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Current Affairs (CONSOLIDATION)

SEPTEMBER 2020
(PART – I)

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Polity and Governance

Highlights

- *Basic Structure Doctrine: Kesavananda Bharati Case*
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- *Reservation to In-service Doctors in PG: SC*
- *Question Hour and Zero Hour*
- *Monsoon Session of Parliament*
- *Supplementary Demands for Grants*
- *Mission Karmayogi for Civil Servants*
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- *Uttar Pradesh Special Security Force*
- *Climate Smart Cities Assessment Framework*
- *Five Star Villages Scheme: India Post*
- *Rashtriya Khel Protsahan Puruskar 2020*

Basic Structure Doctrine: Kesavananda Bharati Case

Why in News

Recently, **Kesavananda Bharati**, the main petitioner of the **Kesavananda Bharati Sripadagalvaru and Ors versus State of Kerala Case (1973)** has passed away.

- The landmark judgement is known for introducing the **basic structure doctrine** of the Constitution of India.

Key Points

- **Kesavananda Bharati:**
 - He **challenged the Kerala land reforms legislation in 1970**, which imposed restrictions on the management of the religious property.
 - The case was **challenged under Article 26**, concerning the right to manage religiously owned property without government interference.

- A **13-judge bench** was set up by the **Supreme Court (SC)**, the biggest so far, to hear the case.

- **The question underlying the case also included:** Was the power of Parliament to amend the Constitution unlimited? In other words, could Parliament alter, amend, abrogate any part of the Constitution even to the extent of taking away all Fundamental Rights?

➤ Background:

- The SC conceded absolute power to Parliament in amending the Constitution, as was seen in the verdicts in the **Shankari Prasad case (1951)** and **Sajjan Singh case (1965)**.
 - **In both the cases**, the court had ruled that the term **"law" in Article 13** must be taken to mean rules or regulations made in exercise of ordinary legislative power and not amendments to the Constitution made in exercise of constituent power under **Article 368**.

Note:

- This means **Parliament had the power to amend any part of the Constitution** including Fundamental Rights.
 - But **Article 13(2)** reads, “The State shall not make any law which takes away or abridges the right conferred by this Part (i.e. Part-III) and any law made in contravention of this clause shall, to the extent of the contravention, be void.”
- However, in the **Golaknath case (1967)**, the SC held that **Parliament could not amend Fundamental Rights**, and power to amend the Constitution would be only with a Constituent Assembly.
 - The Court held that an **amendment under Article 368 is “law” within the meaning of Article 13** of the Constitution and therefore if an amendment “takes away or abridges” a Fundamental Right conferred by Part III, it is void.
- To dis-effect the judgments of the SC in the *Golaknath case* (1967), *RC Cooper case* (1970), and *Madhavrao Scindia case* (1970), the then government enacted major amendments to the Constitution. Most notably:
 - **24th Constitutional (Amendment) Act, 1971:** Parliament had also given itself the power to amend any part of the Constitution.
 - **25th Constitutional (Amendment) Act, 1972:** The right to property had been removed as a Fundamental Right.
- **Verdict in the Kesavananda Bharati Case:**
 - The landmark judgement was delivered on **24th April 1973** by a **thin majority of 7:6** wherein the majority held that **any provision of the Indian Constitution can be amended by the Parliament** in order to fulfil its socio-economic obligations that were guaranteed to the citizens as given in the Preamble, provided that such amendment **did not change the Constitution’s basic structure**.
 - The minority, however, in their dissenting opinion, were wary of giving the Parliament unlimited amending power.
 - The court held that the **24th Constitutional Amendment was entirely valid** but it found the **second part of the 25th Constitutional Amendment to be ultra vires**.
- The SC declared the **Article 31C** as unconstitutional and invalid on the ground that **judicial review** is the basic structure and hence cannot be taken away.
 - Despite the ruling that Parliament cannot breach Fundamental Rights, the court upheld the amendment that removed the Fundamental Right to property.
 - The court ruled that in spirit, the amendment would not violate the “basic structure” of the Constitution.
- **Doctrine of the Basic Structure:**
 - The **origins of the basic structure doctrine** are found in the **German Constitution** which, **after the Nazi regime**, was amended to protect some basic laws.
 - Learning from that experience, the new German Constitution introduced substantive limits on Parliament’s powers to amend certain parts of the Constitution which it considered ‘basic law’.
 - In **India**, the basic structure doctrine has formed the **bedrock of judicial review** of all laws passed by Parliament.
 - No law can impinge on the basic structure. What the basic structure is, however, has been a continuing deliberation.
 - **Parliamentary democracy, Fundamental Rights, judicial review, secularism**- are all held by courts as the basic structure and the list is not exhaustive.
 - It is the judiciary which is responsible to decide what constitutes the basic structure.
- **Implications of the Judgement:**
 - Politically, as a result of the verdict, the **judiciary faced its biggest litmus test against the executive**. The government ignored the opinion and superseded three judges.
 - Within less than two years of the restoration of Parliament’s amending powers to near absolute terms, the **42nd amendment, 1976** was challenged before the SC by the owners of Minerva Mills (Bangalore), a sick industrial firm which was nationalised by the government in 1974.
 - Basic structure doctrine was **reaffirmed in the Minerva Mills case (1980)** and later in the **Waman Rao case (1981)**.

Note:

Compatibility of the Contempt of Court with International Standards

Why in News

The **International Commission of Jurists (ICJ)** has urged for a **review of criminal contempt laws in India**, expressing its concerns over the Supreme Court's decision to convict **Advocate Prashant Bhushan for criminal contempt**.

Key Points

➤ The Supreme Court's Decision:

- The Court found Prashant Bhushan guilty of 'scandalizing the court' on a suo-motu consideration of his two tweets. It has fined him with Rs. 1.

○ Contempt of Court:

- **Constitutional Provisions: Article 129 and 215 of the Constitution** of India empowers the **Supreme Court (SC) and High Courts** respectively to punish people for their respective contempt.

- Article 142 of the Indian Constitution also empowers the SC to punish for its contempt. However, **what is contempt of court per se has not been defined** by the Indian Constitution.

- **Statutory Provisions: The Contempt of Court Act, 1971** elaborately deals with the concept of contempt of court.

- The Act divides contempt into **civil and criminal contempt**.

➤ International Commission of Jurists' Views:

- For the ICJ, the conviction appears to be inconsistent with international standards on freedom of expression and the role of lawyers.

- **The Universal Declaration of Human Rights:** The judgement goes against the general protection of free speech and expression in the **Universal Declaration of Human Rights**.

- The Declaration was proclaimed by the United Nations General Assembly in 1948. For the first time, fundamental human rights were made universally applicable and protected.

- It states that 'All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.'

- **The International Covenant on Civil & Political Rights:** The judgement is inconsistent with the freedom of expression law guaranteed by the **International Covenant on Civil and Political Rights**.

- The ICCPR is a key international human rights treaty, providing a range of protections for civil and political rights.

- The Covenant compels governments to take administrative, judicial, and legislative measures in order to protect the rights enshrined in the treaty and to provide an effective remedy.

- The Covenant was adopted by the UN General Assembly in 1966 and came into force in 1976. 173 countries including **India have ratified** the Covenant.

- **The United Nations' Basic Principles on the Role of Lawyers:** The judgement goes against the principles enshrined under the UN Basic Principles on the Role of Lawyers.

- **Principle 23:** Lawyers "shall have the right to take part in public discussion of matters concerning the law, the administration of justice and the promotion and protection of human rights".

- These Principles were adopted by the **8th United Nations Congress on the Prevention of Crime and the Treatment of Offenders**, Cuba in 1990.

- The **Bar Association of India** also highlighted that "the exercise of contempt jurisdiction by the Court in this manner has potential for more self-harm than the avowed purpose of safeguarding the prestige of the institution".

International Commission of Jurists

- Since **1952**, the International Commission of Jurists (ICJ) has performed a unique and prominent role as a **Non Governmental Organization (NGO)** defending human rights and the rule of law worldwide.

- It is headquartered in **Geneva, Switzerland**.

Reservation to In-service Doctors in PG: SC

Why in News

Recently, the **Supreme Court** has allowed **states to grant the benefit of reservation of seats** to in-service doctors in the **National Eligibility cum Entrance Test (NEET)** postgraduate degree courses.

Note:



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- The five-judge Constitution Bench of the apex court also held that the **Medical Council of India (MCI)** has **no power to provide or not provide reservation** for in-service doctors in admission to PG courses.
 - MCI is a **creation of a statute under Entry 66 of List-I of the Constitution** and its role is to **coordinate and determine the standards of medical education**.
 - **Entry 66 of List-I:** Coordination and determination of standards in institutions for higher education or research and scientific and technical institutions.

Key Points

- The Bench held that **MCI regulations barring such reservations are unconstitutional and arbitrary** and that the **state legislature** has the authority to provide reservation for in-service doctors.
 - It held that a State has the legislative competence and authority to provide for a separate source of entry for in-service candidates seeking admission to postgraduate degree/diploma courses in the exercise of powers under **Entry 25 of List-III**, described in the **seventh schedule**.
 - **Entry 25 of List-III:** Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.
- It has asked **states to formulate a scheme for rural/remote service by in-service doctors** after completing PG degree and the **doctors must sign a bond for five years in service in such areas**.
- **Background:**
 - Doctors from Kerala, Maharashtra, and Haryana **filed a petition challenging the validity of the Postgraduate Medical Education Regulations 2000**, framed by the MCI.
 - 50% seats in PG diploma courses are reserved for medical officers in the government service but the MCI regulations barred it in PG degree courses.
 - All the admission to PG degree courses are conducted through the NEET and 50% seats are filled through all India quota and the remaining 50% from state quota.
 - Doctors held that **granting reservation benefits would encourage** those working in government hospitals and rural areas.

- The in-service candidates, due to their work, hardly find time to study and it becomes tough for them to compete with the general merit candidates.
- The **Central government and the MCI opposed the plea** contending that granting reservations or a separate source of entry for in-service candidates would **directly impinge on the authority of MCI** and its regulations.

Question Hour and Zero Hour

Why in News

Recently, the Central government has decided to **suspend the Question Hour** and **curtail Zero Hour** for **Monsoon Session**. This has been done in view of the **Covid-19 pandemic**.

- In the past too, the **Question Hour has been suspended**. However, they were suspended during national emergencies. The current suspension has been done during a regular session.

Key Points

- **Question Hour:**
 - **Definition:** The **first hour of every parliamentary sitting** is slotted for the Question Hour. However, in 2014 the Question Hour **was shifted in the Rajya Sabha from 11 am to 12 noon**.
 - During this one hour, Members of Parliament (MPs) ask **questions to ministers** and hold them accountable for the functioning of their ministries.
 - The questions can also be asked to the **private members** (MPs who are not ministers).
 - **Regulation:** It is regulated according to the **parliamentary rules**.
 - The **presiding officers of both Houses** (Rajya Sabha and Lok Sabha) are the **final authority** with respect to the conduct of Question Hour.
 - **Kinds of Questions:** There are three types of questions asked, which are as follows:
 - **Starred question** (distinguished by an asterisk): This requires an **oral answer** and hence supplementary questions can follow.
 - **Unstarred question:** It requires a **written answer** and hence, supplementary questions cannot follow.

Note:



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- **Short notice question:** It is asked by giving a notice of less than ten days. It is answered orally.
- **Frequency:** Question Hour in both Houses is held on all days of the session but there are two days when an exception is made.
 - When the **President addresses MPs from both Houses.**
 - The President's speech takes place at the beginning of a new Lok Sabha and on the first day of a new Parliament year.
 - On the day the Finance Minister presents the **Budget.**
- **Zero Hour:**
 - Zero Hour is an **Indian parliamentary innovation.** It is **not mentioned in the parliamentary rules book.**
 - Under this, MPs can raise matters **without any prior notice.**
 - The zero hour starts immediately after the question hour and lasts until the agenda for the day (i.e. regular business of the House) is taken up.
 - In other words, the **time gap between the question hour and the agenda** is known as zero hour.
- **Impact:**
 - Over the last 70 years, MPs have successfully used the parliamentary device of 'Question Hour' to shine a light on government functioning. Their questions have **exposed financial irregularities** and brought data and information regarding government functioning to the **public domain.**
 - Suspension of the Question Hour would mean that the **Opposition would lose the right to question the government.** Also, the **Ministers are not liable to reply to the issues raised during the Zero Hour.**
 - This would mean that the **MPs would not be able to hold the government accountable** for its action. This will go **against the spirit of parliamentary democracy.**

Monsoon Session of Parliament

Why in News

Recently, the **monsoon session of Parliament** began after several months which was delayed due to the **Covid-19 pandemic.**

Key Points

➤ Parliament Session:

- The **President of India is empowered to summon** each House of Parliament from time to time.
- The **maximum gap** between two sessions of Parliament **cannot be more than six months.** That means the Parliament should meet at **least twice a year.**
- A '**session**' of Parliament is the period between the first sitting of a House and its prorogation.
- There are usually **three sessions** in a year, viz,
 - **Budget Session** (February to May)
 - **Monsoon Session** (July to September)
 - **Winter Session** (November to December)
- The period between the prorogation of a House and its reassembly in a new session is called '**recess**'.

➤ Termination of Session:

- A sitting of Parliament can be terminated by **adjournment** or **adjournment sine die** or **prorogation** or **dissolution** (in the case of the Lok Sabha).
- **Adjournment:** It suspends the work in a sitting for a specified time, which may be hours, days or weeks.
- **Adjournment sine die:** It means terminating a sitting of Parliament for an indefinite period.
 - In other words, when the House is adjourned without naming a day for reassembly.
 - The **power of adjournment** as well as **adjournment sine die** lies with the **presiding officer** (Speaker or Chairman) of the House.
- **Prorogation:** The **President** issues a notification for prorogation of the session after the business of a session is completed and the presiding officer declares the House adjourned sine die.
 - The President can also prorogue the House while in session.
- **Dissolution:** Only the **Lok Sabha** is subject to dissolution. Rajya Sabha, being a permanent House, is not subject to dissolution.
 - A **dissolution ends the life of the existing House**, and a new House is constituted after general elections are held.
 - The **President** is empowered to dissolve the Lok Sabha.

Note:



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Supplementary Demands for Grants

Why in News

The Centre has sought Parliament approval for a **gross additional expenditure** of Rs. 2.35 lakh crore for 2020-21.

- The Minister of Finance presented the first batch of **Supplementary Demands for Grants** for this financial year in the Lok Sabha.

Key Points

- Out of the gross additional expenditure of Rs. 2.35 lakh crore, Rs. 1.67 lakh crore is the **net cash outgo** and Rs. 68,868 crore is matched by savings of the Ministries/ Departments or by enhanced receipts/recoveries.
- Due to the emergency situation caused by the **Covid-19** pandemic, this year's supplementary demand includes **additional allocations to pay for**:
 - Relief measures announced as part of the **Pradhan Mantri Garib Kalyan Yojana** in March 2020.
 - These include insurance schemes, food security, cash transfer, help to small companies for paying employees etc.
 - **Aatmanirbhar Bharat** stimulus package announced in May 2020.
 - The package is expected to focus on **land, labour, liquidity and laws**.
 - **Grants-in-aid for the State Disaster Response Funds**, in accordance with the interim recommendations of the 15th Finance Commission.
 - The government has decided to treat Covid19 as a "**notified disaster**" as defined in **Disaster Management Act, 2005**.
 - **Grants for bank recapitalisation**: The Centre had not allocated any funds for bank recapitalisation in **Budget 2020-21**, but the economic impact of the lockdown led the **Reserve Bank of India (RBI)** to announce in July that infusing money into banks had become necessary.
 - The allocation will **not involve cash outgo**, as the money is being raised through **government securities**.
 - **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** scheme etc which is suffering from a fund crunch.

Supplementary Grants

- **Supplementary Grant**: It is granted when the amount authorised by the Parliament through the appropriation act for a particular service for the current financial year is found to be **insufficient** for that year.
 - It is specified by the **Article 115** of the constitution of India, along with Additional and Excess Grants.
- **Other Grants**:
 - In addition to the **budget** that contains the ordinary estimates of income and expenditure for one financial year, various other grants are made by the Parliament under extraordinary or special circumstances. Apart from Supplementary Grants, these include:
 - **Additional Grant**: It is granted when a need has arisen during the current financial year for additional expenditure upon **some new service** not contemplated in the budget for that year.
 - **Excess Grant**: It is granted when money has been spent on any service during a financial year **in excess of the amount granted** for that service in the budget for that year. Before the demands for excess grants are submitted to the Lok Sabha for voting, they must be approved by the Public Accounts Committee of Parliament.
 - **Vote of Credit**: It is granted for meeting an **unexpected demand upon the resources of India**, when on account of the magnitude or the indefinite character of the service, the demand cannot be stated with the details ordinarily given in a budget. Hence, it is like a blank cheque given to the Executive by the Lok Sabha.
 - **Exceptional Grant**: It is granted for a **special purpose** and forms no part of the current service of any financial year.
 - **Token Grant**: It is granted when funds to meet the proposed expenditure on a new service can be made available by reappropriation. A demand for the grant of a token sum (of Re 1) is submitted to the vote of the Lok Sabha and if assented, funds are made available.
 - Reappropriation involves transfer of funds from one head to another. It does not involve any additional expenditure.

Note:

- **Votes on account, votes of credit and exceptional grants** are specified in **Article 116** of the constitution.
- Supplementary, additional, excess and exceptional grants and vote of credit are **regulated by the same procedure which is applicable in the case of a regular budget**.

Mission Karmayogi for Civil Servants

Why in News

The Union Cabinet has approved 'Mission Karmayogi' - the **National Programme for Civil Services Capacity Building (NPCSCB)**.

- It is meant to be a **comprehensive post-recruitment reform** of the Centre's human resource development. Similar to **pre-recruitment changes** in the form of the **National Recruitment Agency**.

Key Points

- **Aim & Objective:**
 - It is **aimed at** building a future-ready civil service with the **right attitude, skills and knowledge, aligned to the vision of New India**.
 - It aims to prepare Indian civil servants for the future by making them more **creative, constructive, imaginative, proactive, innovative, progressive, professional, energetic, transparent, and technology-enabled**.
 - Comprehensive reform of the capacity building apparatus at the **individual, institutional and process levels** for efficient public service delivery.
- **Reason for Mission:**
 - To address the challenges like- **Rule orientation, political interference, inefficiency with promotions, and generalist and specialist conflict**.
 - To change the status quo of civil services and bring about the long pending **civil services reforms**.
 - The capacity of Civil Services plays a vital role in rendering a wide **variety of services, implementing welfare programs and performing core governance functions**.
- **Features of the Scheme:**

- **Tech-Aided:** The capacity building will be delivered through **iGOT Karmayogi digital platform**, with content drawn from **global best practices**.
- **Coverage:** The scheme will cover 46 lakh **central government employees**, at all levels, and involve an outlay of Rs. 510 crores over a five-year period.
- **Shift from Rules to Roles:** The programme will support a transition **from "rules-based to roles-based"** Human Resource Management (HRM) so that work allocations can be done by matching an official's competencies to the requirements of the post.
 - Apart from domain knowledge training, the scheme will focus on **"functional and behavioural competencies" as well**, and also includes a monitoring framework for performance evaluations.
- **Integrated Initiative:** Eventually, service matters such as confirmation after probation period, deployment, work assignments and notification of vacancies will all be integrated into the proposed framework.
- **Governance Structure:**
 - **Human Resource Council:** NPCSCB will be governed by the **Prime Minister's Human Resource Council**, which will also include state Chief Ministers, Union Cabinet ministers, and experts.
 - This council will approve and review civil service capacity building programmes.
 - **Cabinet Secretary Coordination Unit:** It will comprise select secretaries and cadre controlling authorities.
 - **Capacity Building Commission:** It will prepare and monitor annual capacity building plans and audit human resources available in the government.
 - **Special Purpose Vehicle:** It will **govern the iGOT-Karmayogi platform**.
 - It will be set up under Section 8 of the Companies Act, 2013 and will be a "not-for-profit" company.
 - The SPV will create and operationalize the content, market place and manage key business services of the iGOT-Karmayogi platform, relating to content validation, independent proctored assessments and telemetry data availability.
 - The SPV will own all Intellectual Property Rights on behalf of the Government of India.
 - **Monitoring and Evaluation Framework:** An appropriate monitoring and evaluation framework

Note:

will also be put in place for performance evaluation of all users of the iGOT-Karmayogi platform so as to generate a dashboard view of Key Performance Indicators.

- To conclude, the **ultimate aim** of Mission Karmayogi is to ensure **“Ease of Living” for the common man, “Ease of Doing Business” and Citizen-Centricity** that is reducing the gap between the government and the citizens. This can only be achieved by regular and constructive involvement by the government and civil servants.

Assam Firm on NRC Re-verification

Why in News

The Assam government remains firm on its demand of **10-20% re-verification of the nationality claims** made by some of the people included in the **final National Register of Citizens (NRC)**, published in 2019.

- The state government’s plea for the re-verification is **lying pending in Supreme Court (SC)** for more than a year and the apex court is yet to stamp its approval on it.
- The NRC 2019 is yet to be approved by the **Registrar General of India**.

National Register of Citizens

- NRC is a **register prepared** in respect of each village, showing the houses or holdings in a serial order and indicating against each house or holding the number and names of persons staying therein.
- The register was **first prepared after the 1951 Census of India** and since then it has **not been updated until recently**.
 - It has been **updated in Assam only for now** and the government **plans to update it nationally** as well.
- **Purpose:** To separate “illegal” immigrants from “legitimate” residents.
- **Nodal Agency:** Registrar General and Census Commissioner India.

Key Points

- **Background:**

- In **2018**, the SC **mentioned the prospect of sample re-verification** in an order, saying that it could consider re-verifying 10% of the names included in the NRC.
- In **July 2019**, the state government gave an affidavit in the SC seeking a **re-verification of 20% included names in the districts bordering Bangladesh and 10% in the rest of the districts**.
- However, it was **dismissed** after the erstwhile coordinator of the NRC submitted that **re-verification was already done**.

➤ Current Scenario:

- The state government of Assam has **provided the latest data regarding ‘foreigner’ detection** in the state.
 - 1,36,149 people have been declared ‘foreigners’ by the state’s 100 functioning **Foreigners’ Tribunals**, whereas only 227 ‘foreigners’ have been deported from 13th March 2013 to 31st July 2020.
 - A total of 425 people are currently lodged in the six detention centres in the state.
- There is a **need for re-verification because people of Assam want a correct NRC**.
- Also, there has been a **delay in issuing the rejection slips** to the over 19 lakh excluded people so that they can move court to claim nationality.
 - Officials have cited the **Covid-19 pandemic** and the **floods in the state** as reasons for the delay.
 - The rejection slips would carry the **reason of rejection**, which **would differ from person to person and based on the reason they would be able to challenge their exclusion** in the Foreigners’ Tribunals.
 - Every individual, whose name does not figure in the final NRC, can represent his/her case in front of the Foreigners Tribunals.

Postal Voting in the USA

Why in News

Many states in the USA are making **postal voting options** more easily accessible, as the **USA presidential election** is set to take place in **November 2020** amid the **Covid-19 pandemic**.

Note:

Key Points

➤ Election in USA:

- In the USA, all elections—federal, state, and local—are directly organised by the governments of individual states.
- Unlike India, there is no Election Commission independent of the government in the USA to conduct elections at the national (federal) level.
- The USA Constitution and laws grant the states wide latitude in how they administer elections, this has resulted in varying rules across the country.

➤ Postal Voting in USA:

- Every single state allows postal voting, but they have different rules for this.
 - In some states voters are provided **absentee ballots** if they provide an **excuse** as to why they cannot be present in person on election day.
 - **Absentee voting** allows a person to **vote by mail**.
 - However, in some states there is “**no-excuse absentee voting**”, where voters can get an absentee ballot without providing justification.
 - Some states also have “**vote-by-mail**” facilities, where every registered voter is sent a ballot without a request.
- In 2016 around 24% of voting happened through postal ballots. In 2020, the proportion is expected to surge significantly.

➤ Issues involved:

Postal Voting in India

- **Ballot papers** are distributed electronically to electors and are returned to the election officers via post.
- Currently, only the **following voters** are allowed to cast their votes through postal ballot:
 - **Service voters** (armed forces, the armed police force of a state and government servants posted abroad),
 - **Voters on election duty.**
 - **Voters above 80 years of age or Persons with Disabilities (PwD).**
 - **Voters under preventive detention.**
- The exception to the above-mentioned category of voters is provided under Section 60 of the **Representation of the People Act, 1951.**

- Mr. Trump and his supporters allege that the expansion of postal voting in the November 2020 elections will lead to malpractices. However, Democrats and a section of the Republicans disagree with Mr. Trump, saying he is deliberately disrupting the postal voting.

Revised Guidelines for Parole and Furlough: MHA

Why in News

Recently, the Union **Ministry of Home Affairs (MHA)** has revised the **Model Prison Manual, 2016** guidelines related to **parole** and **furlough**.

Key Points

➤ Revised Guidelines:

- The MHA has asked states to **not release prisoners**, on **parole** and **furlough**, who are considered a threat to the security of the state or to individuals.
 - Imprisonment besides being a mode of punishment also **aims at protecting the society from criminal activities**, therefore **release on parole is not an absolute right** but a concession.
 - A **balance** is, therefore, considered essential between ensuring the rights of inmates and protecting the society from further harm.
- The **parole rules of states to be reviewed** about the benefits and detriments of such parole.
- Parole and furlough may **not be granted as a matter of routine** and may be **decided by a committee of officers and behavioural experts**, especially for inmates sentenced for sexual offences and serious crimes such as murder, child abduction, violence etc.
- **Inclusion of an expert psychologist/ criminologist/ correctional administration expert** as a member of the sentence review board and in the committee which decides grant of parole and furlough to inmates and obtain their opinion before such temporary release.

➤ Background:

- In the wake of the **Covid-19 pandemic**, states are under pressure to release prisoners in order to avoid overcrowding in prisons. Earlier, the **Supreme Court of India** has also passed orders on measures taken to **decongest** prisons, correction homes and detention centres due to the Covid-19 outbreak.

Note:



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- **Prison is a state subject** and **all states have their own rules** for parole, furlough, remission and premature release based on good conduct of the prisoners.
- The MHA guidelines came in the **backdrop of reports** of several prisoners being released on parole and furlough and some of them committing crimes out of jail.

Parole and Furlough

- **Parole:** It is a system of **releasing a prisoner with suspension of the sentence**. The release is **conditional**, usually subject to behaviour, and requires periodic reporting to the authorities for a set period of time.
 - **Parole is not a right**, and is given to a prisoner for a specific reason, such as a death in the family or a wedding of a blood relative.
 - It may be denied to a prisoner even when he makes out a sufficient case, if the competent authority is satisfied that releasing the convict would not be in the interest of society.
- **Furlough:**
 - It is similar to parole, but with some significant differences. It is given in cases of **long-term imprisonment**. The period of furlough granted to a prisoner is treated as **remission of his sentence**.
 - Unlike parole, **furlough is seen as a matter of right for a prisoner**, to be granted periodically irrespective of any reason, and merely to enable the prisoner to retain family and social ties, and to counter the ill-effects of prolonged time spent in prison.
- Both parole and furlough are considered as **reformatory processes**. These provisions were introduced with a view to **humanising the prison system**.
 - Parole and furlough are covered under the **Prisons Act of 1894**.

Proposed Amendment to Railways Act 1989

Why in News

Recently, the **Ministry of Railways** has **proposed to decriminalise begging** on trains or railway premises and

compound the offence of smoking by levying spot fine and dropping all charges/action against the person involved.

- These changes are part of an exercise to **decriminalise/rationalise penalties under the provisions of the Railway Act, 1989**.

Key Points

- **On Begging:**
 - **Current Provision: Section 144 (2) of the Act** holds that if any person begs in any railway carriage or upon a railway station, s/he shall be **liable for punishment of either imprisonment** for a term that may extend to one year, or with a **fine** that may extend to Rs. 2,000, **or with both**.
 - **Proposed Amendment:** Now the **proposal** is to amend the Section by stating that "No person shall be permitted to beg in any railway carriage or upon any part of the Railway".
 - In **2018, Delhi High Court quashed a similar law** that made begging in the national capital a punishable offence and held that **law does not make any distinction between types of begging: voluntary or involuntary**.
 - The law violated **Article 14** (Equality before Law) and **Article 21** (Right to Life and Personal Liberty) of the Constitution.
 - The Court held that the **State cannot fail to do its duty to provide a decent life to its citizens and add insult to injury by arresting, detaining and, if necessary, imprisoning persons who beg** in search for essentials of bare survival.
 - It noted that the **city governments can bring in alternative legislation to curb any racket of forced begging** after undertaking an empirical examination on the sociological and economic aspects of the matter.
- **On Smoking:**
 - **Current Provision: Section 167 of the Act** holds that **no person in any compartment of a train shall**, if objected to by any other passenger, **smoke therein**. Irrespective of any objections raised, the railway **administration may prohibit smoking** in any train or part of a train. Whosoever contravenes these provisions shall be **punishable with a fine** that may extend to Rs.100.

Note:



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- **Proposed Amendment:** If the person liable to pay the fine is willing to pay it immediately, the officer authorised may **compound the offence by charging the maximum fine** which will be paid to the railway administration. Provided that, the **offender shall be discharged and no further proceeding** shall be taken against him/her in respect of such offence.

Beggary

➤ Definition of Beggary:

- The **Bombay Prevention of Begging Act, 1959** defines **beggary** as an activity of having no visible means of subsistence, and wandering about or remaining in any public place in such condition or manner, as makes it likely that the person doing so exists by soliciting or receiving alms.
- However, the provisions of legislation **aim to effectively "cleanse" these spaces of individuals who appear poor or destitute.**
- In India, begging was **first criminalised in the 1920s**, as part of a **colonial logic** that sought to subjugate certain communities by imputing criminality to them.
- **Beggary Laws In India:**
 - There is **no central Act on beggary**, however, many States and Union Territories have used certain sections of the Bombay Prevention of Beggary Act, 1959, as the basis for their own laws.
 - The act of begging in Delhi was made a criminal offence after the 1959 Act was **extended to Delhi** by a **Central government amendment in 1960.**
 - Through these legislations, the governments try to maintain public order, address forced begging or "begging rackets", and prevent annoyance to tourists.

Major Provision Related to Smoking

- The **Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 (COTPA)** is the principal comprehensive law governing tobacco control in India.
- In **2004**, India ratified the **World Health Organisation Framework Convention on Tobacco Control (WHO-FCTC)** which came into force in 2005.

State of the Young Child in India Report

Why in News

Recently, the **State of the Young Child in India report** has been released by **Mobile Creches**, a non-governmental organisation (NGO).

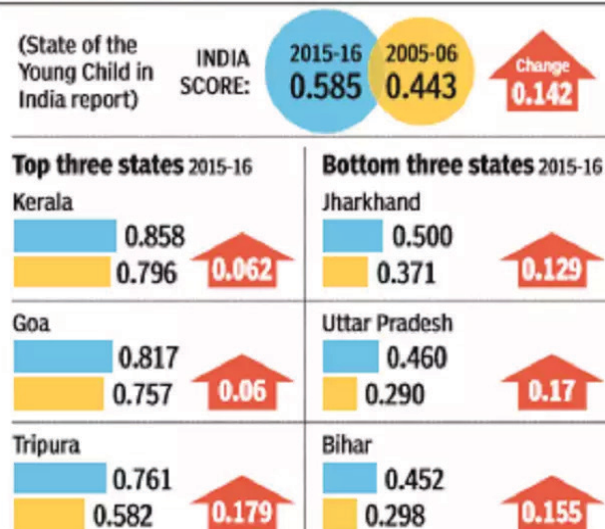
- The **Young Child Outcomes Index (YCOI)** and the **Young Child Environment Index (YCEI)** are parts of the report.
- Mobile Creches works in the field of **early childhood care and development by ensuring creche services at construction sites and slum settlements** across several cities.

Key Points

➤ Young Child Outcomes Index:

- It measures **health, nutrition and cognitive growth of children in the 0-6 years age group** with the help of indicators such as **infant mortality rate, stunting and net attendance** at the primary school level.
- It has been constructed for **2005–2006** and **2015–2016** to enable inter-state comparisons as well as provide an idea of change over time.
- **Kerala, Goa, Tripura, Tamil Nadu and Mizoram** are among the top five states for the well-being of children.

IMPROVING SCORE



Note: Three major components for constructing the index, viz., health, nutrition and cognitive growth and the respective indicators selected are Infant Mortality Rate, stunting and net attendance at the primary school level

Note:

- Assam, Meghalaya, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, Uttar Pradesh and Bihar have scores below the country's average.
- The overall India score is 0.585 on a scale of 0-1.
- **Young Child Environment Index:**
 - It helps to understand the policy and environment enablers that influence a child's well-being.
 - It uses five policy enablers that influence child well-being outcomes, including poverty alleviation, strengthening primary health care, improving education levels, safe water supply and promotion of gender equity.
 - It was constructed for 2015–2016 only due to limitations of data availability.
 - Kerala, Goa, Sikkim, Punjab and Himachal Pradesh have secured the top five positions.
 - The eight states with a below-average score on the YCOI have also performed poorly on this one.
 - The overall India score is 0.672.
- **Analysis of Expenses:**
 - India spent Rs. 1,723 per child in 2018–2019 towards child nutrition, healthcare, education and other necessary protection services which is insufficient and fails to reach the entire eligible population.
 - It highlights that the budgetary allocation for the Ministry of Women and Child Development has increased on a yearly basis however all the additional funds have been allocated towards nutrition delivery under the Integrated Child Development Scheme (ICDS).
 - While the population of children under six years of age is 158.8 million, the ICDS covers only 71.9 million children as calculated from the total number of beneficiaries across states.
 - Out of the 159 million children aged below 6 years in India, 21% are undernourished, 36% are underweight and 38% do not receive full immunisation.
 - The report calls for an increase in public spending on children.

Launch of Bamboo Clusters

Why in News

Recently, the Union Minister for Agriculture and

Farmers' Welfare has virtually inaugurated 22 bamboo clusters in 9 states viz. Gujarat, Madhya Pradesh, Maharashtra, Odisha, Assam, Nagaland, Tripura, Uttarakhand and Karnataka.

- A logo for the National Bamboo Mission (NBM) has also been released.

Key Points

- **National Bamboo Mission:**
 - The restructured NBM was launched in 2018-19 for the holistic development of the complete value chain of the bamboo sector and is being implemented in a hub (industry) and spoke model.
 - **Objective:**
 - Connecting farmers to markets so as to enable farmer producers to get a ready market for the bamboo grown and to increase the supply of appropriate raw material to the domestic industry.
 - It also endeavours to upgrade skills of traditional bamboo craftsmen as per the requirement of contemporary markets with a tie-up with enterprises and premier institutes.
 - The Sector Skill Councils established under the National Skill Development Agency (NSDA) will impart skills and recognition of prior learning to traditional artisans, encouraging the youth to carry forward their family traditions.
 - NSDA is an autonomous body under the Ministry of Skill Development and Entrepreneurship that anchors the National Skill Qualifications Framework and allied quality assurance mechanisms for synergizing skill initiatives in the country.
 - **New Logo:**
 - It portrays a bamboo culm in the centre of a circle composed of half an industrial wheel and half farmers, depicting the objectives of NBM appropriately.
 - The green and yellow colour of the logo symbolise bamboo often termed as green gold.



Note:

Delhi Master Plan 2041

Why in News

Recently, the **Delhi Development Authority (DDA)** has decided to hold public consultations for the preparation of the **Master Plan for Delhi 2041**, a vision document for Delhi's development over the next two decades.

- The **existing Master Plan for Delhi**, which lays down **planning guidelines, policies, code of development, and space requirements** for various socio-economic activities will come to end in 2021.

Key Points

- **Features of 2041 Master Plan:**
 - It focuses on **sustainability, inclusivity and equity**.
 - It endeavours to be **proactive and forward-looking** in nature that accounts for current, emerging and anticipated drivers of urban development.
- **Area of Focus:**
 - A **blue-green infrastructure, cycling infrastructure, walking circuits for pedestrians**, and focus on **unauthorised colonies** to make it less dense.
 - There is also a plan to develop spaces for yoga, active sports, open-air exhibitions, museums and information centres, and other low impact public uses.
 - The Master Plan will be able to fulfill various provisions of **Sustainable Development Goals (SDGs)** like:
 - **SDG 6**- Clean water and sanitation.
 - **SDG 11**- Sustainable cities and communities.
 - **SDG 14**- Life below water.
 - **SDG 15**- Life on land.
- **Functioning:**
 - Delhi has around 50 big drains (blue areas) but due to their **poor condition and encroachment**, the land around green areas has also been affected. In the recent past, **severe air pollution** has also affected the city.
 - The master plan focuses on the **removal of all sources of pollution by checking the outfall of untreated wastewater** as well as the **removal of existing pollutants**.
 - As per the report by the **Central Pollution Control Board**, Delhi generates 3,800 million

litres of sewage per day and half of this goes directly into water bodies without being treated.

- A **mix of mechanised and natural systems may be adopted**, and **dumping of solid wastes** in any of these sites will be strictly prohibited by local bodies, through the imposition of **penalties**.
- **Issues Involved:**
 - **Lack of access to basic services** of **water and sanitation** and other facilities.
 - **Vulnerability and risks** related to disasters such as fire, earthquakes, etc.
 - **Lack of coordination between the multiplicity of agencies** like DDA, Delhi Jal Board, Flood and Irrigation Department, and various municipal corporations.
 - **Other issues** included the legality of some of the properties, narrow access roads, congestion, conflicts between commercial and residential uses, quality of drinking water and waterlogging.

Blue-Green Infra Policy

- It refers to **urban planning** where **water bodies and land are interdependent**, and grow with the help of each other while offering environmental and social benefits.
 - **'Blue'** infrastructure refers to water bodies like rivers, canals, ponds, wetlands, floodplains, and water treatment facilities.
 - **'Green'** stands for trees, lawns, hedgerows, parks, fields, and forests.

Report on Literacy Rate

Why in News

Recently, the report on **'Household Social Consumption: Education in India as part of 75th round of National Sample Survey - from July 2017 to June 2018'** has been released.

- It is based on the **National Statistical Office (NSO)** survey and provides for state-wise **detail of literacy rate among the persons aged seven years and above**.
- The report comes before the **International Literacy Day** which is celebrated on **8th September** every year.

Key Points

- **Data Analysis:** India's **Overall Literacy Rate** is **77.7%**.
 - Urban Areas: 87.7%.

Note:



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- Rural areas: 73.5%.
- Male Literacy Rate: 84.7%.
- Female Literacy Rate: 70.3%.
 - The **male literacy rate is higher than the female literacy** rate among all states with a considerable gap in the worst-performing states.
- **Best Performers:** Kerala > Delhi > Uttarakhand > Himachal Pradesh > Assam.
- **Worst Performers:** Andhra Pradesh < Rajasthan < Bihar < Telangana < Uttar Pradesh.
- **Digital Literacy:**
 - 23% of urban households and 4% of rural households possess computers.
 - Among persons of age 15-29 years, nearly 56% in urban areas and 24% in rural areas were able to operate a computer.
 - In the same age group, nearly 25% in rural areas and 58% in urban areas reported the use of the internet.

International Literacy Day 2020

- The importance of literacy was **first observed at the United Nations Educational, Scientific and Cultural Organisation's (UNESCO) General conference in 1966** and following this, the **first International Literacy Day** was celebrated on **8th September 1967** and the tradition has been held annually since then.
- **Objective:** To raise awareness and remind people of the importance of literacy as a matter of dignity and human rights.
- **Literacy Day 2020:** It will focus on the **changes and challenges in learning during the Covid-19 pandemic**.
 - It will reflect on the innovative and effective pedagogies that can be used in youth and adult literacy programmes to face the pandemic and beyond.
- The international community is **focusing on 2030** with **Sustainable Development Goals (SDGs)** and has aimed to "ensure inclusive and quality education for all and promote lifelong learning" within its goals of **SDG 4**.
- The **50-year review of South Asia** (which includes Bangladesh, India, Islamic Republic of Iran, Nepal and Pakistan) states that the **large scale illiteracy is ever-present among adults**.
 - As per UNESCO, **India will achieve universal literacy by 2060**.

Virtual Courts

Why in News

Recently, the **Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice** has presented its report "**Functioning of the Virtual Courts/ Courts Proceedings through Video Conferencing**".

- This is the **first report** to be presented **by any parliamentary panel** on the **impact of the pandemic**.

