Criticism of the UGC decision

Exam centric education system

- It is a matter of concern that our education system continues to be **examination-centric** and these guidelines fail to take into account the fact that the validity of examinations fundamentally depends on their reliability.

Inadequately trained teachers

- Most teachers too are **not trained in setting good papers** particularly for online open-book examinations.

One size doesn't fits all

- A **one size fits all cannot apply** to our universities as we have all kinds of universities, i.e. unitary, affiliating, private and subject specific.

Uncertainty

- In case the COVID-19 infection does not subside it would mean that the UGC either **extends the deadline further** or universities are forced to conduct online exams.

Discriminatory policy

- In case of **Online exams**, the UGC would have imposed a **discriminatory policy** on the students — issues with access to the Internet, electricity and study materials, as well as a lack of a study environment in homes would go unaddressed.

Last semester being sacrosanct

- The idea that just one semester of examinations will be **determinative** of the integrity and value of a degree for which students would have worked hard for six to 10 semesters is questionable.

Criticism of UGC

- The UGC was fundamentally meant to be the **fund granting institution**.
- But the UGC Act 1956 does confer on it the power of '**coordination and determination of standards**' in universities as well and, therefore, it has become the regulator of higher education.
- Today, the higher education sector is **overregulated and underfunded**.

Alternative to UGC

- The present government at the Centre wants to replace the UGC with a **higher education commission**.
- Since universities are autonomous bodies, **autonomy can help us in finding solutions** keeping in view the specific situation of each university.

Way forward:

- UGC should eventually take the decision that would be **equitable, fair, pragmatic** and beneficial to any set of students.

INDIAN EXPRESS EXPLAINED

1) Is EC empowered to delay Bihar elections due to Covid-19?

GS paper 2: Representation of People's Act, Constitutional Bodies

About Election Commission

- The Election Commission of India is an **autonomous constitutional authority** responsible for administering Union and State election processes in India.
- The Constitution of India (**Article 324**) has vested in the Election Commission of India the **superintendence, direction and control** of the entire process for conduct of elections to Parliament and Legislature of every State and to the offices of President and Vice-President of India.

Chief Commissioners

- Originally the commission had only a Chief Election Commissioner. It currently consists of the **Chief Election Commissioner and two Election Commissioners**.
- The President appoints Chief Election Commissioner and Election Commissioners. They have tenure of six years, or up to the age of 65 years, whichever is earlier.
- They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court of India. The Chief Election Commissioner can be removed from office only through impeachment by Parliament.
- The Commission has a separate Secretariat at New Delhi, consisting of about 300 officials, in a hierarchical set up.

Why in the news?

- Political parties are increasingly voicing concerns over **holding elections in Bihar** amid the COVID pandemic.
- The Election Commission is mandated to hold elections at any time **within six months** before the five-year term of the Lok Sabha or Legislative Assembly expires.
- Usually the polls are timed in a way that the new Assembly or Lok Sabha is in place

on the day of the dissolution of the outgoing House.

- In the case of **early dissolution**, EC has to ensure, as far as possible, a new Lok Sabha or Assembly is in place within six months of the dissolution.
- But the elections in the pandemic COVID situation are becoming a tougher job for ECI.

What is the issue?

- Under **Section 153 of the Representation of the People Act**, ECI can “extend the time” for completing an election, **but such extension should not go beyond the date of the normal dissolution of the Lok Sabha or the Assembly**.
- In 1991, the Commission, under this provision read with **Article 324 of the Constitution**, postponed the ongoing parliamentary elections for three weeks after Rajiv Gandhi’s assassination during his campaign in Tamil Nadu.

Can the ECI postpone the Elections of Bihar?

- Yes, ECI can be done through extraordinary powers under Article 324.
- The ECI will have to inform the government about its inability to hold polls on time.
- Then the government and the President will then decide the future course — **to impose President’s Rule or allow the incumbent Chief Minister to continue for six months**.

Related information

RPA

- Representation of People Act provides for the conduct of elections of the Houses of Parliament and to the House or Houses of the Legislature of each State, the qualifications and disqualifications for membership of those Houses, the corrupt practices and other offences at or in connection with such elections and the decision of doubts and disputes arising out of or in connection with such elections.

