



From the Desk of the Director

Dear Students

The preparation of current affairs magazine is an evolutionary process as its nature and content keeps changing according to the demands of Civil Service Exam. As you are aware about the importance of current affairs for the prelims as well as mains exam, our aim is to follow an **integrated approach** covering all stages of examination from prelims to interview. Keeping these things in mind, we, at Vajiram and Ravi Institute, are always in the process of evolving our self so as to help aspirants counter the challenges put forward by UPSC.

In fulfillment of our objective and commitment towards the students, we have introduced some changes in our current affairs magazine. The CA Magazines, now with the name of “**The Recitals**”, will have four sections. These are:

1. **Feature Article:** As you are aware of the fact that civil service mains exam has become quite exhaustive and analytical, especially since 2013 after the change in syllabus, we have decided to focus on 2-3 topics every month that will provide an insight into the issue so as to help students understand the core of the issue. This will help in Essay writing as well as Mains Exam.
2. **Mains Q&A:** New students quite often struggle to find out that in what way the given topic is useful for them and in what form questions can be framed from the article. To help those students, we at Vajiram and Ravi have designed an innovative way to teach current affairs. Now, we will cover the current issues through questions and answers so as to make it more targeted towards exam. This will not just provide the information and analysis on current issues but will also help in learning the art of answer writing. Further the related information on the topics on which questions have been framed but that is outside the purview of answer will be given in the Box as ‘**Extra Mile**’.
3. **Prelims Q&A:** This section will contain prelims based MCQs that will test your diligence while reading the current issues. These MCQs will be of UPSC standard and will contain detailed explanation. Students are advised to attempt these MCQs honestly and read the Explanation carefully. The idea is to also provide students with a question bank of around 600 current affairs MCQs (50 Qs × 12 months = 600 Qs) just before their prelims examination, which will act as revision on issues spanning over the entire year.
4. **Bridging Gaps:** This section will contain miscellaneous topics which has not been covered through Q&A. That is why it is called Bridging Gaps, meaning the left-over topics.

So, the new magazine is a complete overhaul of what we have been doing for so long. We hope that the new beginning will be to the liking of students.

Thanks

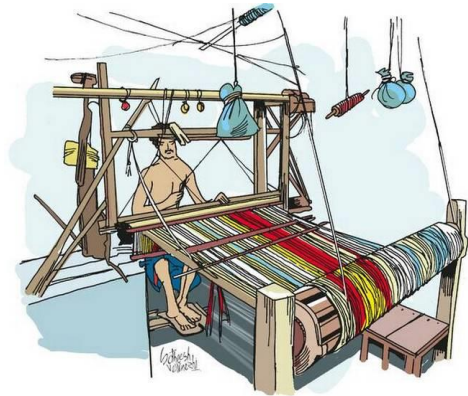
Best Wishes

Handloom Industry In India

The Indian handloom industry is one of the oldest and largest cottage industries in India with a long tradition of excellent craftsmanship, representing and preserving the vibrant Indian culture. The activities are spread across the length and breadth of the country and involve transfer of skills from one generation to the next. This sets the industry apart from the other industries as can be seen from the unique offerings of handmade products from each state in India.

Definition

- Different definitions for the word handloom have evolved since the Handloom (Reservation and Articles for Production) Act, 1985, where 'handloom' meant "any loom other than power loom". A loom is a device used to weave cloth.
- In 2012, a new definition was proposed, according to which, handloom means any loom other than the power loom and includes any hybrid loom on which at least one process of weaving require human effort.



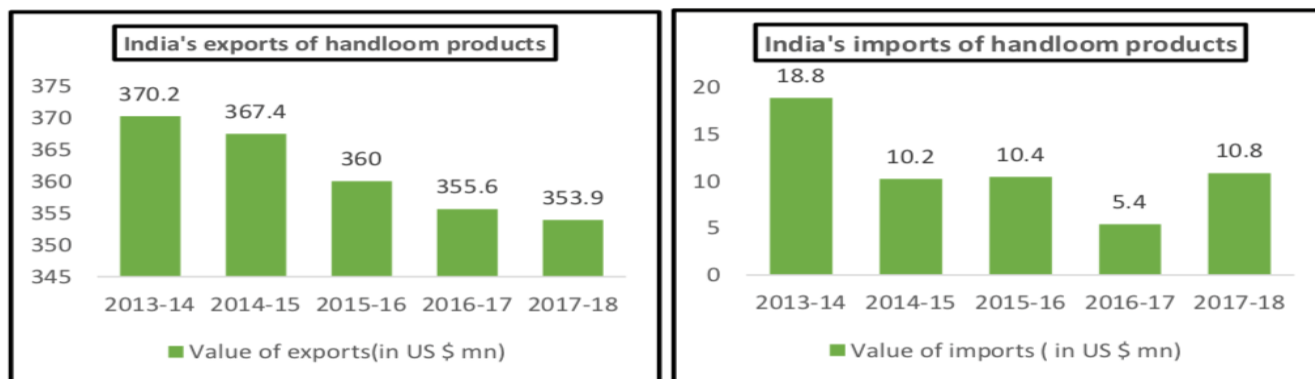
Handloom Day

- The Swadeshi Movement started in India on 7th August, 1905, to boycott foreign products and use products made in India. To commemorate this day, it was decided in 2015 to observe August 7 as National Handloom Day every year.
- The day is celebrated to honour the handloom community, and recognize their contribution towards India's socio-economic development. The aim is to protect this heritage and to empower the workers in this sector.

Features Of Handloom Industry

- The operations of this industry are primarily household based. The sector is one of the largest, albeit unorganized, economic activity in the country. It provides employment directly and indirectly to over **43.31 lakh weavers** from rural and semi-urban areas, with as much as 77% of the adult weavers and allied workers in the sector being women.
- Strengths of the sector include ***minimal use of capital and power, environment-friendly production processes*** and ***flexibility to innovate*** and offer products as per market requirements.
- As per the Third Handloom Census conducted in 2009-10, nearly 27.83 lakh handloom households are engaged in weaving and allied activities, out of which ***87% are in rural areas and the remaining 13% are in urban areas.***
- A vast majority of the handlooms are located in the **North Eastern Region (NER) of India**, which accounts for nearly 65.2% of the total handlooms that are operational in the country. NER accounts for 49.8% of the total weavers in the country with Assam leading the share of handloom workers.