Key Points

- **Pre-Covid-19 period**, the **video-conference (VC)** set up was primarily used **for conducting remand matters to prevent movement of prisoners between courts and jails**.
 - In August 2019, the **High Court of Punjab and Haryana launched its first virtual court** at Faridabad to deal with traffic challan cases from across the state.
- The report suggests that a **full-fledged virtual court should be piloted** in the first instance and recommends the **continuation of virtual courts in a post-Covid-19 scenario**.
- It argued that **transfer of certain categories of cases**, like cases pertaining to traffic challans or other petty offences, from regular court establishments to virtual courts **will reduce the pendency of cases**.
 - Currently, there are 30 million pending cases.
- **Advantages:**
 - Virtual/digital justice is **cheaper and faster** besides **addressing locational and economic handicaps**.
 - Virtual courts are an improvement over traditional courts as they are **more citizen-friendly and offer greater access to justice**.
 - The **productivity of lawyers will increase substantially** as there will be no regular visits to courts and long waiting hours. If this practice is extended to other civil cases, **efficiency will double, even treble, in judicial functioning**.
- **Challenges:**
 - Various stakeholders have noted that the **present infrastructure does not support virtual court proceedings**.
 - 3,477 courtrooms are supported with facilities for virtual proceedings while 14,443 are still to be provided with them.

Note:

- Almost 50% of **lawyers**, particularly in district courts, **do not have any laptop or computer facility** so their participation in the virtual courts will be either very less or not at all.
- **All judges are not able to undertake virtual hearings** due to lack of experience and also due to lack of sufficient infrastructure to enable all of them to undertake virtual hearings.
- Virtual court hearings, especially during peak hours when many people log into the video-conferencing system, are **subject to frequent crashes of the system** and one **glitch can spoil the entire proceeding**.
- There are concerns that virtual courts will **compromise the privacy of data as well as the confidentiality of discussions and court proceedings**, due to the usage of third-party software applications, which are **prone to hacking and manipulation**.

e-Courts Project

- It was conceptualized on the basis of the “**National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary-2005**” submitted by e-Committee, **Supreme Court of India** with a vision to transform the Indian Judiciary by ICT enablement of Courts.
- The e-Courts Mission Mode Project, is a **pan-India Project**, monitored and funded by the **Department of Justice**, Ministry of Law and Justice, for the District Courts across the country.

FCRA Clearance of 6 NGOs Suspended

Why in News

Recently, the Union **Ministry of Home Affairs** has suspended licenses under the **Foreign Contribution Regulation Act (FCRA), 2010** of the six **Non Governmental Organisations (NGOs)**.

- Suspension of FCRA license means that the **NGO can no longer receive fresh foreign funds** from donors pending a probe by the Home Ministry.

Key Points

- The **reasons for the suspension have not been specified** by the government.

Foreign Contribution (Regulation) Act (FCRA), 2010

- Foreign funding of voluntary organizations in India is regulated under FCRA act which is implemented by the **Ministry of Home Affairs**.
- The Acts ensures that the **recipients of foreign contributions adhere** to the stated purpose for which such contribution has been obtained.
- Under the Act, organisations are required to register themselves **every five years**.

Non Governmental Organisations

- Worldwide, the term ‘**NGO**’ is used to describe a body that is **neither part of a government nor a conventional for-profit business organisation**.
- NGOs are groups of ordinary citizens that are involved in a wide range of activities that may have **charitable, social, political, religious or other interests**.
- NGOs are helpful in implementing **government schemes at the grassroots**.
- In India, **NGOs can be registered** under a plethora of Acts such as the **Indian Societies Registration Act, 1860, Religious Endowments Act, 1863, Indian Trusts Act**, etc.
- India has possibly **the largest number of active NGOs** in the world, a study commissioned by the government put the number of NGOs in 2009 at 33 lakh.
 - That was one **NGO for less than 400 Indians**, and many times the number of primary schools and primary health centres.
- Ministries such as Health and Family Welfare, Human Resource Department, etc provide funding to a handful of NGOs.
- NGOs also receive funds from abroad, if they are registered with the Home Ministry under the **Foreign Contribution (Regulation) Act (FCRA)**.
 - Without this, no NGO can receive cash or anything of value **higher than Rs 25,000**.

- Earlier, in 2017, USA- based Christian donor, **Compassion International**, was forced to stop operations in India after the Home Ministry found that it funded NGOs that encouraged religious conversions.

Controversies Related to FCRA

- The FCRA regulates the receipt of funding from sources outside of India to NGOs working in India.

Note:

It prohibits the receipt of foreign contribution “for any activities detrimental to the national interest”.

- The Act also held that the government can refuse permission if it believes that the donation to the NGO will adversely affect “**public interest**” or the “**economic interest of the state**”.
 - However, there is **no clear guidance** on what constitutes “public interest”.
- The FCRA restrictions have serious consequences on both the **rights to free speech** and **freedom of association** under Articles 19(1)(a) and 19(1)(c) of the Constitution.
- The right to free speech is affected in **two ways**:
 - By allowing only some political groups to receive foreign donations and disallowing some others, can induce biases in favour of the government.
 - NGOs need to tread carefully when they criticise the regime, knowing that too much criticism could cost their survival.
 - FCRA norms can reduce critical voices by declaring them to be against the public interest. This chilling effect on free speech can lead to self-censorship.
 - Similar to this on unclear guidelines on public interest, in **Shreya Singhal v. Union of India (2015)**, the Supreme Court (SC) struck down Section 66A of the Information Technology Act. The SC held that the Act could be used in a manner that has a chilling effect on free speech.
- Besides, given that the right to freedom of association is part of the **Universal Declaration of Human Rights** (Article 20), a violation of this right also constitutes a human rights violation.
- In April 2016, the **UN Special Rapporteur on the Rights to Freedom of Peaceful Assembly and of Association** undertook a legal analysis of the FCRA, 2010.
 - It stated that restrictions in the name of “public interest” and “economic interest” as invoked under the FCRA failed the test of “legitimate restrictions”.
 - The terms were too vague and gave the state excessive discretionary powers to apply the provision in an arbitrary manner.
- In this context, though it is **necessary to regulate corrupt NGOs**, there needs to be **clarity on terms like public interest**.

SAROD-Ports: Dispute Resolution Mechanism

Why in News

The Union **Ministry of Shipping** launched ‘**SAROD-Ports**’ (**Society for Affordable Redressal of Disputes - Ports**) through virtual ceremony in New Delhi.

Key Points

- **About SAROD-Ports:**
 - It is established under **Societies Registration Act, 1860**.
 - ‘SAROD-Ports’ is similar to provision available in Highway Sector in the form of **SAROD-Roads** constituted by **National Highways Authority of India (NHAI)**.
 - **Functions:**
 - SAROD-Ports will **advise and assist** in settlement of disputes **through arbitrations** in the maritime sector, including ports and shipping sector in Major Port Trusts, Non-major Ports, including private ports, jetties, terminals and harbours.
 - It will also cover disputes between:
 - Granting authority and Licensee/Concessionaire /Contractor.
 - Also, disputes between Licensee/Concessionaire and their contractors arising out of and during the course of execution of various contracts.
- **Benefits:**
 - SAROD-Ports will become the pivotal mechanism of **ummeed (hope), vishwas (trust) and nyaya (justice)** in the Port sector of India. It will lead to **saving huge amounts of legal expenditure and time**.
 - Enforcement of **concession agreements** in the letter and spirit.
 - A **concession agreement** is a **contract** that gives a company the right to operate a specific business within a government’s jurisdiction or on another firm’s property, subject to particular terms.
 - It will promote **ease of doing business** in the maritime sector because of the **fast, timely, cost effective and robust dispute resolution mechanism**.
 - It will inspire confidence in the private players.

Note:

- All major Ports will shift towards the 'Landlord Model'.

Landlord Port Model

- In the landlord port model, the **publicly governed port authority acts as a regulatory body** and as landlord while private companies carry out port operations—mainly cargo-handling activities.
- The port authority maintains ownership of the port while the infrastructure is leased to private firms that provide and maintain their own superstructure and install their own equipment to handle cargo.
- In return, the landlord port gets a share of the revenue from the private entity.
- **Significance:**
 - Currently, most major port trusts in India carry out terminal operations as well, resulting in a hybrid model of port governance. The involvement of the port authorities in terminal operations leads to a **conflict of interest**.
 - The **neutrality** of the landlord port authority is a **basic requirement** for fair competition between port service providers, particularly the terminal operators.
 - The role of the landlord port authority would be to carry out all public sector services and operations such as the award of bids for cargo terminals and dredging.

Model Concession Agreement

- Model Concession Agreement is the **core of public private partnership projects** in India. It sets regulatory framework to implement PPP (Public Private Projects) in India. There are MCAs for national highways, urban rail transit systems, state highways and ports.
- **Amendments to the Model Concession Agreement (MCA):** In January 2018, the government approved amendments in the Model Concession Agreement (MCA) to make the Port Projects more investor-friendly.

Key features:

- Constitution of the **Society for Affordable Redressal of Disputes** – Ports (SAROD-Ports) as dispute resolution mechanism.
- Providing an **exit route to developers** by way of divesting their equity upto 100% after completion of 2 years from the Commercial Operation Date (COD).
- Under provision of additional land to the Concessionaire, **land rent has been reduced** from 200% to 120% of the applicable scale of rates for the proposed additional land.
- Introduction of **Complaint Portal** for the use of port users.

Shikshak Parv

Why in News

Shikshak Parv is **being celebrated from 8th-25th September 2020** to felicitate the teachers and to take **New Education Policy (NEP) 2020** forward.

Key Point

- **Teachers' Day** is celebrated on **5th September** every year throughout **India** in memory of **Dr. Sarvapalli Radhakrishnan** on his birth anniversary.
 - Radhakrishnan was born in a family in Tiruttani (Tamil Nadu) in 1888.
 - He has played many roles in his life. He has been a teacher, philosopher, author and politician. He was the **first Vice President of India (1952–1962)** and the **second President of India from 1962 to 1967**.

FOR SCHOOLS	FOR COLLEGES
From 10+2 to 5+3+3+4: Current 10+2 structure in which policy covered schooling from Class 1 to 10 (age 6-16) and then Class 11-12 (age 16-18) gives way to 5 years of foundational education, 3 of preparatory, 3 of middle & 4 years of secondary schooling	SAT-Like College Test: National Testing Agency to conduct common college entrance exam twice a year
Multi-Stream: Flexibility to choose subjects across streams; all subjects to be offered at two levels of proficiency	4-Year Bachelor: 4-year multi-disciplinary bachelor's programme to be preferred; mid-term dropouts to be given credit with option to complete degree after a break
Diluted Board: Board exams to test only core competencies; could become modular (object and subjective) and will be offered twice a year	No Affiliation: Over next 15 years colleges will be given graded autonomy to give degrees, affiliation with universities to end, so would deemed university status
Multilingual: 3-language policy to continue with preference for local language medium of instruction till class 8	Fee Cap: Proposal to cap fee charged by private institutions of higher learning
Bag-Less Days: School students to have 10 bag-less days in a year during which they are exposed to a vocation of choice (i.e. informal internship)	Going Global: Top-rated global universities to be facilitated to come to India, top Indian institutions to be encouraged to go global

Note:

- He was awarded **knighthood in 1931**. In 1954, he was awarded **Bharat Ratna**, the highest civilian award in India. He got **honorary membership of the British Royal Order of Merit** in 1963.
- **World Teachers' Day** is celebrated on **5th October** annually to commemorate the anniversary of the adoption of the **1966 ILO/UNESCO Recommendation** concerning the Status of Teachers.
 - This instrument sets forth the rights and responsibilities of teachers, and standards for their initial preparation and further education, recruitment, employment, teaching and learning conditions.
- **New Education Policy (NEP) 2020:**
 - This policy aims to pave the way for transformational reforms in school and higher education systems in the country. This policy **replaces the 34 year old National Policy on Education (NPE), 1986**.
 - NEP 2020 is **aligned to the 2030 Agenda for Sustainable Development**. It is built on the **foundational pillars of Access, Equity, Quality, Affordability and Accountability**.
 - An autonomous body, the **National Educational Technology Forum (NETF)**, is proposed to provide a platform to facilitate decision making on the induction, deployment, and use of technology, as well as the opportunity to consult and share best practices.

Aatmanirbhar Bharat ARISE-Atal New India Challenge

Why in News

The **Aatmanirbhar Bharat ARISE-Atal New India Challenge (ANIC)** Program, launched by the government, is a **national initiative** to promote **research & innovation** and increase **competitiveness** of Indian **startups** and **Micro, Small and Medium Enterprises (MSMEs)**.

Key Points

- **Objective:** To proactively collaborate with Ministries and the associated industries to **catalyse research, innovation and facilitate innovative solutions** to sectoral problems.
 - The objective is also to provide a steady stream of innovative products & solutions where the Central

Government Ministries / Departments will become the **potential first buyers**.

➤ **Administration:**

- The initiative will be carried under the **Atal Innovation Mission (AIM)** - an initiative by the **NITI Aayog**.
- The programme will be driven by **Indian Space Research Organization (ISRO)** and four ministries:
 - Ministry of Defence;
 - Ministry of Food Processing Industries;
 - Ministry of Health and Family Welfare; and
 - Ministry of Housing and Urban Affairs.

➤ **Features:**

- A total of 15 sector-specific challenges will be selected where **three challenges** are kept for **each ministry**.
- A grant-of-aid of up **Rs. 50 lakh** for a period of 9 to 12 months have been earmarked for startups to develop a **minimum usable prototype**.
- Innovators would also be attracted by using the **Mahatma Gandhi Challenge method**.
 - On the 150th birth Anniversary of Mahatma Gandhi, 'the Gandhian Challenge' was launched.
 - It provides a platform for **every child across India** to ideate innovative solutions for a sustainable India of their dreams, using Gandhi's principles.
 - Broad categories in the challenge: **Art & Innovation and Science, Technology & Innovation**.

Ease of Doing Business Rankings of the States: DPIIT

Why in News

Recently, the **Department for Promotion of Industry and Internal Trade (DPIIT)**, Ministry of Commerce and Industry released the 4th edition of **Ease of Doing Business Rankings** based on the **State Business Reform Action Plan (State BRAP)**.

- **Andhra Pradesh** has topped the rankings followed by **Uttar Pradesh, Telangana, Madhya Pradesh and Jharkhand**. **Tripura, Sikkim, Odisha** were among the worst performers.

Key Points

- Andhra Pradesh has achieved **100% compliance with BRAP**.

Note:

S.No.	State/UT	Rank 2019
1	Andhra Pradesh	1
2	Uttar Pradesh	2
3	Telangana	3
4	Madhya Pradesh	4
5	Jharkhand	5
6	Chhattisgarh	6
7	Himachal Pradesh	7
8	Rajasthan	8
9	West Bengal	9
10	Gujarat	10
11	Uttarakhand	11
12	Delhi	12
13	Maharashtra	13
14	Tamil Nadu	14
15	Lakshadweep	15
16	Haryana	16
17	Karnataka	17
18	Daman and Diu	18
19	Punjab	19
20	Assam	20
21	Jammu and Kashmir	21
22	Andaman & Nicobar	22
23	Dadra & N. Haveli	23
24	Goa	24
25	Mizoram	26
26	Bihar	26
27	Puducherry	27
28	Kerala	28
29	Arunachal Pradesh	29
30	Chandigarh	29
31	Manipur	29
32	Meghalaya	29
33	Nagaland	29
34	Odisha	29
35	Sikkim	29
36	Tripura	29

- It is the first State to take measures to revive the economy hit by the global pandemic and revive the small and medium scale industries with a **ReSTART package**.

- **Ease of Doing Business (EODB):** It is a joint initiative by the **Department for Promotion of Industry and Internal Trade (DPIIT)** and the **World Bank** to improve the overall business environment in the States.
 - Ranking of all the States and Union Territories is done, based on the implementation of BRAP by them.
- **Business Reform Action Plan (BRAP):**
 - It was **launched in 2015**.
 - BRAP 2019 contains a list of **80 reforms** (187 reform action points) to be implemented by **19 State departments**.
 - These reforms cover **12 business regulatory areas** such as Access to Information, Single Window System, Labour, Environment, etc.
 - **Objective :** It was introduced to **encourage a healthy competition between states**.
 - This would help in **attracting investments and increasing Ease of Doing Business** in each State.

Draft Data Empowerment and Protection Architecture: NITI Aayog

Why in News

Recently, the **NITI Aayog** has released **draft Data Empowerment and Protection Architecture (DEPA)** which aims to promote greater user control on data sharing.

Key Points

- **Features:** DEPA will be empowering individuals with control over their personal data, by operationalising a **regulatory, institutional, and technology design for secure data sharing**.
- **Consent Managers:** DEPA's Institutional Architecture will involve the creation of **new market players** known as **User Consent Managers**. These will ensure that individuals can provide consent as per an innovative digital standard for every data shared. These Consent Managers will also work to protect data rights.
 - **Reserve Bank of India (RBI)** issued a Master Directive creating Consent Managers in the financial sector to be known as **Account Aggregators (AAs)**. A non-profit collective or alliance of these players is created called the **DigiSahamati Foundation**.

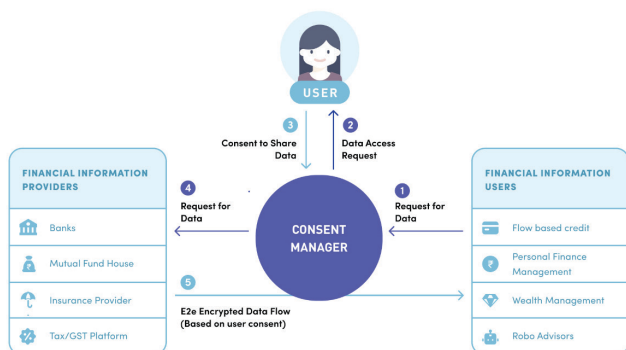
Note:



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- **Open APIs:** Open **Application Programming Interfaces** (APIs) enable **seamless and encrypted flow of data** between data providers and data users through a consent manager.
- **Implementation:** RBI, **SEBI, IRDAI, PFRDA** and the Ministry of Finance will implement this model. This regulatory foundation is also expected to evolve with time (eg. with the forthcoming **Data Protection Authority** envisaged under **Personal Data Protection Bill, 2019**).

DEPA Institutional Architecture



- **Background:** Regulatory direction on data privacy, protection, consent, and the new financial institutions required for DEPA's application in the financial sector was provided through
 - Supreme Court Judgement on the fundamental **Right to Privacy** in 2017.
 - **Personal Data Protection Bill (PDP), 2019.**
 - **Justice Srikrishna Committee Report, 2018.**
 - **RBI Master Direction on NBFC-Account Aggregators, 2016** (for the financial sector).
- Recently, a government committee headed by Infosys co-founder **Kris Gopalakrishnan** has suggested that **non-personal data** generated in India **be allowed to be harnessed by various domestic companies and entities.**

Application

- **Financial sector:**
 - Using DEPA, individuals and Micro, Small and Medium Enterprises (MSMEs) can use their **digital footprints to access not just affordable loans, but also insurance, savings, and better financial management products.**
 - The framework is **expected to become functional for the financial sector starting fall 2020.**

- It will help in **greater financial inclusion and economic growth.**
- **Flow based lending:** If **portability and control of data** could allow an MSME owner to digitally share proof of the business' regular tax (GST) payments or receivables invoices easily, a bank could design and offer **working capital loans based on demonstrated ability to repay** (known as flow based lending) rather than only offering bank loans backed by assets or collateral.
- **Telecom Sector:** DEPA is also being launched in the telecom sector following a **Telecom Regulatory Authority of India (TRAI) consultation report on privacy** released in July 2018.
- **Government Departments:** The first major government department to become a Government Information Provider will be **Goods and Services Tax (GST).**
 - In future, departments with data on individuals and MSMEs could adopt the specifications to improve the ease of doing business or create greater data portability of individual education, jobs, or transaction data.
- **Healthcare:** National Health Authority which has been tasked with implementing the **National Digital Health Mission**, is piloting the DEPA architecture for **healthcare data.**
- **Skilling:** The Ministry of Skill Development and Entrepreneurship is encouraging adoption of a **digital skill credential** that could be used to address low data portability in employment by sharing **verified information on work experience or educational training.**

Advantages

- Opening up an API-based data sharing framework would bring **significant innovation by new fintech entities.**
- This architecture **replaces costly and cumbersome data access and sharing practices that disempower individuals**, such as physical submission, username/password sharing, and terms and conditions forms providing blanket consent etc.
- Individuals and small firms do not benefit from individual's data right now. DEPA will provide individuals and small businesses with the practical means to **access, control, and selectively share** personal data that they have stored across **multiple institutional datasets** – to **maximise the benefits of data sharing for individual empowerment whilst minimising privacy risks and data misuse.**

Note:

- DEPA will also enable **better personal financial management services, wealth management, robo advisory, or different types of lending, insurance, and investment use cases and products** that one may not be able to foresee today.

Jammu and Kashmir Official Languages Bill 2020

Why in News

Recently, the Union Cabinet has approved the **Jammu and Kashmir Official Languages Bill 2020** to be introduced in the monsoon session of Parliament.

Key Points

- The Bill will include **Kashmiri, Dogri and Hindi as official languages** in the newly-created Union Territory of Jammu and Kashmir.
 - Only English and Urdu were official languages in the former State, which was **bifurcated on 5th August 2019**, with **Ladakh becoming a separate Union Territory**.

Constitutional Provisions

- **Part XVII of the Indian Constitution** deals with the official languages in **Articles 343 to 351**.
 - **Article 345:** Official language or languages of a State subject to the provisions of Article 346 and 347.
- The Constitutional provisions related to the **Eighth Schedule** are:
 - **Article 344:** Article 344(1) provides for the constitution of a Commission by the President on expiration of five years from the commencement of the Constitution and thereafter at the expiration of ten years from such commencement, which shall consist of a Chairman and such other members representing the different languages specified in the Eighth Schedule to make recommendations to the President for the progressive use of Hindi for official purposes of the Union.
 - **Article 351:** It provides for the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India.

- **Dogri along with Bodo, Maithili and Santhali** was added to the **scheduled languages** under the **Eighth Schedule** by **92nd Amendment Act of 2003**, which consists of the **following 22 languages**:
 - Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili and Dogri.
 - Of these languages, **14 were initially included** in the Constitution.
 - **Sindhi** language was added by the **21st Amendment Act of 1967**.
 - **Konkani, Manipuri, and Nepali** were included by the **71st Amendment Act of 1992**.
- The Bill not only **fulfills a long-pending public demand** of the region but also **keeps with the spirit of equality**.

Sub-categorisation of OBCs

Why in News

A commission headed by Justice (Retd.) G Rohini has been **examining sub-categorisation of Other Backward Classes (OBC)** for almost three years now.

- The issue of the **sub-categorisation of Scheduled Castes and Scheduled Tribes** for reservations is also in the highlights after the **Supreme Court (SC)** has referred it to a larger Bench.

Key Points

- **Sub-categorisation of OBCs:**
 - OBCs are granted **27% reservation in jobs and education** under the central government **but only a few affluent communities** among the over 2,600 included in the Central List of OBCs **have secured a major part** of this.
 - Sub-categorisation or creating categories within OBCs for reservation would **ensure "equitable distribution" of representation** among all OBC communities.
 - However, sub-categorisation **can be used to appease one vote-bank or the other within the category** and thus a **cause of social justice would end up being politicised**.
 - The commission requested for an appropriate budget provision for a **proposed all-India survey for an estimate of the caste-wise population of OBCs**.

Note:



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- The reason given was the **absence of data for the population of various communities to compare with** their representation in jobs and admissions as the data of the **Socio-Economic Caste Census** (SECC) were not considered reliable.
 - In August 2018, it was announced that the data of OBCs will also be collected in **Census 2021** but there have been no other announcements after that.
- **Commission:**
- It took charge in October 2017 with a tenure of 12 weeks ending in January 2018. In **June 2020**, the Cabinet approved a **six-month extension to the commission** up to 31st January 2021.
 - **Progress:** It is **ready with the draft report** and would have huge political consequences and is likely to face a **judicial review** as well.
 - **Budget:** Until November 2019, the government has spent **over Rs. 1.70 crore** on the Commission including salary and other expenses.
 - The budget is being drawn from the **National Commission for Backward Classes** (NCBC) which was given **constitutional** status by the government in 2018.
- **Commission's Terms of References:**
- To **examine the uneven distribution of reservation benefits** among different castes in the central OBC list.
 - To **work out the mechanism, criteria, norms and parameters in a scientific approach** for sub-categorisation within such OBCs.
 - To **take up the exercise of identifying the respective castes/communities/sub-castes/synonyms** for comprehensive data coverage.
 - To **study and recommend correction of any repetitions, ambiguities, inconsistencies and errors** of spelling or transcription.
- **Findings So Far:**
- According to the **2018 data analysis of 1.3 lakh central jobs and admissions to central higher education institutions** given under OBC quota:
 - 24.95% of these jobs and seats have gone to just 10 OBC communities.
 - 97% of all jobs and educational seats have gone to just 25% of all sub-castes classified as OBCs.

- 983 OBC communities, 37% of the total, have zero representation in jobs and educational institutions.
 - 994 OBC sub-castes have a total representation of only 2.68% in recruitment and admissions.
- According to the **2018-19 annual report of the Department of Personnel and Training**, **OBC recruitment in central jobs is considerably low**.
- For example, there was **not a single professor and associate professor appointed under the OBC quota** in central universities.
 - Posts reserved for them were being **filled by people of general category** as OBC candidates were declared '**None Found Suitable**' (NFS).

Sanskrit Grams Programme: Uttarakhand

Why in News

The Uttarakhand Government has decided to develop 'Sanskrit Grams' across the state.

- The decision was taken **after noting significant progress in a pilot programme** to teach Sanskrit to residents of two villages in Uttarakhand.

Key Points

- **Sanskrit Grams Programme:**
- **Aim:** To teach people to use **Sanskrit regularly**.
 - **Villages Selected:**
 - Villages were selected at the meeting of the **Uttarakhand Sanskrit Academy**, chaired by the **Uttarakhand Chief Minister**.
 - It has also been decided to **rename the academy as Uttaranchal Sanskrit Sansthanam** Haridwar, Uttarakhand.
 - The academy was **established in 2002**.
 - **Implementation Strategy:**
 - The **focus will be on the school-going children** so that they can learn the language from a young age.
 - The programme will start by teaching people smaller sentences which are used most commonly.
 - The programme will **run first at the district level** and then at the **block level** for promotion of the Sanskrit language.

Note:

➤ Usage of Sanskrit in Uttarakhand:

- Sanskrit is the **second official language** in Uttarakhand after Hindi (**Article 345 of the Constitution: Official language or languages of a State**).
- The state government currently **runs 97 Sanskrit schools**, where an average of **2,100 students** study each year.

Sanskrit

- It is an **old Indo-Aryan language** in which the **most ancient documents, Vedas** are composed in what is called **Vedic Sanskrit**.
- **Classical Sanskrit**, a language close to late Vedic as then used in the northwest of the subcontinent, was elegantly described in one of the **finest grammars** ever produced, the **Aṣṭādhyāyī** ("Eight Chapters") composed by **Pāṇini** (c. 6th–5th century BCE).
- Sanskrit has been written both in **Devanāgarī script** and in various regional scripts, such as Śāradā from the north (Kashmir), Bāṅglā (Bengali) in the east, Gujarātī in the west, and various southern scripts, including the **Grantha alphabet**, which was especially devised for Sanskrit texts.
- There are also **major works of drama and poetry**, although the exact dates of many of these works and their creators have not been definitively established. Important authors and works include:
 - **Bhāsa** (for example, his **Svapnavāsavadatta** - Vāsavadatta in a Dream), who is assigned widely varying dates but definitely worked prior to Kālidāsa, who mentions him.
 - **Kālidāsa**, dated anywhere from the 1st century BCE to the 4th century CE, whose works include Śakuntalā, **Vikramorvaśīya**, **Kumārasambhava** and **Raghuvamśa**.
 - Śūdraka and his **Mṛcchakatika** ("Little Clay Cart"), possibly dating to the 3rd century CE.
 - **Bhāravi** and his **Kirātārjunīya** ("Arjuna and the Kirāta"), from approximately the 7th century.
 - **Māgha**, whose Śīsupālavadha ("The Slaying of Śīsupāla") dates to the late 7th century.
 - The two epics **Rāmāyaṇa** ("Life of Rāma") and **Mahābhārata** ("Great Tale of the Bhāratas") were also composed in Sanskrit, and the former is esteemed as the first poetic work (ādikāvya) of India.
- Sanskrit is a **classical** and an **eighth schedule** language.

Promotion of Sanskrit by the Central Government

- The government has established the **Rashtriya Sanskrit Sansthan** in Delhi as a nodal authority to promote Sanskrit. The Sansthan has been allocated Rs 643.84 crore in the last three years.
- Providing **financial assistance to Adarsh Sanskrit Mahavidyalayas** / Shodha Sansthans.
- Award of **merit scholarships** to students of Sanskrit Pathasala to College level.
- **Financial assistance to NGOs / Higher Educational Institutions** of Sanskrit for various Research Projects / Programmes.
- Retired eminent Sanskrit scholars are engaged under the **Shastra Chudamani scheme** for teaching.
- Sanskrit is also taught through **Non-formal Sanskrit Education (NFSE)** programme, by setting up Non-Formal Sanskrit learning centres, in reputed institutions like Indian Institutes Technology, Ayurveda institutions, Modern Colleges and Universities.
- **Presidential awards for Sanskrit Language** are awarded annually to 16 senior scholars and to 5 young scholars.
- Financial Assistance for **Publication**, Reprint of **rare Sanskrit books**.
- **Ashtaadashi** containing eighteen Projects for sustaining the growth of Sanskrit has been implemented.

English as Medium of Education

Why in News

Recently, the Supreme Court refused to stay the Andhra Pradesh High Court's order **striking down** the state government's decision to make **English the medium of education for government school students** from Classes I to VI beginning 2020-21 academic year.

- The Court pointed out that **Section 29(2)(f) of the Right to Education (RTE) Act, 2009** says that the medium of instruction shall, as far as practicable, be in a child's **mother tongue**.

Key Points

- **Constitutional and Legal Provisions:**
 - **Article 29 (Protection of interests of minorities)** gives all citizens right to **conserve their language** and **prohibits discrimination on the basis of language**.

Note:



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- **Article 120 (Language to be used in Parliament)** provides for use of Hindi or English for transactions of parliament but gives the right to members of parliament to express themselves in their mother tongue.
- **Part XVII of the Indian Constitution** deals with the **official languages** in **Articles 343 to 351**.
 - **Article 350A (Facilities for instruction in mother-tongue at primary stage)** provides that it shall be the endeavour of every State and of every local authority within the State to provide adequate facilities for **instruction in the mother-tongue at the primary stage of education to children belonging to linguistic minority groups**.
 - **Article 351 (Directive for development of the Hindi language)** provides that it shall be the duty of the Union to **promote the spread of the Hindi language**.
- The **Eighth Schedule** recognises **following 22 languages as official languages**: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili and Dogri.
- **Right to Education (RTE) Act, 2009** says that the medium of instruction shall, as far as practicable, be in a child's mother tongue.
- **Arguments in Favour of English as Medium of Instruction:**
 - **Career:** The ability to speak in english qualifies one for many jobs which are not yet available for speakers of regional languages.
 - **Competitive Exams:** Lack of knowledge of english will put the students of government schools on a backfoot as compared to those of English-medium private schools in competitive exams,
 - **Higher Education:** Most technical and scientific books are available only in english and much of higher education is also imparted in english. This may hinder the access of students from government schools to STEM and higher education.
 - **Global Opportunities:** English being the global lingua franca gives the students opportunity to compete at the global level.
 - **Status Symbol:** Knowing english is often equated with progressiveness.
- **Arguments against English as Medium of Instruction:**
 - **Accessibility to Knowledge:** The use of mother tongue or regional languages makes the process of learning familiar, comprehensible, and approachable for the students. This encourages wholehearted engagement of students in the learning process and boosts their confidence.
 - **Promotion of Local Culture:** Also, using mother tongue allows students to express themselves better and communicate their experiences, their multifaceted identities, and their cultures.
 - **Encouragement to Merit:** The use of English language often creates a divide between students hailing from backward castes and communities and the 'upper' class. Often, **real talent and merit gets suppressed** due to an **imposed linguistic disability**.
- **Government Initiatives to Promote Regional Languages:**
 - The recently announced **New Education Policy** states that wherever possible, students **till Class 5 in schools** should be taught in mother tongue/ regional language/local language. It also introduces the **Three-Language Formula** for **primary education**, as per the recommendation of **Kothari Commission, 1968**.
 - The **Commission for Scientific and Technical Terminology (CSTT)** is providing publication grants towards the publications of University Level Books in regional languages.
 - It was established in 1961 to evolve technical terminology in all Indian Languages.
 - The **National Translation Mission (NTM)** is being implemented through the **Central Institute of Indian Languages (CIIL)**, Mysore under which the text books of various subjects prescribed in Universities and Colleges are being translated in all languages of the Eighth Schedule.
 - CIIL was established in 1969 under the administrative control of the Ministry of Education.
 - Its objective is to **coordinate the development of Indian languages**, to bring about the essential unity of Indian languages through **scientific studies** and **protect and document minor, minority and tribal languages**.
 - The Government of India is running a scheme known as **"Protection and Preservation of Endangered Languages"** for conservation of threatened languages.

Note:

- The **University Grants Commission (UGC)** also promotes regional languages in higher education courses in the country and supports nine Central Universities under the scheme “**Establishment of Centre for Endangered Languages in Central Universities**”.
- Recently, an initiative **Namath Basai** by Kerala State Government has proved to be very beneficial in educating children from tribal areas by adopting vernacular languages as medium of instruction.
- **Global Efforts:**
 - The **Yuelu Proclamation** made by **United Nations Educational, Scientific and Cultural Organization (UNESCO)** at **Changsha, China, in 2018** plays a central role in guiding the efforts of countries and regions around the world to **protect linguistic resources and diversity**.
 - The **United Nations General Assembly** has proclaimed **2019 as the International Year of Indigenous Languages (IYIL)**.
 - The IYIL 2019 strives to preserve, support and promote indigenous languages at the national, regional and international levels.

Extension of Tenure of Standing Committees

Why in News

The Rajya Sabha Secretariat is considering changing the rules governing the **Departmentally-Related Standing Committees’ (DRSC)** tenure to make it to two years from the present one year so that the **panels have enough time** to work on the subjects selected by them.

Key Points

- **Reason for Extension:** The tenure of all the DRSCs of Parliament is **ending** on 11th September, 2020 and they can’t hold deliberations till new panels are formed.
 - A significant amount of the tenure of the committees was lost due to the **Covid-19** pandemic.
 - Many of the panels have not been able to complete reports on the subjects they were working on. For example, the **Information Technology panel** could not complete deliberations on “**Safeguarding citizens’ rights and prevention of misuse of social/online news media platforms including special**

emphasis on women security in the digital space”, for which it summoned Facebook recently.

- **Options Being Considered:**
 - To **extend the term of the panels for a year**.
 - To form **new committees with a fixed tenure of two years**.
- **Origin:** On the recommendation of the Rules Committee of the Lok Sabha, **17 DRSCs** were set up in the Parliament in **1993**. In **2004**, seven more such committees were set up, thus increasing their number from **17 to 24**.
- **Departmental Standing Committees:** Out of the 24 standing committees, **8 work under the Rajya Sabha and 16 under the Lok Sabha**.
- **Members:** Each standing committee consists of **31 members (21 from Lok Sabha and 10 from Rajya Sabha)**. The members of the Lok Sabha are **nominated by the Speaker**, just as the members of the Rajya Sabha are nominated by the Chairman from amongst its members.
 - A **minister is not eligible to be nominated as a member of any of the standing committees**. In case a member, after his nomination to any of the standing committees, is appointed a minister, he then ceases to be a member of the committee
- **Tenure:** The term of office of each standing committee is **one year from the date of its constitution**.
- **Role:**
 - They secure more **accountability of the Executive** (i.e., the Council of Ministers) to the Parliament. Through Committees, Parliament exercises its control and influence over administration and keeps vigilance over the executive.
 - The Committees **aid and assist the Legislature in discharging its duties** and regulating its functions effectively, expeditiously and efficiently. They assist the Parliament in thoroughly and systematically scrutinising the matters which could not be discussed on the floor at length.
 - The Committees also provide the **expertise on a matter** which is referred to them.
- **New Draft Guidelines:** Recently, Rajya Sabha secretariat prepared **new draft guidelines for its standing committees**. The guidelines are still under review by the Lok Sabha Speaker. This may include:
 - A minimum 15 days’ notice and confirmation by one-third of the members before holding a panel meeting.

Note:



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Parliamentary Committees

- The Constitution of India makes a mention of these committees at different places, but **without making any specific provisions regarding their composition, tenure, functions, etc.**
- Broadly, parliamentary committees are of two kinds—**Standing Committees and Ad Hoc Committees.**
- **Standing Committees : Permanent** (constituted every year or periodically) and **work on a continuous basis.** They can be categorized into following broad groups
 1. Financial Committees
 2. Departmental Standing Committees (24)
 3. Committees to Inquire
 4. Committees to Scrutinise and Control
 5. Committees Relating to the Day-to-Day Business of the House
 6. House-Keeping Committees or Service Committees
- **Ad Hoc Committees: Temporary** and cease to exist on completion of the task assigned.
 - Ad hoc committees can be divided into two categories, that is, Inquiry Committee and Advisory Committee.
 - Examples of Ad Hoc Committees: **Joint Committee on Bofors Contract, Joint Committee on Fertilizer Pricing** etc.
- Nomination of members based on their qualifications, interests and occupations.
- At least 50% attendance while collecting evidence and adopting reports.

Pradhan Mantri Matsya Sampada Yojana

Why in News

Recently, the **Pradhan Mantri Matsya Sampada Yojana** (PMMSY) has been launched.

- Several other initiatives in the **fisheries** and **animal husbandry** sectors have also been launched on the occasion.

Key Points

- PMMSY is a **flagship scheme for the focused and sustainable development of the fisheries sector** in

the country as a part of the **Aatmanirbhar Bharat Abhiyan.**

➤ It aims to:

- **Adopt 'Cluster or Area-based Approaches'** and **create fisheries clusters** through backward and forward linkages.
- **Focus especially on employment generation** activities such as seaweed and ornamental fish cultivation.
- **Address critical gaps in fish production and productivity**, quality, technology, post-harvest infrastructure and management, modernisation and strengthening of the value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.
- **Consolidate the achievements of the blue revolution** and **bring new interventions** such as fishing vessel insurance, support for new/upgradation of fishing vessels/boats, integrated aqua parks, e-trading/marketing, etc.

➤ Targets:

- **Enhance fish production** by an additional 70 lakh tonne and increase fisheries export earnings to Rs.1,00,000 crore by 2024-25.
- **Double the incomes** of fishers and fish farmers.
- **Reduce post-harvest losses** from 20-25% to about 10%.
- **Generate** an additional 55 lakhs direct and indirect gainful **employment opportunities** in the fisheries sector and allied activities.

➤ Budget and Time Period:

- An estimated investment of **Rs. 20,050 crore for a period of 5 years from financial year (FY) 2020-21 to FY 2024-25** in all States/Union Territories.
- This investment is the **highest ever in the fisheries sector** yet.

➤ Implementation: It will be implemented as an **umbrella scheme with two separate components** namely:

- **Central Sector Scheme:** The project cost will be borne by the Central government.
- **Centrally Sponsored Scheme:** All the sub-components/activities will be implemented by the States/UTs and the cost will be shared between Centre and State.

Note:



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Other Inaugurations

Related to Animal Husbandry

➤ e-Gopala App:

- It is a **comprehensive breed improvement marketplace and information portal** for direct use of farmers.
- It will **provide solutions on the aspects of:**
 - Managing livestock including buying and selling of disease-free germplasm in all forms (semen, embryos, etc.).
 - Availability of quality breeding services (Artificial Insemination, veterinary first aid, vaccination, treatment, etc.).
 - Guiding farmers for animal nutrition and treatment of animals using appropriate ayurvedic medicine/ethnoveterinary medicine.
 - Providing a mechanism to send alerts and inform farmers about various government schemes and campaigns in the area.

➤ Semen Station:

- The **state of the art facility** has been established under **Rashtriya Gokul Mission** in Purnea, Bihar with an investment of Rs. 84.27 crores.
- It is **one of the largest semen stations** in the government sector with a production capacity of 50 lakh semen doses per annum.
- It will give a **new dimension to the development and conservation of indigenous breeds** of Bihar and **meet the demand of semen doses** of eastern and northeastern States.

➤ In vitro fertilization (IVF) Laboratories:

- Various IVF laboratories are being set up across the country through a **100% grant in aid**.
- These labs are **crucial for propagating elite animals of indigenous breeds and thereby enhancing milk production** and productivity manifold.

➤ Use of Sex-sorted Semen in Artificial Insemination:

- Through this method, **only female calves can be produced** (with more than 90% accuracy) which will help double the growth rate of milk production in the country.

➤ Demonstration of IVF Technology at Farmer's Doorstep:

- It will propagate the technology for the **multiplication of high yielding animals at a faster rate** as through the use of technology, a female cattle can give birth to 20 calves in a year.

Household Social Consumption: Education in India

Why in News

Recently, a report on 'Household Social Consumption: Education in India' has been released by the **National Statistical Office** (NSO) as part of the 75th round of National Sample Survey (July 2017 to June 2018).