2) Delimitation in North- East

GS 2: Constitutional Bodies, Parliament and State Legislatures

What is delimitation?

- Delimitation is the redrawing of the boundaries of parliamentary or assembly constituencies to make sure that there are, as nearly as practicable, the same number of people in each constituency.
- It is normally done after a decadal census.
- Whenever the government goes for a delimitation process, it sets up a **Delimitation Commission**, which constitutes the Chief Election Commissioner and two judges or ex-judges from the Supreme Court or High Court.

Is the delimitation process happening every ten years?

- Initially Delimitation Commissions were set up in **1952, 1963, 1973** but in **1976** due to a constitutional amendment delimitation was suspended until 2001.
- The 1976 amendment was done because there was an issue about family planning policies run by different states. Most states that took little interest in population control could end up with more seats in Parliament, while the southern states that promoted family planning could end up with fewer seats
- The **last delimitation exercise between July 2002 and March 31, 2008**, based on the **2001 Census, only readjusted boundaries of existing Lok Sabha and Assembly seats and reworked the number of reserved seats** (without changing the number of seats in Lok Sabha and Assemblies).
- Now another amendment extended the freeze on the number of seats **until 2026**.

Why were some north-eastern states left in 2002-08?

- **Arunachal Pradesh, Nagaland, Assam and Manipur** were left from the delimitation process in the 2002-08 process because there were **protests due to the pending National Register of Citizen (NRC) process**.

Why in the news?

- In March 2020, the Law Ministry notified the Delimitation Commission for the four northeast states and Jammu and Kashmir, which was also left out in 2002-08. This

delimitation will not change the number of seats in North-eastern states but only change the boundaries of seats.

- Jammu and Kashmir will have changes in the number of seats.

What is the issue?

- But many experts are commenting that setting up a delimitation commission by the law ministry for only certain states is **unconstitutional**.
- Because, in 2008, after the President deferred delimitation in Arunachal Pradesh, Assam, Manipur and Nagaland, the Parliament decided that instead of creating another Delimitation Commission in future for the limited purpose of redrawing seat boundaries in the four north-eastern states, the exercise there would be carried out by the **Election Commission**.
- The **Representation of the People Act 1950** was amended, and **Section 8A** was introduced for this purpose.
- The Parliament was guided by the fact that there is precedence of the EC being vested with the authority to redraw boundaries of constituencies – including when Delhi was delimited into 70 seats in 1991-92, and Uttarakhand into 70 seats in 2000.
- Since the RP Act 1950 clearly states that delimitation in the four northeastern states, when held, would fall within the EC's remit, many experts argue that the Centre should not have notified a separate Delimitation Commission for this purpose.
- They opine that any delimitation exercise in Arunachal, Manipur, Assam and Nagaland by the new Delimitation Commission would be declared void by the courts and, subsequently, result in wastage of huge precious public funds.

3) Trends in World Population

GS 3: Population and associated issues

Total Fertility Rate (TFR)

- The total fertility rate in a specific year is defined as the **total number of children that would be born to each woman** if she were to live to the end of her child-bearing years and give birth to children in

alignment with the prevailing age-specific fertility rates.

- It is calculated by totalling the age-specific fertility rates as defined over five-year intervals.
- A **total fertility rate of 2.1 children per woman ensures a broadly stable population**, this rate is also called **Replacement rate**.

What is in the news?

- A study about the trends in the world population has been published in the Lancet Magazine.
- This report analyzes and exhibits that the population will peak in the year 2064 with a global population of 9.73 billion and will show a declining trend by 2100 where the global population is expected to be around 8.79 billion .
- The global TFR is predicted to steadily decline from 2.37 in 2017 to 1.66 in 2100.
- The TFR is projected to fall below 2.1 in 183 countries. In 23 countries including Japan, Thailand, Italy and Spain, it is projected to shrink by more than 50%.
- The **female educational attainment and access to contraception** is seem as the major reason for declines in fertility and slow population growth.

What will happen to Indian population?