- The exports of the Indian handloom products are valued at US\$ 353.9 million in 2017-18 making India the second largest exporter of such products in the world.
- In last five years, India has exported over US\$ 1.8 billion worth of handloom products. Over 125 countries globally purchase handloom products from India. Imports on the other hand are estimated at around US\$ 10.8 million in 2017-18.
- There are various popular handloom products which have Geographical Indication (GI) viz. Muga silk (Assam), Bhagalpur Silk (Bihar), Patan Patola (Gujarat), Chanderi Sarees (Madhya Pradesh), Paithani sarees and Fabrics (Maharashtra), Kancheepuram silk (Tamil Nadu), Mysore silk (Karnataka).



Challenges Faced By Handloom Sector

The strength of the handloom sector lies in its uniqueness, flexibility of production, openness to innovations, adaptability to buyers' requirement and wealth of its tradition. However, the sector is still facing multifarious problems and challenges which are stifling its growth and impacting its sustainability.

A. Shortage Of Inputs And Problem Of Working Capital

- The high costs of inputs such as yarn, cotton, silk, art silk, chemicals & dyes and zari and irregular supply of working capital affects the operations and continuity of the industry thereby leading to a decline in the production of handloom products.
- The major raw materials have low yield which creates hurdles in production planning and aggravates the problem due to lack of economies of scale

B. Lack of Credit

- Shortage of credit facilities and expensive cost of obtaining credit is a key concern for handloom sector. Also, lack of financial literacy increases credit related challenges among the weavers.
- As per the Third Handloom Census, 44.6% of weavers relied on master weaver for the provision of credit and nearly 13.4% depended on the money lenders. Only 14.8% of handloom weavers had access to institutionalized sources of credit.
- Also, majority of the weavers find it difficult to meet their credit needs on reasonable terms as they are unable to satisfactorily provide adequate security to banks and other financial institutions. This limits their ability to upgrade their looms or buy new looms.

C. Marketing Issues

- Some of the concerns regarding the low volume of sale of finished handloom products stem from the fact that weavers lack awareness and information on customer preferences.
- Customers are unable to distinguish between the products produced from the power loom sector versus those produced from the handlooms and promotional campaigns are not sustained over time to promote the products

D. Greater Competition From Power Looms And Mill Sector

- The modernization of the textile industry with increased usage of sophisticated technology in production of cloth has led to serious threat to the traditional handloom industry.
- Diversified product ranges, low prices, high quality, superior and standardized products offered by modern textile industry are in greater demand by the consumers relative to the expensive handloom clothing.

E. Technological Backwardness

- The looms deployed in the production of handloom products are old, worn out and unproductive which require more labour to operate.
- This increases the price of the final product and renders the industry uncompetitive relative to its power loom counterparts.

F. Reduction In Number Of Weavers

- It has been observed that the younger generation is not interested to take this profession due to low wages and irregular sales of the product. This is a huge concern as the nature of the industry is such that it involves transfer of skills from elder generation to the younger generation.
- As per the Third Handloom Census, the proportion of households of the opinion that their children would take up the handloom activity as their profession were only 25.3%.
- The reduction in number of workers in search for other occupations would raise difficulty in preservation of the art and conservation of the culture.

G. Poor Policy Dissemination

- Major institutions providing input — credit, research, technology, management and market development — are centralised and, hence, unable to reach the dispersed home-based weavers.
- Further, inadequate database on the handlooms industry serves as a major drawback for policy planning, formation and review.

H. Other Issues

Unorganized nature of industry, inconvenient working conditions, limited research and training, lack of information on government schemes amongst weavers are some of the other factors which are detrimental to the growth of the industry.

Various Schemes Promoting Handloom Sector

The Ministry of Textiles is implementing the following schemes to revive, promote and develop the handloom sector in various parts of the country:

1. Handloom Weavers' Comprehensive Welfare Scheme

- Handloom Weavers Comprehensive Welfare Scheme (HWCWS) is providing life, accidental and disability insurance coverage to handloom weavers/workers.
- The insurance is provided under various components like Pradhan Mantri Jivan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Converged Mahatma Gandhi Bunkar Bima Yojana (MGBBY).

2. Comprehensive Handloom Cluster Development Scheme

- The Comprehensive Handloom Cluster Development Scheme (CHCDS) is implemented for development of Mega Handloom Clusters covering at least 15000 to 25,000 handlooms.
- Under the scheme the government provides financial assistance for raw material, product development, skill up-gradation, technology up-gradation, value addition etc.
- The range of financial assistance is between Rs. 40 crore to Rs. 70 crore in a period of 5 years.

3. Yarn Supply Scheme

- Yarn Supply Scheme is implemented to provide yarn at cheaper prices. The scheme is implemented through National Handloom Development Corporation.
- Under the Scheme freight is reimbursed and it provides 10% price subsidy on raw materials like, cotton, domestic silk, woollen yarn etc.

4. National Handloom Development Programme (NHDP)

The following initiatives are a part of the National Handloom Development Programme.

i) Weavers' MUDRA Scheme:

Under the Weavers' Mudra Scheme, credit at concessional interest rate of 6% is provided to the handloom weavers.

ii) Hathkargha Samvardhan Sahayata (HSS)

- Hathkargha Samvardhan Sahayata (HSS) was introduced with an objective to provide looms/accessories to the weavers to increase their earnings through improved productivity and quality of the handloom products.
- Under the scheme, 90% of the cost of loom/accessory is paid by the Union Government, while remaining 10% is paid by the beneficiary(weaver).

iii) Handloom Marketing Assistance

- It provides a marketing platform to the handloom agencies/weavers to sell their products directly to the consumers.
- It also provides financial assistance to the States/eligible handloom agencies for organising marketing events in domestic as well as overseas markets.

iv) India Handloom Brand

- The 'India Handloom' Brand was launched for branding of high quality handloom products. It promotes production of high quality handloom products of genuine traditional designs, with low impact on the environment.