Key Points

➤ About:

- This is the **6th survey on social consumption relating to education**. Earlier, 35th, 42nd, 52nd, 64th, and 71st rounds had surveys on this subject. The 71st round pertained to January-June 2014.
- A sample of 64,519 rural households from 8,097 villages and 49,238 urban households from 6,188 blocks was surveyed all over India.
- It provides for state-wise **detail of literacy rate among the persons aged seven years and above** and highlights a **stark digital divide across States, cities and villages, and income groups**.
- This survey covered **both qualitative and quantitative aspects** related to the educational attainment of the household members and educational services used by them.

➤ Data Analysis:

- **Best Performers:** Kerala > Delhi > Uttarakhand > Himachal Pradesh > Assam.
- **Worst Performers:** Andhra Pradesh < Rajasthan < Bihar < Telangana < Uttar Pradesh.
- **Education and Literacy Rates:**
 - The literacy rate among persons (aged 7 years and above) in India was about 77.7%. In rural areas, the literacy rate was 73.5% compared to 87.7% in urban areas.



Access to
**SECONDARY
SCHOOLS**

Rural Households
38%
Urban Households
70%

**LITERACY RATE
AMONG THOSE
AGED 7 & ABOVE** Rural **73.5%** Urban **87.7%**

**HAVING
ACCESS TO
COMPUTERS** Rural **4%** Urban **23%**

ANNUAL AVG EXPENDITURE/STUDENT (IN Rs)

Secondary Level		Sr Secondary Level	
Rural	Urban	Rural	Urban
5,856	17,518	9,148	23,832

*Data: NSO

Note:



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- The male literacy rate was higher (84.7%) than female literacy rate (70.3%).
- Only 5.7% were graduates or above in rural areas while the percentage was 21.7% in urban areas.
- **Internet Access:**
 - Nearly 4% of rural households and 23% of urban households possessed computers and 24% of the households in the country had internet access.
 - Among persons of age 15-29 years, nearly 24% in rural areas and 56% in urban areas were able to operate a computer.
- **Access to Schools, Attendance, Type of Education:**
 - Only 38% of rural households have secondary schools within 1 km of the house as compared to 70% for urban households.
 - In rural areas 92.7% of households and in urban areas, 87.2% of households reported availability of primary school within 1 km from the house.
 - 96.1% of students were in general education and remaining were in technical/professional education.
 - **Gross Attendance Ratio (GAR)** at the primary level was nearly 100% for both males and females in rural and urban areas.
 - For each level of education, GAR is the ratio of the number of persons attending in the level of education (for example, class I-V) to the number of persons in the corresponding official age-group (for example, the total population of age group 6-10).
- **Free Education, Scholarships, Stipends:**
 - At all-India level, nearly 14% of students attending formal education received scholarship/stipend/reimbursement.
 - 77% of the students studying in Government institutions were receiving free education. Percentage of students studying in private unaided institutions and receiving free education was nearly 2% in rural areas and 1% in urban areas.
 - At the pre-primary level, nearly 33% of students were getting a free education in India. At primary level, the proportion of students receiving free education was 62%.
- **Private Coachings:**
 - Nearly 20% of students attending pre-primary and above level were taking private coaching in India.

- Incidence of taking private coaching was maximum at the secondary level (31% of male students and 29% of female students).
- **Household Expenditure on Education:**
 - Average expenditure per student incurred during the current academic session (2017-18) for basic courses was nearly Rs. 8,331 for general courses, Rs. 50,307 for technical/professional courses.
 - The average annual expenditure on education for secondary school students is Rs. 9,013, of which Rs. 4,078 goes towards regular school fees.
 - About Rs. 1,632, or just over 18%, goes towards private coaching. In higher secondary school, students spend more than Rs. 2,500, also about 18% of the total expenditure, on private coaching.
- **Persons Currently Not Attending Education:**
 - In India, percentages of persons in the age group of 3-35 years dropping out of studies were nearly 14% in rural areas and 10% in urban areas.
 - For the males of age 3-35 years engagement in economic activities was the most common major reason for not attending education, whereas for the females it was the engagement in domestic activities.

Challenges

- There is a **major digital divide within the country across states, cities and villages, and income groups.**
 - Schools across the country are closed for six months due to **Covid-19**.
 - This means vastly different things for different people like many who have access to digital resources are getting an online education, those who do not have such resources are devoid of education.
- **Access to Computers and the Internet:**
 - Across India, only one in ten households have a computer, whether a desktop, laptop or tablet.
 - Almost 25% of all homes have internet facilities, accessed via a fixed or mobile network using any device, including smartphones.
- **Urban-Rural Divide:**
 - Most of the internet-enabled homes are located in cities, where 42% have internet access. In rural India, however, only 15% are connected to the internet.
 - The huge differences in some parameters like internet access, the ability to use the internet or

Note:



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physical access to schools show that urban and rural India have very different conditions.

- Accordingly, there is a need for separate policies which cater to the separate needs of both, based on local input and community-led approaches.
- **Access and Utilization Gap:** Having internet access is no guarantee that one can use it.
- **Regional Disparity:**
 - The national capital has the highest internet access, with 55% of homes having such facilities.
 - Himachal Pradesh and Kerala are the only other states where more than half of all households have internet.
 - Odisha is at the bottom with only one in ten homes having Internet.
 - There is less than 20% internet penetration, even in states with software hubs such as Karnataka and Tamil Nadu.
- **Disparity Due to Economic Status:**
 - The biggest divide is by economic status, which the NSO marks by dividing the population into five equal groups, or quintiles, based on their usual monthly per capita expenditure.
 - Even in Odisha, almost 63% of homes in the top urban quintile have internet facilities.
 - In the poorest quintile of rural Odisha, however, that figure drops to an abysmal 2.4%.
- **Intra-state Inequality:**
 - Kerala shows the least inequality with more than 39% of the poorest rural homes having internet, in comparison to 67% of the richest urban homes.
 - Himachal Pradesh also fares well, with 40% of the lowest rural quintile having internet.
 - Assam shows the starkest inequality, with almost 80% of the richest urban homes having internet access denied to 94% of those in the poorest rural homes in the state.
- **Low Literacy Rate in Women:**
 - This not only leads to increased **gender divide** but also leads to low participation of women in the workforce and **research and development activities**.
 - Also, as the reason for women dropping out of schools remains domestic, the deep-ingrained patriarchy in the society is still the major factor behind the gender divide.

➤ **Dependence on Coaching Institutes:**

- It leads to the affluent having more access to education thus increasing the disparities between different social groups.
- It also compromises the quality of education as the emphasis often shifts to employability only, while the real motive of education should be to enhance critical thinking along with developing skills of the students.

➤ **Heavy Household Expenditure:**

- In spite of many government initiatives to promote and improve education in governmental institutions, the cost of education is still very high for a large population to afford.
- The percentage of students who are receiving free education is still not enough and many needy students are outside its coverage.

Solutions

- **Online Education As a Common Good:** The Centre and the state governments should start making access to technology universal and more feasible in the public education system.
 - Also, as part of **Corporate Social Responsibility (CSR)**, private players can involve tech-based organisations to make e-resources accessible and available to students, especially in government and low-income private schools.
 - The Centre has directed State Education Departments to map the online access available to all their students in order to adequately plan curriculum and teaching methods that can reach such students.
- **Expansion in Scope of Right to Education:** Expand the definition of the **right to education** and promote online education so that it addresses the importance of connectivity and access to knowledge and information.
- **Valuing Teaching Profession:** Digital innovation provides a remarkable opportunity for the democratisation of education. However, there is a need to encourage conditions that give frontline educators autonomy and flexibility to act collaboratively.
- **e-Skilling:** Inclusion of virtual vocational training, virtual labs and skill development courses.
- **Vernacular Language:** Developing quality e-content in local languages.
- **Infrastructural Development:** Promote and ensure digital literacy among the masses by ensuring

Note:

uninterrupted internet connectivity and mobile network signals in rural areas, complemented with infrastructure reforms, support and training by the government and aided by civil-society groups.

- **Behavioural Changes:** Need for real emancipation of the people. Education systems across the world should provide the training required for children and working adults so that they can learn to read and write. National educational plans should include schooling for children and literacy training for adults as parallel elements.

Government Initiatives

➤ For Education and Literacy:

- **National Education Policy, 2020:** It aims at making “India a global knowledge super-power” by introducing several changes from the school to college level in the Indian education system.
- **Samagra Shiksha:** It is an integrated scheme for school education extending from pre-school to class XII to ensure inclusive and equitable quality education at all levels of school education.
- **Mid Day Meal Scheme:** It provides that every child within the age group of six to fourteen years studying in classes I to VIII who enrolls and attends the school, shall be provided hot cooked nutritional meals, free of charge every day except on school holidays.
- **Eklavya Model School and Rajiv Gandhi National Fellowship Scheme (RGNF):** These aim to encourage the students belonging to **Scheduled Tribes (ST)** community to pursue higher education.
- **On Air:** Shiksha Vani, DAISY by National Institute of Open Schooling (NIOS) for differently-abled, e-PathShala-Radio broadcasting for children in remote areas who are not online (especially for grades 1 to 5).

➤ For Digital Literacy:

- **Digital India Programme:** It pulls together many existing schemes by restructuring and re-focusing them and then implementing them in a synchronized manner.
- **Pradhan Mantri Gramin Digital Saksharta Abhiyan:** It is one of the largest initiatives of the country with the target of making citizens digitally literate.

- **National Digital Literacy Mission:** It aims to empower at least one person per household with crucial digital literacy skills by 2020.
- **Bharat Net Programme:** It aims to have an optical fibre network in all gram panchayats.
- **Digital Infrastructure for Knowledge Sharing (DIKSHA) Platform:** Part of the **PM-eVidya**, it is a national platform for school education available for all states and the central government for grades 1 to 12.
- **SWAYAM and SWAYAM Prabha:** Study Webs of Active Learning for Young Aspiring Minds (SWAYAM) provides one integrated platform and portal for online courses. SWAYAM Prabha provides 32 high-quality educational channels through DTH across the length and breadth of the country on a 24x7 basis.

Gap in Vaccination of Children

Why in News

According to the ‘Health in India’ report recently published by the **National Statistical Organisation (NSO)**, the **full immunisation** programme is not completed among 40% of the children.

- The report is based on the **75th round of the National Sample Survey (July 2017-June 2018)** on household social consumption related to health.

Full Immunisation

- It means that a **child receives a cocktail of eight vaccine doses** in the first year of life. This includes:
 - **BCG Vaccine:** It is injected in a single dose shortly after birth, which protects against a childhood attack of **tuberculosis**.
 - **Measles Vaccine:** **Measles** is a viral disease.
 - **Oral Polio Vaccine (OPV):** It is given against **polio virus**. Its first dose is given at birth, followed by two more doses at intervals of four weeks.
 - **DPT/Pentavalent Vaccine:** It is injected in three doses, which is meant to protect a child from **diphtheria, pertussis or whooping cough, tetanus, Hepatitis B**, and **meningitis** and **pneumonia** caused by **haemophilus influenzae type B**.
 - Booster doses for OPV and DPT are also given between 16 and 24 months.

Note:

More work needed | The table depicts the percentage share of children below 71 months who received immunisation as per the NSS health survey conducted in July 2017-June 2018

	% of children immunised
BCG	94.1
Polio vaccine	
Polio birth dose	93.9
OPV-1	92.4
OPV-2	87.8
OPV-3	80.6
Booster dose	58.1
DPT / Pentavalent*	
DPT-1	91
DPT-2	86.5
DPT-3	78
Booster dose	54
Measles	67



*Prevents five diseases—diphtheria, pertussis, tetanus, hepatitis B and Hemophilus influenza type B (Hib)

Key Points

➤ Data Analysis:

- Across the country, only 59.2% of children under five years are fully immunised.
- About 97% of children across the country received **at least one vaccination** — mostly **BCG** or the first dose of OPV at birth.
- Only 67% of children are protected against **measles**. Only 58% got their polio booster dose, while 54% got their DPT booster dose.

➤ States/UTs Specific Data:

- **Best Performance:** Manipur (75%), Andhra Pradesh (73.6%) and Mizoram (73.4%) recorded the highest rates of full immunisation.
- **Poor Performance:** Nagaland (12%), followed by Puducherry (34%) and Tripura (39.6%).
- In Delhi, less than half of all children are fully immunised.

VIP Security in India

Why in News

Recently, the Ministry of Home Affairs (MHA) has provided Y-plus category of CRPF security to an actress.

Key Points

➤ VIP Security:

- This protection is informally called “VIP security”, and it is generally given only to someone who holds a position of **consequence either in the government or in civil society**.
- Certain individuals, by reason of positions they hold in government, are automatically entitled to security cover. They include:
 - The Prime Minister and his immediate family.
 - The Home Minister.
 - Officials such as the National Security Advisor.
- In **cases where the central government decides to extend security to an individual**, the level of security needed by any individual is **decided by the MHA**, based on inputs received from intelligence agencies which include the **Intelligence Bureau (IB)** and **Research and Analysis Wing (R&AW)**.
- Concern due to lack of Accountability:
 - Indian intelligence agencies are **not accountable to any statutory body**, and are subject only to the internal oversight of the MHA and the Ministry of External Affairs (MEA).
 - Because of this opacity in functioning, and the fact that there is virtually no accountability except to the government in power, VIP security is open to manipulation by the executive.
 - A large number of protectees, it has been alleged, are under security cover purely for **political** or “**prestige**” reasons, and not necessarily because of any genuine threat.
- **Levels of Protection:**
 - There are broadly **six categories** of security cover: X, Y, Y-plus, Z, Z-plus, and **SPG (Special Protection Group)**.
 - The **SPG is meant only for the Prime Minister and his immediate family**, other protection categories can be provided to anyone about whom the Centre or state governments have inputs of a threat.
 - The number of personnel guarding the protectee differ from category to category.
 - **The X category** on average entails just one gunman protecting the individual. The X category is the most basic level of protection.
 - **Z-plus category** protectees have 10 security personnel for mobile security, and two (plus 8 on rotation) for residence security.

Note:



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➤ **Different Forces Involved:**

- Protectees get residence security from state police, but mobile security from a **Central Armed Police Force (CAPF)**.
 - Central Armed Police Forces of India is a group of forces (under the **Ministry of Home Affairs**) for internal security. It includes the CRPF, CISF, ITBP, etc.
- For VIPs other than the PM, the government has mandated the **National Security Guard (NSG)**, **Central Reserve Police Force (CRPF)** and the **Central Industrial Security Force (CISF)** to provide security cover.

➤ **Paying for the Protection:**

- **On Assessment by the Intelligence Agencies:** Anyone to whom the government provides security after assessment by intelligence agencies, gets the protection for free.
 - However, those who have an elaborate security cover such as those in the Z and Z-plus categories, may have to consider accommodation for these security personnel on their own.
- **Private Individuals:** Those who apply for the security but their case is not having consequences on the government and civil society, the government can charge a private individual for their security cover even after assessing a threat to them.

Start-Up Village Entrepreneurship Programme

Why in News

Women **Self Help Groups (SHGs)** under the **Start-Up Village Entrepreneurship Programme (SVEP)** stepped up as effective frontline responders and reached the last mile ensuring an immediate relief to the rural communities and the most vulnerable population during the ongoing **Covid-19 pandemic**.

Key Points

- SVEP is a **sub-scheme of the Deendayal Antyodaya Yojana-National Rural Livelihood Mission (DAY-NRLM)**, Ministry of Rural Development and has been implemented **since 2016**.
- **Progress:** It has extended **business support services**

and capital infusion to 153 blocks of 23 states as of **August 2020**.

- **Partner: Entrepreneurship Development Institute of India (EDII), Ahmedabad** is the technical support partner of SVEP.

- EDII is an **autonomous and not-for-profit institute, set up in 1983**.
- It is sponsored by apex financial institutions like the IDBI Bank Ltd., IFCI Ltd., ICICI Bank Ltd. and the State Bank of India (SBI).
- It has been **assigned the task of setting up Entrepreneurship Development Centers** in Cambodia, Myanmar, Vietnam, Uzbekistan, etc. by the Ministry of External Affairs.

➤ **It aims to:**

- Support the rural poor to come out of poverty.
- Support the people to set up enterprises and provide support until the enterprises stabilise.
- Providing self-employment opportunities with financial assistance and training in business management and soft skills.
- Create local community cadres for promotion of enterprises.

➤ **Features:**

- It addresses **three major pillars of rural start-ups** namely **finances, incubation and skill ecosystems**.
- It **promotes both individual and group enterprises**, majorly in manufacturing, trading and service sectors.
- It **invests on building the capacities of the entrepreneurs** to run the businesses profitably based on the local demand and ecosystem.
- Investments are also made on the **use of the Information and Communication Technology (ICT)** to create standard **E-learning modules** for minimizing the transmission loss in technical aspects like a business plan and profit and loss account preparations.
- **Activities:** Activities under SVEP are strategically **designed to promote rural enterprises** with a few key areas.
 - One of the key areas is to **develop a pool of Community Resource Persons-Enterprise Promotion (CRP-EP)** who are local and support entrepreneurs setting-up rural enterprises.

Note:

- Another key area is to **promote the Block Resource Center (BRC)** in SVEP blocks, to monitor and manage the community resource persons, appraise SVEP loan applications and act as the repository of enterprise-related information in the concerned block.
 - BRCs play the role to support a sustainable revenue model to operate effectively and independently.
- SVEP **established local markets/rural haat** which motivated entrepreneurs to take up demand-based production, advertise their enterprise and increase earning opportunities.
 - A **typical rural haat** is **mostly indigenous, flexible and multi-layered structure** which accommodates the economic activities of various nature.
 - Local market/haat/bazaar **serves as an important economic platform** where a range of products is traded.

Uttar Pradesh Special Security Force

Why in News

The Uttar Pradesh government is going to constitute a **Special Security Force (SSF)** in the state.

Key Points

- On the lines of the **Central Industrial Security Force**, SSF will be responsible for security of vital government and private buildings, and industrial establishments.
 - It can also be hired by private establishments by paying a fixed cost.
- It will be headed by an Additional Director General (ADG)-ranked officer and will be headquartered in **Lucknow**.
- **Powers:** It will **not require magistrate's order or warrants to make an arrest or conduct searches**.
 - Its powers will be governed by a set of rules made by the state government.
- **Background :** The UPSSF will **set up on the basis of orders of the Allahabad High Court**, which had expressed its displeasure over the security at civil courts in December 2019 over shootout incidents at Bijnor and Muzaffarnagar courts.

- The court had directed the state government to form an exclusive force for security on court premises.

Central Industrial Security Force

- It is a central armed force the Union raised under an Act of Parliament namely **Central Industrial Security Force Act, 1968**.
- It is directly under the **Union Ministry of Home Affairs**.
- The CISF provides **security cover to industrial units, government infrastructure projects and facilities and establishments located all over India**.
- Other **central armed forces** in India include **Central Reserve Police Force (CRPF)**, **Border Security Force (BSF)**, **Indo-Tibetan Border Police (ITBP)**, **Sashastra Seema Bal (SSB)**, **National Security Guard (NSG)** and **Assam Rifles (AR)**.

Climate Smart Cities Assessment Framework

Why in News

The Ministry of Housing and Urban Affairs has launched the **Climate Smart Cities Assessment Framework (CSCAF) 2.0**, along with the 'Streets for People Challenge' under the **Smart Cities Mission**.

Key Points

- **CSCAF 2.0:**
 - **Objective:** To provide a clear **roadmap for cities** towards **combating Climate Change** while planning and implementing their actions, including investments.
 - CSCAF initiative intends to inculcate a **climate-sensitive approach** to urban planning and development in India.
 - **Framework:** It has **28 indicators across five categories** namely;
 - Energy and Green Buildings,
 - Urban Planning, Green Cover & Biodiversity,
 - Mobility and Air Quality,
 - Water Management and
 - Waste Management.
 - **Implementing Agency:** The Climate Centre for Cities under **National Institute of Urban Affairs (NIUA)** is supporting MoHUA in implementation of CSCAF.

Note:

Smart Cities Mission

- It is an innovative initiative under the Ministry of Housing and Urban Affairs, to drive **economic growth and improve the quality of life** of people by enabling local development and harnessing technology as a means to create smart outcomes for citizens.
- It was launched in the year **2015** as a **Centrally Sponsored Scheme**.
- **Objective:** To promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of Smart Solutions.
- **Strategy:**
 - Pan-city initiative in which at least one Smart Solution is applied city-wide.
 - Develop areas step-by-step with the help of these three models:
 - Retrofitting.
 - Redevelopment.
 - Greenfield.
- **Streets for People Challenge:**
 - **Aim:** It aims to inspire cities to create **walking-friendly and vibrant streets**.
 - **Eligibility:** All cities with a population of over 5 lakh, and capital cities, can apply.
 - It includes:
 - Creating **pedestrian-friendly streets in high footfall areas**,
 - Re-imagining under-flyover spaces,
 - Re-vitalizing dead neighbourhood spaces, and
 - Creating walking links through parks and institutional areas.
 - Supporting Partners:
 - **Fit India Mission**, under **Ministry of Youth Affairs and Sports**,
 - The **India program** of the Institute for Transport Development and Policy (ITDP).
 - ITDP works around the world to design and implement high quality transport systems and policy solutions that make cities more livable, equitable, and sustainable. It was set up in 1985 and is headquartered in New York, USA.

- **The India Program** works with cities to design and implement sustainable transport projects, and provide policy solutions to enhance social inclusion, reduce dependency on limited resources, improve road safety, and reduce carbon emissions.

Five Star Villages Scheme: India Post

Why in News

The **Department of Posts** under the Ministry of Communications has launched the **Five Star Villages Scheme**.

- It seeks to **bridge the gaps in public awareness and reach of postal products and services**, especially in interior villages.

Key Points

- **Objective:** To ensure **universal coverage of flagship postal schemes in rural areas** of the country.
- **Features:**
 - **Three components:** Product and Service Availability, Product and Service Publicity and Product and Service Marketing.
 - **One-Stop Centre:** Branch offices will function as **one-stop shops** to cater to all post-office-related needs of the villagers.
 - **Schemes Covered:**
 - Savings Bank accounts, Recurring Deposit Accounts (RDA), National Savings Certificate (NSC) and Kisan Vikas Patra (KVP) certificates.
 - **Sukanya Samridhi Accounts** and Public Provident Fund (PPF) Accounts.
 - Funded Post Office Savings Account linked India Post Payments Bank Accounts.
 - Postal Life Insurance Policy and Rural Postal Life Insurance Policy.
 - Pradhan Mantri Suraksha Bima Yojana Account and Pradhan Mantri Jeevan Jyoti Bima Yojana Account.
 - **Rating System:** One Scheme is equal to one star of rating. Therefore, if a village attains universal coverage for four schemes from the above list, then that village gets four-star status and so on.

Note:

Rashtriya Khel Protsahan Puruskar 2020

Why in News

Air Force Sports Control Board was conferred with '**Rashtriya Khel Protsahan Puruskar 2020**' for the outstanding contribution in helping sportspersons to excel in their respective disciplines and to implement robust sports welfare measures.

Key Points

➤ **Rashtriya Khel Protsahan Puruskar:**

- The Rashtriya Khel Protsahan Puruskar scheme was introduced by the government in **2009** to

encourage involvement of corporates and sports promotion boards in the development of sports in the country.

- The **Union Ministry of Youth Affairs & Sports** revised the Scheme of Rashtriya Khel Protsahan Puruskar in the year **2015**.
- The award is given in the following four categories:
 - Identification and nurturing of budding/young talent.
 - Encouragement of sports through Corporate Social Responsibility (CSR).
 - Employment of sportspersons and sports welfare measures.
 - Sports for Development.



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Note:

Economic Scenario

Highlights

- Impact of Lockdown on Indian Corporates
- Core Sector Contracted by 9.6%
- Special Open Market Operations by RBI
- GDP Contracted by 23.9% in First Quarter
- Financing the Fiscal Deficit
- Manufacturing Improved: PMI
- Adjusted Gross Revenue to be Paid in 10 Years
- NPAs in SHG Loans
- Capping of MEIS Scheme Benefits
- Revised Priority Sector Lending Guidelines
- Development Bank for Infrastructure Funding
- Retiring Old Thermal Power Plants
- Resolution Plan by RBI for Covid-19 Stressed Assets
- Panel to Assess Impact of Waiving Loan Interest
- High Forex Reserves
- EASE 2.0 Banking Reforms Index
- Global Innovation Index 2020
- New FDI Policy in Defence Sector
- Ranking of States on Support to Startup Ecosystems: DPIIT
- Limits on Multi-Cap Fund Investments
- Contraction in July Factory Output: IIP
- Steel Industry in India
- Inflation Data: August 2020

Impact of Lockdown on Indian Corporates

Why in News

Recently an investment information and credit rating agency **analysis looked into** the effect of **prolonged nationwide lockdown on Indian corporate sector**.

Key Points

- **Study:** Around 500 companies which were surveyed have shown aggregate revenues contracting by **31.1%** year-on-year basis in the first quarter of Financial Year 2021.
- **Exceptions:** Stress is visible across major sectors, with the **exception** of select sectors like IT, telecom, sugar and pharmaceuticals.
- **Impact:**
 - The contraction in revenues was visible across most major sectors, but it was **sharpest in consumer-oriented sectors** where revenues contracted to nearly half of the previous year's levels.
 - Sectors like **airlines, hotels, retail, automotive and consumer durables**, which primarily comprise **discretionary purchases**, are significantly impacted.

- **Discretionary spending:** It refers to **non-essential items**, such as recreation and entertainment, that consumers purchase when they have enough income left over after paying the necessary expenses such as the mortgage and utilities.

- **FMCG and consumer foods** were relatively less impacted given the essential nature of these purchases.
- **Commodity-linked sectors** contracted by **34%** on a y-o-y basis with almost all the major commodity sectors, including oil and gas, metals and mining, iron and steel and cement, reporting revenue contraction on the back of tepid realizations due to **benign commodity prices and subdued volumes**.
- **Commodity-linked sectors:** Sectors which are dependent upon the **commodity market** (involves buying, selling, or trading a raw product, such as oil, gold, or coffee).
- **Industrial and infrastructure-oriented sectors** also contributed to the slowdown with **29% and 38%** y-o-y de-growth **respectively** during the quarter, given the restrictions on activity.
- **Non-pharma exporters, real estate and construction** companies also face one of their worst years.
- **Banking Sector:** Poor credit growth, including retail loans, along with rising **Non-Performing Assets**

Note:

(NPAs) and credit costs will be harmful for banks and **Non-Banking Financial Companies (NBFCs)**.

➤ **Reasons:**

- **Restrictions on manufacturing, industrial, construction and consumption activities** for the major part of **Q1 FY2021** due to imposition of nationwide lockdown primarily hurt the financial performance of the Indian corporate sector.
- **Demand-side:** Mainly due to customer wariness because of the uncertain economic environment and erosion of purchasing power.
- **Consumer Confidence Survey:** One of India's most lucrative assets is its large consumer base. But people appeared to be less optimistic about their current situation and future expectations.
 - Data from the **Reserve Bank of India** showed **consumer confidence** has collapsed.
 - The **current situation index and the future expectations index** were both below 100, indicating that consumers were pessimistic. A reading above 100 represents optimism.

➤ **Consequences:**

- Despite the benefit of subdued raw material prices and favourable rupee movement in select sectors like IT, the negligible revenues for the major part of the quarter has:
 - Made companies struggle to cover even operating costs.
 - Lower realization of profit in commodity sectors (especially metals and oil and gas), with Profit Before Tax margins contracting to multi-year lows.

➤ **Expectations:**

- **ICRA expects** that revival will be marginal from these historic lows. However, a sustained recovery to pre-pandemic levels would be gradual.
- **Banking:** NPAs are expected to swell for non-banking finance companies, too, with microfinance, MSME loans and wholesale/developer funding witnessing the sharpest spike.
- **Normal monsoons** with sufficient and well distributed rainfall are expected to revive investment sentiments and job creation which are very crucial to sustain the growth in earnings.
- **Electricity generation** will also see a 6% to 8% growth, however, capital goods sector revenue is likely to decline by 5% indicating that the recovery is not yet broad-based.

- In **pharmaceuticals**, new launches from a strong product pipeline will propel 15% growth.
- **Movement** of goods on National Highways, as indicated by the **Fastag** and **E-way** bill volumes, shows recovery to 85% of pre-pandemic levels in July 2020, which was also visible in the railway freight and port tonnage data.

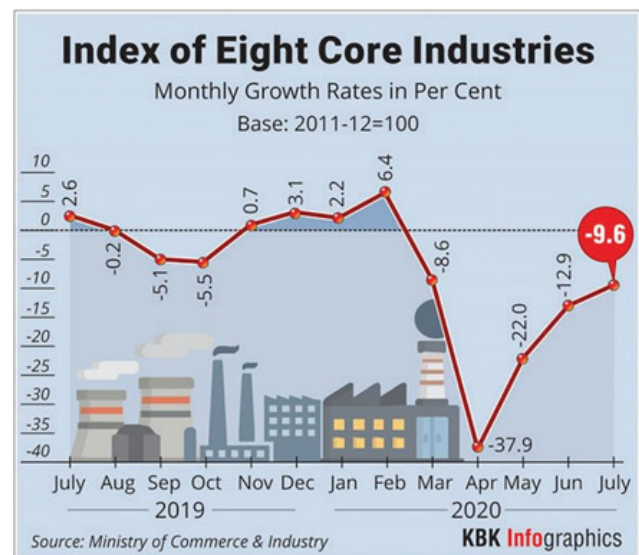
Core Sector Contracted by 9.6%

Why in News

The **output of eight core infrastructure sectors dropped by 9.6% in July 2020**. It has been a continued contraction for the past five months.

Key Points

- **Reasons:** The contraction is due to a **decline mostly in the production of steel, refinery products and cement**.
 - In general, the **weak demand and over-supply** along with global and domestic disruptions due to **Covid-19** are hampering the mobilization of economic resources.
 - In **July**, **local demand growth has slowed** because of **high fuel prices, renewed lockdown** in parts of the country, and as **monsoon rains hit transport, industrial, and construction activity**.
- **Current Scenario:**
 - The production of eight core sectors expanded by 2.6% in July 2019.



Note:

- Barring the **fertiliser sector** which grew by 6.9%, all seven sectors namely coal, crude oil, natural gas, refinery products, steel, cement, and electricity recorded negative growth in July.
- The output of steel saw the highest decline (16.5%). It was followed by refinery products (13.9%).
- The minimum contraction in the output is in the electricity sector with 2.3%.

Core Sector Industries

- The eight-core sector industries include **coal, crude oil, natural gas, refinery products, fertiliser, steel, cement, and electricity**.
- These comprise **40.27%** of the weight of items included in the **Index of Industrial Production (IIP)**.
- The eight core Industries in decreasing order of their weightage: **Refinery Products > Electricity > Steel > Coal > Crude Oil > Natural Gas > Cement > Fertilizers**.

Industry	Weight (in %)
Petroleum and Refinery production	28.04
Electricity generation	19.85
Steel production	17.92
Coal production	10.33
Crude Oil production	8.98
Natural Gas production	6.88
Cement production	5.37
Fertilizers production	2.63

Index of Industrial Production

- It is an indicator that measures the changes in the volume of production of industrial products during a given period.
- It is compiled and published monthly by the **National Statistical Office (NSO)**, Ministry of Statistics and Programme Implementation.
- IIP is a composite indicator that measures the growth rate of industry groups classified under:
 - **Broad sectors:** Mining, Manufacturing, and Electricity.
 - **Use-based sectors:** Basic Goods, Capital Goods, and Intermediate Goods.
- **Base Year for IIP is 2011-2012.**
- **Significance of IIP:**

- It is used by government agencies including the Ministry of Finance, the **Reserve Bank of India**, etc. for policy-making purposes.
- IIP remains extremely relevant for the calculation of the quarterly and advance GDP estimates.

Special Open Market Operations by RBI

Why in News

Recently, the **Reserve Bank of India (RBI)** has announced several measures to ensure orderly market conditions and smooth financial conditions.

- These measures include two more tranches of **special Open Market Operations (OMOs)** in bonds and a **hike in the Held-To-Maturity (HTM) limit** under the **Statutory Liquidity Ratio (SLR)** for banks.

Key Points

- The move has been termed as '**Operation Twist**'.
 - Operation Twist is the name given to a **USA Federal Reserve monetary policy** operation, which involves the purchase and sale of government securities to boost the economy by bringing down long-term interest rates. It is now being used for **similar measures taken by RBI** in Indian context as well.
- **OMOs:** RBI will conduct **additional special open market operations** for an aggregate amount of Rs. 20,000 crore.
 - RBI conducted **OMOs in March** as well.
- **Term Repo Operations:** RBI will also conduct **term repo operations** for an aggregate amount of Rs. 1,00,000 crore at the **prevailing** repo rate in the middle of September **to ease liquidity pressures on the market**.
 - In order to reduce the cost of funds, banks that had availed of funds under **Long-Term Repo Operations (LTROs)** may exercise an option of reversing these transactions before maturity.
 - LTRO is a tool that lets banks borrow one to three-year funds from the RBI at the repo rate, by providing government securities with similar or higher tenure as collateral.
 - Thus, the banks may reduce their interest liability by returning funds taken at the repo rate prevailing at that time (5.15%) and **availing funds at the current repo rate** of 4%.

Note:

Open Market Operations

- Open Market Operations is the **simultaneous sale and purchase of government securities and treasury bills** by RBI.
- The objective of OMO is to **regulate the money supply** in the economy.
- RBI carries out the OMO **through commercial banks** and does not directly deal with the public.
- OMO is one of the **quantitative tools** that RBI uses to **smoothen the liquidity** conditions through the year and minimise its impact on the interest rate and inflation rate levels.
 - Quantitative tools control the extent of money supply by changing the Cash Reserve Ratio (CRR), or bank rate or open market operations. Qualitative tools include persuasion by the Central bank in order to make commercial banks discourage or encourage lending which is done through moral suasion, margin requirement, etc.
- **Increase in HTM limit:** RBI raised the limit on bonds held-to-maturity (HTM) to 22% from 19.5% of Net Demand and Time Liabilities (NDTL). This means banks will have room to buy more bonds without bothering about short-term fluctuations in yields.
 - **HTM** securities are the debt securities acquired with the intent to keep it until **maturity**.

Key Terms

- **Repo Rate:** It is the rate at which RBI lends money to **commercial banks**.
- **Government Securities (G-Sec):** It is a tradable instrument issued by the central government or state governments.
 - Short term G-secs (with original maturities of less than one year) are called **Treasury Bills**. Long term G-secs (with original maturities of more than one year) or long term are called **Government Bonds or Dated Securities**. Treasury Bills are not issued by State Governments while Government Bonds or Dated securities are issues both by State and Central Governments.
- **Net Demand and Time Liabilities (NDTL):** It is the difference between the sum of demand and time liabilities (deposits) of a bank (with the public or the other bank) and the deposits in the form of assets held by the other banks.

GDP Contracted by 23.9% in First Quarter

Why in News

According to the recent **National Statistical Office (NSO)** data, India's **Gross Domestic Product (GDP)** growth **contracted by 23.9%** in the first (April-June) quarter of 2020 compared to the same period (April-June) in 2019.

- It is the sharpest contraction since India started reporting quarterly data in 1996.
- **Gross Value Added (GVA)** growth rate also **declined by 22.8%** in the first quarter of this financial year.
 - GDP is a **measure of economic activity** in a country. It is the **total value** of a country's annual output of goods and services. It gives the **economic output from the consumers' side**.
 - **GVA** is the sum of a country's GDP and net of subsidies and taxes in the economy.

Key Points

- **Sector Wise Data:**
 - **Construction, manufacturing, trade, hotels and other services** and **mining** were the worst-hit sectors, recording contractions of 50.3%, 39.3%, 47.0% and 23% respectively.
 - This reflects the unprecedented suspension of economic activity in the first quarter of this fiscal due to the **pandemic** and the series of lockdowns.

QUARTERLY ESTIMATES OF GVA

INDUSTRY	CHANGE OVER PREVIOUS YEAR	
	April-June 2019-20	April-June 2020-21
Agriculture, forestry & fishing	3.0%	3.4%
Manufacturing	3.0%	-39.3%
Construction	5.2%	-50.3%
Trade, hotels, transport, communication & services related to broadcasting	3.5%	-47.0%
Public administration, defence & other services	7.7%	-10.3%
Gross Value Added (GVA)	4.8%	-22.8%
Gross Domestic Product (GDP)	5.2%	-23.9%

*at Basic Prices in Q1 (April-June) of 2020-21 (at 2011-12 Prices)

Note:

- Only the **agriculture sector** showed a **positive growth** at 3.4%.
- **Factors of GDP Contraction:**
 - In any economy, the **GDP growth is generated from one of the four engines** of growth. i.e. **private consumption, demand generated by private sector businesses, demand generated by government and exports.**
 - **Private consumption** has fallen by 27%. It is the biggest engine that drives the Indian economy.
 - **Investment by private sector businesses** have fallen by 47%. It is the second biggest engine.
 - **The net export demand** has turned positive in this first quarter because India's imports have crashed more than its exports.
 - While on paper, this provides a boost to overall GDP, it also points to an economy where economic activity has plummeted.
 - The **government's expenditure went up by 16%** but this was nowhere near enough to compensate for the loss of demand in other sectors (engines) of the economy.

CHART 4: ENGINES OF GROWTH FALTER

Sources of total demand /engines of growth	Q1 FY20 (Rs crore)	Q1 FY21 (Rs crore)	Difference (Rs crore)	% change (year on year)
Expenditure by individual consumers [C]	19,92,967	14,61,164	-5,31,803	-27
Expenditure/Investment by private businesses [I]	11,32,195	5,99,192	-5,33,003	-47
Expenditure by Govt [G]	4,18,249	4,86,636	68,387	16
Net demand from exports minus imports	-1,17,242	75,675	1,92,917	165
Total (including discrepancies)	35,35,267	26,89,556	-8,45,711	-23.9

Source: MoSPI and Express Research GrOp

- **Implications:**
 - **On Jobs:** The sectors which have contracted (e.g. construction, manufacturing etc.) are the sectors that create the maximum new jobs in the country.
 - Therefore, in a scenario where each of these sectors are contracting, would lead to more and more people either losing jobs (decline in employment) or failing to get one (rise in unemployment).
 - **On Informal Sector:** The real extent of the economic crisis is expected to be deeper given that the **small-scale sector and informal sector** is more affected than the organised sector, but is **not reflected in the quarterly GDP numbers.**

- In the informal sector, factory output figures are used to extrapolate the trends in the growth.
- **On Banks:** The looming defaults in the banking sector after the moratorium ends will add to the banking sector woes, impacting bank's lending.
 - Also, there are **worries regarding household debt**, with incomes stagnating, salary cuts and job losses.
- **On Economy:** With GDP contracting by more than what most observers expected, it is now believed that the full-year GDP could also worsen.
 - A fairly conservative estimate would be a contraction of 7% for the full financial year.

Possible Solutions

- As the incomes of individuals fall sharply, they reduce consumption. When consumption falls sharply, businesses stop investing. Since both of these are voluntary decisions, there is no way to force people to spend more and/or coerce businesses to invest more.
 - The same logic holds for exports and imports as well.
- Therefore under these circumstances, there is **only one engine that can boost GDP, that is the government.**
 - Only when the government spends more — either by building roads and bridges and paying salaries or by directly handing out money — can the economy revive in the short to medium term.
 - If the government does not spend adequately enough then **the economy will take a long time to recover.**
- The Indian Government can also adopt the measures suggested by **McKinsey Global Institute** in which an additional 3.5 % of the GDP can be raised by the government. This includes:
 - **Global Shift:** Global trends such as digitization and automation, shifting supply chains, urbanization, rising incomes and demographic shifts, and a greater focus on sustainability, health, and safety can become the hallmarks of the post pandemic economy.
 - **Higher Productivity through Privatisation:** Privatisation of 30 or so of the largest state-owned enterprises to potentially double their productivity. Government also had a focus on privatisation under the **Atmanirbhar Bharat Package.**
 - **Improvement in Infrastructure:** India needs to unlock supply in land markets to reduce land costs by 20-25%, enable efficient power distribution to

Note:



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reduce commercial and industrial tariffs by 20-25%; and improve the ease and reduce the cost of doing business.

- **Efficient Financing:** Streamlining fiscal resources can deliver USD 2.4 trillion in investment while boosting entrepreneurship by lowering the cost of capital for enterprises by about 3.5 percentage points.
- **Bad Bank:** Creation of a '**bad bank**' can take care of the inoperative assets.

Financing the Fiscal Deficit

Why in News

India, being one the hardest-hit major economy due to **Covid-19**, faces the challenge of managing its fiscal deficit.

- **Borrowing more and monetising the deficit** are the options being considered by the government and the **Reserve Bank of India (RBI)** to finance the fiscal deficit.