- At the current rate of growth, India's population is likely to peak by 2047 at about 1.61 billion and then decline to 1.03 billion by 2100.
- However, were it to meet UN Sustainable Goal Development targets, the peak would be earlier and see a population decline to 929 million. The sharper fall is due to the assumption that all women globally will have much **higher access to contraception and education**.
- This scenario will lead to a sharper reduction in the Total Fertility Rate.
- India will, however, remain the most populous country. The five largest countries in 2100 (are projected) to be India, Nigeria, China, the U.S. and Pakistan.
- India is projected to have a low life expectancy of 79.3 years in 2100. (presently it is 69.1 years)
- By 2100, India can expect about half million people coming into the country as immigrants. This will be a challenge to the country to handle.
- The working population will be decreased to 578 million in 2100 from 748 million presently.

References

POLITY:

- 1) <https://www.thehindu.com/news/national/disabled-are-entitled-to-same-benefits-of-scast-quota-supreme-court/article32059867.ece#:~:text=Upholding%20HC%20decision%2C%20Bench%20says,in%20public%20employment%20and%20education.>
- <https://vikaspedia.in/social-welfare/differently-abled-welfare/policies-and-standards/rights-of-persons-with-disabilities-act-2016>
- <https://vikaspedia.in/social-welfare/differently-abled-welfare/schemes-programmes/ddrs-scheme-revised>
- 2) <https://www.thehindu.com/news/national/other-states/no-postal-ballot-facility-for-voters-above-65-in-bihar-elections-ec/article32105142.ece>
- 3) <https://www.thehindu.com/news/national/newly-elected-rajya-sabha-members-to-take-oath-on-july-22/article32111838.ece>
- https://rajyasabha.nic.in/rajya_sabha/council_state.aspx
- <http://ddnews.gov.in/national/newly-elected-rajya-sabha-members-take-oath-july-22#:~:text=Keshava%20Rao%20and%20Tiruchi%20Siva,the%20meetings%20of%20the%20Committees.>
- 4) <https://www.thehindu.com/todays-paper/section-144-in-gadag/article32119949.ece>
- <https://www.business-standard.com/about/what-is-section-144>
- <https://indianexpress.com/article/explained/what-is-section-144-crpc-prohibitory-orders-india-cao-citizenship-act-6175056/>

Environment

- <https://cals.arizona.edu/crops/citrus/insects/woolywhitefly.pdf>
- <https://biocontrol.entomology.cornell.edu/predators/ladybeetles.php>
- <https://entomology.ca.uky.edu/ef148>
- <https://www.thehindu.com/sci-tech/energy-and-environment/indigenous-bugs-help-tackle-invasive->

[pest/article32095078.ece#:~:text=Two%20types%20of%20ladybird%20beetles,fruit%20farmers%20—the%20the%20woolly%20whitefly.&text=This%20whitefly%20\(Aleurothrixus%20floccosus\)%20is,on%20various%20kinds%20of%20food.](pest/article32095078.ece#:~:text=Two%20types%20of%20ladybird%20beetles,fruit%20farmers%20—the%20the%20woolly%20whitefly.&text=This%20whitefly%20(Aleurothrixus%20floccosus)%20is,on%20various%20kinds%20of%20food.)

IR

- <https://www.thehindu.com/news/international/rohingya-refugees-cant-leave-island/article32035334.ece>
- <https://www.thehindu.com/news/national/india-to-take-a-call-on-australia-inclusion-in-malabar-exercises-with-japan-us/article32034664.ece>
- <https://www.thehindu.com/news/national/fourth-highest-opium-seizure-in-2018-reported-from-india-world-drug-report/article32005672.ece>
- <https://www.thehindu.com/news/international/caatsa-the-spectre-of-us-sanctions/article32053452.ece>
- <https://www.thehindu.com/news/international/pakistan-will-complete-cpec-at-all-costs-says-imran-khan/article31988392.ece>
- <https://www.thehindu.com/business/Economy/state-borrowings-set-to-rise-53-in-first-half-care-ratings/article32024991.ece>
- <https://www.thehindu.com/news/international/china-us-in-new-spat-over-uyghur-crackdown/article32045622.ece>