- Under this, initiatives with various leading brands have been undertaken to develop a separate range of handloom garments in their brand.

Education Of Handloom Weavers And Their Children

- Ministry of Textiles has signed Memorandums of Understanding with Indira Gandhi National Open University (IGNOU) and National Institute of Open Schooling (NIOS) to provide educational facilities for the weavers and their families.
- NIOS offers Secondary and Senior Secondary level education with specialized subjects on design, marketing, business development, etc. through distance learning mode for handloom weavers.
- IGNOU offers educational programs to handloom weavers and their children for career development.
- Ministry of Textiles is providing reimbursement of 75% of the fee towards admission to NIOS/IGNOU courses, in case of SC, ST, BPL, and women learners belonging to handloom weavers' families.

Institutional Support

A. National Handloom Development Corporation (NHDC)

- NHDC was set up in 1983, as a public sector undertaking under the ambit of Ministry of Textiles. Its vision is to achieve the objectives of faster more inclusive and sustainable growth of Handloom sector.
- It coordinates actions covering the procurement and supply of inputs at reasonable prices, augmenting the marketing efforts of state handloom agencies and initiating developmental activities for upgrading the technology in the handloom sector and improving productivity.

B. Handloom Export Promotion Council (HEPC)

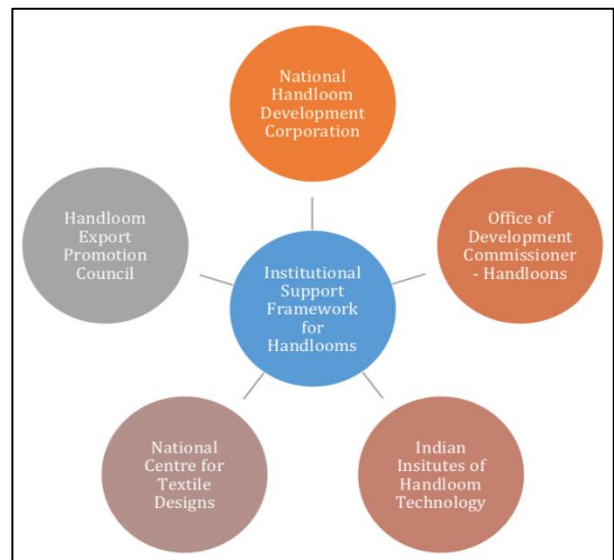
- HEPC is a nodal agency constituted (in 1965) under the Ministry of Textiles, to promote the exports of all handloom products.
- HEPC is incorporated as a not for profit company under the Companies Act, 1956.
- The basic objective of HEPC is to provide support and guidance to the Indian handloom exporters and international buyers for trade promotion and international marketing.

C. National Centre for Textile Design (NCTD)

National Centre for Textile Design, under the Ministry of Textiles is involved in making innovative, ethnic and contemporary designs available to the textile sector. Information on trend and forecast related to the textiles sector is also given.

D. Indian Institutes of Handloom Technology (IIHTs)

- Indian Institutes of Handloom Technology are government run public institutes of higher education in the handloom sector. There are six institutes in central sector and four in State sector.



- Their aim is to cater to high quality technical and managerial manpower for the handloom / textile industry and to undertake Research and Development programmes for its sustainable growth and maintain close liaison with the industry so as to enable it to face the changing technological and environmental global changes

Conclusion

- Despite the declining trend in value of exports and imports in last few years, India has been a net exporter of handloom products. Clearly, there is a lot of potential for foreign exchange earnings from the handloom sector.
- The development of the wealth of traditional skills and capabilities by encouraging capacity and skill building coupled with design, quality and marketing intervention would not only ensure sustainability of the sector but also help in reviving the waning skills while fostering exports.
- Given the employment intensive nature of this sector, its potential to create jobs, earn foreign exchange for the country and be a key source of showcasing India's soft power, this sector needs to be nurtured well through all possible support.

India and Indo-Pacific

India is **bringing together its Indo-Pacific and ASEAN policies under a single unit** with the Ministry of External Affairs. With this, India will be creating a new vertical, which includes a new **Oceania territorial division** with Australia at its center, as well as including the Indo-Pacific and ASEAN divisions within it.

Rationale Behind This Step

- **Keeping China in focus**, this move is intended to **align policies in the region** stretching from western Pacific (with the Pacific islands) to the Andaman Sea and the very area China regards as its strategic backyard.
- By focusing administrative and diplomatic attention, India wants to signal its own focus on the region. It signals **a meshing of Indian interests with key blocks and nations** in the Indo-Pacific.
- The timing of the decision in the current context of heightened military tensions with China in Ladakh is also significant.

Growing Importance of Australia

- The **Oceania division will include Australia, New Zealand and Pacific islands**, with a greater prominence given to Australia within MEA. Within the MEA structure, Australia was part of the '**South division**'.
- Now, with the rejig, Australia **gets bumped up to be handled by an additional secretary, rather than a joint secretary**.

- This is because **Australia is playing a larger role in India's outreach to the region**. Also, both the countries are together in Quad.

Indo-Pacific region: As Viewed by India

- The term Indo-Pacific achieved operational clarity after the **Indian vision** was presented by Prime Minister Narendra Modi in his keynote address at the **Shangri-La Dialogue in June 2018**.
- According to this speech, the **geography of the Indo-Pacific** stretches from the **eastern coast of Africa to Oceania** (from the shores of Africa to that of the Americas) **which also includes in its fold the Pacific Island countries**.
- It should be noted that India looks towards this region from **diplomatic perspective not from military perspective**.
- It is evident from the fact that, unlike USA, **India did not create a military or naval command dealing with Indo-Pacific region**. Rather, it created an Indo-Pacific wing under the Ministry of External Affairs.

Significance Of This Region

A. Strategic Significance

- It has become a **theatre of Great Power competition and rivalry**. Traditional rivalries over maritime territory, sovereignty and resources have intensified which has larger bearing on peace and stability of the world.
- Through its **rebalance strategy towards the Indo-Pacific** region, US is trying to protect and promote American national interests.
- **Rise of China and its assertive foreign policy** has created geostrategic flux in the region.