Key Points

- **State of Indian Economy:**
 - As per the official data, the **Centre's fiscal deficit** for the first three months of fiscal 2020-21 (April-June) was Rs. 6.62 lakh crore, which is 83% of the budgeted target for the whole year.
 - As per the economists, the fiscal deficit may end up as high as 8% of the Gross Domestic Product (GDP), far exceeding the budget's goal of 3.5%.
 - The **GDP contracted by 23.9% in the first** (April-June) quarter of 2020 compared to the same period (April-June) in 2019.
 - The **manufacturing sector is also contracting**, as per the recent IHS Markit India Manufacturing **Purchasing Managers' Index (PMI)**.
 - The **output of eight core industries** contracted for the **fourth consecutive month, shrinking by 15%** in June 2020.
 - The **Financial Stability Report** from RBI also shows an increase in bad loans and **Non-Performing Assets (NPA)**.

Methods of Bridging the Fiscal Deficit

- **Borrowing From the Market:**

- The government has already raised its gross market borrowing target for the current financial year by **more than 50%**, owing to the pandemic.
- **Disadvantage:**
 - **High Debt:** An increased **borrowing** programme means that public **debt** will go up.
 - **Higher Interest Rates:** Higher borrowing can **push up interest rates** because markets are nervous about the government's ability to repay.
 - **Increase in Taxes:** It may also necessitate an increase in taxes. This may burden the common people and also lead to less spending and saving by the public, leading to a stalled market.
 - **Crowding out:** When the government borrows from the private sector by selling bonds, the private sector is left with less money to spend and invest. Therefore, although government spending increases, private sector spending falls.

Monetisation of the Deficit:

- Monetising deficit means **RBI purchases government bonds in the primary market and prints more money to finance the debt**.
- This is resorted to only when the government **cannot borrow from the market** (Banks and other Financial Institutions like LIC).
- The money printed by the RBI is called **high powered money or reserve money or monetary base**.
- RBI also conducts **indirect monetisation of the deficit** through **Open Market Operations (OMOs)**.
 - OMOs are market operations conducted by RBI by way of **sale/purchase of government securities to/from the market** with an objective to **adjust the rupee liquidity conditions** in the market on a durable basis.
 - Recently, RBI has decided to **infuse Rs. 10,000 crore liquidity in the banking system** by buying government securities through OMOs.
 - Purchase of Government securities by the RBI helps in increasing the supply of the money in the market and with banks. It helps to stabilize the market economy and generates credibility in the investors.
 - It is different from monetisation as it is controlled by RBI instead of the government as it is not as inflationary as deficit monetisation.

Note:



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○ Advantages:

- It has helped in the economic development of India as our domestic savings were less than 9% of GDP and the capacity to raise loans was also limited during the early 1950s, constraining the welfare activities of the government.

○ Disadvantages:

- Deficit financing is **inflationary** and is bad for the health of the central bank.
- It may **push up interest rates** and thus make it even more difficult for the government to service the loan.
- It also poses threat to the **financial stability** of the economy.

FRBM and Monetising Deficits

- Monetisation of deficit was in practice in India till 1997, whereby the central bank automatically monetised government deficit through the issuance of ad-hoc **treasury bills**.
- **Two agreements were signed between the government and RBI in 1994 and 1997** to completely phase out funding through ad-hoc treasury bills.
- With the enactment of **Fiscal Responsibility and Budget Management (FRBM) Act, 2003**, it was totally barred.
- However, the **FRBM Act Amendment, 2018** contains an **escape clause** which permits monetisation of the deficit under special circumstances.
 - **Escape clause** generally refers to a contract provision that specifies the conditions under which a party can be freed from an obligation.
 - It provides **flexibility to governments to overshoot fiscal deficit targets** in times of need, enabling them to respond to economic shocks.
 - The clause **details a set of events** in which the Central government can deviate from fiscal deficit targets. **These include:**
 - Overriding considerations of **national security, acts of war, and calamities of national proportion and collapse of agriculture** severely affecting farm output and incomes.
 - Far-reaching **structural reforms** in the economy with unanticipated fiscal implications.
 - A sharp **decline in real output growth** of at least 3% points below the average for the previous four quarters.

Manufacturing Improved: PMI

Why in News

As per the latest Purchasing Managers' Index (PMI) data, India's manufacturing sector activity has started to show signs of growth in August, driven mainly by pick-up in production along with improvement in customer demand.

Purchasing Managers' Index

- Purchasing Managers' Index (PMI) is an indicator of business activity - both in the **manufacturing and services sectors**.
- It is calculated separately for the manufacturing and services sectors and then a composite index is also constructed.
- The PMI summarizes whether market conditions as viewed by purchasing managers are expanding, neutral, or contracting.
- The purpose of the PMI is to provide information about current and future business conditions to company decision makers, analysts, and investors.
 - The PMI is a number from **0 to 100**.
 - PMI **above 50** represents an expansion when compared to the previous month;
 - PMI **under 50** represents a contraction, and
 - A **reading at 50** indicates no change.
- The PMI is usually released at the start of every month. It is, therefore, considered a good leading indicator of economic activity.
- The Index (PMI) is compiled by **IHS Markit** for more than 40 economies worldwide. IHS Markit is a global leader in information, analytics and solutions for the major industries and markets that drive economies worldwide.

Key Points

- **PMI Data:**
 - The **Purchasing Managers' Index (PMI)** rose from **46 in July to 52 in August**.
 - In PMI parlance, a value **above 50 means expansion**, while a score below that denotes contraction.
 - **In April**, the index had slipped into contraction mode, after remaining in the growth territory for 32 consecutive months.

Note:

➤ **Positive Highlights:**

- **New business** received by Indian manufacturers **expanded at the fastest pace since February**.
 - **Higher levels of production** supported a **modest rise in the number of purchases** during August.
 - **Goods and Services Tax Collection:** **GST** collections in August stood at— 88% of the august 2019-20 level.
 - Collections in July were marginally higher but at 85.6% of the year earlier.
 - **Infrastructure:** The contraction in India's infrastructure sector **slowed to 9.6%** in July compared with 12.9% shrinkage in June.
 - **Mobility:** The **Google Mobility index**, which measures visits to different locations such as retail shops, workplaces, parks and transport hubs, **showed a 2% rise in trends** for places such as supermarkets, food warehouses, farmers' markets, speciality food shops and pharmacies.
 - **E-way bills**, another widely followed indicator of business activity, reached **99.8% of last year's level in August**.
 - **Petrol consumption:** Petrol consumption **rose by about 2%** in the first fortnight of August from the corresponding period in July.
- **Reasons:** The pick-up in demand from domestic markets gave rise to upturns in production and input buying.
- Gradually, unlocking after lockdown has increased the pace of mobilization of economic resources.
 - Exports are also on marginal improvement. When compared to imports, the rate of export demand is on the higher side due to strict slash on imports.
- **Concerns:**
- **Unemployment:** Despite an expansion in new orders, **job shedding** continued in the Indian manufacturing sector.
 - The relocation of employees following Covid-19 pandemic is linked to the reduction in staffing numbers.
 - **Inflation:** Reports of higher raw material costs due to supplier shortages and transportation delays stemming from the Covid-19 pandemic, resulted in rising input prices during August.
 - **Exports:** The decline in foreign exports weighed slightly on overall new orders as firms cited subdued demand conditions from abroad.

Suggestions

- **Focusing on Atmanirbhar Bharat:** The government announced an economic stimulus package of Rs. 20 lakh crore and big-bang systemic reforms under the **Atmanirbhar Bharat Abhiyan** (self-reliant India). The intended objective of this plan is two-fold.
- First, **interim measures** such as liquidity infusion and direct cash transfers for the poor will work as shock absorbers for those in acute stress.
 - The second, **long-term reforms** in growth-critical sectors to make them globally competitive and attractive.
- **Increasing the MGNREGA Funding and Expanding to Urban Areas:** The **Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA)** programme has proved to be a bedrock of support in the normal times and during times of difficulty (like Covid-19) and it will be a good idea to expand the scheme to urban areas.
- **Transfer of Cash Benefits:** Money in the hands of people can provide an immediate sense of security and confidence, which is the cornerstone to restoring economic normalcy.
- It will raise the consumption and demand of the economy and can bring back the virtuous cycle of demand and supply in play.
- **Issues with the Banking System:** Covid-19 assistance measures undertaken by the Reserve Bank of India (RBI) and the government such as interest rate reductions, credit guarantee and liquidity enhancement schemes are welcome steps.
- Although banks have largely failed to take initiatives as they are not confident of lending.
 - The RBI should consider a Single One Time Window for restructuring business loans, as required, by all banks.
- **Tax Incentivization:** Big business houses and **MSME sector** should be supported by the government through tax incentivization to reopen their operations.
- This will energize consumer demand and boost the functioning of the vendor or ancillary industry in the MSME sector (which has huge potential for job creation).
- **Calibrating Make in India:** The ongoing distrust on Chinese manufacturing amid USA-China spat can be very well garnered by India.

Note:



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- Making India a global trading hub – devise an incentive regime for companies setting up global trading operations from India.
- **Promoting Sunrise Sectors:** It should also encourage sunrise sectors as part of re-imagining Indian economy such as battery manufacturing (storage systems)/ solar panel manufacturing.
 - The government can also consider giving impetus to “Deep Tech”-leveraged businesses - blockchain, robotics, AI, machine learning, etc.
- **Auto-sector Reforms:** The auto industry which contributes significantly to GDP (nearly 9%) deserves special treatment.
 - In addition to reducing GST rate, old vehicle scrap policy with tax incentives for creating a demand for new vehicles may be formulated.
- **Labour Law Reforms:** Focus should be given to strictly enforce discipline within the factory premises and demand higher productivity. The moves by U.P., M.P. and Gujarat are welcome signals.
 - Labour laws must be motivated by concerns of sustainability. Minimum wages, a written job contract that specifies terms and conditions of working, social security provisions etc. increase costs in the short run but augment economic optimisation in the long run by enhancing the productivity of the workforce.
 - The government has come out with **four labour codes** as long term reforms.
 - The government should provide health insurance for migrant labourers as experimented by certain States.

Adjusted Gross Revenue to be Paid in 10 Years

Why in News

Recently, the **Supreme Court of India** allowed **telecom companies (telcos)** 10 years' time to pay their **Adjusted Gross Revenue (AGR)** dues to the government.

Key Points

- **Background:**
 - The telecom sector was liberalised under the **National Telecom Policy, 1994** after which licenses

were issued to companies in return for a fixed license fee.

Adjusted Gross Revenue

- AGR is a **fee-sharing mechanism** between the government and the telcos who shifted to the **‘revenue-sharing fee’** model in 1999, from the **‘fixed license fee’** model.
 - In this course, telcos are supposed to **share a percentage** of AGR with the government.
- To provide relief from the steep fixed license fee, the **government in 1999** gave an option to the licensees to migrate to the **revenue sharing fee model**.
 - Under this, mobile telephone operators were required to share a percentage of their AGR with the government as **annual license fee (LF)** and **spectrum usage charges (SUC)**.
 - License agreements between the Department of Telecommunications (DoT) and the telecom companies define the gross revenues of the latter.
- The definition of AGR has been under litigation for 14 years. In 2005, **Cellular Operators Association of India (COAI)** challenged the government's definition for AGR calculation.
- However, DoT argued that AGR includes **all revenues from both telecom and non-telecom services**.
- The companies claimed that **AGR should comprise just the revenue accrued from core services** and not dividend, interest income or profit on the sale of any investment or fixed assets.
- In 2015, the **Telecom Disputes Settlement and Appellate Tribunal (TDSAT)** stayed the case in favour of telecom companies and held that AGR includes all receipts except capital receipts and revenue from non-core sources such as rent, profit on the sale of fixed assets, dividend, interest and miscellaneous income.
- However, setting aside TDSAT's order, the Supreme Court upheld the definition of AGR as stipulated by the DoT in October 2019.
 - As per the government definition, AGR includes rental receipts, dividend income and income from any other-activity arising out of the telecom licence the company has.
 - Later on, the Court rejected a 20-year payment timeline proposed by the central government

Note:

and supported by telecom companies. Instead it has given 10 years' time to repay the AGR dues.

➤ **Directions Issued by Court:**

- The telecom operators would **make the payment of 10% of the total dues** as demanded by the Department of Telecom by 31st March 2021.
- The **yearly instalments would commence from 1st April 2021 up to 31st March 2031**. The instalments would be paid by **31st March every year**.
- In the event of any default in making payment of annual instalments, **interest would be levied** as per the agreement **along with penalty and interest on penalty** automatically without reference to court.
 - Besides, it would be **punishable for contempt of court**.
- Compliance with the court order should be reported by the telcos and the telecom department every year on 7th April.
- The sale of spectrum by telcos facing insolvency proceedings shall be decided by the **National Company Law Tribunal (NCLT)**.

➤ **Issues Involved:**

- The definition of AGR has been such a contentious issue because it has **huge financial implications for both telcos and the government**.
 - It was estimated, after the SC's 2019 judgment, that the telecom operators owe the government about Rs. 92,000 crore in back charges, interest and penalties on license fee alone.
 - The October 2019 judgment had pushed many telcos on the verge of bankruptcy.
- While the **government has been deprived of the extra revenue**, the financial implications for telecom companies — who now have to pay overdue amounts piled up for years — are serious too.
 - Especially at the current juncture, when profits for telcos are under pressure from severe competition and the falling average revenue per user.

NPAs in SHG Loans

Why in News

The Union Ministry of Rural Development (MoRD) has asked states to monitor the status of **Non Performing**

Assets (NPAs) district-wise and take corrective measures to recover overdue/ outstanding dues from **Self-Help Groups (SHGs)**.

- The issue was raised in the review meeting of the **Deendayal Antyodaya Yojana-National Rural Livelihoods Mission**.
- A **Non Performing Asset (NPA)** is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.

Deendayal Antyodaya

Yojana - National Livelihoods Mission

- It was launched by the **Ministry of Rural Development (MoRD)**, Government of India in 2011.
- NRLM set out with an agenda to cover 7 Crore rural poor households, across 600 districts, 6000 blocks, 2.5 lakh Gram Panchayats and 6 lakh villages in the country through **SHGs and federated institutions** and support them for livelihoods collectives in a period of 8-10 years.
- The Mission aims at creating **efficient and effective institutional platforms for the rural poor** enabling them to **increase household income through sustainable livelihood enhancements and improved access to financial services**.

Key Points

➤ **SHG Loans as NPAs:**

- About Rs. 91,130 crore have been given to about 54.57 lakh SHGs across the country by the end of March 2020 as loans.
 - Around **2.37%** or **Rs. 2,168 crore** of this total outstanding bank loans turned out to be **NPAs**.
- The proportion of NPAs in bank loans given to SHGs has **significantly increased** over the last decade from **2.90% in 2008 to 6.12% in 2018**
- There has been a rise of **0.19%** in overall NPAs in SHG loans in 2019-20 compared to financial year 2018-19.

➤ **State Wise Distribution:**

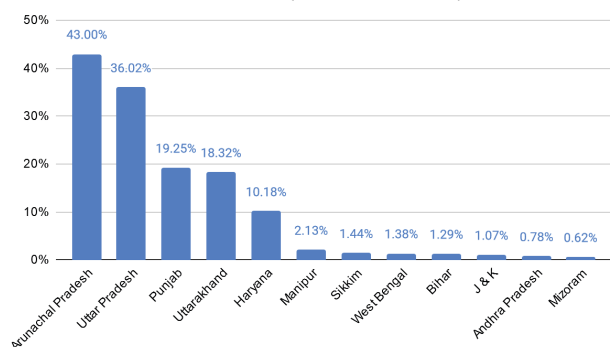
- **Uttar Pradesh**, which has 71,907 SHGs, reported that 36.02% of the loans taken by the groups were NPAs at the end of March 2020, as compared to 22.16% in 2018-19.
- In **Arunachal Pradesh**, the NPA proportion stood at an alarming 43%, though the number of SHGs there is just **209**.

Note:



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State-Wise NPA % in SHGs (as of March 2020)



- **Directions:** The **State Rural Livelihood Missions (SRLMs)** were directed by the MoRD to monitor the status of NPA district wise and take immediate corrective actions wherever instances of NPA or overdues were found.
 - A mechanism under which representatives drawn from SHGs monitored loans had proved critical in ensuring timely repayment and therefore, it should **be institutionalised in all bank branches**.
- **Reasons:** In 2019, the **National Institute of Rural Development and Panchayati Raj (NIRDPR)** has conducted a research study on NPAs by SHGs.
 - It found that **poor economic conditions, non-cooperation, lack of training, expenses towards marriages and social ceremonies, and medical emergencies** are the main reasons for non-payment of loans by SHGs.
 - **Expectations of loan waiver from the government** was also found to be a major reason for the poor financial health of SHGs.
 - The **role played by banks** in handholding, timely opening accounts, monitoring and follow-up was not as per the expectation.

Suggestions

- **Training SHGs and providing them market linkages** for the products/services so that they use the funds for income generating activity and have no problem in paying back the loan amount should be done by the government. In addition, providing group health and life insurance clubbed with loans at low cost will help as members spend a significant portion of the loan on events like ill-health, ceremonies etc.
- It needs to be ensured that **grading of SHGs** needs to be done properly and loans should be issued only if it is found suitable for lending. **Follow-ups and constant monitoring** is a must.

Initiatives by

Central Government to promote SHGs

- **Agriculture Infrastructure Fund**
- **PM Formalization of Micro Food Processing Enterprises (PM FME) Scheme**
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**
- **Ambedkar Hastshilp Vikas Yojana (AHVY)**
- **North East Rural Livelihood Project**
- **Economic Stimulus-III**

National Institute of

Rural Development and Panchayati Raj

- It is an **autonomous** organisation under the **Union Ministry of Rural Development**.
- It is a premier national centre of excellence in **rural development and Panchayati Raj**.
- It has been recognized internationally as one of the **UN-ESCAP Centres of Excellence**.
- It builds **capacities of rural development functionaries**, elected representatives of Panchayati Raj Institutions, bankers, Non-Governmental Organizations and other stakeholders through interrelated activities of training, research and consultancy.
- The Institute is located in **Hyderabad (Telangana)**.

- **Quantum of loan should be high** as it is a major limiting factor, one-time lending not only impedes the process of business expansion but also wastes the money lent so far. Banks need to be sensitized to **lend multiple doses of credit, for well performing SHGs**.

Capping of MEIS Scheme Benefits

Why in News

The government has taken a decision to **cap export incentives** under **Merchandise Exports from India Scheme (MEIS)** at **Rs. 2 crore per exporter** on outbound shipments made during September-December, 2020.

Key Points

- **About the Decision:**
 - The ceiling would be **subject to a downward revision** to ensure that the total claim doesn't exceed the allocated Rs. 5,000 crore for the period.

Note:

- The new **Import Export Code (IEC)** obtained on or after 1st September will be **ineligible to submit any MEIS claim** for exports.
 - **Import Export Code:** It is issued by the **DGFT (Director General of Foreign Trade - Ministry of Commerce and Industry)**. IEC is a **10-digit code** which has a lifetime validity. Predominantly **importers cannot import** goods without the IEC and similarly, the **exporter merchant cannot avail benefits from DGFT** for the export scheme, etc. without IEC.
- **Reasons for Government Decision:** MEIS is **not World Trade Organisation (WTO) compliant** and rolling back of the MEIS scheme will pave the way for a new scheme in place. The Indian government has announced a **new WTO-compliant scheme** called **Remission of Duties or Taxes On Export Product (RoDTEP)** which will replace MEIS starting 1st January 2021.
- **Merchandise Exports from India Scheme (MEIS):**
 - MEIS was introduced in the **Foreign Trade Policy (FTP)** 2015-20 w.e.f. 1st April 2015 with the objective to offset infrastructural inefficiencies and associated costs involved in exporting goods/products which are produced /manufactured in India including products produced/manufactured by MSME Sector.
 - Under MEIS, the government provides duty benefits depending on product and country.
 - Rewards under the scheme are payable as percentage of realised free-on-board value (of 2%, 3% and 5%) and MEIS duty credit scrip can be transferred or used for payment of a number of duties including the basic customs duty.
- **Remission of Duties or Taxes On Export Product (RoDTEP):**
 - The new scheme will be implemented from 1st January 2020 and create a **fully automated route for Input Tax Credit (ITC)** in the GST to help increase exports in India.
 - It will **reimburse all the taxes/duties/levies** being charged at the Central/State/Local level which are not currently refunded under any of the existing schemes but are incurred at the manufacturing and distribution process.
 - The Ministry of Finance has set up a **committee** under the chairmanship of former commerce and home secretary **GK Pillai** to finalise the rates under RoDTEP that will allow reimbursement of

all embedded taxes including local levies paid on inputs by exporters.

➤ **Concerns:**

- **Lack of Data for New Scheme to Replace MEIS:** The RoDTEP committee has started the work, but the industry is facing **challenges in providing the data** due to frequent local lockdowns, non-availability of transport and non-functioning of auditors.
- **The Federation of Indian Export Organisations (FIEO)** is of the view that exports during September-December are based on orders that had been **negotiated earlier after factoring in** the existing **Merchant Export from India Scheme (MEIS)** benefit.
 - These benefits are **part of the export competitiveness** and therefore the sudden change will affect exporters' financially as **buyers are not going to revise their prices upwards**.

Revised Priority Sector Lending Guidelines

Why in News

Recently, the **Reserve Bank of India (RBI)** released revised **Priority Sector Lending (PSL)** guidelines, which align with emerging national priorities and also bring sharper focus on inclusive development.

- The PSL guidelines were last reviewed for **commercial banks in April 2015** and for **Urban Co-operative Banks (UCBs)** in May 2018.

Key Points

- **Fresh Categories:** Bank finance to **start-ups up to Rs. 50 crore**, loans to farmers for installation of solar power plants for **solarisation of grid connected agriculture pumps** and loans for **setting up Compressed BioGas plants** have been included as fresh categories eligible for finance under priority sector.
- **Farmers' Related:** Higher credit limit has been specified for **Farmers Producers Organisations (FPOs)** undertaking farming with assured marketing of their produce at a predetermined price.
 - Loans for these activities will be subject to an **aggregate limit of Rs. 2 crore** per borrowing entity.
 - The targets prescribed for **small and marginal farmers** and **weaker sections** will be increased in a phased manner.

Note:



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- It has defined **farmers with land holding of up to one hectare** as **marginal farmers**, and farmers with a landholding of **more than one hectare and up to 2 hectares** as **small farmers**.
- **Boosting Credit:** The credit limits for renewable energy, health infrastructure, including the projects under '**Ayushman Bharat**', have been doubled.
 - Bank loans up to a limit of **Rs. 30 crore** to borrowers for purposes like solar-based and biomass-based power generators, windmills, non-conventional energy-based public utilities, etc. For individual households, the loan limit will be **Rs. 10 lakh per borrower**.
 - Bank loans up to a **limit of Rs. 10 crore per borrower** for building healthcare facilities including under '**Ayushman Bharat**' in Tier II to Tier VI centres.
- **Addresses Disparity:** It seeks to **address** the issues concerning **regional disparities** in the **flow of priority sector credit** at **district level** which includes:
 - Ranking districts on the basis of per capita credit flow to the priority sector.
 - **Building an incentive framework** for districts with comparatively low flow of credit and a **dis-incentive framework** for districts with comparatively high flow of priority sector credit.
 - Higher weightage has been assigned to priority sector credit in 'identified districts' where priority sector credit flow is comparatively low.

Priority Sector Lending

- The RBI mandates banks to lend a certain portion of their funds to **specified sectors**, like **agriculture, Micro, Small and Medium Enterprises (MSMEs), export credit, education, housing, social infrastructure, renewable energy** among others.
 - All **scheduled commercial banks** and **foreign banks** (with a sizable presence in India) are mandated to set aside **40% of their Adjusted Net Bank Credit (ANBC)** for lending to these sectors.
 - **Regional rural banks, co-operative banks** and **small finance banks** have to allocate **75% of ANBC** to PSL.
- The idea behind this is to ensure that adequate institutional credit reaches some of the vulnerable sectors of the economy, which otherwise may not be attractive for banks from the profitability point of view.

Development Bank for Infrastructure Funding

Why in News

The government is planning to set up a new **Development Finance Institution (DFI)** essentially to fill the gap in long-term finance for infrastructure sectors.

Key Points

- **Proposed DFI:**
 - It will be used to finance both social and economic infrastructure projects identified under the **National Infrastructure Pipeline (NIP)**.
 - In April 2020, the Government released the **final report on NIP for 2019-25**, which had drawn up projects totalling investments of Rs. 111 lakh crore across roads, railways, energy and urban sectors.
 - The task force on NIP was headed by **Atanu Chakraborty** (economic affairs secretary).
- **Role of Government in DFI:**
 - The DFI can have two types of character:
 - Either it should be **promoted by the government**.
 - Or it should be given a **private sector character** with the government restricting its holding to 49%.
 - There are clear **advantages if the DFI is fully held by the government**, the most important being **fund-raising**.
 - The securities from the DFI could be made **Statutory Liquidity Ratio (SLR)** eligible. This will encourage banks to subscribe to the securities issued by DFI and fulfil their SLR obligations.
 - However, the issue involved in this is that the senior management of the DFI may be **hounded by investigative agencies** such as the Central Bureau of Investigation (CBI), and be **subject to the scrutiny** of the Comptroller and Auditor General (CAG) and the Central Vigilance Commission (CVC).
 - A **DFI with a private sector character** will require the government to believe and trust the private sector.
 - This will require the government to maintain some distance from the private sector DFI institution and let it implement and execute projects aimed at improving the quality of life of all citizens.

Note:

Development Finance Institutions

- **DFIs provide long-term credit** for capital-intensive investments spread over a long period and yielding low rates of return, such as urban infrastructure, mining and heavy industry, and irrigation systems.
- DFIs often **lend at low and stable rates of interest** to promote long-term investments with considerable social benefits.
- DFIs are also known as **Development banks**. They are **different from commercial banks** which mobilise short- to medium-term deposits and lend for similar maturities to avoid a maturity mismatch-a potential cause for a bank's liquidity and solvency.

DFIs in India

- Soon after independence, the institutional framework for development banking began- IFCI (1948), IDBI (1964), IIBI (1972), **NABARD** and EXIM Bank (1982), SIDBI (1990), etc.
- However, in the past few years, DFIs such as ICICI, IDBI and IDFC have transformed into universal banks as they **did not have the advantage of low-cost funding for long term projects**.
- Currently, **DFIs are sector-specific**, such as Rural Electrification Corp. Ltd (REC) for the power sector, National Bank for Agriculture and Rural Development (NABARD) for the agriculture sector, and Indian Railway Finance Corp. to fund rail infrastructure among others.
 - The institution can also work without fear of the CBI, CVC or the CAG.
- **Issues in Infrastructure Funding:**
 - **Funding Gap:** Banks are unable to provide long-term finance to infrastructure projects.
 - Infrastructure financing is currently dominated by bank lending, with **outstanding credit to the infrastructure sector touching 15% until FY16**.
 - However, due to rising **non-performing assets** in the banking sector driven by declining asset quality in the infrastructure sector, the **share has declined to 12% in FY19**.
 - **Asset/Liability Management Mismatch:** In India, most lenders borrow funds with maturity under 5 years. The reason is primarily the absence of a deep bond market to borrow from. As a result, they lend to a project with a maturity of, say 20 years, with funds of 2-year maturity. This leads to a

mismatch in the maturities of assets and liabilities for the lender.

Retiring Old Thermal Power Plants

Why in News

According to a report by research organisation **Climate Research Horizon**, **shutting down thermal power plants older than 20 years can save the government Rs. 53,000 crore over five years**.

- The thermal power plants were analysed in **11 States** (Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Tamil Nadu, Telangana, Uttar Pradesh and West Bengal), which account for **nearly 50% of Power Distribution Companies (discom) dues**.

Key Points

- **Findings from the Report :**
 - **Shutting down old coal-based power plants and freezing those under construction can save over Rs. 1.45 lakh crore** at a time when **electricity demand has been hit due to Covid-19**.
 - The savings will accrue from **avoiding retrofitting old plants** to reduce the toxicity from their emissions.
 - **Replacing electricity from older coal plants with cheaper renewable sources** will reduce the gap between cost of supply and revenue generation for discoms.
 - Further, surplus electricity generation capacity has seen many **power plants struggle with low Plant Load Factors** (PLF or capacity utilisation), a situation that most experts predict will persist for the foreseeable future.
- **Power Generation Scenario:**
 - India mainly uses three types of **thermal power plants**- Coal, Gas and Liquid-fuel based. The electricity generated by these plants adds up to **62.2%** of the total power generation in the country.
- **Problems Faced by Discoms:**
 - 75-80% of a discoms' costs are in power purchase and many are locked into expensive agreements (**Power Purchase Agreements -PPAs**) for decades.

Note:

Fuel	MW	% of Total
Total Thermal	2,31,456	62.2%
Coal	1,99,595	53.7%
Lignite	6,360	1.7%
Gas	24,992	6.7%
Diesel	510	0.1%
Hydro (Renewable)	45,699	12.3%
Nuclear	6,780	1.8%
RES* (MNRE)	88,042	23.7%
Total	371,977	

- PPAs in India are **not flexible**. They lack the option for exiting the contract.
- Also renegotiating them in case of demand collapse is not easy because of lack of provisions for a review of terms and conditions.
- Discoms purchase power from generation companies through **Power Purchase Agreements (PPAs)**, and then supply it to their consumers (in their area of distribution).
- This has been **affecting the ability of discoms to buy power for supply**, and the **ability to invest in improving the distribution infrastructure**. Consequently, this impacts the quality of electricity that consumers receive.
- **Issues Complicating the Problem:**
 - **Lockdown Effect:** The nationwide lockdown has resulted in peak electricity demand coming down, with commercial and industrial power demand taking a hit after many factories shut down.
 - **Power theft** is also a challenge.
 - **Cross Subsidisation** - Discoms charge "commercial and industrial (C&I) consumers" very high tariffs.
 - This is to compensate for subsidies provided to residential and agricultural consumers, for whom tariffs are kept artificially low for political reasons.
 - **Ineffective Government Schemes-** The **Ujwal Discom Assurance Yojana (UDAY)** that was launched in 2015 to fix the financial problems of the sector has not yielded expected benefits.

Government Initiatives

- **Shut down old power plants:** The **2020-21 Budget speech** advised utilities to close thermal power plants which are in violation of **National Clean Air Programme (NCAP)** norms.

- **Economic Stimulus:** Part of the **Rs. 90,000-crore economic stimulus package** announced by the Ministry of Finance is assigned for liquidity injection into power distribution companies.

Solutions

- **Cost Effective Solar Plants:** The average cost of coal-fired projects is **Rs.4 per unit** and generally sees an upward escalation whereas new solar power plants are being bid out at less than **Rs.3 per unit**.
- **Encourage Private Sector:** New private competition can bring new capital and more innovation.
 - New coal-fired power plants are still being financed so that the private sector is not building any coal-based power plants at all; only the public sector power companies are doing so. These PSU thermal plants are financed by public sector banks and largely on tax payers' money.
- **UDAY 2.0:** Government's announcement of the launch of UDAY 2.0 which seeks installation of smart prepaid metres, prompt payment by discoms, making coal available for short term and reviving gas-based plants is a step in the right direction.
- **Flexible Contracts:** Long-term supply contracts need flexibility for public utilities to adapt to unforeseen situations such as a Covid collapse in demand.

Resolution Plan by RBI for Covid-19 Stressed Assets

Why in News

The **Reserve Bank of India (RBI)** has specified **five financial ratios and sector-specific thresholds** for resolution of **Covid-19** related **stressed assets** in **26 sectors**.

Key Points

- **Recommended by:** This resolution plan is based on the recommendations of the **K.V. Kamath committee**.
- **Financial Ratios:** The key financial ratios to be considered in the restructuring of loans impacted by the Covid-19 pandemic are:
 - **Total Outside Liability to Adjusted Tangible Net Worth Ratio** : This ratio is arrived at by addition of long-term debt, short term debt, current liabilities

Note:



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and provisions and deferred tax liability divided by tangible net worth net of the investments and loans. **It indicates a company's financial leverage over the total net worth of the company.**

- **Total debt to EBITDA ratio:** It is total debt divided by Earnings Before Interest, Depreciation, Taxes and Amortisation (EBITDA). This ratio indicates **the cash position of a company to pay back its debt**. Higher ratio means the company has more leverage.
- **Current ratio:** Current assets divided by current liabilities. Current ratio indicates the **company's ability to pay short term debt and other liabilities** which are due within a year's time.
- **Debt Service Coverage Ratio:** It is the **available cash to pay current debt**.
- **Average Debt Service Coverage Ratio.**
- **Sectors:** The 26 sectors specified by the RBI include automobiles, power, tourism, cement, chemicals, gems and jewellery, logistics, mining, manufacturing, real estate, and shipping among others.
- **Eligibility:** The resolution under this framework is applicable only to those borrowers **who have been impacted on account of Covid**.
- **Graded Approach:** The lending institutions may, at their discretion, adopt a **graded approach depending on the severity of the impact on borrowers** while implementing the resolution plan.
- **Background:**
 - The RBI took a number of steps to give relief to companies affected by **Covid-19** in its **Monetary Policy Report**.
 - It permitted lenders a one-time restructuring of loans without classifying these as **Non-Performing Assets**.
 - It allowed lenders to grant a **loan moratorium** for three months on Equated Monthly instalments (EMIs) falling due between 1st March and 31st May, 2020. Later, it **extended this for another three months** until 31st August.
- According to a report by **India Ratings and Research**, a high proportion of debt from the real estate, airlines, hotels, and other sectors had been restructured, the **largest contribution had been from infrastructure, power, and construction**.
 - Banks are likely to restructure up to Rs. 8.4 lakh crore of loans, or 7.7% of the overall system's credit.

- The restructuring quantum from the corporate sector in FY21 could range between **3% and 5.8% of the banking credit**, amounting to Rs 3.3-6.3 lakh crores.
- At least **Rs. 2,10,000 crore (1.9% of banking credit) of non-corporate loans** is likely to undergo restructuring after the announcement, which would have otherwise slipped into the **Non-Performing Asset** category.
- India Ratings and Research is a credit rating agency that provides credit opinions regarding India's credit markets.

Panel to Assess Impact of Waiving Loan Interest

Why in News

Recently, the Union government has constituted an expert committee to measure the economic impact of waiving of interest on the **Covid-19** related **loan moratorium**.

Key Points

- **Chairmanship:** The expert panel will be **chaired by Rajiv Mehrishi**, former **Comptroller and Auditor General (CAG)** of India, and will **submit its report within one week**.
- **Task:** It will measure the impact on the national economy and financial stability of waiving of interest and Covid-19 related moratorium.
- **Background:** The move came as **various concerns** have been raised during the ongoing hearing in the **Supreme Court** in the matter regarding relief sought in terms of waiver of interest and waiver of interest on interest and other related issues.

Loan Moratorium

- A **moratorium** provides stressed customers **extra time to repay** without their accounts being labelled NPA or their credit score being affected.
- It is **not a loan waiver** and does not offer any discount on interest payout.

High Forex Reserves

Why in News

As per the **Reserve Bank of India (RBI)** data, India's

Note:

foreign exchange (forex) reserves touched a record high of USD 541.431 billion in the week ended 28th August 2020.

Key Points

➤ Forex Reserves:

- **Definition:** **Foreign exchange reserves** are assets denominated in a foreign currency that are held on reserve by a central bank. These may include foreign currencies, bonds, treasury bills and other government securities.
 - **Objectives Behind Holding Forex Reserves:**
 - Supporting and maintaining **confidence in the policies for monetary and exchange rate management**.
 - Provides the capacity to intervene in **support of the national or union currency**.
 - **Limits external vulnerability** by maintaining foreign currency liquidity to absorb shocks during times of crisis or when access to borrowing is curtailed.
 - **Forex Reserves in India:** Forex reserves are external assets accumulated by India and controlled by the RBI in the form of:
 - **Gold.**
 - **Special Drawing Rights (SDRs)** of the **International Monetary Fund (IMF)**.
 - **Foreign currency assets** (capital inflows to the capital markets, Foreign Direct Investment and external commercial borrowings).
 - **Reserve Position with IMF.**
 - **Forex Reserves Storage:** The **RBI Act, 1934** provides the **legal framework for the deployment of reserves in different foreign currency assets and gold** within the broad parameters of currencies, instruments, and issuers.
- #### ➤ Reasons for High Forex Reserves:
- Rise in investment by **foreign portfolio investors (FPIs)** and increased **foreign direct investments (FDIs)**.
 - The sharp jump in reserves started with the Finance Ministry's announcement in 2019, **cutting corporate tax rates**.
 - **Fall in crude oil prices** has brought down the oil import bill, saving precious foreign exchange.
 - **Dollar outflow** from **overseas remittances and foreign travels** have fallen steeply.

➤ Significance of Rising Forex Reserves:

- **Comfortable Position for the Government:** The rising forex reserves give **comfort** to the government and the RBI in managing India's **external and internal financial issues** at a time of **major contraction (23.9%) in economic growth**.
- **Managing Crisis:** It serves as a **cushion in the event of a Balance of Payment (BoP) crisis** on the economic front.
 - It is **enough to cover the import bill** of the country for a year.
 - Assist the government in meeting its **foreign exchange needs and external debt obligations**.
- **Rupee Appreciation:** The rising reserves have also helped the **rupee to strengthen against the dollar**.
- **Confidence in Market:** Reserves will provide a level of **confidence to markets and investors** that a country can meet its external obligations

Using Forex for Infrastructure

- #### ➤ Arguments in Favour:
- There was a demand from some quarters that forex reserves should be used for infrastructure and other development needs in the country because of:
- **Adequate Forex Reserves:** Sufficiency of forex reserves is sometimes measured on how many months' worth of imports can a country afford. Six months is the safer limit and at present reserve is sufficient for the whole year.
 - **Adequate Contingency Arrangement:** In case of a credit shock, India can mitigate any BoP crisis situation, as there are sufficient arrangements for foreign exchange reserves in the form of a credit line from the IMF and many central bank **liquidity swap agreements** with countries like Japan.
 - **Leveraging Forex as a Last Resort:** Tax revenues, in this fiscal year, will be affected by lower-than-expected economic activity. Also, non-tax revenue will remain subdued as the RBI has already given a huge dividend payment to the government in 2019.
 - Thus, the lack of considerable space both on the monetary and fiscal front to support economic growth, part of the country's forex reserves can be used for stimulating the economy.
- #### ➤ Arguments Against:
- The RBI had opposed the plan. Reasons may include the considerations of:

Note:

- **Oil Price Unpredictability:** Current low crude oil prices are due to several issues, one such is the **price war between Russia and Saudi Arabia**. As soon as a common ground is agreed between the two, the crude prices will tend to rise again.
- **Unreliable Portfolio Investments:** Another issue is the high ratio of volatile flows (portfolio flows and short-term debt) to reserves which are around 80%. This money can exit at a fast pace. Foreign institutional investments (FIIs) by their nature are investments based on speculation.
 - Therefore, the current surge in forex reserves should not be treated with permanent nature.
 - In March 2020 alone, FII in India fell by Rs. 65,000 crore.
- **Confidence of High Forex:** High forex reserves also help India to maintain its global rating, especially in the context of falling GDP growth rate.
 - The depletion in forex reserves may have a negative impact on these ratings, which in turn may reduce foreign investment inflows into India.
- **Volatility in Indian Rupee:** RBI has been fundamentally using India's foreign exchange to ensure rupee stability.

EASE 2.0 Banking Reforms Index

Why in News

Recently, the **Enhanced Access and Service Excellence (EASE) 2.0 Banking Reforms Index** on the performance of the Public Sector Banks (PSBs) from March 2018-2020 has been released and best-performing banks on EASE were felicitated.

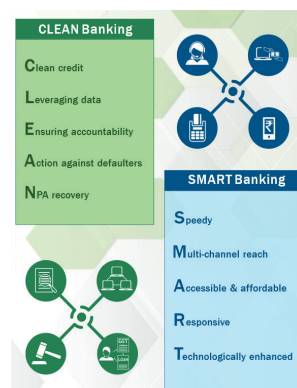
- Union Minister of Finance and Corporate Affairs also inaugurated the **Doorstep Banking Services by PSBs** on the occasion.
- In February 2020, **EASE 3.0 (2020-21)** for smart, tech-enabled banking was also unveiled.

Key Points

- **EASE Reforms Agenda:** It was jointly launched by the government and PSBs in January 2018.
 - It was commissioned through **Indian Banks' Association** and authored by **Boston Consulting Group**.

- **Indian Banks' Association**, formed on **26th Sept 1946** is an association of Indian banks and financial institutions based in Mumbai.

- EASE Agenda is aimed at **institutionalising CLEAN and SMART banking**.