Economy

- <https://www.thehindu.com/business/pandemic-spurs-more-private-sector-enrolments-in-nps/article32118121.ece>
- <https://www.thehindu.com/business/Industry/wpi-inflation-slows-for-third-month-in-row/article32083268.ece>
- <https://www.thehindu.com/news/national/india-and-eu-push-trade-talks-discuss-china-pakistan-and-the-coronavirus-pandemic/article32092238.ece>
- <https://www.thehindu.com/business/Economy/eu-india-summit-to-launch-talks-on-resuming-fta-negotiations/article32082576.ece>
- <https://www.google.com/search?client=firefox-b->

[d&q=1.+FinMin+not+for+slashing+GST+o
n+sanitisers](#)

IR

- <https://www.thehindu.com/news/national/at-un-meet-modi-calls-for-reformed-multilateralism/article32118114.ece>
- <https://www.thehindu.com/news/international/un-blacklists-pakistan-taliban-leader-noor-wali-mehsud/article32117427.ece>
- <https://www.thehindu.com/news/international/jordan-court-dissolves-muslim-brotherhood/article32106413.ece>
- <https://www.thehindu.com/news/national/8-crore-to-13-crore-people-may-go-hungry-due-to-covid-induced-recession/article32095212.ece>
- <https://www.thehindu.com/news/national/lancet-study-predicts-earlier-peak-for-indian-population/article32095120.ece>
- <https://www.thehindu.com/news/national/adb-appoints-election-commissioner-ashok-lavasa-as-new-vice-president/article32089006.ece>
- <https://www.thehindu.com/news/national/iran-drops-india-from-chabahar-rail-project-cites-funding-delay/article32072428.ece>

S&T

- <https://www.thehindu.com/news/national/national-intelligence-grid-to-be-ready-by-early-2020/article29480961.ece>
- <https://www.thehindu.com/news/national/network-for-intel-agencies-to-share-info-will-go-live-next-year/article30019937.ece>
- <https://www.thehindu.com/news/national/natgrid-to-have-access-to-database-that-links-around-14000-police-stations/article32058643.ece>
- <https://ncrb.gov.in/en/crime-and-criminal-tracking-network-systems-cctns>
- <https://www.thehindu.com/news/cities/chennai/iit-m-team-conducts-research-on-cancer-curing-properties-of-turmeric/article32071234.ece>
- <https://en.wikipedia.org/wiki/TRAIL>
- <https://www.medicinenet.com/script/main/art.asp?articlekey=25458>
- [\[infant-pneumonia-approved/article32095084.ece\]\(#\)](https://www.thehindu.com/sci-tech/health/first-indigenous-vaccine-for-

</div>
<div data-bbox=)

- <https://www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204>
- <https://www.forbes.com/sites/bernardmarr/2017/01/24/a-complete-beginners-guide-to-blockchain/#6836aee36e60>
- <https://www.investopedia.com/terms/c/cryptocurrency.asp>
- <https://www.thehindu.com/news/international/biden-gates-other-high-profile-twitter-accounts-hacked/article32097535.ece>
- <https://economictimes.indiatimes.com/markets/stocks/news/sc-allows-trade-in-cryptocurrency-quashes-rbi-curb-on-use/articleshow/74470078.cms?from=mdr>
- <https://www.webopedia.com/TERM/C/cryptocurrency-mining.html#:~:text=Cryptocurrency%20mining%2C%20or%20cryptomining%2C%20is,to%20the%20blockchain%20digital%20ledger.&text=In%20order%20to%20be%20competitive,a%20computer%20with%20specialized%20hardware.>

Health

- <https://www.thehindu.com/sci-tech/health/the-hindu-explains-is-airborne-transmission-of-covid-19-a-risk/article32053924.ece>
- <https://www.who.int/news-room/commentaries/detail/transmission-of-sars-cov-2-implications-for-infection-prevention-precautions>
- [https://www.thehindu.com/sci-tech/health/india-registers-a-steep-decline-in-maternal-mortality-ratio/article32106662.ece#:~:text=The%20Maternal%20Mortality%20Ratio%20\(MMR,Sample%20Registration%20System%20\(SRS\).](https://www.thehindu.com/sci-tech/health/india-registers-a-steep-decline-in-maternal-mortality-ratio/article32106662.ece#:~:text=The%20Maternal%20Mortality%20Ratio%20(MMR,Sample%20Registration%20System%20(SRS).)
- <https://data.unicef.org/topic/maternal-health/maternal-mortality/#:~:text=Definition%3A%20The%20maternal%20mortality%20ratio,du ring%20the%20same%20time%20period.>
-