B. Economic Significance

- It is **rich in natural resources**, especially hydrocarbons which fuel the industrial engines of the world's economies.
- In recent years, with the global economic power shift, it has swiftly emerged as a **centre of international trade and investments**.
- It **embodies a large market** which is defined by nearly half of the world's population.
- **Labour, capital and consumer goods** are also increasingly flowing from Asia to other regions of the world. As a matter of fact, the region constitutes the **engine of global economic growth and development**.

C. Security Aspect

- Regional peace and stability, **freedom of navigation** and **maritime security** have become very important as this region **consists of many of the world's vital choke points** for global commerce, including **the Straits of Malacca** which is very critical for the growth of world economy.
- **Terrorism, piracy, drug trafficking and climate change** have thrown new challenges for this region.

- The region has been termed by many security analysts as the **most militarized area in the world**.

Mechanisms Through Which India Is Pursuing Its Indo-Pacific Strategy:

- India's **Act East policy** remains the **bedrock of the national Indo-Pacific vision**. India has been an active participant in mechanisms like:
 - The Indian Ocean Rim Association (IORA), ASEAN-led frameworks like the East Asia Summit, ASEAN Defence Ministers' Meeting Plus,
 - ASEAN Regional Forum, Mekong-Ganga Economic Corridor
 - Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
- India has also been convening the **Indian Ocean Naval Symposium**, in which the navies of the Indian Ocean Region (IOR) participate.
- India has boosted its engagements with **Australia and New Zealand** and has deepened its cooperation with **the Republic of Korea**.
- Through the Forum for **India-Pacific Islands Cooperation**, India is stepping up its interactions with the Pacific Island countries.
- India's growing partnership with Africa can be seen through the convening of mechanisms like the **India-Africa Forum Summits**.
- India's multi-layered engagement with China as well as strategic partnership with Russia underlines its commitment to ensuring a stable, open, secure, inclusive and prosperous Indo-Pacific.
- In April 2019, India has set up a new **Indo-Pacific division in the foreign office** to deal with region's policy.

India-France-Australia Trilateral Dialogue

- The **first India-France-Australia Trilateral Dialogue** was held virtually in September 2020.
- These three countries came together for the first time under a trilateral framework with focus on **enhancing cooperation in the Indo-Pacific**.

Factors Which Led To A Rise In India's Role And Influence In The Indo-Pacific Region

- As India's **economy grows**, its influence in the region is also seeing a commensurate rise.
- India has set up **additional naval bases** recently in its strategically-located Andaman and Nicobar Islands, which lie very close to the Straits of Malacca.
- New Delhi's strategic relations with countries like the US and Japan are improving rapidly.
- Concerns over **Beijing's growing assertiveness** in the region have brought together India, Japan, Australia and the US together in the '**Quad**'.
- New Delhi's **relations with regional groupings** like the Association of South East Asian Nations (ASEAN) are also improving.

Challenges

- **Increased terrorism** in South Asia might bog down New Delhi in the subcontinent.
- **Many connectivity initiatives**, such as India-Myanmar-Thailand trilateral highway and the Indian-funded Kaladan Multi-Modal Transport Corridor Project in Myanmar, are **running behind schedule**.
- India faces **huge domestic challenges** although it has become the “fastest growing major economy in the world”.
- In addition, New Delhi runs a **huge trade deficit** with countries like China.
- The **integration of the Quadrilateral initiative**, which was revived in 2017, with its larger Indo-Pacific approach is a major challenge faced by India.
- There are **differences between India’s vision and the U.S.’s strategy** for the Indo-Pacific.
- Countries like **China and Russia view the Indo-Pacific with suspicion**. In this case, it will be challenging to maintain a balance between the interests of all stakeholders.

Conclusion

- India has been consistently **emphasising “inclusiveness”** in the Indo-Pacific framework. The creation of Indo-Pacific wing in MEA signifies the fact that **India views this region diplomatically and not as a security bloc**.
- As geopolitical tensions rise between China and the U.S., India will face a daunting task of maintain a balance between different stakeholders.
- Depending on **who is defining it and for what purpose**, the term Indo-Pacific is still evolving. In this case, India will have to work hard so that **Indo-Pacific does not get closely tied to the US strategic ‘rebalance’**.
- This will lead to **Chinese acceptance of this term**, which in turn would assist in developing a shared strategic vocabulary and perspective in Asia.

Official Secrets Act

The Delhi police has arrested a strategic affairs analyst and two others under the Official Secrets Act (OSA) for passing on information such as the deployment of Indian troops on the border to Chinese intelligence officers.

Evolution Of The Act

- OSA has its roots in the British colonial era. The original version was *Indian Official Secrets Act (Act XIV), 1889*. This was brought in with the **main objective of muzzling the voice of a large number of newspapers** that had come up in several languages, and were opposing the Raj’s policies.
- It was amended and made more stringent in the form of **Indian Official Secrets Act, 1904**, during **Lord Curzon’s tenure** as Viceroy of India.

- In 1923, a newer version was notified. The **Indian Official Secrets Act (Act No XIX of 1923)** was extended to all matters of secrecy and confidentiality in governance in the country.

Features Of Official Secrets Act

- **Applicability:** The law is applicable to both government servants and citizens and provides the framework for dealing with espionage, sedition, and other potential threats to integrity of the nation.
- **Offences Under The Act:** It broadly deals with two aspects — spying or espionage and disclosure of other secret information of the government. The law makes spying, sharing 'secret' information, unauthorised use of uniforms, withholding information, interference with the armed forces in prohibited/restricted areas, among others, punishable offences.
- **Secret information:** Secret information can be any official code, password, sketch, plan, model, article, note, document, or information. Under Section 5, both the person communicating the information and the person receiving the information can be punished.
- **Punishment:** If guilty, a person may get up to 14 years' imprisonment, a fine, or both.
- A person prosecuted under this Act can be **charged with the crime even if the action was unintentional** and not intended to endanger the security of the state.
- **When a company is seen as the offender** under this Act, everyone involved with the management of the company, including the board of directors, are liable for punishment.
- **In the case of a newspaper**, everyone – including the editor, publisher and the proprietor — can be imprisoned for the offence.