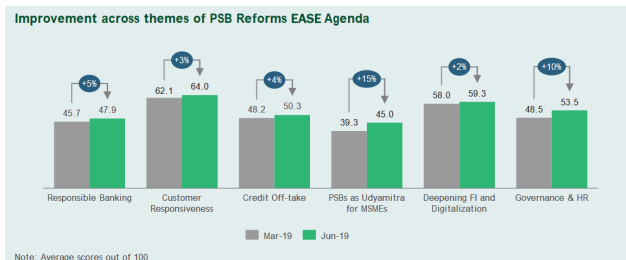
- **EASE Reforms Index:** The Index measures **performance of each PSB** on 120+ objective metrics.
 - The Index follows a fully transparent scoring methodology, which **enables banks to identify their strengths** as well as **areas for improvement**.
 - The goal is to continue driving change by **encouraging healthy competition among PSBs**.
- **EASE 1.0:** The EASE 1.0 report showed significant improvement in PSB performance in the resolution of **Non Performing Assets (NPAs)** transparently.
- **EASE 2.0:** EASE 2.0 builds on the foundation of EASE 1.0 and introduces **new reform Action Points** across six themes to make reforms journey irreversible, strengthen processes and systems, and drive outcomes.
 - The **six themes** of EASE 2.0 are Responsible Banking, Customer Responsiveness, Credit Off-take, PSBs as **UdyamiMitra** (SIDBI portal for credit management of MSMEs), Financial Inclusion and Digitalisation; and Governance and Human Resources.

Performance of PSB on EASE 2.0 Index

- **Overall Score:** Increased by **37%** between March-2019 and March-2020, with the average EASE index score improving from **49.2 to 67.4** out of 100.
- **Top Performing Banks:** Bank of Baroda, State Bank of India, and erstwhile Oriental Bank of Commerce.
- **Major Improvements:**
 - **Digital Banking:** Nearly 4 crore active customers on mobile and internet banking.
 - 50% of financial transactions through digital channels.
 - **Customer service:** Increase in **the number of call centres** and **inclusion of 13 regional languages** in customer service, enhanced doorstep banking support by **75,000+ Bank Mitras** etc.

Note:

- **Easy loans:** Turnaround time for retail loans reduced by from **nearly 30 days to nearly 10 days**.
- **NPAs and Frauds:** Gross NPAs reduced from Rs. 8.96 lakh crore in March-2018 to Rs. 6.78 lakh crore in March-2020.
 - A sharp decline in fraud occurrence from 0.65% of advances during FY10-FY14 to 0.06% in FY19-20.
 - Record recovery of Rs. 2.27 lakh crore in FY19-FY20.
 - Banks have taken steps like instituting **data-driven risk assessments** and introducing **Early Warning Signals (EWS)** systems.



EASE 3.0

- A comprehensive agenda for **smart, tech-enabled banking** has been adopted for FY 2020-21, under which PSBs have initiated the **eShishu Mudra** (app-based lending for instant sanction of working capital up to Rs. 50,000) for straight-through processing of loans to micro-enterprises.
- EASE 3.0 seeks to enhance ease of banking in all customer experiences, using technology viz. **Dial-a-loan, Partnerships with FinTechs and E-commerce companies, Credit@click, Tech-enabled agriculture lending, EASE Banking Outlets**, etc.

Doorstep Banking Services

- As part of the EASE Reforms, Doorstep Banking Services is envisaged to provide the convenience of banking services to the customers at their doorstep through the universal touchpoints of **Call Centre, Web Portal or Mobile App**.
- At present, **only non-financial services** viz. request for account statement, delivery of cheque book, demand draft, pay order etc are available to customers. **Financial services shall be made available from October 2020**.
- The services shall benefit all customers, particularly **Senior Citizens and Divyangs** who would find it at ease to avail these services.

Global Innovation Index 2020

Why in News

Recently, the **Global Innovation Index 2020** was released by the **World Intellectual Property Organisation (WIPO)**.

- India is at the **48th position** in the list of top 50 innovative countries.
 - India occupied the 52nd position in **2019 rankings**.

Key Points

- **Switzerland, Sweden, the USA, the UK and Netherlands** are the top five countries.
- With a group of **Asian economies advancing up** the rankings, the index indicates that “**a gradual eastward shift in the locus of innovation**” is underway.
- In Asian economies, **China, India, the Philippines and Vietnam** have made the most progress on the index in recent years, with all four now among the top 50.
 - **India is one of the leading innovation achievers** in the central and southern Asian region, as it has **shown a consistent improvement** in its innovation ranking for the last 5 years.
 - **China**, which is the **only middle-income economy among the top 30**, now holds the **14th position**.
- **India Specific Highlights:**
 - India has become the **third most innovative lower-middle-income economy** in the world.
 - India ranks in the **top 15** in indicators such as the **Information and Communication Technology (ICT) services exports, government online services, graduates in science and engineering, and Research and Development-intensive global companies**.
 - India **improved the most in three pillars:** Institutions (61st), business sophistication (55th), and creative outputs (64th).
 - The **consistent improvement** in the index rankings is owing to the immense knowledge capital, the vibrant startup ecosystem, and the amazing work done by the public and private research organisations.
 - The **India Innovation Index 2019** which was released by the **NITI Aayog**, has been widely **accepted as the major step in the direction of decentralisation of innovation** across all the states of India.

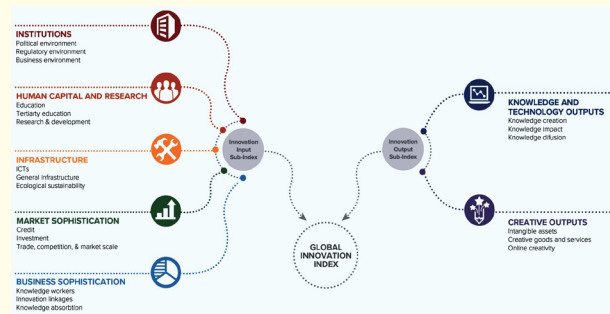
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Global Innovation Index

- It provides **detailed metrics about the innovation performance of 131 countries and economies** around the world.
- Its **80 indicators** explore a broad vision of innovation, including political environment, education, infrastructure and business sophistication.
- It is published annually by **Cornell University, INSEAD** and the **WIPO**.
- **2020 Theme: Who will Finance Innovation?**
 - The GII 2020 sheds light on the state of innovation financing by investigating the evolution of existing mechanisms and by pointing to progress and remaining challenges.



New FDI Policy in Defence Sector

Why in News

Recently, the Union Cabinet approved a new **Foreign Direct Investment (FDI)** policy in the defence sector which allows the FDI through automatic approval to be increased from 49% to 74%.

- However, the new policy has a **'National Security' clause** as a condition which has been proposed by the **Ministry of Commerce and Industry**.

Key Points

- **National Security Clause:** FDI in the defence sector shall be subject to scrutiny on the ground of **National Security** and the **Government reserves the right to review** any foreign investment in the defence sector that may affect national security.
- **Strengthening Indigenous Manufacturing:** Through more **liberalised FDI policy** the government is seeking to **attract foreign players** to set up manufacturing units in India.

- It has been focusing on the **defence sector to act as an engine for boosting manufacturing in the country**, and is **aiming** to achieve a turnover of Rs 1.75 lakh crore, including exports worth Rs 35,000 crore, by 2025.
 - As of 2019, the defence industry, along with the aerospace and shipbuilding industry, was estimated to be worth Rs. 80,000 crore, of which the share of Public Sector Units (PSUs) was nearly 80%.
- The government has brought a **draft Defence Production and Export Promotion Policy 2020 (DPEPP 2020)**, which **aims** to provide an overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.
- The government has also brought a **negative imports list** for defence equipment and a dedicated budget for capital acquisition from the domestic industry.
 - The negative imports list **contains a list of weapons that will not be imported** and can only be purchased from within the country.
 - It was done with an aim to **reduce the defence import bill**.
- The government has **inaugurated two defence industrial corridors**, in **Tamil Nadu** and in **Uttar Pradesh**, to boost the flagship **'Make in India'** programme that in turn would attract investments as well as encourage employment generation.

Foreign Direct Investment

- FDI is an **investment made by a firm or individual** in one country into business interests located in another country.
- Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company.
- It is different from **Foreign Portfolio Investment** where the foreign entity merely buys equity shares of a company. FPI does not provide the investor with control over the business.
- **Routes through which India gets FDI:**
 - **Automatic Route:** In this, the foreign entity does not require the prior approval of the government or the RBI.

Note:



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- **Government route:** In this, the foreign entity has to take the approval of the government.
 - The **Foreign Investment Facilitation Portal (FIFP)** facilitates the single window clearance of applications which are through approval route.
 - This portal is administered by the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.

Ranking of States on Support to Startup Ecosystems: DPIIT

Why in News

The Results of the 2nd edition of **Ranking of States on Support to Startup Ecosystems** were released by the **Department for Promotion of Industry and Internal Trade (Ministry of Commerce & Industry)**.

Key Points

- **Objectives:** The rankings were started with an objective of fostering **competitiveness, mutual learning** and propel States and Union Territories (UTs) to work proactively towards uplifting the startup ecosystem.
- **Framework:** The 2019 Ranking Framework has **seven broad reform areas consisting of 30 action points** ranging from institutional support, easing compliances, relaxation in public procurement norms, incubation support, seed funding support, venture funding support, and awareness and outreach.
- **Participation:** 22 States and 3 Union Territories.
- **2 Categories:** To establish uniformity and ensure standardization in the ranking process, States and UTs have been divided into two groups.
 - **Category Y:** All UTs except Delhi and all States in North East India except Assam.
 - **Category X:** All other States and UT of Delhi.
- **Results:** The States and UTs were classified as: Best Performers, Top Performers, Leaders, Aspiring Leaders and Emerging Startup Ecosystems.
 - **Gujarat** was the Best performer in **Category X** followed by Karnata and Kerala. Uttar Pradesh and Tamil Nadu occupied the lowest positions.
 - **Andaman and Nicobar Islands** was the Best performer in **Category Y**. Sikkim secured the bottom place.

- Gujarat had secured the Best Performer position previous year as well.

Limits on Multi-Cap Fund Investments

Why in News

Recently, the **Securities and Exchange Board of India (SEBI)** has imposed some limits on multi-cap funds.

Multi-Cap Fund

- Multi-cap funds are those that **diversify their investments** into all three categories (small, medium, and large-cap).
- These funds invest by **market capitalization of shares**.
 - **Market capitalization** is the aggregate valuation of the company based on its current share price and the total number of outstanding stocks.
 - It is calculated by multiplying the current market price of the company's share with the total outstanding shares of the company.
- **Large cap stocks:** Stocks of top 100 listed companies in terms of full market capitalisation.
- **Mid-cap stocks:** Stocks of top 101 to 250 companies in terms of full market capitalisation.
- **Small-cap stocks:** Stocks of companies above 251 in terms of full market capitalisation.

Key Points

- **Changes Made:**
 - A multi cap fund will be required to **invest a minimum of 75%** of its total assets in equities and equity-related instruments.
 - At present, the rule is to invest a minimum of 65% in equities.
 - Minimum investment of **75% has to be allocated in between** large cap companies, mid cap companies and small cap companies, with a **minimum share of 25% in each**. The rest 25% can be invested as per the investor's choice.
 - Till now, fund managers of multi cap mutual funds were investing across market capitalisation as per their choice.
- **Reason:**
 - The changes have been done **to diversify the underlying investments** of multi-cap funds across

Note:

the large-cap, mid-cap and small-cap companies and be true to the label.

- Currently, the portfolio of most multi cap funds is **biased towards large caps** with 65% to 90% of their portfolio in large cap stocks.
- **Impact:**
 - Fund houses will have to cut their exposure to big cap stocks and invest in mid- and small-cap stocks.
 - This will result in up to Rs. 40,000 crore moving from largecap to broader market (mid-cap and small-cap fund).

Contraction in July Factory Output: IIP

Why in News

Recently, the **National Statistical Office (NSO)** has released data, highlighting the **decline in the factory output** (also called **Industrial Production**) for the fifth consecutive month, with July 2020 posting a contraction of 10.4% compared to July 2019.

- The data, however, **recorded a sequential improvement from 15.8% contraction seen in June**, reflecting some **resumption in industrial activity** with the **lifting of lockdown** restrictions.

Key Points

- Cumulatively, the **Index of Industrial Production (IIP)** contracted by 29.2% for April-July against a growth of 3.5% in the same period last year.
 - The IIP had grown by 4.9% in July 2019.
- **Reason:** The decline is **mainly due to degrowth** in manufacturing, mining, capital goods, and consumer durables output.
- **Contraction Data:** Barring consumer non-durables, all other sectors including manufacturing, mining, primary goods, capital goods contracted in July.
 - **Consumer Non-durables:** A proxy for the **Fast Moving Consumer Goods (FMCG)**, it posted a positive growth of 6.7%.
 - **Manufacturing Sector:** Weight of 77.6% in IIP, contracted by 11.1% in July from a contraction of 16.0% in June.
 - **Electricity Output:** It contracted by 2.5% as against a double-digit contraction of 10.0% in June.

- It recorded the best sequential improvement and may turn out to be the first sector, apart from consumer non-durables, to find its way in positive territory going ahead.

- **Similar Trends:** The decline in industrial growth **mirrors the trend in other high-frequency indicators** for July.
 - India's Manufacturing **Purchasing Managers' Index (PMI)** had stood at 46 in July compared with 47.2 in June. A print below 50 signifies a contraction.
- **Impact:** The negative IIP for July, which is the first month of the second quarter, will reflect in the expected contraction in the **Gross Domestic Product (GDP)** growth numbers for the July-September quarter.
 - India's **GDP growth contracted by 23.9%** in the April-June quarter, the worst among G20 countries.

Steel Industry in India

Why in News

According to recent information shared by the Union Minister for Steel in Lok Sabha, **Indian steel companies** including the public sector **steel** companies **have consistently enhanced their capacities, production and sales** including exports over the years.

Key Points

- **Improvements:**
 - India was a **net exporter of steel in 2019-20** and during the period of April-August, 2020, steel exports from India have increased by more than 153% in comparison to the same period in 2019-20.
 - **Capacity for domestic crude steel production** has been expanded from 109.85 Million Tonnes Per Annum (MTPA) in 2014-15 to 142.29 MTPA in 2019-20.
 - **Crude steel production** has gone up from 88.98 MTPA in 2014-15 to 109.14 MTPA in 2019-20.
 - These improvements can be **attributed to the continuous efforts of skill training and government initiatives** in the country.
- **Skill Training:**
 - By **Skill Training Centres** under the Ministry of Steel. For example, **National Institute of Secondary Steel Technology (Punjab)**, **Institute for Steel Development and Growth (Kolkata)**, etc.

Note:



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- By **Central Public Sector Enterprises (CPSEs)** like **Steel Authority of India Ltd. (SAIL)** and **Rashtriya Ispat Nigam Ltd. (RINL)**.
 - Both CPSEs have been making continuous efforts towards reducing the operational costs through technology induction, enhanced productivity and streamlining procurement.
- **Challenges:**
 - **Capital:** Iron and steel industry **requires large capital investment which is difficult for a developing country like India** to afford. Many of the public sector integrated steel plants have been established with the **help of foreign aid**.
 - **Low Productivity:** The per capita labour productivity in the country is at 90-100 tonnes for the steel industry which is very low. It is 600-700 tonnes per person in Korea, Japan, and other steel producing nations.
 - **Low Potential Utilisation:** Durgapur steel plant makes use of approximately 50% of its potential which is caused by factors like strikes, shortage of raw materials, energy crisis, incompetent administration, etc.
 - **Huge Demand:** **Huge chunks of steel are to be imported** in order to meet the demands. In order to save invaluable foreign exchange, productivity needs to be increased.
 - **Inferior Quality of Products:** The **weak infrastructure, capital inputs** and other facilities eventually lead to a steel making **process which is more time-taking, expensive and produces an inferior variety** of steel products.

Inflation Data: August 2020

Why in News

Recently, the **inflation data** for the month of August 2020 was released. The inflation data includes **retail inflation** and **wholesale inflation** data.

- The retail inflation is measured by the **Consumer Price Index (CPI)**.

- The wholesale price-based inflation is measured by **Wholesale Price Index (WPI)**.

Key Points

- **Retail Inflation:**
 - The retail inflation growth dipped to 6.69% in the month of August. It was at 6.73% in July 2020.
 - However, the retail inflation continued to grow beyond the **Reserve Bank of India's (RBI)** upper margin of 6%.
 - The Central government has mandated the RBI to keep inflation within the **range of 4±2%**.
 - This inflation range (4% within a band of +/- 2%) was **recommended by the committee headed by Urjit Patel** in 2014.
 - The growth in retail inflation was **primarily due to** a rise in meat and fish prices that saw a 16.50% on-year rise in August.
 - The **Consumer Food Price Index (CFPI)** or the inflation in the food basket eased to 9.05% in the month of August. It was at 9.27% in July 2020.
- **Wholesale Inflation:**
 - The wholesale price-based inflation **rose to 0.16%** in August as food items and manufactured products turned costlier.
 - The **WPI inflation was in the negative territory for four straight months** — April (-) 1.57%, May (-) 3.37%, June (-) 1.81% and July (-) 0.58%.
 - Inflation in food articles during August stood at 3.84%. However, **fuel and power inflation fell 9.68%** in August.
- **Implication:** The **difference between WPI (food) and CPI (food)** shows the **supply side issues** due to several lockdowns at regional level.

CPI vs. WPI

- WPI, tracks inflation at the producer level and CPI captures changes in prices levels at the consumer level.
- WPI does not capture changes in the prices of services, which CPI does.
- In April 2014, the RBI had adopted the CPI as its key measure of inflation.



Note:

International Relations

Highlights

- Turkey- Russia Military Drill in Eastern Mediterranean
- Eighth East Asia Summit Economic Ministers' Meeting
- G-20 Foreign Ministers Meet
- UNSC Rejects to Designate Indians as Terrorists
- Indra 2020 to be held in Andaman Sea
- Indo-China Defence Ministerial Meet
- Five Point Plan to De-escalate LAC Stand-off
- US-India Strategic Partnership Forum
- India-Japan Logistics Agreement
- 5th BRICS Culture Ministers' Meet
- Indo-Pacific Trilateral Dialogue
- UK Internal Market Bill, 2020
- USA-Maldives Framework on Defense and Security Relationship
- Singapore Convention on Mediation
- Tension Between Russia-Germany
- India-Bangladesh Inland Waterway Route
- India's Position-Shift on Taliban
- USA Sanctions Against ICC Officials

Turkey- Russia Military Drill in Eastern Mediterranean

Why in News

Turkey has announced that Russia will hold **live-fire naval exercises** in the eastern Mediterranean. This will happen during **escalating tensions between Turkey and its coastal neighbors Greece and Cyprus** over the rights to search for energy resources in the region.

Key Points

- **Complex Geo-politics:** Turkey is a **North Atlantic Treaty Organization (NATO)** member, and it is strange to expect NATO-member Turkey to engage such drills on Russia's behalf.
 - It can be noted that the two countries have in recent years significantly strengthened their military, political and economic ties.
- **Russia-Turkey Link:**
 - Apart from the announced drill, they are coordinating closely on their military presence in Syria.
 - Turkey has purchased **Russia's advanced S-400 missiles** and has agreed to go with a Russian-built nuclear power plant on its southern coast.
- **Reasons:**
 - Recently, the USA lifted a decades-old arms embargo (1987) on Cyprus which created the fresh strains between Turkey and Greece.

- Turkey condemned the move and urged the USA to reverse course to safeguard Turkish-speaking Cypriots.

- **The Embargo:** To prevent an arms race that would hinder UN-facilitated reunification efforts for Cyprus.

- It was directed against the southern, Greek Cypriot part of the island, where Cyprus' internationally recognised government is seated.

➤ Impact of Russia-Turkey Military Drill:

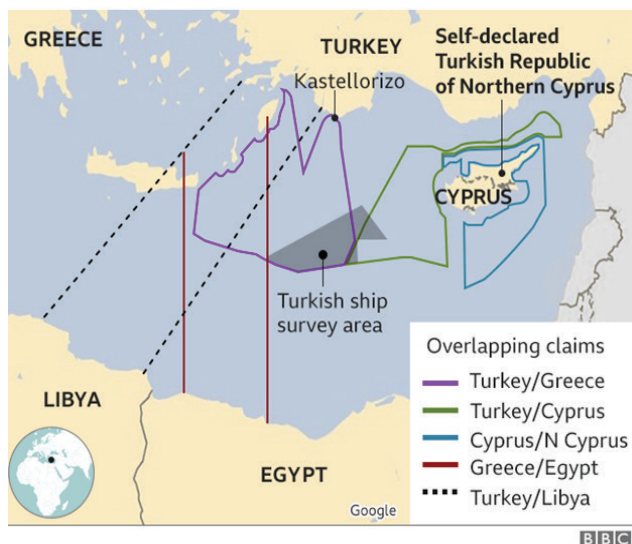
- Turkey's announcement comes at a time when Turkish survey vessels and drillships continue to prospect for hydrocarbons in waters where Greece and Cyprus claim exclusive economic rights.
- **Russia** maintains a **sizeable naval presence** in the eastern Mediterranean and regularly conducts naval manoeuvres.
- It's also at odds with the **European Union** over its territorial disputes with bloc members Greece and Cyprus.
- **France** recently increased its military presence in the area to support Greece and Cyprus.
- **Impact on India:**
 - **Energy:** Mediterranean oil accounted for about 4.5% of India's overall imports in the year 2019-20. Stability of this region is important for India's energy security.

Note:



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Greece and Turkey have overlapping claims in the Eastern Mediterranean



- **Diaspora:** Any turmoil in the region will have an impact on **India's diaspora** in the region.
- India is not only a party, but also founded the **Non Aligned Movement** whereas Turkey and Russia lean to different polar ideologies.
 - It is a real test of Indian diplomatic skills to create a balance between different ideologies.
- The diplomatic exchanges between Turkey and India have intensified in recent past following **India's decision to end the special status of Kashmir**.
 - India's voice over this remains important being a protagonist of **democracy, right to self-determination and sovereign responsibility**.

Eighth East Asia Summit Economic Ministers' Meeting

Why in News

Recently, the 8th **East Asia Summit Economic Ministers' Meeting** (EAS-EMM) was held **virtually** and attended by **10 ASEAN members and eight other nations**, including India, the USA, and China.

- The meeting **highlighted the importance of strengthening regional supply chains to make them resilient** in times of heightened challenges posed by the **Covid-19 pandemic** and to **spur economic growth**.

- Recently, Japan has mooted the **Supply Chain Resilience Initiative (SCRI)** as a trilateral approach to trade, with India and Australia as the key-partners.

Key Points

Features of the Joint Statement:

- Any **trade-restrictive emergency measures** put in place to address the impact of Covid-19 must be **targeted, proportionate, transparent, temporary, consistent with the World Trade Organisation (WTO) rules** and **do not create unnecessary barriers to trade or disruption of global and regional supply chains**.
- Support for the **necessary reforms in the WTO** and pledge to continue to work together to **realise a free, fair, transparent, non-discriminatory, predictable, and stable trade environment**.
- **Facilitating the essential movement of people across borders**, without undermining each country's efforts to prevent the spread of the virus and to stabilise the trade and investment.
- **Commitment to facilitate supply chain connectivity**, including for essential goods such as medical supplies, medicines, including vaccines, food, commodities and other essential supplies and services in the region.
- **Harness the opportunities of the digital economy** to overcome the challenges posed by restricted movement.

India's Stand:

- India highlighted its **Atmanirbhar Bharat Abhiyan** which is about **upscaling the growth of Indian industry, its skills and capabilities to make them resilient and less vulnerable to shocks and integrating Indian industries with the global supply chains**.

Significance of the Meeting:

- The meeting comes at a **critical juncture** when the pandemic has not just **posed an unprecedented health crisis** but also caused a **sharp contraction in economic activities**, disrupting trade and investments.
- The **International Monetary Fund (IMF)** has predicted a 4.9% contraction for the 2020 global **Gross Domestic Product (GDP)**, warning that the Covid-19 outbreak has plunged the global economy into its worst recession since the **Great Depression in the 1930s**.

Note:

- In April, the WTO also warned that **global trade volume growth could crash** by 13-32% in 2020.

East Asia Summit

- Established in **2005**, it is a **forum of 18 regional leaders for strategic dialogue and cooperation** on the key political, security, and economic challenges facing the **Indo-Pacific region**.
- **Genesis:**
 - The concept of an East Asia Grouping was **first promoted in 1991 by the then Malaysian Prime Minister, Mahathir bin Mohamad**.
 - **India is one of the founding members** of the East Asia Summit.
- **Membership:**
 - It comprises the **ten member states of the ASEAN** which are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam, **along with 8 other countries namely** Australia, China, Japan, India, New Zealand, the Republic of Korea, Russia and the USA.
 - It is an **ASEAN-centred forum** so it can **only be chaired by an ASEAN member**.

East Asia Summit

Leaders' summit in Naypyidaw, Myanmar on November 12-13



G-20 Foreign Ministers Meet

Why in News

Recently, Saudi Arabia has hosted the **G-20** foreign ministers meeting with a focus on cross-border movement amid the **Covid-19 pandemic**.

- Currently, **Saudi Arabia holds the presidency** of G-20. It is the **first Arab nation** to take over the G20 Presidency.

Key Points

➤ Meeting:

- The foreign ministers **acknowledged the importance of opening borders and promoting measures to allow the economy to thrive** in light of the protective measures for the **Covid-19 pandemic**.
 - Many health safety protocols were brought in to minimize the risk of spread of the Covid-19, like closed borders.
 - However, they have now become a **huge obstacle** in running trade and businesses worldwide resulting in a crisis of life and livelihood for many.
- India apprised the G-20 foreign ministers about steps taken by India including **Vande Bharat Mission** and creation of **travel bubbles** for the welfare and protection of foreign citizens stranded in India as well as its own citizens abroad.

➤ Recent Initiatives Taken by G-20:

- Earlier, in the 3rd G-20 **Finance Ministers and Central Bank Governors (FMCBG)** meeting held in July 2020, G-20 came up with the **G20 Action Plan** to deal with the pandemic.
 - The Action Plan includes a list of collective commitments under the pillars of health response, economic response, strong and sustainable recovery and international financial coordination.
- The G-20 also organised a virtual meeting of **G-20 Digital Economy Ministers** to highlight the digital initiatives taken by the countries to deal with Covid-19.

➤ India's Proposal:

- Development of **voluntary "G-20 Principles on Coordinated Cross-Border Movement of People"** with three elements:
 - **Standardisation of testing procedures** and universal acceptability of test results.
 - Standardisation of **Quarantine procedures**.
 - Standardisation of **'movement and transit' protocols**.
- Governments around the world need to ensure that **the interests of foreign students are protected** and **movement of stranded seafarers** back to their home country is facilitated.
 - The education institutes around the globe have been shut for months due to the pandemic.

Note:

With borders closed now, foreign students who had returned to their home countries are now finding it difficult to rejoin their respective institutions.

UNSC Rejects to Designate Indians as Terrorists

Why in News

The **United Nations Security Council (UNSC)** has rejected all Pakistan's requests to list four Indians as designated terrorists under its **1267 Committee for Counterterrorism Sanctions**.

- The USA, UK, France, Germany and Belgium blocked Pakistan's requests due to **lack of evidence**.
- While the **USA, UK and France are permanent members of the UNSC**, Germany and Belgium are **non-permanent** members.

UNSC Resolution 1267 Sanctions Committee

- This committee **oversees the implementation of sanctions pursuant to UNSC resolutions 1267 (1999) 1989 (2011) and 2253 (2015)**.
- It was adopted **unanimously on 15th October 1999**.
- It is **one of the most important and active UN subsidiary bodies** working on efforts to **combat terrorism**, particularly in relation to Al Qaeda, Taliban and the Islamic State group. It prepares a consolidated list of people associated with these organizations.
- It **discusses UN efforts to limit the movement of terrorists**, especially those related to travel bans, the freezing of assets and arms embargoes for terrorism.

Key Points

- In September 2019, Pakistan had alleged that four Indians working in Afghanistan, formed an Afghanistan-based "Indian terror syndicate" that was organising the banned terror groups **Tehreek-e-Taliban Pakistan (TTP) and Jamaat-ul-Ahrar (JuA)** to carry out attacks in Pakistan.
- **Pakistan and China** also moved the joint proposal to declare one of these four, as a **sanctioned terrorist** with links to TTP and JuA.
 - This proposal received a **veto from the USA** in UNSC.
- Pakistan later claimed it had made a statement at an Open Debate of the Security Council on the

Report of the Secretary-General on the Threats to International Peace and Security posed by Terrorism Actions, accusing India of terrorism.

- However, the UNSC President had refused to take cognisance of the statement, as **Pakistan is not a member of the UNSC**.
- **India formally protested** against this calling this a **false claim**.
- In July 2020, Pakistan moved the **1267 Resolution Sanctions Committee** to designate the four Indians as **global terrorists**.
- **Reasons for Pakistan's Actions :**
 - The tension between India and Pakistan has escalated after the **abrogation of special status to Jammu and Kashmir under Article 370** in August 2019, which was heavily objected by Pakistan.
 - **Pakistan released a new political map** that included all of Jammu and Kashmir, Ladakh, Sir Creek and Junagadh, on the completion of one year of abrogation of Article 370.
 - After repeated attempts (in 2009, 2016 and 2017) to list Pakistan-based Jaish-e-Mohammad chief as "global terrorist", India finally **succeeded in getting him listed** in 2019. This move was not received well by Pakistan as it tainted its international image as a terrorism-supporter.
 - Pakistan has also received another **extension on the greylist of the Financial Action Task Force (FATF)** until October 2020.
 - It also faced setbacks on other fronts like the USA slamming its record on terrorism, including its failure to act against groups like the **Lashkar-e-Taiba (LeT)**.
 - **Pakistan also opposed India's leadership** in dealing with the **Covid-19** crisis in the **SAARC** region which was criticized by India.
 - Pakistan's requests to get Indians listed in the 1267 sanctions are also being seen as attempts to **target India ahead of January 2021**, when **India will join as a non-permanent member** for a two-year term at the UNSC.

Indra 2020 to be held in Andaman Sea

Why In News

India and Russia are scheduled to hold **Indra 2020**

Note:

in the **Andaman Sea**, close to the **Strait of Malacca** instead of the **Indian Ocean Region (IOR)**.

- The Strait of Malacca connects Indian Ocean to the South China Sea and is 900 km in length and is also a prominent trade route between East Asia and West Asia-Europe.
- IOR is under high operational alert by the Indian Navy due to the ongoing **standoff with China in Ladakh**.



Key Points

- The **Indra series of exercises began in 2003** and was conducted as a **bilateral naval exercise** alternately between the two countries.
 - However, the **first joint Tri-Services Exercise was conducted in 2017**.
 - **Indra 2020** will be the **first bilateral naval exercise** since all such engagements were **suspended due to Covid-19 pandemic**.
- Its timing coincides with **Indian Defence Minister's visit to Russia** for the **Shanghai Cooperation Organisation (SCO) Defence Ministers Meet**.
- Andaman Sea was also the location where frontline warships of the **Indian Navy conducted a Passage Exercise (PASSEX)** with the **USA Navy's USS Nimitz carrier strike group** in July this year.
- **China Factor:**
 - Recently, **India has withdrawn from the Kavkaz-2020 multinational exercise in Russia** due to the restrictions posed by the pandemic. However, the **participation of Chinese troops in the same exercise is apparently the main reason**.
 - Indian Navy is keeping a **close watch on the movement of Chinese Naval ships in the IOR**

because their presence in the IOR has gone up considerably over the years in the name of Anti-Piracy patrols.

- In **2017**, China opened its first overseas **military base in Djibouti** in the **Horn of Africa**.
- Given its strategic location, **India has embarked on a major infrastructure expansion plan** on the **Andaman and Nicobar island chain**.

Indo-China Defence Ministerial Meet

Why in News

Recently, the **Indo-China Defence Minister level meet** has happened **on the sidelines of the Shanghai Cooperation Organisation (SCO) Defence Ministers' meeting in Moscow (Russia)**.

Key Points

- **Significance of the Meet:**
 - It is the **first high-level political face-to-face meeting** between India and China **since the border row erupted along the Line of Actual Control (LAC) in eastern Ladakh**.
 - India pushed for the restoration of status quo ante at all friction points along the LAC in eastern Ladakh and called for disengagement of troops in an expeditious way.
- **Background:**
 - The Indian and Chinese armies are engaged in the standoff at **Pangong Tso, Galwan Valley, Demchok and Daulat Beg Oldie** in eastern Ladakh.
 - The **actions on the northern bank of Pangong Tso** are not just for territorial gains on land, but enhanced domination of the **resource-rich lake**.
 - **Pangong Tso** is overlooked by the **Finger Area**, a set of eight cliffs extending out of the Sirijap range (on the northern bank of Lake).
 - The **stand-off at Ladakh's Galwan Valley** has escalated in recent weeks due to the infrastructure projects that India has undertaken in recent years.
 - India is building a strategic road, **Darbuk-Shyok-Daulat Beg Oldie (DSDBO) road**, through the Galwan Valley, close to China, connecting the region to an airstrip.

Note:

- **China is opposed to any Indian construction** in the area. A stand-off in the Galwan area was one of the biggest flashpoints of the **1962 war**.

India's Statement at SCO

- **Peace and Prosperity:** India stressed upon a peaceful, stable and secure region of SCO member states.
 - Prosperity and stability in the region demand a climate of trust and cooperation, non-aggression, respect for international rules, sensitivity to each other's interest and peaceful resolution of differences.
 - India is committed to the evolution of a **global security architecture** which will be open, transparent, inclusive, rules-based and anchored in international laws.
- **Regional Situation:**
 - India expressed concern at the security situation in **Afghanistan**.
 - The **SCO contact group on Afghanistan** is useful for arriving at a formal agreement among SCO member States.
 - It was conceived in 2005 and was brought into action in 2017 **at the level of deputy foreign ministers**.
 - The group envisages joint actions to enhance cooperation in security, trade, the economy as well as cultural and humanitarian ties.
 - **Gulf Region:** India called upon the **Gulf countries** to resolve differences between them by "dialogue based on mutual respect, sovereignty and non-interference in internal affairs of each other".
- **Terrorism:** India unequivocally **condemned all forms of terrorism, its manifestations and proponents** and asserted the **need to build institutional capacity** to deal with both traditional and non-traditional threats, above all, terrorism, drug-trafficking and transnational crime.

Shanghai Cooperation Organization

- **Geographic Extent:** SCO is a significant organisation that has a vast geographic expanse and is important for Central Asia, South-Asia and Asia-Pacific region.
 - It is a **major Eurasian organisation** that represents half of the world's population.
 - It is a **permanent intergovernmental** international organisation.

- **Member-states:** Eight members are India, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan.
 - **India joined SCO in 2017 at the insistence of Russia**, and China balanced India's entry with the entry of Pakistan.
 - **Four observer states** are Afghanistan, Belarus, Iran and Mongolia.
- **Permanent Bodies:** The organisation has **two permanent bodies**:
 - SCO Secretariat based in Beijing (China).
 - Executive Committee of the Regional Anti-Terrorist Structure (RATS) based in Tashkent (Uzbekistan).
- **Significance:** It counterbalances the **North Atlantic Treaty Organization (NATO)**.
- **Mandate:** SCO has an evolving mandate which started off by being an economic, political, cultural and regional security organisation.

Five Point Plan to De-escalate LAC Stand-off

Why in News

Recently, India and China have agreed on a **five points plan** to **disengage troops** and **reduce tensions** along the **Line of Actual Control (LAC)**, where **Indian and Chinese troops have been engaged in a four and a half month-long stand-off**.

- The move came after the **talks between India's External Affairs Minister and his Chinese counterpart**, on the margins of a **Shanghai Cooperation Organisation (SCO)** meeting in Russia.

Key Points

- **Five Point Plan:**
 - **Both countries should take guidance** from **Wuhan and Mahabalipuram summits** on developing relations, that includes **not allowing differences to become disputes**.
 - **Border troops** should continue their **dialogue**, quickly **disengage**, maintain proper distance and ease tensions.
 - The two sides should **abide by all the existing agreements and protocols on China-India boundary affairs** and avoid any action that could escalate matters.

Note:



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- Communications should continue through the **Special Representatives (SRs) mechanism** and the meetings of the **Working Mechanism for Consultation and Coordination (WMCC)** on border affairs.
 - The SRs on the **Boundary Question** was **established in 2003**. It provided important guidance for ensuring peace and tranquillity in border areas in a challenging situation.
 - WMCC was **established in 2012** as an institutional mechanism for consultation and coordination for the management of India-China border areas.
- Both nations should **work to conclude new confidence-building measures**.
- **Reasons for Talk:**
 - Initially, China appeared to have convinced itself that India had no option but to accept its new claims at LAC.
 - This confidence was reflected in China's refusal to pull back its forces from LAC and its dismissive diplomatic tone.
 - India's repeated demand for restoration of the status quo ante on the frontier was **not heeded** until the **Indian army ramped up its mobilisation** and boldly seized some high ground to challenge Chinese military positions.
 - These moves on the frontier also came along with a **series of economic measures against China**, such as **banning various Chinese applications** and **specifying the country of origin** on imports.
 - India's demonstration of the political resolve to **escalate the conflict** and the military capability to back it may have convinced China that it needs to rethink its approach to the current crisis.
- **Issues Involved:**
 - The joint statement of India and China tries to **reduce the tension at LAC** but the **separate explanatory comments from both the countries reveal the challenges ahead**.
 - India insists that the **objective of the talks is to "restore" the status quo ante** but there is **no explicit Chinese commitment** to that goal.
 - China wants to **separate the border conflict from the rest of the relationship** but India says the **two are inextricably interlinked**.

- These **deep differences** continue to complicate the path towards comprehensive military disengagement and de-escalation.

US-India Strategic Partnership Forum

Why in News

Recently, the Prime Minister of India has delivered the keynote address at the 3rd Annual Leadership Summit of **US-India Strategic Partnership Forum (USISPF)**.

Key Points

- **Established:** It is a **non-profit organisation** established in 2017.
- **Objective:** Strengthening the **USA-India bilateral and strategic partnership**.
- **Aim:** Strengthening **economic and commercial ties** between the two countries through **policy advocacy** that will lead to driving economic growth, entrepreneurship, employment-creation, and innovation to create a more inclusive society.
 - Enabling business and governments to collaborate and create meaningful opportunities that can positively change the lives of citizens.
- **Theme for 2020:** US-India Navigating New Challenges.
- **Economic Relations:** In 2019, overall **USA-India bilateral trade** in goods and services reached **USD 149 billion**.
 - USA energy exports are an important area of growth in the trade relationship.

India-Japan Logistics Agreement

Why in News

Recently, India and Japan have signed a **logistics agreement** that will allow armed forces of both sides to coordinate closely in services and supplies. The agreement is known as the **Acquisition and Cross-Servicing Agreement (ACSA)**.

- India has similar agreements with the **USA, Australia, France, Oman, Singapore and South Korea**.

Note:

Key Points➤ **Agreement:**

- It is aimed at greater maritime cooperation and can **upgrade India-Japan naval exercises** as both countries are expected to share maritime facilities for mutual benefit.
- It **establishes the enabling framework** for closer cooperation between the armed forces of both countries in the **reciprocal provision of supplies and services** while engaged in bilateral training activities, **United Nations Peacekeeping** Operations, Humanitarian International Relief and other mutually agreed activities.
 - The supplies and services include food, water, transportation, airlift, petroleum, clothing, communications and medical services etc.
- It will also **enhance the interoperability, assist in maintaining regional security** and further **increase the bilateral defence engagements** between the two countries.
- It will **remain in force for 10 years** and will be automatically extended for periods of 10 years unless one of the parties decides to end it.
- The agreement is being interpreted as a coming together of Japan and India when India is having a **border standoff with China at Line of Actual Control (LAC)** in eastern Ladakh.

➤ **India-Japan Defence Cooperation:**

- In 2019, India and Japan held the first-ever ministerial-level **2+2 dialogue**. This dialogue involves the Defence and Foreign Ministers on both sides and is seen as an endorsement of the special strategic partnership between **India and Japan**.
 - Both nations share a common vision of a free, open, inclusive and rules-based **Indo-Pacific region** in which the principles of sovereignty and territorial integrity are ensured.
 - India and Japan defence forces organize a series of bilateral exercises namely, **JIMEX** (naval exercise), **SHINYUU Maitri** (air force exercise), and **Dharma Guardian** (military exercise).
 - Both countries also participate in the **Malabar exercise** with the USA.



- Both countries are also part of **Quadrilateral Security Dialogue (QUAD)**.

➤ **Significance:**

- India needs **sophisticated weapons and technology** from Japan, so **more collaboration and cooperation can prove beneficial** to both nations.
- There is a huge potential as far as **Make in India** and defence deals are concerned. **Joint ventures could be created by merging Japanese technology with Indian raw materials and labour.**
- **Closer cooperation is the best measure to combat China's growing role in Asia and Indo-Pacific.**

5th BRICS Culture Ministers' Meet

Why in News

The **5th BRICS Culture Ministers' Meeting** was held through a video conference under the **Chairpersonship of Russian Federation**.