Editorials

- <https://www.thehindu.com/opinion/editorial/sure-power-the-hindu-editorial-on-indias-solar-strategy/article32060269.ece>
- <http://isolaralliance.org/Objective.aspx>
- <http://isolaralliance.org/docs/ISA%20FAQs.pdf>
- <https://www.thehindu.com/opinion/lead/hardly-smart-about-urban-health-care/article32060296.ece>
- <http://www.amssdelhi.gov.in/imd%20structure.htm>
- <https://www.thehindu.com/opinion/editorial/gains-from-rains/article32071933.ece>
- <https://www.thehindu.com/opinion/lead/enabling-people-to-govern-themselves/article32071943.ece>
- <https://www.thehindu.com/opinion/lead/chinas-post-covid-aggression-is-reshaping-asia/article32095103.ece>
- <https://www.thehindu.com/opinion/op-ed/india-should-believe-in-the-eu/article32094669.ece>
- <https://ec.europa.eu/trade/policy/countries-and-regions/countries/india/>
- <https://www.livelaw.in/top-stories/disabled-entitled-same-benefits-as-sc-st-candidates-159793>
- <https://www.thehindu.com/opinion/editorial/for-equal-treatment-the-hindu-editorial-on-the-supreme-court-extending-benefits-to-the-disabled/article32106048.ece>
- <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
- <https://vikaspedia.in/social-welfare/differently-abled-welfare/policies-and-standards/rights-of-persons-with-disabilities-act-2016>
- <https://www.thehindu.com/opinion/op-ed/university-examination-guidelines-that-score-low/article32118429.ece>

PIB

- <https://pib.gov.in/PressReleasePage.aspx?PRID=1638347>
- 2) <https://pib.gov.in/PressReleasePage.aspx?PRID=1638541>
- https://mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1637998>
- 4) <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1639395>

- 5) <https://www.thehindu.com/news/national/first-trial-movement-of-a-container-ship-from-kolkata-port-to-bangladeshs-chattogram-port-flagged-off/article32106986.ece>
- <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1639055>
- 6) <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1639103>
- <https://itpd.ncert.gov.in/mod/page/view.php?id=504>
- <https://vikaspedia.in/education/teachers-corner/diksha-national-teacher-platform>

AIR

- <http://newsonair.com/News?title=Jal-Shakti-Minister%2c-LG-reviewed-implementation-of-Jal-Jeevan-Mission-in-J%26K&id=393466>
- https://www.youtube.com/watch?v=Qcdu8XBaJo&list=PLcDghvQhYD9IOCPeVG4pQvLDCuTCit_D8&index=6&frags=pl%2Cwn
- https://www.youtube.com/watch?v=tzn9xFxJVeU&list=PLcDghvQhYD9IOCPeVG4pQvLDCuTCit_D8&index=5

ART and CULTURE

- <https://www.tourmyindia.com/states/jammu-kashmir/amarnath-cave.html>
- <https://www.thehindu.com/news/national/other-states/jk-governor-performs-pratham-aarti-at-amarnath-cave/article31995781.ece>
- <https://www.culturalindia.net/indian-crafts/zardozi.html>

INDIAN EXPRESS EXPLAINED

- http://legislative.gov.in/sites/default/files/04_representation%20of%20the%20people%20act%2C%201951.pdf
- <https://eci.gov.in/about/about-eci/the-functions-electoral-system-of-india-r2/>
- <https://indianexpress.com/article/explained/explained-is-ec-empowered-to-delay-bihar-elections-due-to-covid-19-6501317/>
- <https://indianexpress.com/article/explained/delimitation-commission-northeast-india-election-commission-6510333/>
- <https://data.oecd.org/pop/fertility-rates.htm>
- <https://indianexpress.com/article/explained/explained-what-forecast-of->

[shrinking-populations-means-for-india-and-world-6507785/](https://www.officerspulse.com/shrinking-populations-means-for-india-and-world-6507785/)