Classifying As Secret Document

- For classifying a document, a Government's Ministry or Department follows the **Manual of Departmental Security Instructions, 1994, not under OSA**.
- Also, **OSA itself does not say what a "secret" document is**. It is the **government's discretion** to decide what falls under the ambit of a "secret" document to be charged under OSA.

Question Of Primacy Between The RTI Act and The OSA?

- It has often been argued that this law is in direct conflict with the Right to Information Act, 2005.
- **Section 22 of the RTI Act** provides for its primacy vis-a-vis provisions of other laws, including OSA. This gives the RTI Act an overriding effect, notwithstanding anything inconsistent with the provisions of OSA. So, if there is any inconsistency in OSA with regard to furnishing of information, it will be superseded by the RTI Act. However, under **Sections 8 and 9** of the RTI Act, the government can refuse information.
- Effectively, **if the government classifies a document as "secret" under OSA Clause 6**, that document can be kept outside the ambit of the RTI Act, and the government can invoke Sections 8 or 9. Legal experts see this as a loophole.

Major Instances When OSA Has Been Invoked

- **Coomar Narain Spy Case (1985):** Twelve former staff members in the Prime Minister's Office and Rashtrapati Bhavan Secretariat were sentenced to 10 years' imprisonment in 2002. They were found guilty of entering into a criminal conspiracy with officials of the French, Polish and German embassies, communicating secret official codes, classified documents and information pertaining to defence, shipping, transport, finance, planning, and R&AW and Intelligent Bureau reports.
- **ISRO Spy Case Targeting Scientist S Nambi Narayan (1994):** Before his acquittal, he had faced a criminal trial under OSA and was accused of passing on rocket and cryogenic technology to Pakistan for illegal gratification.
- **Kashmir Times journalist Iftikhar Gilani** was arrested in 2002 and charged under OSA.
- **Madhuri Gupta Case:** In 2018, Delhi court sentenced former diplomat Madhuri Gupta, who had served at the Indian High Commission in Islamabad, to three years in jail for passing on sensitive information to the ISI.

Arguments Against OSA

- **The OSA does not define “secret” or “official secrets”.** Public servants could deny any information terming it a “secret” when asked under the RTI Act.
- In **Clause 6** of the OSA, information from any governmental office is to be considered official information, hence it can be used to override the Right to Information Act, 2005 requests.
- Its **Section 5**, which deals with potential breaches of national security, **is often misinterpreted.** The Section makes it a punishable offence to share information that may help an enemy state. The Section comes in handy for booking journalists when they publicise information that may cause embarrassment to the government or the armed forces.
- The SARC report states that OSA's background is the **colonial climate of mistrust of people and the primacy of public officials** in dealing with the citizens and it created a culture of secrecy.
- OSA should be repealed to bring transparency and accountability in the workings of the government and to ensure that citizens should have certain rights to take part in the decision making in the governance of the nation by disclosure of documents and relevant information for the sake of public good.

Do Other Nations Have Similar Laws?

- Several countries, including the United Kingdom, Malaysia, Singapore, and New Zealand, continue to use the legislation to protect state secrets.
- In 2001, Canada replaced its OSA with a Security of Information Act.
- The “official secrets” come under the Espionage Act in the U.S.

Arguments In Favour Of OSA

- There should be **strict laws in the country to deal with crime against the state.**
- There are several documents and information which needs to be kept secret *to protect the interest of the state*. It is necessary to maintain secrecy and confidentiality in matters which are crucial for the security and safety of the nation such as military operations and other vital information.

- The Official Secrets Act, 1923 was formulated with the aim to keep the secrecy and confidentiality in the workings of the government which are utmost *significant for the development and growth of the nation*.

Recommendations Of Various Commissions

- **In 1971, Law Commission** in its report observed that “it agrees with the contention” that “merely because a circular is marked secret or confidential, it should not attract the provisions of the Act if the publication thereof is in the interest of public and no question of national emergency and interest of the State as such arises”. It, however, did not recommend any changes to the Act.
- **Second Administrative Reforms Commission (SARC) Report, 2005**, suggested that the Act should be substituted by a chapter in the National Security Act that incorporates the necessary provisions. The reason: it had become a contentious issue after the implementation of the Right to Information Act.
- **The Shourie Committee** suggested that there should be an amendment to Section 5(1) of the Act and stated that the penal provisions of the section should be applicable only to violations affecting the national interest.
- In 2015, the government had set up a committee to look into provisions of the OSA in light of the RTI Act. It submitted its report to the Cabinet Secretariat in 2017, recommending that OSA be made more transparent and in line with the RTI Act.

Way Forward

- In this age, where information flow is in real-time, the **Official Secrets Act should be reviewed and strengthened. Officials should be made more aware** of the need to ensure that state’s secrets are not revealed.
- Keeping official secrets is **more about ethics**, which should be taught to officials right from the time they join the service. Issues of security and defence, like operations, procurement, training and so on, should be dealt with utmost seriousness.
- Since our society has evolved and several things have changed, the government of the day **must define what it considers an ‘official secret’**.

MAINS Q&A

1. Recently Union Cabinet has approved the 'Mission Karmayogi' programme. In this light discuss what is Mission Karmayogi and possible challenges in its implementation?

Answer

The Union Cabinet has approved the 'Mission Karmayogi' - National Programme for Civil Services Capacity Building (NPCSCB) - which aims to **reform and upskill civil servants** across the country and prepare them for future. Under this mission, the government will be providing **mid-career training** to civil servants. The training which was earlier available for only All India Services will now be compulsory for all officers at all levels.

Need Of The Mission

- Both the **National Training Policy of 2012** and the **NITI Aayog's India@75 report** underscored the necessity of capacity building of officials as a critical part of the overall Civil Services Reforms.
- There is a need to **develop domain knowledge besides administrative capacity** in the bureaucracy by beginning right at the recruitment level and then invest in building more capacity through the rest of their career.
- As the Indian economy grows, it will get more complex to govern and the governance capacities will have to be enhanced proportionately.