- The delegates from Culture Ministries of the **BRICS nations - Brazil, Russia, India, China and South Africa** - participated in the meeting.

Key Points➤ **Discussions Held:**

- Impact of the **Covid-19** situation on the cultural sphere in the BRICS countries.
- Review of the **possible implementation of joint cultural online-projects** within BRICS.

➤ **Suggestions Given by India:**

- **Digitisation:**
 - Exploring possibilities of hosting a **Digital Online Exhibition** on a shared theme towards the end of 2021 under the auspices of **BRICS Alliance of Museums**.
 - Extending full cooperation and **content sharing for the website envisaged** under the BRICS Alliance.
- **BRICS Corner:** Opening the BRICS Corner under the auspices of **BRICS Alliance of Libraries** proposed to be inaugurated during **India's BRICS Presidency in 2021**. The Corner will disseminate information related to the history and culture of BRICS countries.

Note:

- **Joint Exhibition to be Organised by India:** The **National Gallery of Modern Arts, New Delhi** will host the **BRICS Joint Exhibition** titled '**Bonding Regions & Imagining Cultural Synergies**' under the auspices of the **BRICS Alliance of Art Museums and Galleries** in **2021**.
- **Cultural Cooperation among BRICS Nations:**
 - In **2018**, the BRICS nations endorsed **institution-to-institution collaborations** in the form of BRICS Alliance of Museums, BRICS Alliance of Art Museums and Galleries.
 - In **2017**, the **agreement on cooperation in the field of culture (2017-21)** between the governments of BRICS nations was signed.

BRICS

- BRICS is an **acronym** for the grouping of the world's leading emerging economies, namely **Brazil, Russia, India, China, and South Africa**.
 - In 2001, the British Economist **Jim O'Neill** coined the term **BRIC** to describe the four emerging economies of Brazil, Russia, India, and China.
 - The grouping was **formalised** during the first meeting of BRIC Foreign Ministers' in **2006**.
 - **South Africa** was invited to join BRIC in December **2010**, after which the group adopted the acronym BRICS.
- The **chairmanship of the forum is rotated annually among the members**, in accordance with the acronym B-R-I-C-S.
- During the **Sixth BRICS Summit in Fortaleza** (Brazil) in **2014**, the leaders signed the Agreement establishing the **New Development Bank (NDB - Shanghai, China)**. They also signed the **BRICS Contingent Reserve Arrangement** to provide short-term liquidity support to the members.

Indo-Pacific Trilateral Dialogue

Why in News

Recently, **India, Australia and France** held a dialogue for the first time under a **trilateral framework**. The three sides have **agreed to hold the dialogue on an annual basis**.

Key Points

- **Focus:** Enhancing cooperation in the **Indo-Pacific Region**. Australia, along with **France**, has emerged

as a **major strategic partner for India** in the Indo-Pacific and Indian Ocean Region (IOR), especially in the maritime domain. For instance:

- India has **logistics agreements** with both countries. The logistics agreement provides for easier access to supplies of goods and services.
- There is significant cooperation in information exchange for **Maritime Domain Awareness**.
 - France was the first country to deploy a Liaison Officer at the **Indian Navy's Information Fusion Centre (IFC-IOR)** as part of efforts to improve Maritime Domain Awareness (MDA).
- India conducted its **first joint patrols** with France in Reunion Island (western Indian ocean) in February 2020.

➤ Chinese Factor:

- The trilateral cooperation will help to take on China's aggressive behaviour in the Indo-Pacific region. E.g in **South China Sea**.
- This trilateral cooperation is an addition to the **Quad** which comprises the USA, Japan, Australia and India.
- It also adds diplomatic muscle to the global coalition that is shaping up to counter China's belligerence.

➤ Issues Discussed:

- Possibility of **enhancing maritime security cooperation** between the three countries in the Indo-Pacific region.
 - It also includes areas of humanitarian assistance and disaster relief, maritime domain awareness, mutual logistics support and capacity-building of friendly countries.
- **Development cooperation in the Indo-Pacific region**, initiatives such as the **International Solar Alliance** and **Coalition for Disaster Resilient Infrastructure**, and the need for a **reformed multilateralism**.
- **Cooperation on marine global commons**. It includes **blue economy**, **marine biodiversity** and **environmental challenges** such as marine pollution.
- **Practical cooperation at the trilateral and regional level**, including through regional organisations such as **Association of Southeast Asian Nations (ASEAN)**, **Indian Ocean Rim Association (IORA)** and the **Indian Ocean Commission**.
- The increased salience of **resilient and reliable supply chains**.

Note:



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- India, Australia and Japan recently inked an initiative to build resilient supply chains, which is named as **Supply Chain Resilience Initiative (SCRI)**. France may join this initiative too.
- **Emerging challenges** in the context of **Covid-19 pandemic**, including the financial impact of the pandemic on the Indian Ocean region countries.

UK Internal Market Bill, 2020

Why in News

The **new UK Internal Market Bill** has run into controversy over its impact on talks with the **European Union (EU)** and on international treaties, given it could rewrite parts of the **Brexit withdrawal agreement**.

Key Points

➤ About the Bill:

- The bill is **designed to "protect jobs and trade" within the UK** after the end of 2020's **transition period** for leaving the EU.
- Under the withdrawal treaty, a transition period has been **finalised until December 2020**.
- It will enable the UK government to provide **financial assistance to Scotland, Wales, and Northern Ireland** and with new **powers to spend taxpayers' money** previously administered by the EU.
- It will also **empower ministers to pass regulations**, specifically on **trade and state aid**, even if they are **contrary to the agreement** previously reached with the EU under what is known as the **Irish**



Backstop (earlier known as the **Northern Ireland Protocol**).

- Irish Backstop is the draft agreement between the UK and the EU that **aims to prevent a hard border** (limited number of authorised crossing points staffed by customs officers and police) **in Ireland after the UK leaves the EU**.
- Northern Ireland will become the **UK's only land border with the EU** after the transition ends.
- The UK has held that the Bill is **needed for a smooth trade** between England, Scotland, Wales and Northern Ireland, and will **help power recovery from the Covid-19 pandemic**.
- **Current System:**
 - Currently, the UK is a part of the European single market, with **jointly agreed regulations and standards** right across the continent.
 - Post-Brexit, the UK wants to continue to have a **joint and "internal market" across England, Scotland, Wales and Northern Ireland**.
 - Due to Brexit, **rules and regulations** around things like food and air quality and animal welfare **have to be set in the UK only but there is a conflict** on who should have the ultimate authority out of the four countries.
- **Criticisms:**
 - Under the EU Withdrawal Treaty, **England is meant to cooperate with Brussels (EU's Headquarter)** on any arrangements for Northern Ireland and not decide on such matters all by itself.
 - Scotland holds that the new Bill is a **just a power-grab by England** from the devolved administrations in Scotland itself, Wales and Northern Ireland.
 - **All four nations will have to accept goods at the standards set in any one country** so there are fears local **quality controls could be dragged down** to the lowest common denominator if England sets any such standard which is not practical or profitable for the rest of the three countries.
 - Furthermore, under the current proposals, **any disputes would be settled by a new Office** for the Internal Market.
 - This might be envisioned as an independent third party forum, but the devolved administrations see it as being **another example of decisions being taken out of their hands**.

Note:

USA-Maldives Framework on Defense and Security Relationship

Why in News

Recently, a **Framework on Defense and Security Relationship** has been signed between the **USA and the Maldives**.

- The move is seen as consistent with the growing alignment of the USA and Indian interests in the **Indian Ocean Region (IOR)** and **Indo-Pacific**.

Key Points

- The Framework intends to **deepen engagement and cooperation in support of maintaining peace and security in the Indian Ocean**.
- It marks an important step forward in the defence partnership between the USA and the Maldives, where **both of them agreed to reiterate their commitment to a free and open Indo-Pacific** that promotes the security and prosperity of all nations in the region.
- The Framework **outlines a range of bilateral activities**, including senior-level dialogues, engagements etc. in areas such as **maritime domain awareness, natural disasters and humanitarian relief operations**.



Significance for India

- **India has not officially responded** to the announcement of the framework **yet**.
- This announcement can be seen as a **timely signal to China**, particularly when Indian and Chinese soldiers are locked in a **stand-off at the Line of Actual Control (LAC)** in Ladakh.
 - The Chinese presence and influence in the IOR have been a **constant source of worry** for India.
 - **India has taken steps to strengthen its strategic presence** in both the IOR and Indo-Pacific.
 - The **Quad**, a grouping that brings together the **USA, Japan, India and Australia**, with the apparent but unstated aim of **containing China** in the region, is also part of this process.

- **Malabar Exercise** to strengthen the shared objective of a free, open and prosperous Indo-Pacific.
- **Track 1.5 dialogue** between **India, France and Australia** to identify security challenges and sustainability issues in the Indo Pacific.
- **Acquisition and Cross-Servicing Agreement** between India and Japan which allows armed forces of both sides to coordinate closely in services and supplies.

- The framework has the **potential to blunt the security aspects of cooperation between China and the Maldives**, even if economic co-operation continues.
 - In 2017, the Maldives signed up to **China's Belt and Road initiative** and is part of President Xi Jinping's vision of the **Maritime Silk Route** as well.
- Given India-USA ties, India sees the pact as useful also because **India's own direct involvement in Maldivian security matters tends to be viewed with suspicion domestically**.
 - The framework can **provide an indirect route** to India if needed.

Singapore Convention on Mediation

Why in News

Recently, the **United Nations Convention on International Settlement Agreements Resulting from Mediation** has come into force.

- The convention will provide a more effective way of **enforcing mediated settlements of corporate disputes** involving businesses in India and other signatories.

Key Points

- **About:**
 - The **United Nations General Assembly** adopted the Convention in **2018** and was **opened for signature in 2019** in Singapore.
 - It is also known as the **Singapore Convention on Mediation** and also the **first UN treaty to be named after Singapore**.
 - Singapore had worked with the **UN Commission on International Trade Law**, other UN member states and non-governmental organisations for the Convention.

Note:



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- India approved the signing of the Convention in July 2019.
- As on 1st September 2020, the Convention has 53 signatories, including China and the USA as well.
- **Significance:**
 - The Convention has been designed to become an essential instrument in the **facilitation of international trade** and in the **promotion of mediation** as an alternative and effective method of resolving trade disputes.
 - It will ensure that a settlement reached by parties becomes **binding and enforceable in accordance with a simplified and streamlined procedure**.
 - **Businesses seeking enforcement of a mediated settlement agreement** across borders can do so by **applying directly** to the courts of countries that have signed and ratified the treaty, **instead of having to enforce the settlement agreement as a contract** in accordance with each country's domestic process.
 - The harmonised and simplified enforcement framework will **save time and legal costs**, which are of crucial importance in uncertain times posed by **pandemics** like **Covid-19**.
 - Businesses in India and around the world will now have **greater certainty in resolving cross-border disputes** through mediation, as it provides a **more effective means for mediated outcomes to be enforced**.
- **Importance for India:**
 - It will **boost India's 'ease of doing business' credentials** by enabling swift mediated settlements of corporate disputes.
 - It will also increase **the confidence of the investors** and shall provide a **positive signal to foreign investors** about India's commitment to adhere to international practice on **Alternative Dispute Resolution (ADR)**.

Tension Between Russia-Germany

Why in News

Recently, tensions between Russia and Germany have deepened over the **alleged poisoning of Russian opposition figure Alexei Navalny**.

- Germany has **threatened sanctions against Russia** which, in turn, has **accused Germany of delaying the investigation** on the matter.

Key Points

- Alexei Navalny is Russia's **opposition leader and anti-corruption campaigner** who was evacuated to Germany after falling ill.
- Germany claims that the opposition leader has been **poisoned using the Soviet-era nerve agent Novichok**.
 - It is **one of the strongest accusations yet from Germany** on the basis that the deadly substance has been used by the Russian authorities, in the past as well.
- Germany, which **currently holds the rotating presidency of the European Union (EU)**, will discuss possible sanctions against Russia if it fails to provide an explanation.
 - The EU can discuss sanctions on **Nord Stream 2**, which is a **critical energy export project** for the Russian government.

Novichok

- It means "**newcomer**" in Russian and applies to a **group of advanced nerve agents developed by the Soviet Union in the 1970s and 1980s**, under a programme codenamed **Foliant**.
 - Nerve agents act by **blocking messages from the nerves to the muscles**, causing a collapse of many bodily functions.
 - The main nerve agents are the **chemicals sarin (GB), soman (GD), tabun (GA) and VX**. **Sarin was used by Syrian air force** in chemical attacks on a village in Syria's western Hama region in 2017.
 - Nerve agents are **man-made and have been manufactured for use in chemical warfare**.
- These nerve agents were **designed to escape detection** and are **extremely toxic**.

Nord Stream 2

- **About:**
 - It is a **nearly constructed 1,200-kilometre pipeline from Russia to Germany via the Baltic Sea**.
 - It will **run alongside the already constructed Nord Stream** and will **double the amount of gas** being funnelled through the Baltics to 110 billion cubic meters per year.

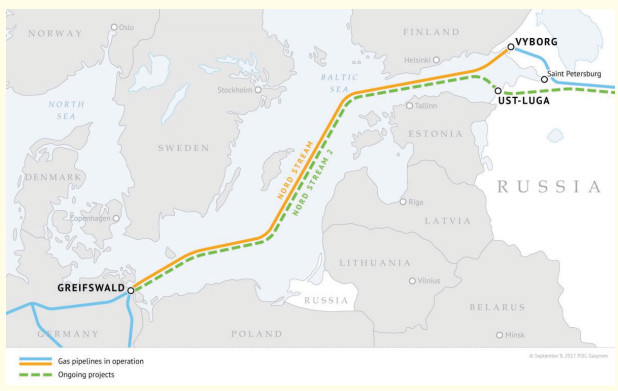
Note:

➤ Benefits:

- It is intended to **provide Europe with a sustainable gas supply** while **providing Russia with more direct access to the European gas market**.
- Its proposed route **enters the territorial waters and Exclusive Economic Zone (EEZ)** of three other countries: **Finland, Sweden and Denmark**. National governments and local authorities **will benefit economically** from investment and employment in the pipeline.

➤ Security Concerns and Criticism:

- The project has been **criticized by the USA and Germany's Eastern neighbours** like Poland, Czech Republic etc. citing **Russian dependence as a threat** to the common market and the EU's strategic interests.
 - The pipeline will **enable Russia to increase its military presence in the Baltic Sea** and also to **transmit military information** on the movements of naval vessels.



India-Bangladesh Inland Waterway Route

Why in News

Recently, **Sonamura-Daudkandi** inland waterway route between India and Bangladesh was operationalised.

- Daudkandi is in Bangladesh, while Sonamura is in Tripura, India.

Key Points

- **Sonamura-Daudkandi Route:** The inland waterway route **over river Gumati** was included in the list of **Indo-Bangla Protocol (IBP) routes** in May 2020.

- It connects **Tripura with the National Waterways of India** through Bangladesh.

➤ Benefit of the Route:

- It will improve the **connectivity** of Tripura and the adjoining States with Indian and Bangladesh's economic centers and will help the hinterland of both the countries.
- It will open up new avenues for economic development in both the countries.

➤ Protocol on Transit and Trade: Bangladesh and India have a long standing and time-tested Protocol on Transit and Trade through **inland waterways**.

- It provides inland waterways connectivity between the two countries, particularly with the North Eastern Region of India and also enhances bilateral trade.
- This Protocol was first signed in **1972**.
- It was last renewed for five years with a provision for its automatic renewal for a further period of five years.

River Gumati

- It is the **largest and longest river of Tripura** with a cumulative length of 180 km.
- **Dumbur dam** is built over the river.
- The river meets with **river Meghna** in Bangladesh.

India's Position-Shift on Taliban

Why in News

Recently, India has signalled a **shift in its position on engaging with the Taliban** by participating in the commencement ceremony of **Intra-Afghan talks** between the Afghanistan government and the Taliban in Doha, Qatar.

Key Points

➤ India's Position Shift:

- The Indian presence at the Intra-Afghan peace talks indicates that it has changed its position given the ground reality in Afghanistan and the **changing power structure in Afghanistan**.
 - USA's withdrawal has given **Pakistan a major role to play in Afghanistan** directly or indirectly through its proxies.

Note:



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- However, some experts were of the opinion that India chose to attend the ceremony **because the Afghan government was also at the table.**
- India still **does not recognise** the Taliban.

➤ **India's Stand:**

- India believes that any peace process must be **Afghan-led, Afghan-owned and Afghan-controlled.**
 - It has to respect the **national sovereignty** and **territorial integrity** of Afghanistan and promote human rights and democracy.
 - It also needs to **preserve the progress** made in the establishment of the democratic Islamic Republic in Afghanistan.
- The **interests of minorities, women and vulnerable sections of society** must be preserved and the issue of violence across the country and its neighbourhood has to be effectively addressed.
- **Indian interests**, which include the Indian Embassy and Indian companies and workers in Afghanistan, **should also be protected.**
- India supports an **"independent and sovereign"** Afghanistan. The use of words "independent and sovereign" make it clear that **Pakistan and its Inter-Services Intelligence (ISI) should not control the levers in Afghanistan.**

➤ **Background:**

- The **USA signed a deal with the Taliban** that paved the way towards a full withdrawal of the American troops from Afghanistan and also represent a step towards ending the **18-year-war in Afghanistan.**
- The peace deal was expected to **kick-off two processes, a phased withdrawal of American troops** and an 'intra-Afghan' dialogue.
- The deal is a fundamental step to deliver a comprehensive and permanent ceasefire and the future political roadmap for the Afghanistan peace process.

➤ **India's Interests in Afghanistan:**

- India has a **major stake** in the stability of Afghanistan. India has invested considerable resources in Afghanistan's development.
 - For example, the **Afghan Parliament, the Zaranj-Delaram Highway, Afghanistan-India Friendship Dam (Salma Dam),** etc.
- Afghanistan is the **gateway to Central Asia.**



USA Sanctions Against ICC Officials

Why in News

The **USA announced sanctions**, including **asset freezes and visa bans**, against two officials of the **International Criminal Court (ICC)** for their investigation into alleged war crimes by the USA forces and the Central Intelligence Agency (CIA) in Afghanistan since 2003.

Key Points

- **The USA's Stand:** Not only sanctions against officials, earlier the USA criticized the ICC.
 - The USA has considered the ICC a **threat to USA sovereignty**, and announced the strict punitive measures that are generally reserved for use against terror groups and those accused of abusing human rights.
 - USA had **never ratified the "Rome Statute"**, which created the ICC in 1998, and thus is **not subject to its rulings.**
 - The USA administration also called ICC a thoroughly **broken and corrupted institution.**
- **ICC's Stand on USA Sanctions:** An unacceptable attempt to interfere with the rule of law and the Court's judicial proceedings.
 - It stands firmly by its staff and officials and remains unwavering in its commitment to discharging, independently and impartially, the mandate laid down in its founding treaty, the Rome Statute.
- **Criticism of the USA's Sanctions:**

Note:

- The USA decision has been criticised by the **United Nations**, the **European Union**, 10 members of the **UN Security Council**, including the UK and France, as well as several international human rights agencies, all of which have called for the **sanctions to be reversed**.
- The international NGO Human Rights Watch has observed that by penalising war crimes investigators, the **USA is openly siding with those who commit and cover up human rights abuses**.
 - The USA action is a **setback to the international rules-based multilateral order**.
 - The decision to sanction anybody assisting the ICC will **deter victims of violence in Afghanistan from speaking out**.
- The USA's unilateral sanctions would **encourage other regimes accused of war crimes** to flout the ICC's rulings.

International Criminal Court

- The **International Criminal Court (ICC)** is an **inter-governmental organization** and **international tribunal** that sits in **The Hague** in the **Netherlands**.
- It was set up after the ad hoc tribunals to deal with Rwanda war crimes proved ineffective. ICC is a **criminal court**.
- The ICC has the **jurisdiction** to prosecute individuals for the international crimes of genocide, crimes against humanity, and war crimes.
- ICC is **based on the principle of complementarity**. ICC was not created to supplant the authority of national courts. However, when a state's legal system collapses or when a government is a perpetrator of heinous crimes, the ICC can exercise jurisdiction. ICC is a court of last resort.
- The ICC began functioning on **1st July 2002**, the date that the **Rome Statute** entered into force.

- The Rome Statute is a **multilateral treaty** which serves as the ICC's foundational and governing document.
- States which become party to the Rome Statute, for example by ratifying it, become member states of the ICC.
- The Rome Statute has been signed by 139 countries, and 123 have ratified it through their Parliaments and internal process.
- **USA and the ICC:** Although the USA was part of the founding movement to build the ICC to try cases of genocide and war crime, especially after the courts in Rwanda failed, it decided not to ratify the Statute in 2002.
 - USA opposed the ICC due to apprehensions that it will be used politically against its nationals.
- Countries like **Russia, China and India were never in favour of the Rome Statute** or the ICC, and never signed on.

India and ICC

- India is **not a party to ICC**.
- For India, the decision was based on a number of **principles**. The **major objections** of India to the Rome Statute are:
 - The ICC is a criminal court, unlike the **International Court of Justice** (which adjudicates on civil matters), and arrogates to itself the right to prosecute matters against countries that aren't even signatories.
 - Since ICC is subordinate to the **UN Security Council (UNSC)**, permanent members are vested with unbridled powers.
 - India also **objected to the omission of cross-border terror**, use of nuclear arms and weapons of mass destruction from the areas the ICC would institute its investigations.



Note:

Science and Technology

Highlights

- Spot Robot
- Covid-19 Detection Using Mass Spectrometer
- Bradykinin Storm: Covid-19
- Chandrayaan-1 Findings
- Hypersonic Technology Demonstrator Vehicle
- Intermediate-Mass Black Hole
- Flying V Aircraft
- Indian Brain Templates: NIMHANS
- Number of Giant Radio Galaxies
- Graphene Mask Inactivates Coronaviruses

Spot Robot

Why in News

Recently, researchers from Boston Dynamics, of **Massachusetts Institute of Technology (MIT - USA)** have developed a robot, called '**Spot**'.

- They have planned to use it for patients with **Covid-19** symptoms.

Key Points

➤ Features:

- The robot is controlled by a **handheld device**.
- It can **walk** on four legs, similarly to a dog, **climbs stairs** and can **traverse rough terrain** with ease and **small enough to be used indoors**.
- It can **measure skin temperature, breathing rate, pulse rate, and blood oxygen saturation** in healthy patients, **from 2 metres away**.
 - It has **four cameras** — one infrared, three monochrome.

➤ Working:

- **Body Temperature:** The infrared camera measures skin temperature on the face.
 - An algorithm then correlates the facial skin temperature with core body temperature.
- **Breathing Rate:** When a patient wearing a mask breathes, their breath changes the temperature of the mask.



- The infrared camera measures this temperature change, enabling researchers to calculate the breathing rate.

- **Pulse Rate & Oxygen Level:** When haemoglobin binds to oxygen and flows through blood vessels, it results in slight changes in colour.

- These changes are measured with the help of the three monochrome cameras, which filter lights of three different wavelengths.

- Using these measurements, the algorithm calculates pulse rate and blood oxygen saturation.

➤ Benefit:

- The robot can be deployed in areas where suspected cases of **Covid-19** assemble. Healthcare workers can avoid exposing themselves to risk, by manoeuvring the robot to wherever patients are sitting.
- The robot can also carry a tablet that allows doctors to ask patients about their symptoms without being in the same room.

Covid-19 Detection Using Mass Spectrometer

Why in News

Researchers from the **Institute of Genomics and Integrative Biology (IGIB)** and the **National Centre for Disease Control (NCDC)** have developed a **technique that uses mass spectrometry** to detect **novel coronavirus (SARS-CoV-2)**.

- **IGIB** is a **premier institute of Council of Scientific and Industrial Research (CSIR)**, engaged in research

Note:



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of national importance in the areas of genomics, molecular medicine, bioinformatics, etc. It is based in **New Delhi**.

- **NCDC** is under administrative control of the Directorate General of Health Services in the **Union Ministry of Health and Family Welfare**.

Key Points

➤ **Mass Spectrometry (MS):**

- It is an **analytical technique** used for **determining the elemental composition of samples**, quantifying the mass of particles and molecules, and elucidating their chemical structure.
- MS is **based on ionization and fragmentation of sample molecules in the gaseous phase**.
- The instruments used in this technique are called **mass spectrometers** and **mass spectrographs**, and they operate on the principle that **moving ions may be deflected by electric and magnetic fields**.
- Clinical laboratories use the MS technology for **disease screening, diagnosis of disease and metabolic disorders**, monitoring of drug therapy, identifying drug toxicity and poisoning, and discovering new biomarkers.
 - **Biomarker** is short for **biological marker**, and is used as an indication that a biological process in the body has happened or is ongoing.

➤ **New Technique Covid-19 Detection:**

- The new technique based on mass spectrometry relies on **detecting the presence of two peptides which are unique to SARS-CoV-2 virus** and not seen in any other coronavirus or other viruses.
 - **Peptides** are **building blocks of the viral protein**.
- Only two peptides are used for quick virus detection, though seven peptides were found to be unique to SARS-CoV-2. One of the peptides is the **spike protein** and the other is a **replicase protein**.
 - The unique peptides were seen in over 54,000 genomic sequences of the SARS-CoV-2 virus deposited in a **public database (GISAID)** as on 1st July 2020.
 - The **GISAID initiative** promotes the rapid sharing of data from all influenza viruses and the coronavirus causing Covid-19. It was launched on the occasion of the **61st World Health Assembly** in **May 2008**.

➤ **New Technique vs RT-PCR:**

○ **No Amplification of RNA:**

- The new method can directly detect the virus without amplifying the RNA for detection, as is the case with the **Reverse Transcription-Polymerase Chain Reaction (RT-PCR) test**, which is considered the gold standard of testing for the infection.

- Scientists **could detect the peptides** of SARS-CoV-2 virus even in patients who have recovered from the symptoms and have **tested negative for the virus by RT-PCR**. The peptides were present even after 14 days of initial infection.

- **Sensitivity and Specificity:** With the new technique, scientists have been able to detect novel coronavirus with **95% sensitivity** and **100% specificity** with respect to RT-PCR. This is **much better than the alternative rapid antigen kits**, currently in use in India for scaling up testing, that can throw up 20 to 50% false negatives.

- **Sensitivity** measures how often a test correctly generates a positive result for people who have the condition that's being tested for (also known as '**true positive**' rate).

- **Specificity** measures a test's ability to correctly generate a negative result for people who don't have the condition that is being tested for (also known as the '**true negative**' rate).

- **Detection Time:** Detection of the virus takes less than **three minutes**; time from sample preparation to detection takes less than **30 minutes**.

- The **RT-PCR takes a minimum of 2-5 hours** including time taken for a sample transportation.

- **Cost:** The mass spectrometer is **expensive** but it would cost only about **Rs.100 per test**, and so **cheaper than RT-PCR**. Further, many research labs have the mass spectrometer.

- **Pooled Testing:** The method **also allows for effective pooling of samples**.

- **Pooled testing** is when samples from more than one person are mixed together and tested. And, if one of the batches comes back positive, the samples from only that batch are retested individually to detect the person who has the infection. This method helps save cost and scale up testing.

Note:



- Considering its benefits, it can **either complement RT-PCR** or be used as an **alternative to RT-PCR**.

Different Types of Test for Detecting Covid-19

- **RT-PCR Tests**
- **Rapid Antigen Detection Tests**
- **RTnPCR Tests**
- **Feluda Tests**
- **ELISA Antibody Tests**
- **SalivaDirect Test**

Bradykinin Storm: Covid-19

Why in News

A recent analysis of samples of patients with the **Covid-19** infection has shown a phenomenon called a 'bradykinin storm'.

Key Points

- Doctors treating Covid-19 patients often **cannot identify the severity with which the SARS-CoV-2 virus seems to affect some people** and 'bradykinin storm' might explain the working of the virus in the body.
 - However, the **cytokine storm** is able to explain certain causes for the rapid deterioration in some patients with Covid-19.
- **The Bradykinin Hypothesis:**
 - SARS-CoV-2 uses a human enzyme called **ACE2** to enter into the cells of its host.
 - ACE2 lowers **blood pressure** in the human body and works against another enzyme known as ACE (which has the opposite effect).
 - The virus causes the levels of ACE to fall in the lungs, and consequently pushes up the levels of ACE2.
 - This happens as a chain reaction and increases the levels of the **molecule bradykinin** in the cells, causing a **bradykinin storm**.
 - **Bradykinin** is a compound that is **related to pain sensation and lowering blood pressure** in the human body.
 - Bradykinin storm causes the blood vessels to expand and become leaky, leading to swelling of the surrounding tissue.
 - **Increase in hyaluronic acid:** The levels of a substance called hyaluronic acid also increases.

- Hyaluronic acid is a sugar molecule that occurs naturally in the skin, and it helps to bind water to collagen (a protein). It can absorb more than 1,000 times its own weight in water to form a hydrogel.

- **Impact:** The bradykinin storm-induced **leakage of fluid into the lungs combined with the excess hyaluronic acid** would likely result in a **Jello-like substance** that prevents oxygen uptake and carbon dioxide in the lungs of severely affected Covid-19 patients.
 - This rapid accumulation of fluid in the lungs of patients sometimes makes even the most sophisticated intensive care, including ventilators, futile.
- **Significance:** Knowing the mechanism, doctors can target the bradykinin pathway to evolve more **therapeutic interventions** to offset the severe effects of Covid-19.

Cytokine Storm Syndrome

- **Cytokine Storm Syndrome** is characterised by the overproduction of immune cells and the cytokines themselves because of a dysregulation in the process.
 - **Cytokines** are a large group of proteins that are secreted by specific cells of the immune system.
- **Reasons:** A cytokine storm can occur due to an infection, auto-immune condition (when the body's immune system attacks healthy cells as in case of coeliac disease- an immune disorder that primarily affects the small intestine), or other diseases.
- **Signs and symptoms** include high fever, inflammation (redness and swelling), severe fatigue, and nausea.
- In the case of any flu infection, a cytokine storm is associated with a surge of activated immune cells into the lungs, which, instead of fighting off the antigen, leads to lung inflammation and fluid build-up, and respiratory distress.

Chandrayaan-1 Findings

Why in News

The recent images sent by Chandrayaan-1 suggest that the **moon may be rusting along the poles**.

- Chandrayaan-1, **India's first mission to the moon**, was launched by the **Indian Space Research Organisation (ISRO)** in 2008.

Note:



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Key Points

➤ Findings:

- Data from the **Mineralogy Mapper (M3)**, one of the instruments on Chandrayaan-1, indicates the **presence of hematite at the lunar poles**.
 - **Hematite (Fe_2O_3)** is a mineral which is a form of iron oxide, or rust, produced when iron is exposed to oxygen and water.
- The sign of this finding is that even though the **surface of the moon** is known to have **iron-rich rocks**, it is **not known for the presence of water and oxygen**, which are the **two elements needed to interact with iron to create rust**.
 - The **National Aeronautics and Space Administration (NASA)** has also found evidence of greater quantities of **metals such as iron** and titanium on the moon's subsurface.

➤ Possible Reasons Behind Rusting along the Lunar Poles:

- As per scientists at NASA, **earth's oxygen** could be driving the **formation of hematite**. Earth's **magnetotail** (elongated region of the **magnetosphere** of the earth) ferries oxygen to the moon and also blocks 99% of the solar wind during certain periods of the moon's orbit.
 - The **solar wind**, a stream of charged particles that flows out from the sun, **bombards earth and the moon with hydrogen**.
 - **Hydrogen makes it harder for hematite to form**. It is a reducer, meaning it adds electrons to the materials it interacts with. That's the opposite of what is needed to make hematite or iron to rust, which requires an oxidizer, which removes electrons.
- Chandrayaan-1 Moon data **indicates that the moon's poles are home to water** that scientists are trying to decipher.

➤ Chandrayaan-3: It is likely to be launched in early 2021.

- It will be a **mission repeat of Chandrayaan-2** and will **include a Lander and Rover** similar to that of Chandrayaan-2, but will **not have an orbiter**.
 - Planned to **land on the South Pole of the Moon**, Chandrayaan-2 was launched on **22nd July 2019**. However, the **lander Vikram hard-landed** on **7th September 2019**, crashing India's dream to become the first nation to successfully touch down on the lunar surface in its maiden attempt.

- With the **Artemis programme**, NASA will land the first woman and next man on the moon by 2024.
 - India's **first-ever human space mission Gaganyaan** aims to send a three-member crew to space for a period of five to seven days by 2022 when India completes 75 years of Independence.

Hypersonic Technology Demonstrator Vehicle

Why in News

Recently, the **Defence Research and Development Organisation (DRDO)** successfully flight tested the **Hypersonic Technology Demonstrator Vehicle (HSTDV)**.

Key Points

- **About:** HSTDV is an unmanned scramjet demonstration aircraft that can travel at **hypersonic speed**.
 - It uses **hypersonic air-breathing scramjet technology**.
 - The vehicle travelled its desired flight path at a velocity of six times the speed of sound i.e. **Mach 6**.
 - **Mach number:** It describes an aircraft's speed compared with the speed of sound in air, with **Mach 1 equating to the speed of sound i.e. 343 metre per second**.

Air Breathing Engine

- Air-breathing engines use oxygen from the atmosphere in the combustion of fuel. They include the **turbojet, turboprop, ramjet, and pulse-jet**.
- This system is **lighter, efficient and cost-effective** than other systems in use.
- Worldwide efforts are on to develop the technology for **air breathing engines for satellite launch vehicles**.
 - Presently, satellites are launched into orbit by multi-staged **satellite launch vehicles** that can be used only once (expendable). These launch vehicles carry oxidiser along with the fuel for combustion to produce thrust.
 - A **propulsion system which can utilise the atmospheric oxygen** during their flight will considerably reduce the total propellant required to place a satellite in orbit.

Note:

- If those vehicles are made **reusable**, the cost of launching satellites will further come down significantly.

➤ Types of Air Breathing Engines

- **Ramjet:** A ramjet is a form of air-breathing jet engine that uses the vehicle's forward motion to compress incoming air for combustion without a rotating compressor.
 - Ramjets work most efficiently at **supersonic speeds** but they are **not efficient at hypersonic speeds**.
- **Scramjet:** A scramjet engine is an improvement over the ramjet engine as it efficiently operates at **hypersonic speeds** and allows **supersonic combustion**.
- **Dual Mode Ramjet (DMRJ) :** A dual mode ramjet (DMRJ) is a type of jet engine where a **ramjet transforms into a scramjet over Mach 4-8 range**, which means it can efficiently operate both in **subsonic and supersonic combustion modes**.

Speed Range	Mach Number	Velocity in m/s
Subsonic	< 0.8	< 274
Transonic	0.8–1.2	274–412
Supersonic	1.2–5	412–1715
Hypersonic	5–10	1715–3430
High-hypersonic	10–25	3430–8507

- **Site of Test:** Dr APJ Abdul Kalam Launch Complex at APJ Abdul Kalam island off the coast of Odisha.
- **Implications:** India became the fourth country to have demonstrated this technology after the **USA, Russia and China**.
 - China successfully tested its first **waverider hypersonic flight vehicle** in 2018.

Intermediate-Mass Black Hole

Why in News

Analysis of signals from gravitational waves detected in 2019 at the **Laser Interferometer Gravitational-Wave Observatory (LIGO)**, the **USA** and the detector **Virgo, Italy** have indicated a black hole with unusual mass.

- These waves were a result of a collision between two **black holes** billions of years ago.

Key Points

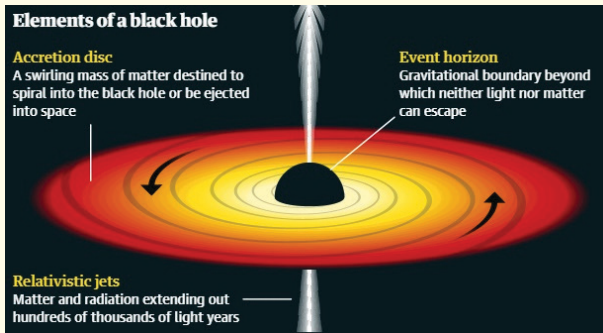
- The signal has been named **GW190521** and likely represented the instant that the two black holes merged.
 - It **lasted less than one-tenth of a second**.
 - It was calculated to have **come from roughly 17 billion light-years away**, a time when the universe was about half its age.
- Out of the two, the **larger black hole was of 85 solar masses** and the **smaller black hole was of 66 solar masses**. Post-merger they created a **new black hole of about 142 solar masses** and **energy equivalent to 8 solar masses** was released in the form of gravitational waves, leading to the **strongest ever wave detected** by scientists so far.
 - A **solar mass** is the mass of the sun or more precisely, it is **1.989×10^{30} kilograms**, which is equivalent to about 333,000 Earths.
 - Astronomers use a solar mass as a **basic unit of mass**.
- **Unusual Mass Category:**
 - The black hole with 85 solar masses falls in an **"intermediate-mass" range (first-ever to be observed)** and it **defies the traditional knowledge** of how black holes are formed.
 - According to traditional knowledge, stars that could give birth to black holes **between 65 and 120 solar masses** do not do so because they **blow themselves apart when they die, without collapsing into a black hole**.
 - In the merger leading to the GW190521 signal, the **larger black hole was well within the unexpected range**, known as the **pair-instability mass gap**.
- **Suggested Reasons for Unusual Mass:**
 - The researchers suggest that the larger 85-solar-mass black hole **was not the product of a collapsing star but was itself the result of a previous merger**.

Black Hole

- It refers to a point in space where the **matter is so compressed as to create a gravity field from which even light cannot escape**.
- The concept was **theorized by Albert Einstein in 1915** and the term '**black hole**' was coined in the **mid-1960s by American physicist John Archibald Wheeler**.

Note:

- All the black holes observed so far belong to **two categories**:
 - One category **ranges between a few solar masses and tens of solar masses**. These are thought to form when massive stars die.
 - The other category is of **supermassive black holes**. These range from **hundreds of thousands to billions of times that of the sun** from the Solar system to which Earth belongs.
- In April 2019, the scientists at the **Event Horizon Telescope Project** released the **first-ever image of a Black Hole** (more precisely, of its shadow).
 - The image was made possible by the **Event Horizon Telescope** which is a **group of 8 radio telescopes** (used to detect radio waves from space) located in different parts of the world.
- **Gravitational waves are created when two black holes orbit each other and merge.**



Gravitational Waves

- These are **invisible ripples that form when**:
 - A star explodes in a **supernova**.
 - Two big stars orbit each other.
 - Two black holes merge.
- They **travel at the speed of light and squeeze and stretch anything in their path**.
 - As a gravitational wave travels through space-time, it causes it to stretch in one direction and compress in the other, Any object that occupies that region of space-time also stretches and compresses as the wave passes over them, though very slightly, which can only be detected by specialized devices like LIGO.
- Gravitational Waves are a **relatively new field of discovery**.

- These were proposed by Albert Einstein in his **General Theory of Relativity**, over a century ago.
- However, the **first gravitational wave was actually detected by LIGO only in 2015**.

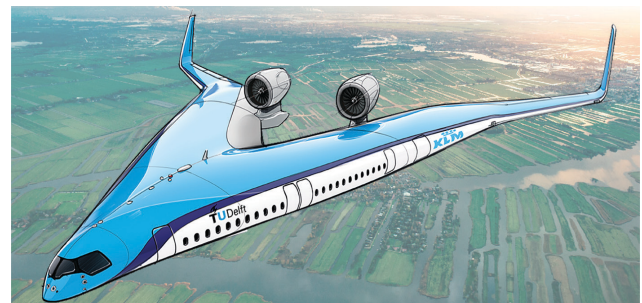
Flying V Aircraft

Why in News

A team of researchers and engineers along with a drone pilot from the **Dutch-based Technical University of Delft (TU Delft)** have successfully conducted the **first real test flight of the scaled model of the 'Flying V' aircraft**.

Key Points

- Flying V is a **futuristic and fuel-efficient long-distance aircraft** that could one day **carry passengers in its wings**.
- The Flying-V design, which **derives its name from its noticeable 'V' shape**, integrates the **passenger cabin, the cargo hold and the fuel tanks in the wings**.
- Computer calculations have predicted that the aircraft's improved aerodynamic shape and reduced weight will **reduce fuel consumption by 20%** compared to today's advanced aircrafts.
- The Flying-V **carries about the same number of passengers** - 314 in the standard configuration – and the **same amount of cargo**, 160 m³.
- The **original plan** for the Flying-V aircraft design came from TU Berlin student **Justus Benad**.
- The 'Flying V' project was **first presented at the 100th anniversary of the Dutch airlines KLM**, which has also been a partner in the project since its **beginning in 2019**. Various business partners including **Airbus** (an aerospace company), are now involved in the project.



Note:

Indian Brain Templates: NIMHANS

Why in News

A team of neuroscientists from the **National Institute of Mental Health and Neuro Sciences (NIMHANS)** has developed **Indian Brain Templates (IBT)** and a **brain atlas**.