Features Of Mission Karmayogi

- **Digital Learning Framework:** Mission Karmayogi programme will be delivered by setting up a digital platform called **iGOTKarmayogi**. The platform will act as a launchpad for the NPCSCB, which will enable a comprehensive reform of the capacity building apparatus at the individual, institutional and process levels.
- **Governance:** 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. Besides this, there will be a **Cabinet Secretary Coordination Unit** comprising of select secretaries and cadre controlling authorities.
- **Civil Service Competency Framework** — FRAC (Framework of Roles, Activities and Competencies) — which will contain the competency requirements for every role. The learning records of the officials will signal their existing competency details. Matching the two will help to identify the right person with the right competencies for the right job.
- **Capacity Building Commission:** This commission will prepare and monitor annual capacity building plans and audit human resources available in the government. It includes experts in related fields and global professionals.
- **Special Purpose Vehicle (SPV):** The SPV will be a "not-for-profit" company and will *own and manage iGOT-Karmayogi platform*. It will create and operationalise the content, market place and manage key business services of 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.
- **Funding:** To cover around 46 lakh central employees, a sum of Rs 510.86 crore will be spent over a period of 5 years from 2020-21 to 2024-25. The expenditure is partly funded by multilateral assistance to the tune of \$50 million.

Challenges In Implementation

- **Linking training to career progression and performance is complex** in practice and needs careful planning, systemic ownership and a high degree of transparency and credibility.
- While a centralised architecture may offer coordination and standardisation, a diverse public sector workforce needs a **decentralised training and learning ecosystem**.
- Good training is an important facet of state capacity but is unlikely to improve service delivery or get absorbed by organisations without a concomitant effort to **change organisational norms and learning culture**.
- **Training assessment occurs most effectively at the local, organisational level**. This requires precise estimation of existing knowledge, skilling requirements, and an understanding of the needs of the population being served.
- **Norms of hierarchy and bureaucratic processes** can stifle innovation even among highly skilled workers. Hence the culture in which competence is deployed is as important as competence itself.
- Even though the government will hold extensive discussions with national and international experts in designing the programme structure, they will not decide the form or policies. Only the government will do that, through the Department of Personnel and Training (DoPT).

Way Forward

- Emphasis on digital content and training, and the centralised institutional architecture of the proposed reform must be balanced by understanding of the contexts and needs of diverse workers and learners.
- Extensive research shows that **individual-level technical, behavioural and professional training alone offer limited gains to performance in complex systems**. Civil servants must contend with deeply embedded norms of governance, complex tasks and outcomes, overload, extensive networks of partners, and exogenous socio-political factors.
- While training might increase awareness, behavioural change requires that information is supported by existing organisational practices and norms. Here, organisations that foster problem-solving, participation, trust, shared professional norms, and a strong sense of mission are likely to perform much better in delivering public services.
- The new system must find ways in which departments proactively strengthen investments in training their own employees, beyond goal setting, annual plans and financial contributions, as envisioned in the current proposal.

2. **UN Women recently released a report 'From Insights to Action: Gender Equality in the wake of COVID-19'. Highlight the findings of the report along with the measures required to deal with the impact of Covid-19 on women.**

Answer

UN Women recently released a report titled - From Insights to Action: Gender Equality in the wake of COVID-19. The report is based on a sample of 129 countries and areas accounting for 89% of the global population, where extreme poverty is most applicable.

Highlights Of The Report

- The projections show that while the pandemic will impact global poverty, generally, women will be disproportionately affected, especially women of reproductive age.

- Women typically earn less and hold less secure jobs than men. Further they are employed in some of the most affected sectors, like accommodation, food services, and domestic work, due to which women are losing jobs at a faster pace.
- Globally, the poverty rate for women was expected to decrease by 2.7% between 2019 and 2021, but projections now point to an increase of 9.1% due to the pandemic.
- The pandemic will push 96 million people into extreme poverty (living on USD 1.90 a day or less) by 2021, 47 million of whom are women and girls.
- This will increase the total number of women and girls living in extreme poverty to 435 million, with projections showing that this number will not go back to pre-pandemic levels until 2030.

Social Impact Of The Pandemic On Women

- The impact on women is not just economic, as the shift of funds to deal with the pandemic is impacting women's access to sexual and reproductive health.
- Further, with widespread stay-at-home orders, violence against women has increased significantly around the world.
- More people at home also means that the burden of unpaid care and domestic work has increased for women and girls.

Projections for India

- An estimated 87 million women and girls are living in extreme poverty in 2020 in India and this number is expected to increase to around 100 million by 2021 due to the Covid-19 pandemic.
- In India, the poverty rate for women aged 25 to 34 is estimated to be 12% in 2020, equivalent to around 13.4 million women aged 25 to 34 living in extreme poverty. By 2021, the poverty rate of women aged 25-34 is expected to increase to 14% increasing the total count to 15.2 million.
- These numbers translate into 120 extreme poor women for every 100 poor men in 2021, a ratio that is expected to worsen to 129 poor women per 100 poor men in 2030.
- It is stated that at the current pace, it will take India another 37 years to close the gender poverty gap among individuals of ages 25 to 34.

Way Ahead

- As more women than men live in poverty, closing the gender poverty gap must be a vital part of a broader poverty eradication strategy.
- Economic support packages for vulnerable women should be introduced. This should include efforts to recognize, reduce and redistribute the increased burden of unpaid care and domestic work.
- Despite the pandemic's strain on health systems, governments must ensure that health services continue to operate safely and that policies are in place to protect the sexual and reproductive health of women and girls, and their new-borns.
- Additionally, disease-related health vulnerabilities faced by women from poor, marginalized and excluded communities must also be recognized and addressed as a matter of priority.
- Smart investments and sound policies will be crucial to eradicate extreme poverty. The cumulative cost of doing so by 2030 is about \$2 trillion or just 0.14 per cent of global GDP.

Including women's perspectives and leadership in decision-making about global health and emergency response is the need of the hour. Applying a gender lens in designing fiscal stimulus packages and social assistance programmes will go a long way in building a more prosperous, equal, inclusive and resilient society.

3. The Narcotic Drugs and Psychotropic Substances (NDPS) Act has recently been in news. What are Narcotic Drugs and Psychotropic substances. Highlight the various provisions of the NDPS Act and issues with it.

Answer

- A few prominent names have recently been booked under various sections of the Narcotic Drugs and Psychotropic Substances (NDPS) Act by the Narcotics Control Bureau (NCB).
- A narcotic drug is an addictive drug that reduces pain, induces sleep and may alter mood or behaviour. A psychotropic drug is a chemical substance that changes brain function and results in changes in perception, mood, consciousness or behaviour.
- Some categories of narcotic and psychoactive drugs, which have therapeutic value, are prescribed by physicians and other healthcare practitioners. These substances are also used illegally to improve performance or change one's consciousness.

NDPS Act

- The NDPS Act, enacted in 1985, is the primary law for dealing with drugs and their trafficking in the country. The Act has since been amended thrice — in 1988, 2001 and 2014.
- Under the Act, a wide range of drugs and psychotropic substances, including cannabis, heroin and opium, are considered illegal. **The law, however, does not apply to bhang.**
- The NDPS Act was passed to meet India's global treaty obligations under the ***Convention on Narcotic Drugs 1961, Convention on Psychotropic Substances 1971*** and ***United Nations' Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances 1988***.

Provisions Under NDPS Act

- **Section 8(c)** of the Act prohibits production, manufacture, sale, purchase, transportation and consumption of any narcotic drug or psychotropic substances.
- **Section 27A** provides punishment for financing illicit trafficking of drugs and psychotropic substances.
- **Sections 28 and 29** of the Act deal with attempts to commit offences, abetment and criminal conspiracy.
- Anyone who violates the NDPS Act, will face punishment based on the quantity of the banned substance. The classification of the quantity varies from substance to substance.
- The law makes a distinction between individual drug consumers and drug traffickers. **Section 39** of the Act allows courts to release an addict for treatment if found guilty of consumption of drugs.
- The maximum punishment that can be given under this Act is the **death penalty under Section 31A**. However, death penalty can only be given to repeat offenders, on the discretion of a judge.

Criticisms Of The Act

- Although conviction rates are high under NDPS Act, they do not indicate success of a legislation. As per a report in 2018 by Vidhi Center for Legal Policy, despite the changing nature and type of drugs consumed over the years, overall addiction and use of such substances has continued in the country. The report claims that the Act does not offer long-term solutions to deal with the problem of drug addiction.
- The Act also took a hasty step of clubbing the problem of addiction within the criminal law framework. It also ignored the obvious socio-economic contexts in which drug trade flourishes and a market is created.

- The law provides the same punishment for all forms of drugs, which allowed dealers to shift their focus to harder drugs (like heroin), where profits are far higher. This has led to increase in usage of harder drugs.
- Several human rights bodies have criticised India for being among the 33 countries in the world that have death penalty in drug-related crimes.
- Moreover, the Act has been criticised for putting the responsibility on the accused to prove his/her innocence. Unless the accused is proved innocent, it will be believed that the accused intentionally held the illicit drugs that were found in his/her possession, which is against the international human rights principles.

Conclusion

With a profitable drug market promising alternatives to a decaying economic situation, the focus should be on breaking the large drug cartels instead of criminalising individual consumers, which requires policy intervention to address the problem of addiction and not stricter laws that can barely act as effective deterrent.

Extra Mile

Punishment

- In case the violation involves a small quantity, the punishment involves rigorous imprisonment for a term which may extend to 1 year, or a fine or both.
- In case the violation involves a quantity lesser than commercial quantity but greater than a small quantity, the punishment involves rigorous imprisonment for a term which may extend to 10 years and a fine.
- In case the violation involves a commercial quantity, the punishment involves rigorous imprisonment for a term which shall not be less than 10 years and may extend to 20 years along with a fine.

Narcotics Control Bureau

- As per NDPS Act, the central government can form an authority to exercise its powers for preventing and dealing with abuse of and illicit trafficking of narcotic drugs. The government subsequently constituted the Narcotics Control Bureau in 1986, under **Ministry of Home Affairs**.
- The agency is tasked with coordinating with the state governments and other authorities, under NDPS Act, Customs Act, Drugs and Cosmetics Act and any other law, for the enforcement of the provisions of the NDPS Act.
- The NCB also coordinates actions taken by other concerned ministries, departments and organisations in respect of matters relating to drug abuse.

4. What is the Global Innovation Index? Highlight the findings of the recently released Global Innovation Index, along with recommendations to boost innovation.

Answer

- The Global Innovation Index (GII), 2020 was recently released by the World Intellectual Property Organization (WIPO), Cornell University and INSEAD Business School.

- Launched in 2007, the index, presents the latest global innovation trends and annual innovation ranking of various economies. The aim of GII is to provide data on innovation and assist policymakers to evaluate their innovation performance and to make informed innovation policy decisions.
- GII 2020 includes 131 countries/economies, which represent 93.5% of the world's population and 97.4% of the world's GDP.

Evaluation Framework

- GII is computed by taking an average of the scores in **two sub-indices**, the Innovation Input Index and Innovation Output Index.
- The **Innovation Input Sub-Index** considers elements of the national economy that enable innovative activities. It includes **five pillars**: Institutions; Human capital and research; Infrastructure; Market sophistication; and Business sophistication.
- The **Innovation Output Sub-Index** provides information about outputs that are the result of the innovative activities of economies. There are **two output pillars**: Knowledge and technology outputs; and Creative outputs.

Global Findings of GII 2020

- The top-performing economies in GII, 2020, are still from the high-income group. **Switzerland** continues to be the most innovative nation in the world, followed by Sweden, US, UK and Netherlands.
- From Asia, **Korea** became the second country to move into the top 10, pushing Israel down by one rank to the 11th position. **Singapore** maintained its 8th rank.
- **China at the 14th position** is the only middle-income country in the GII top 30. **Malaysia** is the second-most innovative middle-income economy with a ranking of 33.
- The data shows a gradual eastward shift in innovation, as a group of Asian economies — notably China, India, Philippines and Vietnam — have improved considerably in the innovation ranking over the years.
- The US continues to have the largest number of Science & Technology clusters (25), followed by China (17), Germany (10) and Japan (5). Tokyo-Yokohama, continues to remain the top-performing cluster in the world.