- NIMHANS is a medical institution located in **Bangalore**, Karnataka. It is the **apex centre** for mental health and neuroscience education in the country and **operates autonomously**.

Key Points

- **Brain Template:** It is a gross representation from various brain images to understand brain functionality in diseased conditions.
- **Background:**
 - The **Montreal Neurological Index (MNI)** template that India currently uses is **based on Caucasian brains**, which are **different from Asian brains**.
 - The MNI template was made by **averaging 152 healthy brain scans** from just a small slice of the city's population in North America.
 - **Some countries have their own scale to measure the brain**, whereas India is still dependent on the Caucasian brain template.
- **NIMHANS Indian Brain Templates and Brain Atlas:**
 - Neuroscientists **studied over 500 brain scans of Indian patients** to develop five sets of Indian Brain Templates (IBT) and a brain atlas.
 - **IBT provides a scale that will measure an Indian brain**. When most brain scans are taken, they need to be compared to a standard brain template — a model or standard for making comparisons from a group of individual brain scans.
 - Validation experiments and comparisons with existing international templates found that using the **NIMHANS IBTs for Indian brains significantly improved the accuracy of alignment** and thereby noticeably **reducing distortions, errors or biases** in final reports of brain structure and function.
 - **Brain Atlas** has been **developed for five age groups** covering **late childhood to late adulthood (six to 60 years)**.

➤ Expected Benefits from IBT and Brain Atlas:

- These new population and age-specific Indian brain templates will allow **more reliable tracking of brain development** and ageing.
- The templates and atlas will provide **more precise reference maps for areas of interest in individual patients** with neurological disorders like strokes, brain tumours, and dementia.
- These will also help **pool information more usefully in group studies of the human brain and psychological functions**, aiding in understanding of psychiatric illnesses like Attention Deficit Hyperactivity Disorder (ADHD), autism, substance dependence, schizophrenia, and mood disorders.

Number of Giant Radio Galaxies

Why in News

Indian Researchers working on **giant radio galaxies (GRG)** at Inter-University Centre for Astronomy and Astrophysics (IUCAA) Pune, India and Leiden University, Netherlands, have found nearly 400 new GRGs.

- GRGs are **large single structures** in the universe.

Key Points

- **Radio Galaxies:** The universe has **billions of galaxies** and **almost all have supermassive black holes** at the centre.
 - Some of these **black holes are active** and **produce jets** travelling almost at the speed of light.
 - A **black hole** is a place in space where gravity pulls so much that even light can not get out. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.
 - These jets are **visible in radio light or at radio wavelengths** of the electromagnetic spectrum.
 - Such galaxies, which have active black holes shooting high-speed jets, are called **radio galaxies**.
 - A radio galaxy is a strong source of **electromagnetic radiation or radio waves**.
 - They are **extremely weak in radio luminosity** making it difficult for even a sensitive radio telescope to detect them.

Note:

- **Giant Radio Galaxies:** When some of these radio galaxies grow to enormous sizes, bigger than 33 lakh light years across, they are called giant radio galaxies (GRGs).
 - GRGs were discovered in **1974** and until 2016, only about 300 GRGs were known. The latest findings indicate that they are over 800.
 - It is not clearly understood how some objects grow to such large scales and what is the fuel of their respective black holes.
 - The **length of jets** indicates how powerful and active a black hole is as well as about the environment density of black holes.
- **Significance:** The study of GRGs gives important clues to unveiling how these massive black holes accrete mass and the efficiency with which they produce the magnificent jets.

Graphene Mask Inactivates Coronaviruses

Why in News

Recently, the researchers from the City University of Hong Kong have produced a **laser-induced form of graphene masks** that inactivate the coronavirus species.

Key Points

- **Graphene Mask and Coronaviruses:**
 - Initial tests deactivated two **coronavirus** species. The researchers are also planning to test this mask on the **Covid-19** (SARS-Cov-2) virus.
 - Coronaviruses are a large family of viruses that are known to cause illness ranging from the common cold to more severe diseases such as **Middle East Respiratory Syndrome (MERS)** and **Severe Acute Respiratory Syndrome (SARS)**.
 - The researchers **also tested it on E coli (bacteria)**, which showed an antibacterial efficiency of around

80%. The efficiency can be raised to almost 100% with exposure to sunlight for 10 minutes.

- Graphene is known for **antibacterial properties**.
- **Production:** All carbon-containing materials, such as **cellulose or paper**, can be converted into graphene. The researchers described the production of laser-induced graphene as a **"green technique."**
- **Benefits:** It is **reusable**. Can also be produced at **low cost**. It also resolves the problems of sourcing raw materials and disposing of non-biodegradable masks.

Graphene

- It is a **single layer (monolayer) of carbon atoms**. It is **one atom thick**. It is the building-block of **Graphite**.
- **Properties:** It is **harder than diamond** yet more **elastic than rubber**; **tougher than steel** yet lighter than aluminium. Graphene is the **strongest known material**.
 - **Other Properties** of Graphene are:
 - Lowest resistivity substance known at room temperature.
 - High thermal stability.
 - High elasticity.
 - High electrical conductivity.
 - Electron mobility is high at room temperature.
 - Graphene oxide (GO) membranes can be used to filter common salt from seawater.
- **Uses:** Its **thin composition** and **high conductivity** means it can be used in applications ranging from miniaturised **electronics to biomedical devices** like computers, solar panels, batteries, sensors and other devices.
- **Carbon Allotropes:** **Diamond, graphite** and **fullerenes** (substances that include **nanotubes** and **buckminsterfullerene**) are the important allotropes of pure carbon.
 - **Allotropy** is the property of some chemical elements to exist in two or more different forms, in the same physical state.



Note:

Environment and Ecology

Highlights

- African Baobab Tree
- Project Dolphin
- Review of National Forest Policy, 1988
- World Solar Technology Summit
- UN Special Rapporteurs on EIA 2020
- International Day of Clean Air For Blue Skies
- Disposal of Cigarette Butts
- Paddy Stubble Use by PEDDA
- Low Ozone Over Brahmaputra River Valley
- Net Present Value of Forests
- Significance of Dead Coral Reef

African Baobab Tree

Why in News

A recent study published in the journal Scientific Reports has found that the tree 'African Baobab' has **168 chromosomes**. Previous studies estimated that the tree has between 96 and 166 chromosomes.

- The study will be **useful in genetic conservation efforts**.

Key Points

- **Type of Trees:** Baobabs are **deciduous trees** ranging in **height from 5 to 20 meters**.
 - Deciduous forest is a vegetation composed primarily of broad-leaved trees that **shed all their leaves during one season**.
- **Found in:** The **African baobab (*Adansonia digitata*)** is one of the **nine species of baobab** and is **native to mainland Africa**. They are also found in **African Savannah**.
 - The African savanna ecosystem is a **tropical grassland** with **warm temperatures year-round** and with its highest seasonal **rainfall in the summer**.
 - It is characterized by grasses and small or dispersed trees that **do not form a closed canopy**, allowing sunlight to reach the ground.
- **Oldest Known Angiosperm Tree:** **Carbon-14 dating** places the age of a specimen of African baobab in Namibia at about **1,275 years**.



- **Tree of Life:** As African baobab is a succulent, which means that during the rainy season it absorbs and stores water in its vast trunk, enabling it to produce a nutrient-dense fruit in the dry season when all around is dry and arid.
- **Uses:** Baobab trees can live for more than a thousand years and provide food, livestock fodder, medicinal compounds, and raw materials.
- **Threat:** Since 2005, 9 of the 13 oldest African baobab specimens and 5 of the 6 largest trees have died or suffered the collapse and death of their largest or oldest stems, that may have been caused by the **effects of climate change**.

Project Dolphin

Why in News

Recently, the Indian Prime Minister has announced the **government's plan to launch a Project Dolphin** in his Independence Day Speech.

- The proposed project is **aimed at saving both river and marine dolphins**.

Key Points

- Project Dolphin will be on the lines of **Project Tiger**, which has helped increase the tiger population.
- It **got in-principle approval** in December 2019, at the first meeting of the **National Ganga Council (NGC)**.
- It is expected to be implemented by the **Ministry of Environment, Forest and Climate Change**.

Note:

- A **Special Conservation Programme** needs to be taken up for Gangetic Dolphin which is the **national aquatic animal** and also an **indicator species**. As the Gangetic dolphin is at the top of the food chain, protecting the species and its habitat will ensure the conservation of aquatic lives of the river.



- An indicator species provides **information on the overall condition of the ecosystem** and of other species in that ecosystem. They **reflect the quality and changes in environmental conditions** as well as aspects of community composition.
- So far, the **National Mission for Clean Ganga (NMCG)**, which implements the government's flagship scheme **Namami Gange**, has been taking initiatives for saving dolphins.
- **Global Experience:** The **Rhine Action Plan (1987)** of the **International Commission for the Protection of the Rhine (ICPR)**, representing **Switzerland, France, Germany, Luxemburg and the Netherlands**, helped in the conservation of the **salmon** fish (also an indicator species).

Gangetic Dolphin

- **Scientific Name:** *Platanista gangetica*.
- **Features:**
 - These are **generally blind** and catch their prey in a unique manner. They find their **way and prey in the river waters through echoes**.
 - These are also called **susu**.
- **Location:**
 - It is found mainly in the **Indian subcontinent**, particularly in **Ganga-Brahmaputra-Meghna** and **Karnaphuli-Sangu** river systems.



- It is also found in the **Ganga's tributaries**.
- **Threats:**
 - Dams disturb the migration, breeding cycles and habitat of fish and other prey.
 - Pollution.
 - Excessive silting and sand mining especially in Assam and lower course of the Ganga.
- **Population:**
 - The **Gangetic dolphin census** suggests that the Gangetic dolphin population in India could be about 2,500-3,000.
 - As per Ministry of State for Environment, Forest and Climate Change there are about 1,272 dolphins in Uttar Pradesh and 962 in Assam.
- **Status of Conservation:**
 - **Wildlife (Protection), Act 1972:** Schedule I.
 - **IUCN Red List:** Endangered.
 - **CITES:** Appendix I (most endangered).
 - **Convention on Migratory Species:** Appendix II (migratory species that need conservation and management or would significantly benefit from international co-operation).
- **Conservation Efforts:**
 - **Wildlife Protection Act, 1972:** Dolphin was included in its **Schedule I in 1986**, after the launch of Ganga Action Plan in 1985.
 - It means they have the highest degree of protection against hunting.
 - This was aimed at checking hunting and providing conservation facilities such as wildlife sanctuaries.
 - For instance, **Vikramshila Ganges Dolphin Sanctuary** was established in Bihar under this Act.
 - **Conservation Plan:** The **Conservation Action Plan for the Ganges River Dolphin 2010-2020**, which identified threats to Gangetic Dolphins and impact of river traffic, irrigation canals and depletion of prey-base on Dolphins populations.
 - The **National Ganga River Basin Authority** (replaced by National Ganga Council) in 2009 and constituted a Working Group under the Patna University to prepare a Conservation Action Plan for the Gangetic Dolphin in 2009.
 - **National Aquatic Animal:** In **2009**, during the **1st meeting of the National Ganga River Basin Authority**, the Gangetic river dolphin was declared the national aquatic animal.

Note:

- **National Ganga River Dolphin Day:** it is observed on **5th October every year** by the NMCG.

Review of National Forest Policy, 1988

Why in News

Recently, the Director-General of Forests has advocated for the amendment of National Forest Policy, 1988.

- The recommendations are based on a research paper published in 2016 in the *Natural Resources Forum*, a **United Nations Sustainable Development Journal** which called for **sustainable** forest management based on certification and a policy characterised by restoration, conservation and production equally.

Key Points

- **Data Unavailability:** There is a lack of reliable data relating to growing stock, consumption and production of timber, which constrained forecast of supply and demand projections.
- **Focus on TOFs:**
 - The potential of timber production from Trees Outside Forests (TOFs) i.e. grown outside government Recorded Forest Areas (RFAs) must be explored and tapped.
 - **Recorded Forest Area (RFA)** refers to all the geographic areas recorded as **forest** in government records. **Recorded forest** areas comprise **Reserved Forests (RF)** and **Protected Forests (PF)**, which have been constituted under the provisions of **Indian Forest Act, 1927**.
 - According to **India State of Forest Report 2011**, timber production from government forests is 3.17 million m³ and **potential timber production from TOFs** is 42.77 million m³.
 - **India State of Forest Report (ISFR)** is a biennial publication of **Forest Survey of India (FSI)**, an organisation under the Ministry of Environment Forest and Climate Change.
 - The Supreme Court ruling in the **Godavarman Case (1996)**, stopping felling of trees in forest areas led to a decrease in domestic production of timber.

- Production forestry should focus on a sustainable increase in forest productivity from TOFs and RFAs.
- To boost production through the RFA, States must devise working plans and demarcate **10% of the forests for plantations**.
- For TOFs, a synchronised nationwide policy could be developed.
- Increasing wood production will also **push carbon sequestration, and help in mitigating effects of climate change**.
- Increasing timber production from TOFs can **revive the rural economy**.
- **Review of Export-Import (Exim) Policy:** Since the domestic timber production has declined and imports have increased manifolds, there is a need to review **Export-Import Policy**.
 - The domestic demand for timber has grown owing to the increasing population and per capita GDP. Dependency on imports is not viable as **exporters worldwide are shifting to a conservation-based approach**.
 - **The Policy should be reviewed to rectify** the pricing in the market so that it is economically viable to grow trees on farmlands.
 - **The Exim Policy** is a set of guidelines and instructions related to the **import** and **export** of goods. The Government of **India** notifies the **Exim Policy** for a period of five years under the **Foreign Trade (Development and Regulation Act), 1992**.
- **Revision of Indian Forest Policy:** The paper emphasized on revising the Indian Forest Policy **to boost domestic production**.
 - The conservation policies must focus on **maintaining ecological balance and improving biodiversity** through protected area management.
 - The restoration policies must target **reclamation, rehabilitation and regeneration** of degraded landscapes and wastelands.

Background

- India's forests are currently governed by the **National Forest Policy, 1988**.
- It focuses on **environmental balance and livelihood** mainly.
- **Criticism:** The policy has not been updated in a long time while the situation of forests and climate has substantially changed.

Note:

- Key policies regarding forests and forest management are either missing, delayed or left open-ended. For example, at present, there is no clear definition of forest that is accepted nationally and states are left to determine their definition of forests.
- A **draft National Forest Policy** was released in 2019. The basic thrust of the draft is **conservation, protection and management of forests along with safeguarding the interest of tribals and forest-dependent people.**
- **Other Legislations that Govern Indian Forests:**
 - **Indian Forest Act, 1927.**
 - **Compensatory Afforestation Fund Act, 2016.**
 - **Forest Conservation Act, 1980.**
 - **Forest Rights Act, 2006.**
 - **Wildlife Protection Act, 1972.**

Forestry in India

- According to the **India State of Forest Report, 2019**, **tree and forest cover** together made up **24.56% (8,07,276 sq km)** of India's area.
- In landmark **Godavarman Case**, the Supreme Court **defined forests** as all areas that are forests in the dictionary meaning of the term irrespective of the nature of ownership and classification thereof.
 - The court also ordered all non-forest activity like sawmills and mining to be suspended in forest areas and stopped felling of trees in this order.
- **Constitutional Provisions:**
 - **Forests and Protection of Wild Animals and Birds** are included in the **Concurrent List in the (Seventh Schedule)** of the Constitution of India.
 - Through the **42nd Amendment Act, 1976**, Forests and Protection of Wild Animals and Birds were **transferred from State to Concurrent List along with Education, Weights and Measures and Administration of Justice.**
 - **Article 51 A (g)** of the Constitution states that it shall be the **fundamental duty** of every citizen to protect and improve the natural environment including forests and Wildlife.
 - **Article 48 A** in the **Directive Principles of State policy**, mandates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.

World Solar Technology Summit

Why in News

Recently, the **first-ever World Solar Technology Summit (WSTS)** was organised by the **International Solar Alliance (ISA)** and **Federation of Indian Chambers of Commerce and Industry (FICCI).**

Key Points

- **Objectives:**
 - To showcase to member countries the state of the art and next-generation solar technologies worldwide.
 - To give an opportunity to decision-makers and stakeholders to meet, and discuss their own priorities and strategic agenda towards a larger integration.
 - To discuss the recent highlights of solar technologies, cost-wise, technology-wise, technology transfers, challenges and concerns in the field.
- **Steps Taken by India:**
 - In spite of having **one of the lowest per-capita carbon emissions** in the world, India has pressed ahead with the deployment of renewable energy at a fast pace for lowering carbon footprints.
 - India has **enhanced its installed renewable capacity by 2.5 times** and **increased the solar installed capacity by more than 13 times.**
 - Globally, India **ranks 4th in terms of renewable power.**
 - India has **scaled non-fossil fuel-based power generations to 134GW**, which is about 35% of the total power generation and it is **expected to increase it to 220 GW by 2022.**
 - India is **providing capacity-building support to ISA member countries** through its **Indian Technical and Economic Cooperation (ITEC) Programme.**
 - **Project Preparation Facility** has been set up to **develop bankable Solar Energy** projects in ISA member countries with the help of **Export-Import (EXIM) Bank of India.**
 - In 2018, India announced about **USD 1.4 billion worth of lines of credit (LOCs)** for covering 27 solar projects across 15 countries. These projects are in various stages of implementation.

Note:



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➤ **Solar Energy related Schemes:**

- **Solar energy** has taken a central place in India's **National Action Plan on Climate Change** with the **National Solar Mission** as one of the key Missions.
 - National Solar Mission (NSM) was launched on 11th January 2010 and is in line with India's **Intended Nationally Determined Contributions (INDCs)**.
 - Its objective is to establish India as a global leader in solar energy by creating the policy conditions for solar technology diffusion across the country as quickly as possible.
- **One Sun, One World, One Grid (OSOWOG)**: India's ambitious cross-border power grid plan which seeks to transfer solar power generated in one region to feed the electricity demands of others.
- **KUSUM Scheme**: It aims to replace the use of diesel in the farm sector with solar energy with the target of solarisation of 2.8 million irrigation pumps.
- **Solar Charkha Mission**: It is an enterprise driven scheme and envisages setting up of 'Solar Charkha Clusters' which will have 200 to 2042 beneficiaries. These solar charkhas are operated using solar power, keeping the environment clean and generating sustainable employment for the artisans.
- **750 megawatt (MW) solar project** which has been inaugurated in **Rewa, Madhya Pradesh**.

International Solar Alliance

- It is a **treaty-based international intergovernmental organisation** which was jointly launched by **India and France on 30th November 2015** during the **21st session of the United Nations Climate Change Conference of the Parties (COP-21)** in Paris, France.
 - It was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs.
- **Aim**: To lower the cost of technology and finance and thereby facilitate deployment of over 1,000 GW of solar energy and mobilize more than USD 1,000 billion into solar power by 2030 in member countries.
 - Solar energy is a key source of affordable and reliable energy, thus it could play a significant role in achieving the **universal energy access goal (SDG 7)**.

➤ **Headquarter**: Gurugram in Haryana, India.➤ As of June 2020, the ISA Framework Agreement has been **signed by 86 countries**, with **68 having also deposited instruments of ratification**.

UN Special Rapporteurs on EIA 2020

Why in News

Recently, a group of **Special Rapporteurs to the United Nations (UN)** has written to the Indian government **expressing concerns over the draft Environment Impact Assessment (EIA) notification 2020**.

- Special Rapporteurs are **independent experts working on behalf of the UN**. They work on a country or a thematic mandate specified by the **United Nations Human Rights Council (UNHRC)**.

Key Points

- The group has highlighted that the proposed notification **appeared to have clauses that obstructed people's rights to a safe, clean and healthy environment**.
- There are **clauses which exempt several large industries and projects from the public consultation**, as part of the **Environmental Impact Assessment process**.
 - The draft notification **provides for a reduction of the time period from 30 days to 20 days** for the public to submit their responses during a public hearing for any application seeking environmental clearance.
 - This time frame is inadequate for the preparation of views, comments and suggestions and without a meaningful public hearing, the whole EIA process **would lack transparency and credibility**.
- The draft notification **does not require publication of information or holding of public consultation for projects** labelled by the Central government as 'involving strategic considerations'.
- The 2020 draft notification **allows for post-facto approval for projects** which means that the clearances for projects can be awarded even if they have started construction or have been running phase without securing environmental clearances.
 - Post facto approval is the **derogation of the fundamental principles of environmental**

Note:

jurisprudence and violation of the precautionary principle, which is a principle of environmental sustainability.

- The group has **sought the government's response** on how the provisions of the notification are consonant with **India's obligations under international law**.
 - India is a party to the **Rio declaration (also known as the Earth Summit)** adopted by the **United Nations Conference on Environment and Development (UNCED) in 1992**, which articulated a catalogue of environmental principles including sustainable development, precautionary principle, and EIA.
 - Following the **Rio Conference 1992**, EIA became part of the **formalised legal framework in India in 1994**.
 - India is also party to the **Convention on Biological Diversity (CBD)** and **United Nations Framework on Climate Change (UNFCCC)**, which contain a requirement to have a prior EIA in situations having a significant threat to the environment.
- **Indian Government's Response:**
 - The Environment Ministry Secretary has held that **nothing in the proposed EIA, 2020 violates the UN Declaration of Human Rights** and that the rapporteurs' concerns are "misplaced".
 - The proposed EIA is still a draft and was issued for public consultation. The **imperfections in the existing EIA would be amended** in the new notification.
 - With regard to **post facto clearances**, the **violation of not taking prior approval would be punished as per law** and projects that are already running would be considered only on merit.

International Day of Clean Air For Blue Skies

Why in News

Recently, the **Ministry of Environment, Forest and Climate Change** has organised a webinar on the occasion of the **first-ever International Day of Clean Air For Blue Skies**.

- In **December 2019**, the **United Nations General Assembly** adopted a resolution to observe this day on **7th September every year, starting from 2020**.

- **The Day aims to demonstrate the close link of air quality to other environmental/developmental challenges and raise public awareness related to air quality at all levels.**

Key Points

- **Indian Government's Efforts:**
 - It is committed to **reducing the air pollution level in 122 most polluted cities**.
 - In 2014, the **Air Quality Index (AQI)** was launched which currently tracks the levels of pollution on **eight parameters**.
 - These **parameters are ground-level ozone, Particulate Matter (PM) 10, PM 2.5**, carbon monoxide, sulfur dioxide, nitrogen dioxide, ammonia and lead.
 - **Ground-level ozone and airborne particles** are the two pollutants that pose the **greatest threat** to human health in India.
 - The Prime Minister in his Independence day speech also **highlighted the issue of air pollution** and put across the **goal of holistic improvement in air quality in 100 cities** by drawing up **micro-plans to target hotspots**.
 - A brochure on **Integrated Measures to Combat Air Pollution** under the **National Clean Air Programme (NCAP)** has been launched in the webinar.
 - In **January 2019, NCAP was launched** to tackle the problem of air pollution in a comprehensive manner with a **target to achieve 20 to 30% reduction in PM 10 and PM 2.5 concentrations by 2024** keeping 2017 as the base year.
 - India has migrated to **BS-VI standards, quality petrol, and diesel**, which is an important initiative to fight against pollution.
 - The **Bharat Stage (BS)** are emission standards instituted by the Government of India to regulate the output of air pollutants from motor vehicles.
 - The **Environment Ministry is responsible for deciding the fuel standard in the country**. The **Central Pollution Control Board (CPCB)** implements these standards.
- **Suggestions for Improvement:**
 - States must work with **city-specific plans**, as every city has a different source of pollution.
 - A city is not equally polluted in all areas so the **most effective way to reduce air pollution in cities**

Note:



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is to identify the hotspots and then disburse funds for solutions in these identified areas.

- Use of **electric vehicles** must be encouraged and **public transport should be modernized**.
- Augmenting **waste management infrastructure**, paving roads to make them dust free and imposing **stringent norms on industry** and ensuring that they switch to cleaner fuels.
- **People's participation** is a must to clean the air. **Car-pooling and use of public transport** must be promoted.

Disposal of Cigarette Butts

Why in News

Recently, the **National Green Tribunal (NGT)** has directed the **Central Pollution Control Board (CPCB)** to lay down guidelines pertaining to **disposal of cigarette and beedi butts** within three months.

- NGT held that tobacco is undoubtedly harmful and it is mainly concerned with the manner of disposal of cigarette and beedi butts.

Key Points

- **Background:**
 - An NGO '**Doctors for You**' sought instructions to **regulate the disposal** of cigarette and beedi butts apart from **prohibiting the consumption of tobacco in public places**.
 - The **Ministry of Health and Family Welfare** highlighted that cigarette and beedi butts are **not biodegradable** but the Ministry of Environment, Forest and Climate Change noted that these are **not listed as hazardous**.
- **CPCB Report:**
 - A report by CPCB highlighted that the analysis of the cigarette and beedi butts reflects that their **concentrations detected will not be toxic to humans and the environment**.
 - **Cellulose acetate** is a major component (95%) of the cigarette butts **along with the wrapping paper and rayon** and its degradation studies show that it will persist for a longer duration.
- **Findings of a Study:**
 - A study conducted by the **Indian Institute of Toxicology Research (IITR)** approves the CPCB

report and holds that the concentration of various parameters analyzed is lower than the prescribed limits and will not be toxic.

- It added that **natural environmental conditions and laboratory stimulating conditions would be required** to conclude the safety or toxicity of cigarette butts to further correlate with human and environmental health risk assessment.
- **Suggestions:**
 - An **inter-ministerial or departmental committee should be constituted** to consult at the national level for conducting an impact study of discarded cigarette and beedi butts and spitting of tobacco products in public places.
 - **Recycling of cellulose acetate** after recovery from cigarette butts may be an immediate solution to the problem.
 - There is a **need for more studies and research** so that degradation and safety data can be generated which would be helpful in forming guidelines.

Steps Taken by the Indian Government to Control Tobacco Consumption

- **WHO Framework Convention on Tobacco Control (WHO-FCTC):**
 - It is the **first international treaty** negotiated under the auspices of the **World Health Organisation**.
 - It was developed in response to the globalization of the tobacco epidemic and is an evidence-based treaty that reaffirms the right of all people to the highest standard of health.
 - **India ratified it in 2004.**
- **mCessation Programme:**
 - It is an initiative **using mobile technology for tobacco cessation**.
 - India launched **mCessation** using text messages in 2016 as part of the government's **Digital India initiative**.
 - It uses two-way messaging between the individual seeking to quit tobacco use and programme specialists providing them with dynamic support.
- **Cigarettes and other Tobacco Products (Packaging and Labelling) Amendment Rules, 2020:**
 - These **rules** have been notified by the Ministry of Health and Family Welfare to amend the 2008 rules which were notified under the Cigarettes

Note:

and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003.

➤ **National Tobacco Control Programme:**

- The Ministry of Health and Family Welfare **launched the programme in 2007-08.**
- It aims to **facilitate the effective implementation of the Tobacco Control Law**, to bring about greater awareness about the harmful effects of tobacco as well as to fulfil the obligations under the WHO-FCTC.

➤ **Other Efforts:**

- **World No Tobacco Day:** Every year, 31st May is observed as the **World No Tobacco Day** by WHO and global partners.
 - The annual campaign is an opportunity to raise awareness on the harmful and deadly effects of tobacco use and second-hand smoke exposure, and to discourage the use of tobacco in any form.
- Since 2007, the Ministry of Health and Family Welfare has been pushing to introduce **stronger graphic health warnings on tobacco packets**, with mixed success.

Paddy Stubble Use by PEDAs

Why in News

The **Punjab Energy Development Agency (PEDA)** in association with the Govt. of Punjab, is creating alternatives for paddy stubble utilisation.

- This includes setting up **biomass power plants** and **producing Bio CNG** from the paddy stubble biomass.

Punjab Energy Development Agency

- It was formed in Sept. 1991 as a **state nodal agency for promotion and development of renewable energy programmes/projects** and energy conservation programme in the state of Punjab.
- PEDAs is registered as a Society under the **Societies Act of 1860.**

Key Points

- **Biomass Power Plants:** PEDAs has set up **11 biomass power plants** where 97.50 mega watts (MW) of power is generated.
 - In these plants, 8.80 lakh metric tonnes of paddy stubble is used annually to generate power.
- **Bio CNG: Eight projects of Bio CNG are under execution in the state.** These will need around 3-lakh metric tonnes of paddy stubble annually.
 - **India's largest Bio CNG project**, which will produce 8,000 m cube biogas per day (equivalent to 33.23 tonnes of Bio CNG per day) is under execution at **Lehragaga tehsil in Sangrur district**. The project is expected to be commissioned by March 2021.
- **Bioethanol Project:** A Bioethanol project of 100 kilolitres is being set up at Talwandi Sabo in **Bathinda**. This will require 2 lakh metric tonnes of paddy stubble annually.
 - **Bioethanol** can be used to run vehicles after blending with diesel and petrol.
- **Advantages of these Projects:** After the commissioning of all these projects, Punjab will be able to utilise 1.5 million tonnes (7% of the total) paddy stubble.
 - **Farmers' income:** Farmers can benefit hugely if they can **sell paddy stubble to the industry** instead of burning it.
 - **Environment benefits:** It will reduce the **pollution** caused by stubble burning and also preserve the **fertility** of the soil which is lost due to burning paddy stubble.
 - **Entrepreneurship:** The youth, particularly engineers, graduates in science and technology can start such projects under the '**start-up**' concept, which will create entrepreneurship among them.
 - **Employment:** Educated unemployed youth in rural Punjab where such projects will be set up can get big **job opportunities**.
- **Limitations:** Current usage of stubble in these plants is very small compared to the generation of stubble. Punjab needs **varieties of stubble-based industry** where more and more stubble is consumed.
- **Issues involved with Paddy Stubble:**
 - About 20 million tonnes of paddy stubble or paddy crop residue is generated in Punjab annually. **Less than 5% is being utilized** in Bio-gas, Biomass power generation or other environment-friendly uses.

Note:

The main mode of getting rid of this stubble is **stubble burning**.

- Stubble Burning is a major cause of concern because of environmental and health reasons.
 - Stubble burning is considered to be one of the **factors responsible for smog in Delhi**.
- The burning of stubble **reduces the soil fertility**, besides polluting the environment.
- Additionally, the **heat generated** by stubble burning penetrates into the soil, leading to the loss of moisture and useful microbes.

➤ **Other alternatives to utilize paddy stubble:**

- **Torrefaction:** **Torrefaction** is a thermal process to convert biomass into a coal-like material, which has better fuel characteristics than the original biomass.
- **Fertilizer:** The stubble can be used for the preparation of the **high-grade organic fertilizers** by mixing with cow dung and few natural enzymes.
- **Mechanized Management:** Stubble can be managed in three ways — by **pressing the leftover stubble under the earth; sowing wheat directly in the standing stubble in the fields and thirdly, by collecting it in bundles**. This can be aided by the use of machines like:
 - **Super SMS (Straw Management System):** It cuts and spreads the straw in a uniform manner in the field at the time of harvesting of paddy.
 - **Happy Seeder:** It can sow wheat directly in such fields in standing paddy stubble (the height of which remains around 18 inches after cutting with Super SMS).
 - **Super Seeder:** It is more advanced and it ploughs standing paddy stubble in soil and sows wheat seed simultaneously in a single operation after harvesting.

Government Initiatives

- **Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue** - It is a **Central Sector Scheme** to tackle air pollution and to subsidize machinery required for in-situ management of crop residue in the States of **Punjab, Haryana, Uttar Pradesh and NCT of Delhi**.
- **SATAT Scheme:** Sustainable Alternative Towards Affordable Transportation (SATAT) scheme was launched by the **Minister of Petroleum and Natural**

Gas. Its objectives include reducing pollution from burning of agricultural / organic waste and utilising more than 62 million metric tonnes of waste generated every year in India.

- The **Punjab government** has provided **74,000 subsidised machines** called Super SMS, Happy Seeder and Super Seeders to the farmers for stubble management after harvesting.

Low Ozone Over Brahmaputra River Valley

Why in News

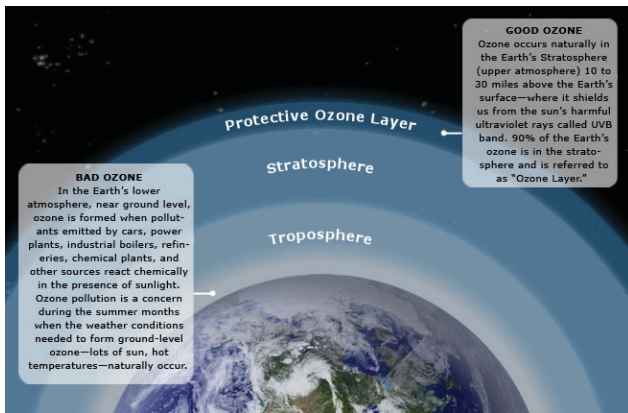
Recently, scientists at the **Aryabhata Research Institute of Observational Sciences (ARIES)**, Nainital (Uttarakhand) have evaluated the **near surface ozone** in the **Brahmaputra River Valley (BRV)**.

- ARIES is an **autonomous research institute under the Department of Science and Technology (DST)**, Government of India.

Key Points

- Scientists analysed the **variability of ozone (O₃) and other air pollutants over the BRV region**.
- They assessed **seasonal characteristics of ozone** to identify the emission source of ozone and its precursors, especially **methane (CH₄)** and **non-methane hydrocarbons (NMHCs)**.
 - NMHCs such as **ethane, ethene, propane, propene**, etc. play an important role in **controlling ozone concentrations**.
- They also studied the **relationships between the meteorological parameters** like air temperature, wind speed, solar radiation, soil temperature, rainfall, etc. and **ozone** in a tropical setting.
- **Findings:**
 - Scientists have found **relatively low concentration of ozone over BRV (Guwahati - Assam)** compared to the other urban locations in India.
 - The pattern of O₃ concentrations in the BRV indicated that it was **strongly influenced by local oxides of nitrogen (NOx) sources** with an **adjacent national highway** being the likely major source.
 - The **mean ventilation coefficient was greater than 6000 m²s** during the day in the pre-monsoon season indicating pollutant dispersion.

Note:



- The **ventilation coefficient**, which is the product of mixing depth and the average wind speed, is an atmospheric condition which gives an indication of the air quality and pollution potential i.e. the ability of the atmosphere to dilute and disperse the pollutants over a region.
- The **higher the coefficient**, the more efficiently the atmosphere is able to dispose of the pollutants and **better is the air quality**.
- **Low ventilation coefficients lead to poor dispersal of pollutants causing stagnation and poor air quality leading to possible pollution related hazards.**
- **High O₃ winter concentrations** were observed, likely driven by local biomass burning providing reactive **volatile organic compounds (VOCs)** that contributed to ozone formation.
 - VOCs are compounds that have a **high vapor pressure and low water solubility**.
 - Many VOCs are **human-made chemicals** that are used and produced in the manufacturing of paints, pharmaceuticals, and refrigerants.
 - VOCs are common **ground-water contaminants**.
- In the **pre-monsoon season**, an **impact of solar radiation (SR)** on the **photochemical formation of O₃** was observed.
 - **Tropospheric, or ground-level ozone**, is created by **chemical reactions between NO_x and VOC**.
 - It usually increases when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources **chemically react in the presence of sunlight**, impacting human health.

Net Present Value of Forests

Why in News

The Ministry of Mines has requested the Forest Advisory Committee (Ministry of Environment, Forest and Climate Change) to **exempt digging exploratory boreholes from Net Present Value (NPV)**.

- In 2018, the Ministry of Coal, the Ministry of Mines and the Ministry of Petroleum and Natural Gas had sought to be exempted from forest clearances for exploratory boreholes.

Key Points

- **Exploratory Boreholes:** An exploratory borehole is drilled for the purpose of identifying the characteristics, location, quantity and quality of a resource (coal, metal or petroleum).
 - It is a part of **prospecting a site** for future use for mining and extraction activities.
- **Net Present Value (NPV):** It is a mandatory one-time payment that a user has to make for diverting forestland for non-forest use, under the **Forest (Conservation) Act, 1980**.
 - **Calculation:** This is calculated on the basis of the services and ecological value of the forests.
 - It depends on the **location and nature of the forest and the type of industrial enterprise** that will replace a particular parcel of forest.
 - These payments go to the **Compensatory Afforestation Fund (CAF)** and are used for **afforestation and reforestation**.
 - The CAF is managed by the **Compensatory Afforestation Management and Planning Authority (CAMPA)**.
 - **Decided by:** The **Forest Advisory Committee** constituted by the Ministry of Environment, Forest and Climate Change (MoEF&CC) decides on whether forests can be diverted for projects and the NPV to be charged.
 - It is a **statutory body** constituted by the Forest (Conservation) Act 1980.
 - **Exemptions:** Some projects have been provided exemption from paying NPV like construction of **Schools, Hospitals, village tanks, laying down of optical fibre** etc. Projects like underground mining

Note:

and wind energy plants have been given a 50% exemption from NPV.

- **Background:** In the *N. Godavarman Thirumulpad v. Union of India case, 2008*, the **Supreme Court mandated** the payment of NPV.
 - The **Kanchan Gupta Committee** developed the concept of NPV after this case.
- **Argument by Ministry of Mines:** All areas of exploration are not converted into mining. Only about 1% of cases are converted to mining.
 - Payment of NPV at a present rate of 2% or 5% NPV of the total forest area in the lease area is one of the major challenges which leads to **delay in the exploration/ prospecting activities**.
- **Response from the Forest Advisory Committee :** While it was not possible to do away with NPV, it recommended that the MoEF&CC may consider charging NPV on a per borehole basis instead of the present practice of charging 2 or 5%.

Forest Conservation Act, 1980

- The Forest Conservation Act, 1980 stipulated that the central permission is necessary to practice sustainable agro-forestry in forest areas. Violation or lack of permit was treated as a **criminal offence**.
- It puts a restriction on the **use of forest-land for non-forest purposes**.
- It targeted to **limit deforestation, conserve biodiversity and save wildlife**.

Significance of Dead Coral Reef

Why in News

According to a recent study by researchers from University of Queensland (UQ), Australia, **more life can be supported by dead coral remains than live corals**.

- Dead coral reefs support **cryptic organisms** like hidden sea creatures, including fishes, snails, tiny crabs and worms, who hide under its rubble **to save themselves from predation**.



Key Points

- **Method:** The researchers designed three-dimensional-

printed coral stacks called **Rubble Biodiversity Samplers (RUBS)** to survey cryptic organisms.

Cryptic organisms

- These are organisms that are **morphologically indistinguishable** (identical in appearance) but are **genetically distinct**. Many species that are classified as single species but are found to be genetically different are called **cryptic species**.
- Examples of cryptic species include the **African elephant**. A 2001 study found the elephants were actually two genetically distinct, non-interbreeding species, the African bush elephant and the African elephant.

- The **3D-printed coral** mimicked surrounding reef rubble and invited unwitting reef organisms to be monitored.
- By sampling the RUBS' structures over time, the team were able to **identify changes in the cryptic population**.
- **Findings:** The researchers found the **missing link in the coral reef food webs**. This data fills important knowledge gaps, such as how small cryptic animals support coral reefs from the bottom of the food chain, all the way up to bigger predators.
 - This also helped to know the importance of **dead coral reef rubble** to the ocean ecosystem.
 - The RUBS technology provides a new opportunity for **reef management**, particularly for **reef education and awareness**.
- **Coral Reefs:**
 - Coral reefs are **large underwater structures composed of the skeletons of colonial marine invertebrates called coral**.
 - Corals extract **calcium carbonate** from seawater to create a hard, durable exoskeleton that protects their soft, sac-like bodies. These exoskeleton remains of millions of corals pile up with time to form coral reefs.
 - The corals have a **symbiotic relationship with an algae** called the **zooxanthellae**.
 - These algae live inside the coral polyp's body and provide the coral with **food**. The polyps, in turn, provide a **home and carbon dioxide** for the algae.
 - These algae are responsible for the variety of **colours** of corals.

Note:

- Coral reefs cover less than 1 % of the ocean floor but they are among the most productive and diverse ecosystems on Earth.
- They are referred to as “**the rainforests of the sea**” for their biodiversity,
- **Death of Coral Reefs:** When corals become stressed due to any changes, including pollution or global warming, they can expel algae and get **bleached**, meaning the ‘death’ of the coral reef.
 - There has been increasing **concerns of fast paced**

coral bleaching due to **emission of greenhouse gases** and **climate change**.

- A number of global initiatives are being taken to address the issues, like the **International Coral Reef Initiative**, the US Coral Reef Task Force etc.
- In india, the **Zoological Survey of India (ZSI)**, with help from Gujarat’s forest department, is attempting a process to restore coral reefs using “**biorock**” or **mineral accretion technology**.



Note:

History

Highlights

- *Inscription From Renati Chola Era*
- *Moplah Uprising*

Inscription From Renati Chola Era

Why in News

A rare inscription dating back to the Renati Chola era has been unearthed in a remote village of Kadapa district of Andhra Pradesh.

Key Points

- The inscription was found engraved on a dolomite slab and shale, which are part of a fragmentary pillar excavated from a farmer's field.
 - **Dolomite** is a sedimentary carbonate rock composed mostly of calcium magnesium carbonate.
 - **Shale** or mudstone is a fine-grained sedimentary rock that forms from the compaction of silt and clay-size mineral particles.
- The inscription was written in **archaic Telugu**. It was assigned to the **8th Century AD**, when the region was under the rule of **Chola Maharaja of Renadu**.
- **Text:** The inscription seems to throw light on the **record of a gift of six Marttus** (a measuring unit) of land to a **Brahmin Priest**. Some lines are indicative of the **priority given to morality in those days**.
- In July 2020, the **Archaeological Survey of India (ASI)** had found the exact location of Renati Cholas' capital in Kadapa district of Andhra Pradesh.
 - ASI deciphered two inscriptions of Renati Cholas belonging to the 7th century. The first inscription speaks of their capital **Erikal** in **Kamalapuram region in Kadapa**, while the other speaks about the **battle of Renati Cholas and Banas**.
- **Renati Cholas:**
 - The Telugu Cholas of Renadu (also called as Renati Cholas) ruled over Renadu region, the present day **Kadapa district**.

- The earliest of this family was **Nandivarman (500 AD)**.
- Renandu Cholas were the **feudatories of the Chola dynasty**.
- These kings claimed that they belonged to **Karikala Chola's dynasty**.
- They are said to be the **first kingdom to use Telugu in administration and inscriptions**, instead of Sanskrit.

Chola Dynasty

- The Cholas controlled the central and northern parts of Tamil Nadu from around the 8th-12th century AD.
- Their core area of the rule was the Kaveri delta, later known as Chola mandalam. Their capital was **Uraiyur** (near Tiruchirapalli town) and Puhar or Kaveripattinam was an alternative royal residence and chief port town.
- **Tiger** was their **emblem**.
- The Cholas also maintained an **efficient navy**.
- **King Karikala** was a famous king of the **Sangam Cholas**.
 - Many **Sangam** poems mention the **Battle of Venni where he defeated the confederacy of Cheras, Pandyas and eleven minor chieftains**.
 - Trade and commerce flourished during his reign.
 - He founded the **port city of Puhar (identical with Kaveripattinam)** and constructed 160 km of an embankment along the Kaveri River.
- Recently, the Department of Science and Technology (DST) has launched '**Project Digital Poompuhar**' to recreate the **Chola Dynasty port city (Poompuhar)** in Tamil Nadu.
- Recently, the consecration (Kumbhabhishekam) ceremony was held at the **Brihadisvara Temple** after 23 years in Thanjavur, Tamil Nadu. The temple was built by Chola emperor **Raja Raja Chola I (985-1014 AD)** between 1003 AD and 1010 AD.

Note:

Moplah Uprising

Why in News

Recently, the **Indian Council for Historical research (ICHR)** has constituted a three-member committee to review the entries in the book **Dictionary of Martyrs: India's Freedom Struggle 1857-1947**, which was released by the Prime Minister on 7th March 2019.

- The book contains an account of the **martyrs** from India's **First War of Independence in 1857**, to India's Independence in **1947**. The project for its compilation was commissioned by the Ministry of Culture to ICHR to commemorate the 150th anniversary of the **uprising of 1857**.

Key Points

- **Background:** A review report submitted to the Indian Council of Historical Research (ICHR) by one of its members in 2016 had recommended the delisting 387 names including victims of **Wagon Tragedy** and **Malabar /Moplah Rebellion** leaders **Ali Musliyar** and **Variamkunnath Ahmad Haji** from the **Dictionary of Martyrs**.
 - The **year 2021** will mark the **100th year anniversary of the Malabar rebellion of 1921**.
 - There has been recent controversy on a film being released on this issue.
- **Issues involved:** The review report of 2016 noted that "almost all the Moplah outrages were **communal**. They were against the Hindu society and done out of sheer intolerance."
 - The report also said that none of those who died in the Wagon Tragedy were freedom fighters of India as they hoisted the Khilafat flag and established Khilafat and Khilafat courts for a brief period.
 - Issue of forced conversion of Hindus into Islam by the leaders of the rebellion were also raised by many organizations.
 - However, many historians view this as a one of the **first cases of nationalist uprisings in Southern India**.

Malabar Rebellion or Moplah Uprising or Mapillah Revolt (1921)

- **Reasons:**
 - The trigger of the uprising came from the **Non-**

Cooperation Movement launched by the Congress in 1920 along with the **Khilafat agitation**.

- The **anti-British sentiment** fuelled by these agitations affected the **Muslim Mapillahs** (also known as **Moplahs**) of **south Malabar** region of **Kerala**.
- **New Tenancy Laws:** After the death of Tipu Sultan in 1799 in the **Fourth Anglo-Mysore War**, Malabar had come under British authority as part of the **Madras Presidency**.
 - The British had introduced **new tenancy laws** that tremendously **favoured the landlords** known as *Janmis* and instituted a **far more exploitative system for peasants** than before.
 - The new laws **deprived the peasants of all guaranteed rights to the land**, share in the produce they earlier got and in effect rendered them landless.

Khilafat Movement

- The Khilafat agitation was launched in India in **1919**.
- It was led by **Muhammad Ali and Shaukat Ali**.
- The demands of the movement were :
 - Control of **Turkish Caliphate** or Khalifa over islamic sacred places in the erstwhile Ottoman Empire.
 - The *Jazirat-ul-Arab* i.e. Arabia, Syria, Palestine, and Iraq remain under Muslim Sovereignty
 - Khalifa is left with sufficient territory to defend the Islamic faith.
- The movement was supported by the **Indian National Congress**.
- Mahatma Gandhi wanted to align it to the Non-Cooperation Movement to unite Hindus and Muslims against the British rule.

Indian Council of Historical Research

- ICHR is an **autonomous organization**, established under Societies Registration Act, 1860 in 1972.
- It is under the **Ministry of Education**.
- **Objectives**
 - To bring historians together for exchange of views.
 - To give a national direction to an objective and scientific writing of history.
 - To promote, accelerate and coordinate research in history and ensure its dissemination.
- The council also provides grants, assistance and fellowships for historical research.

Note:

- **The Communal Angle:** Most of the **landlords were Namboodiri Brahmins** while most of the tenants were **Mapillah Muslims**.
- **The Revolt:** Fuelled by the fiery speeches by Muslim religious leaders and anti-british sentiments, the Mopillahs launched a **violent rebellion**. Numerous **actions of violence were reported and series of persecutions** were committed both **against the British and the Hindu landlords**.
- **Support:** In the initial stages, the movement had the support of **Mahatma Gandhi** and other Indian

nationalist leaders, but as it turned violent they distanced themselves from it.

- **Collapse:** By the end of 1921, the rebellion was crushed by the British who had raised a special battalion, the **Malabar Special Force** for the riot.
- **Wagon Tragedy:** In November 1921, 67 Moplah prisoners were killed when they were being transported in a closed freight wagon from Tirur to the Central Prison in Podanur. They died of suffocation. This event is called the Wagon Tragedy.



Note:

Geography

Highlights

- Hurricane Nana
- Typhoon Maysak and Typhoon Haishen
- Yanomami Tribe of South America
- Methane Hydrates in Krishna-Godavari Basin

Hurricane Nana

Why in News

Atlantic Hurricane Nana has made landfall on the coast of **Belize**, a country located on the **northeast coast of Central America**.

- A few days back, **Hurricane Laura** made landfall in southwestern Louisiana (South Central USA).

Key Points

- **Tropical Cyclone:**
 - A hurricane is a **type of storm called a tropical cyclone**, which forms over tropical or subtropical waters.
 - A tropical cyclone is a **rotating low-pressure weather system** that has organised **thunderstorms but no fronts** (a boundary separating two air masses of different densities).
- **Speed of Winds:**
 - Tropical cyclones with maximum sustained surface **winds of less than 39 miles per hour (mph)** are called **tropical depressions**.
 - Those with maximum sustained winds of 39 mph or **higher are called tropical storms**.
 - When a storm's maximum sustained winds reach **74 mph**, it is called a **hurricane**.
- **Scaling of Wind Speed:**
 - The **Saffir-Simpson Hurricane Wind Scale** is a **1 to 5 rating**, or category, based on a hurricane's maximum sustained winds.



- The **higher the category**, the **greater the hurricane's** potential for property **damage**.
- **Formation:**
 - There needs to be **warm ocean water** and **moist, humid air** in the region.
 - When humid air is flowing upward at a zone of low pressure over warm ocean water, the water is released from the air as creating the **clouds of the storm**.
- **Features:**
 - It has a **low-pressure centre** and clouds spiralling towards the eyewall surrounding the "**eye**", the central part of the system where the weather is normally calm and free of clouds.
 - Its **diameter** is typically around **200 to 500 km** but can reach 1000 km.
 - The **winds** blow **counterclockwise** in the **Northern Hemisphere** and **clockwise** in the **Southern Hemisphere**.
 - A tropical cyclone brings very violent winds, torrential rain, high waves and, in some cases, very destructive storm surges and coastal flooding.
- **Different Names:**
 - **Hurricane:** Caribbean Sea, Gulf of Mexico, North Atlantic Ocean and the eastern and central North Pacific Ocean.
 - **Typhoon:** Western North Pacific.
 - **Cyclone:** Bay of Bengal and Arabian Sea.
 - **Willy-willies:** Australia.

Typhoon Maysak and Typhoon Haishen

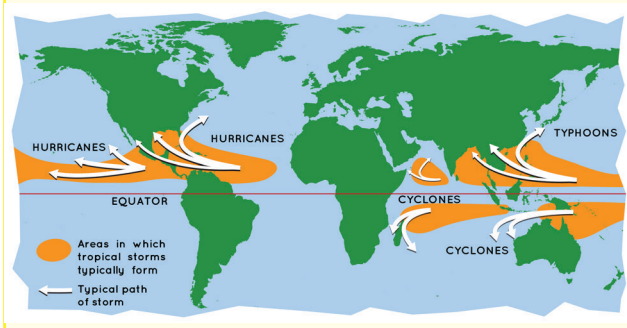
Why in News

Recently, **Korean Peninsula** and **Japan** were hit by two typhoons named **Maysak** and **Haishen**.

Note:

Typhoons

- Typhoons are a kind of **storm**. The storms, depending on where they occur, may be called **hurricanes, typhoons or cyclones**.
 - **Typhoons:** In the China Sea and Pacific Ocean.
 - **Hurricanes:** In the West Indian islands in the Caribbean Sea and Atlantic Ocean.
 - **Tornados:** In the Guinea lands of West Africa and southern USA.
 - **Willy-willies:** In north-western Australia and
 - **Tropical Cyclones:** In the Indian Ocean Region.
- The scientific name for all these kinds of storms is **tropical cyclones**.
 - **Tropical cyclones** are intense circular storms that originate over the warm tropical oceans with speed more than 119 kilometres per hour and heavy rains.



Key Points

- **Categorisation:** Both typhoons were categorised as a **Category 4 hurricane storm**.
 - A Category 4 storm has **wind speeds between 130-156 mph** and can uproot trees and bring down power lines.
 - Hurricanes are categorized on the **Saffir-Simpson Hurricane Wind Scale**, which rates them on a scale of 1 to 5 based on wind speed. Hurricanes that reach category **three or higher** are classified as **major hurricanes**.
- **Naming:** The **Maysak** typhoon takes its name from a **Cambodian word** for a type of **tree**. While, **Haishen** means **sea god** in **Chinese**.
 - Typhoon Maysak and Haishen are referred to as typhoon number 9 and 10 in Japan.
- **Background of Naming:**
 - In **Japan** the first typhoon to occur after January 1st of the year is called typhoon number 1.

- In the **USA**, hurricanes are referred to by English names.
- The intergovernmental organisation called the **Typhoon Committee** which has 14 members including Japan, USA and China uses Asian names for typhoons that are contributed by the member countries.
 - Haishen was a name recommended by China, while Maysak is a Cambodian name.

Yanomami Tribe of South America

Why in News

The Yanomami tribe has launched a global **campaign** to expel 20,000 gold miners from their land amid the coronavirus pandemic.

Key Points

- The Yanomami live in the **rainforests and mountains of northern Brazil and southern Venezuela**, and are, according to Survival International, the **largest relatively isolated tribe in South America**.



- Guarani, Kaingang, Pataxó, Hã Hã Hãe, Tupinambá, Yanomami, Tikuna and Akuntsu are popular tribes of the Amazon basin. **Amazon** is a river of South America and its basin is the **largest tropical rainforest in the world**.
- **Survival International** is an international human rights advocacy based in London (UK), which campaigns for the rights of indigenous and tribal peoples around the world.

Note:

- The tribe **numbers around 38,000** today, and its members **live in contiguous forested territory** of around 9.6 million hectares in Brazil and 8.2 million hectares in Venezuela.
- They live in large, circular houses called **yanos or shabonos**, some of which can hold up to 400 people.
- The Yanomami consider all people to be **equal**, and do not have a chief. Instead, all decisions are based on **consensus** after long discussions and debates.
- They are **speakers of a Xirianá language**.
- A Brazilian indigenous leader **Davi Kopenawa** who secured the land rights of the Yanomami people was awarded the **Right Livelihood Award-2019**, also known as **Sweden's alternative Nobel Prize**.

Methane Hydrates in Krishna-Godavari Basin

Why in News

Recently, a study on **biogenic methane hydrate in the Krishna-Godavari (KG) Basin** has been conducted by the researchers at the **Agharkar Research Institute (ARI)**, Pune.

- ARI is an autonomous institute of the Department of Science and Technology, Government of India.

Key Points

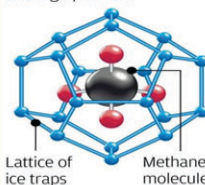
- **Biogenic Methane:** It is the **methane produced from the metabolic activities of methanogens**.
 - **Methanogens** are **microorganisms that produce methane as a metabolic by-product in hypoxic** (low levels of oxygen) conditions.
- The research team has identified the **methanogens** that produced the biogenic methane trapped as **methane hydrate**, which can be a significant source of energy.
 - The ARI team has documented a predominance of genus *Methanosarcina* in the KG basin, followed by a few other genera *Methanoculleus*, *Methanobacterium*.
- **Significance of the Study:**
 - Methane is a clean and economical fuel.
 - It is estimated that **one cubic meter** of methane hydrate contains **160-180 cubic meters** of methane.

Methane Hydrate

- Methane hydrate is a **crystalline solid** that consists of a methane molecule surrounded by a cage of interlocking water molecules.
 - It is formed when **hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures** such as in oceans.
- Methane hydrate is an "ice" that **only occurs naturally in subsurface deposits where temperature and pressure conditions are favourable** for its formation.
- **Difficult to Handle:** If the ice is removed from this temperature/pressure environment, it becomes unstable. For this reason, methane hydrate deposits are **difficult to study and handle**.
 - They **cannot be drilled and cored** for a study like other subsurface materials because as they are brought to the surface, the **pressure is reduced and the temperature rises**.
 - This causes the ice to melt and the methane to escape.
- **Several other names are commonly used** for methane hydrate. These include methane **clathrate**, hydromethane, methane ice, fire ice, natural gas hydrate, and gas hydrate.

Buried treasure

Methane hydrates exist under low temperature and high pressure

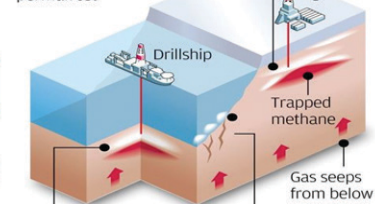


When brought to Earth's surface, one cubic metre of gas hydrate releases 164 cubic metres of gas

Sources: Geology.com, US Department of Energy

Land deposits

Below Arctic permafrost



Ocean deposits
Embedded in sediment on continental margins at depths of 500 metres or more

Hydrate mounds on sea floor where gas escapes from fault conduits

SCMP / Graphic News

- Most methane hydrate deposits **also contain small amounts of other hydrocarbon hydrates**. These include propane hydrate and ethane hydrate.

Krishna-Godavari Basin

- An **extensive deltaic plain** formed by **two large east coast rivers, Krishna and Godavari in the state of Andhra Pradesh** and the **adjoining areas of Bay of Bengal** in which these rivers discharge their water is known as **Krishna-Godavari Basin**.
- The KG Basin is a large basin of continental margin located on the east coast of India.

Note:

- Its land part covers an area of 15000 sq. km.
- The offshore part covers an area of 25,000 sq. km up to 1000 m **isobath**.

- **Isobath** is an **imaginary line** or a line on a map or chart that **connects all points having the same depth below a water surface**.

- The basin contains about 5 km thick sediments with several cycles of deposition, ranging in age from **Late Carboniferous** (306 million years ago) to **Pleistocene** (Great Ice Age).
- The **major geomorphological units** of the basin are **upland plains, coastal plains, recent flood and delta plains**.

- The site is known for the **D-6 block with the biggest natural gas reserves in India**. It was first discovered in 1983 by the **Oil and Natural Gas Corporation (ONGC)**.
- The basin is home to the **Olive Ridley Sea Turtle (IUCN Status: Vulnerable)**.

- This study revealed **maximum methanogenic diversity in the KG basin**, which is one of the prominent reasons to confirm it to be the extreme source of biogenic methane **in comparison to the Andaman and Mahanadi basins**.
- Even the lowest estimate of methane present in the methane hydrates in the KG Basin is **twice** that of **all fossil fuel reserves** available worldwide.



Note:

Art & Culture

Highlights

- Onam Festival
- Patrika Gate in Jaipur
- Rogan Art: Gujarat
- Hindi Diwas
- Promotion of Buddhist Sites

Onam Festival

Why in News

Recently, the festival **Onam** was celebrated across Kerala.

Key Points

- Onam is a **major harvest festival in Kerala** and is celebrated to **honour the home-coming of Asura king Mahabali** who brought peace and prosperity in Kerala.
- **Time:** It is one of the **three major festivals of Kerala**, celebrated during the month of **Chingam**, the first month in the **Malayalam calendar, Kollavarsham**.
 - The other two major festivals of the state are **Vishu** and **Thiruvathira**.
 - The **10-day harvest festival** begins on **Atham** (first day of Onam) and concludes on **Thiruvonam** (last day).
- **Celebration:** Onam is celebrated by making **Pookkalam** (the flower rangolis). Other rituals are also performed which includes, **Vallam Kali** (the boat races), **Pulikali** (the tiger dances), **Kummattikali** (mask dances), **Onathallu** (martial arts), among others.
 - The main attraction is the traditional **Onam sadhya** (grand feast).
- **God versus Demon Story:**
 - Battles between demons and gods are familiar to people everywhere. God emerging victorious over evil is an inseparable part of these battles.
 - However, **an exception** to this has been the battle **between Mahabali** (an asura or demon) and **Vamana** (an avatar of Vishnu), where Mahabali is revered as the **unchallenged King of Malayalis**.

- There are a few isolated places in India where demons are worshipped like some areas in Bihar and Bengal where **Mahishasur is the king of Asur tribes**.

- Historians see these fights between god and demon in the context of fights between brahmins and non-brahmins and tribals in the past.

Asur Tribe

- Asur is among the 9 **Particularly Vulnerable Tribal Groups** found in **Jharkhand** and are **Austro-Asiatic in origin**.
 - Besides Jharkhand, members of the tribe live in pockets of **Bihar, West Bengal**, and a few other states.
 - The 2011 Census put the **number of Asur** at 22,459 in Jharkhand and 4,129 in Bihar.
- The Asurs **claim to be descendants of Mahishasura**, the buffalo-demon **whom Goddess Durga** kills after a spirited fight lasting nine nights.
 - It's this mythology in mainstream Hinduism that's celebrated in the form of the nine-day-long **Durga Puja** but observed as '**Mahishasura Dasain**' among the Asurs, who hold a period of mourning during which they largely stay indoors.
- They celebrate festivals like **Sarhul, Karma, Dhanbuni, Kadelta, Rajj karma, Dasahara Karam**.

Patrika Gate in Jaipur

The recently inaugurated Patrika Gate in Jaipur (Rajasthan) has been **constructed by the Rajasthan Patrika Group of Publications (media conglomerate)**.

- It is an **iconic gate built as a monument** under **Mission Anupam** of the Jaipur Development Authority.

Note:

- The gate was constructed to commemorate **Jaipur's recent recognition as a UNESCO World Heritage Site.**



- In 2019, Jaipur became the **second city of the country after Ahmedabad** to get the recognition.
- India has **38 world heritage sites**, including **30 cultural** properties, **7 natural** properties and **1 mixed** site.

Rogan Art: Gujarat

Why in News

The centuries old tradition of Rogan art (**hand painting on cloth**), is facing an unprecedented challenge due to pandemic.

Key Points

➤ About:

- The word **Rogan** means **"Oil" in Persian**. With origins in Persia, it came to Kutch around 300 years ago.
- This rare craft is practised by a lone Muslim family, the Khatri of **Nirona Village, Gujarat.**



➤ Technique:

- Rogan is a form of textile painting which uses a rich, brightly coloured paint made from **castor oil and natural colors**. Castor is a crop commonly grown in the Kutch region of Gujarat and the artists source it from the local farmers.

➤ Patterns:

- The intricate motifs – geometric flowers, peacocks, the tree of life, etc. – are drawn from the **history and folk culture of the Kutch region.**

➤ Process:

- The castor paste is mixed with natural colours and then is drawn out into a fine 'thread' with a **metal stylus or 'Kalam'**. This metal rod never comes in contact with the fabric.

- The artisans then carefully twist the paint across the cloth into motifs and patterns.
- Next, the fabric is folded thereby **printing its mirror image**. The finer details are then added thus completing the Rogan painting.

➤ Recognition:

- The **'Tree of Life'** design is the most famous design in Rogan painting. It is inspired by traditional Persian designs. The Prime Minister of India, Narendra Modi, gifted Rogan paintings to the USA president, Barack Obama, during his visit to the USA in 2014.
- The nine artists from the Khatri family have six national awards and six State awards between them.

➤ Other Important Painting Styles of India:

- **Kangra Miniature Painting (Himachal Pradesh)**
- **Pattachitra Painting (Odisha)**
- **Thanjavur Painting (Tamil Nadu)**
- **Kishangarh School of Painting (Rajasthan):** The well-known painting **"Bani Thani"** belongs to this style of painting.
- **Kalamkari Painting (Andhra Pradesh)**
- **Madhubani Painting (Bihar)**
- **Warli Painting (Maharashtra)**

Hindi Diwas

Why in News

Every year, **14th September** is celebrated as Hindi Diwas in India.

Key Points

➤ National Hindi Day:

- **Hindi**, written in the **Devanagari script**, was adopted as the **official language** of the Republic of India on **14th September 1949.**
 - **Kaka Kalelkar**, Maithili Sharan Gupta, Hazari Prasad Dwivedi, Seth Govindadas played an important role in the contributions to make Hindi the official language.
- Besides Hindi, English is the other **official language** of India (**Article 343** of the Constitution).
- Hindi is also an **Eighth schedule language.**
- **Article 351** pertains to '**Directive for development of the Hindi language**'.

Note:

- **World Hindi Day:** It is observed on **10th January**, every year.
 - The Day commemorates the **anniversary of the first World Hindi Conference** held in **Nagpur on 10th January 1975**, which saw 122 delegates from 30 countries participating in it.
 - It was **first celebrated in 2006** by former Indian Prime Minister Dr Manmohan Singh with an aim to **promote the Hindi language across the world**.
 - The **World Hindi Secretariat** building was inaugurated in **Mauritius** in 2018.
- **About the Hindi Language:**
 - **Origin:**
 - Hindi got its name from the **Persian word Hind**, meaning 'land of the Indus River'.
 - Turkish invaders in the early **11th century** named the language of the region Hindi, 'language of the land of the Indus River'.
 - The **modern Devanagari script** came into existence in the **11th century**.
 - **Spoken in Countries Outside India:** Hindi is the **fifth most spoken language** among the total languages spoken in the world.
 - It is spoken in Pakistan, Nepal, Bangladesh, USA, UK, Germany, New Zealand, UAE, Uganda, Guyana, Suriname, Trinidad, Mauritius, and South Africa.
- **Government Initiatives to Promote Hindi:**
 - The **Central Hindi Directorate** was established in 1960 by the Government of India under the Ministry of Education.
 - **Indian Council for Cultural Relations (ICCR)** has established '**Hindi Chairs**' in various foreign universities/institutions abroad.
 - **LILA-Rajbhasha (Learn Indian Languages through Artificial Intelligence)** is a multimedia-based intelligent self-tutoring application for learning Hindi.
 - **E-Saral Hindi Vakya Kosh** and **E-Maha Shabdakosh Mobile App**, both initiatives of the Department of Official Language, aim to harness information technology for the growth of Hindi.
 - **Rajbhasha Gaurav Puraskar** and **Rajbhasha Kirti Puraskar** recognise contributions to Hindi.

Promotion of Buddhist Sites

Why in News

Recently, the Ministry of Tourism has undertaken development of **tourism-related** infrastructure and facilities at various **Buddhist sites** in the country under its flagship schemes of **Swadesh Darshan** and **PRASHAD**.

- India's Buddhist heritage is not only important from the tourism point of view but is also a binding factor that strengthens its relationship with Asian countries, in line with its **Act East Policy**.

Key Points

➤ Steps Taken to Promote Buddhist Sites:

- **Swadesh Darshan Scheme:** It has included Buddhist circuit and Spiritual circuit among its **13 thematic circuits** under which Buddhist sites are being promoted.
- **PRASHAD Scheme:** 30 projects for the **development of infrastructure** have also been undertaken under the PRASHAD Scheme.
- **Iconic Tourist Sites:** Buddhist sites at **Bodhgaya, Ajanta and Ellora** have been identified to be developed as **Iconic Tourist Sites** (aimed at enhancing India's soft power).
- **Buddhist Conclave:** **Buddhist Conclave** is organised every alternate year with the objective of promoting India as a Buddhist destination and major markets around the globe.
- **Diversity of Languages:** Signages have been installed in the **Chinese** language at Buddhist monuments in Uttar Pradesh and in the **Sinhala** language (the official language of Sri Lanka) at Sanchi monuments in Madhya Pradesh.
- **Swadesh Darshan Scheme:**
 - It is a **Central Sector Scheme**, launched in 2014-15 for integrated development of theme-based tourist circuits in the country.
 - Under the scheme, the Ministry of Tourism provides **Central Financial Assistance (CFA) to state/UT governments** for infrastructure development of circuits.
 - This scheme is envisioned to synergise with other schemes like **Swachh Bharat Abhiyan, Skill India, Make in India**, etc. with the idea of positioning the

Note:



drishti

tourism sector as a major engine for job creation, driving force for economic growth, building synergy with various sectors to enable tourism to realise its potential.

➤ **PRASHAD Scheme:**

- The **National Mission on Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD)** was launched by the Ministry of Tourism in the year 2014-15 with the objective of **holistic development of identified pilgrimage destinations**.
- The name of the scheme was changed from PRASAD to '**National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive (PRASHAD)**' in October 2017.
 - After the discontinuation of the **HRIDAY scheme of the Ministry of Housing and Urban Development**, the **development of heritage**

destinations was included in the PRASAD scheme, changing it to PRASHAD.

- **Implementation Agency:** The projects identified under this scheme shall be implemented through the identified agencies by the respective state/UT governments.
- **Objective:**
 - **Rejuvenation and spiritual augmentation** of important national/global pilgrimage and heritage sites.
 - Follow **community-based development** and create **awareness** among the local communities.
 - **Integrated tourism development** of heritage city, local arts, culture, handicrafts, cuisine, etc. to generate livelihood.
 - Strengthen the mechanism for **bridging the infrastructural gaps**.



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Note:



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Social Issues

Highlights

- *Kiran: Mental Health Rehabilitation Helpline*

- *Cooperative Labour in Odisha Tribes*

Kiran: Mental Health Rehabilitation Helpline

Why in News

The **Ministry of Social Justice and Empowerment** has launched a **24/7 toll-free helpline 'Kiran'** to provide **support to people facing anxiety**, stress, depression, suicidal thoughts and other mental health concerns.

- Earlier, the **Ministry of Education** had launched the **'Manodharpan'** initiative to provide psycho-social support and **counselling to students** for their mental health and well-being.

Key Points

- **About the Helpline:**
 - It will **cater to** - People in Distress, pandemic induced psychological issues and Mental Health Emergency.
 - It will **offer mental health rehabilitation services** with the objective of early screening, first-aid, psychological support, distress management, promoting positive behaviours, etc.
 - It will be **available in 13 languages** and has **660 clinical/rehabilitation psychologists** and 668 psychiatrists as volunteers.
 - It is being **coordinated** by the **National Institute for the Empowerment of Persons with Multiple Disabilities (NIEPMD)**, Chennai (Tamil Nadu) and **National Institute of Mental Health Rehabilitation (NIMHR)**, Sehore (Madhya Pradesh).
 - NIEPMD and NIMHR are under the **Ministry of Social Justice and Empowerment**.
 - Helpline operators had been sensitised **not to ask the caller for name or any identification details**.
- **Need:**
 - **Uncertainties due to Covid-19 pandemic:** From

the personal risk to be infected to what economic prospects might look like.

○ Mental Illness:

- There was a **shortage of qualified mental health professionals** while **10.6% of adults** and **7.3% of adolescents faced mental illness**, according to a **NIMHANS survey in 2015-2016**. Greater prevalence is amongst persons living in Urban Metros.
- **Treatment Gap ranges from 70% to 92%.**
- The treatment gap is the number of people with an illness, disease, or disorder who need treatment but do not get it (expressed as a percentage). It can be used as an outcome measure in health care.
- **Suicide was the leading cause of death in India in 2016** for those aged 15–39 years; 71.2% of the suicide deaths among women and 57.7% among men were in this age group.
- As per the **World Health Organisation (WHO)**, **mental health workforces in India (per 1,00,000 population)** include **psychiatrists (0.3)**, **nurses (0.12)**, **psychologists (0.07)** and **social workers (0.07)**.
- As per **WHO global health report 2019**, out of every four persons, one person will have some mental problem at a given point of time in their lives. **Mental illness is among the leading causes of disability and ill-health in the world.**

Cooperative Labour in Odisha Tribes

Why in News

The concept of labour cooperatives is popular in almost all tribal communities in Odisha including the **Dongria Kondh, Juanga, Lanjia Saura, Saura, Didayi, Paudi Bhuyan and Kandh**.

Note:

Key Points

- **Need:** Farming on the steep hill slopes **requires more labour which a single family cannot provide.** Therefore, they have evolved an indigenous system to engage the labour available in the community to accomplish the **farming tasks of all the families of the village.**
- **Benefit:** These cooperatives ensure all families of the community are ensured food and **no fields remain barren.** They also strengthen the **feeling of collective belongingness** among the members.
- **Cooperatives in Different Tribes:**
 - **Lanjia Saura:** All members are bound to participate in constructing terraces for farming on the slopes and designing and creating traditional irrigation systems, harnessing hill streams.
 - **Juanga community:** All villagers trek hills, clear trees and create crop fields. The village council ensures that all members contribute their labour.
 - The Juanga and Saura are **Munda ethnic groups** from Southern Odisha.
 - They are **Austroasiatic tribes** i.e. they are believed to be **part of the first wave of migration out of Africa** about 60,000 years ago.
 - **Dongria Kondh:** This tribe practices **at least 10 types of cooperative labour sharing within the community.**

Dongria Kondh

- **About:** They derive their name from dongar, meaning 'hill' and are the member of **Khond Tribe**
- **Status:** They are a **Particularly Vulnerable Tribal Group.**
- **Habitation:** They reside in the Niyamgiri hill range of Odisha, around 4,500 ft above sea level.
- **Language:** Kui language (Oral only, not written)
- **Beliefs:** They worship **Niyam Raja**, the god of the Niyamgiri Forests.
- **Occupation:** They sustain themselves from the resources of the Niyamgiri forests, practising horticulture and shifting cultivation
- **Issues:** They are currently facing displacement due to the **Bauxite mining in the Niyamgiri** hills.
 - They are also facing **severe health problems** because of **dust coming from** the red mud pond (waste generated by the refinery) **site.**

Tribes in Odisha

- Odisha is home to 62 tribal communities — the **largest diverse groups of tribal population in India.**
 - 13 of them are PVTGs— **Bonda, Birhor, Chuktia Bhunjia, Didayi, Dungaria Kandha, Hill Kharia, Juang, Kutia Kondh, Lanjia Saora, Lodha, Mankirdia, Paudi Bhuyan and Saora.**
- Tribal populations are found in the **entire seven districts of Kandhamal, Mayurbhanj, Sundargarh, Nabarangpur, Koraput, Malkangiri and Rayagada,** and in parts of 6 other districts.



Note:

Security

Highlights

• *Special Frontier Force: Vikas Battalion*

• *Administration of Assam Rifles*

Special Frontier Force: Vikas Battalion

Why in News

The **Special Frontier Force (SFF)** unit, referred to as **Vikas Battalion**, has been said to be instrumental in preventing **Chinese occupation on the Line of Actual Control (LAC)** in Ladakh.

Key Points

- **History:** SFF was established on 14th November 1962 in the immediate aftermath of the **1962 Sino-India war**.
 - After the 1962 war, the **Central Intelligence agency (CIA) and Intelligence Bureau (IB)** decided to train a 5,000-strong force of Tibetans for possible missions against China.
 - The CIA had been involved in a covert programme to train Tibetan guerrillas to fight the Chinese forces in Tibet since the 1950s.
 - The CIA is a civilian foreign intelligence service of the federal government of the USA.
 - During the **1950s**, CIA and IB **established Mustang Base in Mustang in Nepal**, which trained Tibetans in guerilla warfare. The Mustang rebels **brought the 14th Dalai Lama to India** during the **1959 Tibetan Uprising**.
 - The recruits initially consisted of Tibetan refugees hailing from the Khampa community and now it has a mixture of **Tibetans and Gorkhas**.
 - It was previously named **Establishment-22** as it was raised by **Major General Sujan Singh Uban**, an Artillery officer who had commanded 22 Mountain Regiment.
- **About:** SFF falls under the purview of the **Cabinet Secretariat** and is headed by an **Inspector General** who is an **Army officer of the rank of Major General**.

- The units that comprise the SFF are known as **Vikas battalions**.
- They are **highly trained special forces personnel** who can undertake a variety of tasks which would normally be performed by any special forces unit.
- **Women soldiers**, too, form a part of SFF units and perform specialised tasks.
- **Link with Army:** The SFF units are **not part of the Army** but they function **under the operational control of the Army**.
 - The units have their **own rank structures** which have equivalent status with Army ranks.
 - They have their **own training establishment** where the recruits to SFF are imparted special forces training.
- **Major Operations:** **Operation Eagle** (India-Pakistan war in 1971), **Operation Bluestar** (clearing Amritsar's Golden Temple in 1984), **Operation Meghdoot** (securing the **Siachen glacier** in 1984) and **Operation Vijay** (war with Pakistan at Kargil in 1999) and many counter-insurgency operations in the country.
 - **Operation Eagle:** In 1971, the SFF operated in the **Chittagong hill tracts in East Pakistan** (later Bangladesh) to neutralise Pakistan Army positions and help the Indian Army advance ahead.
- **Criticism:** SFF was involved in a **joint operation with the CIA in 1965** to place a **nuclear-powered device on Mount Nanda Devi (Uttarakhand)** to **monitor China's nuclear weapons tests**. However, the mission had to be **abandoned** and the nuclear-powered device was lost on the mountain.
 - The **loss of the nuclear-powered sensor** was reported by Indian media outlets in 1978, prompting a response from the then Prime Minister on Indian involvement in the mission.

Note:



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Administration of Assam Rifles

Why in News

Recently, the Delhi High Court has directed the Centre to take a decision on the issue of **bringing Assam Rifles out of the dual control of the Ministry of Home Affairs (MHA) and the Ministry of Defence (MoD)**.

Key Points

➤ Background:

- A petition was filed by the **Assam Rifles Ex-Servicemen Welfare Association** seeking direction to the government for **placing Assam Rifles under one control**, preferably under the MoD.

➤ Issue:

- The **administrative control of the Assam Rifles is with the MHA** and the **operational control of Assam Rifles rests with the MoD**.
 - This duality of administrative control and operational control leads to **problems of coordination**.
- The **objectives and functions** of Assam Rifles are that of military and paramilitary force and considering it anything less than that **is arbitrary, unreasonable and in violation of the rights of Assam Rifles personnel**.
- There is a **disparity in the pay scale** between the Assam Rifles personnel operating alongside the Army on similar duties.

➤ Delhi High Court's Direction:

- The issue has been **pending for nearly three years** and now the **Centre should resolve it within 12 weeks with cooperation** from all the stakeholders.
- It noted that "The matter **involves servicemen/ex-servicemen and whose interest is not only**

to be paramount but is proclaimed from various platforms of the Government, to be paramount".

➤ Centre's Stand:

- The in-principle decision, that Assam Rifles like other **Central Armed Police Forces (CAPFs)** **should come under the exclusive control of MHA**, appears to have already been taken but the final decision has not been made official yet.
- The Centre has asked for a period of **further six months** as the process has been **affected by the Covid-19 pandemic**.

Assam Rifles

- Assam Rifles is a **Central Paramilitary Force** under the **Central Armed Police Forces**.
- It came into being in **1835**, as a **militia called the 'Cachar Levy'**, to primarily **protect British Tea estates and their settlements** against tribal raids.
- It significantly **contributed to the opening of Assam region to administration and commerce** and over time it came to be known as the "**right arm of the civil and left arm of the military**".
- **Major role post-Independence:**
 - Conventional combat role during the **Sino-India War 1962**.
 - Operations in a foreign land as part of the **Indian Peace Keeping Force to Sri Lanka** in 1987 (**Operation Pawan**).
 - Peacekeeping role in the North-Eastern areas of India.
- In November 2019, **MHA proposed to merge it** with the **Indo-Tibetan Border Police (ITBP)**.
 - ITBP is a specialized mountain force, raised in October 1962.
 - It is deployed on border guarding duties from **Karakoram Pass in Ladakh to Jachep La in Arunachal Pradesh** covering 3488 km of Indo-China Border.



Note:

Miscellaneous

Highlights

- Indira Gandhi Peace Prize 2019

- Real Mango: An Illegal Software

Indira Gandhi Peace Prize 2019

Why in News

Sir David Attenborough has been conferred with Indira Gandhi Peace Prize for 2019 at a virtual ceremony.

Key Points

- **Indira Gandhi Peace Prize:**
 - The **Indira Gandhi Prize for Peace, Disarmament and Development** is an annual **prestigious award** named after former prime minister **Indira Gandhi**.
 - It is conferred every year by **Indira Gandhi Memorial Trust** since **1986**.
 - It consists of a **citation** and a monetary award of **Rs. 25 lakh**.
 - The award recognizes creative efforts by **individuals/ organizations** working towards:
 - Creating new international economic order,
 - Promoting international peace & development,
 - Ensuring that scientific discoveries are used for the larger good of humanity and enlarging the scope of freedom.
- **David Attenborough:**
 - Sir David is an **English broadcaster and natural historian**.
 - He is best known for writing and presenting the BBC Natural History Unit.
 - The nine **natural history documentary series** forming the Life collection that together constitute a **comprehensive survey of animal and plant life** on Earth.
 - He has worked to make aware about the need to- **preserve and protect biodiversity** of the planet, to live in a sustainable and harmonious way with all life.

➤ Notable Recipients of Indira Gandhi Peace Prize:

- Parliamentarians for Global Action (1986)
- **UNICEF** (1989)
- **M S Swaminathan** (1999)
- Kofi Annan (2003)
- **Indian Space Research Organization** (ISRO) (2014)
- **UN High Commission for Refugees** (UNHRC) (2015)
- Centre for Science and Environment (2018)

Real Mango: An Illegal Software

Why in News

In a nationwide investigation, **Railway Protection Force (RPF)** has disrupted the operation of **illegal software** called "**Real Mango**" - used for cornering **confirmed Railway reservation**.

Key Points

- **About:** Real Mango software is an illegal software developed for booking Tatkal tickets.
- **Working:**
 - Real mango software **bypasses** captcha.
 - It **synchronises bank OTP** with help of a mobile app and feeds it to the requisite form automatically.
 - The **software auto-fills** the passenger details and payment details in the forms.

CAPTCHA

- CAPTCHA stands for **Completely Automated Public Turing test to tell Computers and Humans Apart**.
- CAPTCHA determines whether the user is real or a spam robot.
- CAPTCHA uses several human validation methods including math or general knowledge questions, visual puzzles and even chess puzzles.

Note:

- The software logs in to the IRCTC website through **multiple IRCTC Ids.**
- Following these steps multiple tickets can be booked. And it leads to swift online tickets booking by agents whereas common people may not get the tickets booked on their own. This creates the

possibility of **ticket hoarding and black marketing of tickets.**

- **Significance:** The information supplied by RPF will help the **Centre for Railway Information Systems (CRIS)** to strengthen security features in the **Passenger Reservation System (PRS).**



Note:

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Summary

Key Points

Details

Summary

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