Findings From India

- India has moved ahead by four positions from the last year and is ranked at the **48th position**. This is the first time India has moved in the list of top 50 innovative countries. Along with this, India has also become the third most innovative lower middle-income economy in the world.
- Three clusters - Bengaluru, Delhi and Mumbai - feature in the top 100 science & technology hotspots.
- India ranked in the top 15 in indicators such as ICT services exports, government online services, graduates in science and engineering and research & development intensive global companies.
- India improved the most in three pillars: Institutions (61st), business sophistication (55th), and creative outputs (64th).
- The consistent improvement in rankings is due to the immense knowledge capital, the vibrant start-up ecosystem, and the work done by the public and private research organizations.

Recommendations

- Countries should formulate innovation policies and ensure that innovation is **integrated as a key priority** in the country's path of national development and progress.
- The innovation policy targets or actions should be **quantifiable** and should be **regularly evaluated**.

- **Cross-ministerial task forces** should be set-up to pursue innovation policy with a whole of government approach, and should ideally report to top government leadership.
- The task force should consult innovation stakeholders from the private and public sector, including start-ups, deans of research universities, and the relevant innovation clusters.

The pandemic poses genuine risks to international openness and collaboration in innovation. However, the joint search for medical solutions during the pandemic has demonstrated how powerful cooperation can be. The speed and effectiveness of this collaboration shows that internationally coordinated R&D missions can effectively address important societal issues—now and in the future.

Extra Mile

Efforts In India To Promote Innovation

- The **National Innovation Council**, which promotes innovation in micro, small and medium enterprises, is working in various ways, particularly through the **India Inclusive Innovation Fund**, to support activities around innovation.
- NITI Aayog is also actively working in monitoring and evaluating India's position in global innovation rankings. The **India Innovation Index**, which was released last year by the NITI Aayog, is helping in the decentralization of innovation across all the states of India.
- To promote innovation and its culture in India, the government has formulated the **New Education Policy 2020**, which will create a mindset of innovation in students from a very young age.

World Intellectual Property Organization (WIPO)

- The WIPO is one of the 15 **specialized agencies of the United Nations (UN)**. It acts as the global forum for intellectual property (IP) services, policy, information and cooperation.
- It was created in 1967 with a mission to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.
- WIPO currently has 192 member states, administers 26 international treaties and is headquartered in **Geneva, Switzerland**.
- The predecessor to WIPO was the United International Bureaux for the Protection of Intellectual Property, which had been established in 1893.

5. The **Singapore Convention on Mediation** recently came into force. What is **Singapore Convention on Mediation**? Also explain the significance of mediation as a tool for dispute resolution.

Answer

- The **Singapore Convention on Mediation** recently came into force on 12th September, which marks a significant development in international commercial dispute resolution through mediation.
- Also known as the **United Nations Convention on International Settlement Agreements Resulting from Mediation**, this is the first UN treaty to be named after Singapore.
- The United Nations General Assembly had adopted the Convention in December 2018, and the Convention was opened for signature in August, 2019. As on September 1, 2020, the Convention has 53 signatories, including **India, China and the U.S.**
- Six countries have ratified the Convention till now, which include, **Ecuador, Singapore, Fiji, Qatar, Saudi Arabia and Belarus.**

Mediation As A Tool For Dispute Resolution

- Mediation has always been recognised as a tool for dispute resolution. It is a way to resolve disagreements by minimising conflicts, as it encourages the two parties to reach an agreement by finding common solutions.
- Often, corporates find themselves in a situation where they have multiple dealings with one another, and do not want to spoil the relationship due to a disagreement in a particular transaction.
- In such situations, mediation is the best tool for dispute resolutions, as it helps to preserve business relationships.
- In commercial disputes, mediation often proves to be the cheapest, quickest and the most confidential mode for dispute resolution.
- It also gives the parties greater control over the outcome, leading to a commercially balanced resolution.

Singapore Convention on Mediation

- Until the introduction of the Singapore Convention a challenge to the use of mediation was the lack of an efficient framework for cross-border enforcement of settlement agreements resulting from mediation. It was in response to this need that the Singapore Convention was developed and adopted by the United Nations.
- The Singapore Convention on Mediation applies to international settlement agreements resulting from mediation, concluded by parties to resolve a commercial dispute.
- It ensures that a settlement reached by parties through mediation becomes binding and allows for direct enforcement of mediated settlement agreements.
- With the Convention in force, 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.
- The Singapore Convention can only be applicable in cases of an international commercial dispute, and specifically *excludes disputes arising from personal, family, inheritance or employment matters*.
- The convention also does not apply to settlement agreements that have been approved by a court or concluded in the course of court proceedings, and are to be enforced as a judgment.

Impact

- The simplified enforcement framework under the Convention will lead to savings in time and legal costs, which is important for businesses in times of uncertainty, such as during the current COVID-19 pandemic.
- The relative peaceful nature of mediation as a process of dispute resolution will also help to preserve commercial relationships despite the disputes.
- It will also help in boosting India's ease of doing business status.

By significantly strengthening the international dispute resolution enforcement framework, the Convention will go a long way in giving greater certainty to businesses across the world in resolving cross-border disputes through mediation, thereby contributing to an increase in international trade and commerce.

- 6. CAROTAR 2020 recently came into force. What is CAROTAR, 2020? Delineate the need for coming up with the provision along with the pros and cons of the provision.**

Answer

- The Customs (Administration of Rules of Origin under Trade Agreements) Rules 2020, notified on August 21, recently came into force from September 21.
- CAROTAR 2020 specify detail disclosures to be made by importers to claim concessional duty benefits under trade pacts such as Free Trade Agreements (FTAs). It supplements the existing operational certification procedures prescribed under different trade agreements.

Need For CAROTAR 2020

- Free Trade Agreements (FTA), entered into by countries, enable import of various products at lower duty rates. India has signed FTAs with several key countries, such as Japan, South Korea, ASEAN (which include Thailand, Singapore and Vietnam etc).
- While India's exports to FTA partner countries has remained flat, imports have risen rapidly with the trade deficit widening from \$ 5 billion in 2010 when ASEAN FTA was implemented to more than \$ 22 million now.
- Items such as TVs, mobile phones, etc coming from FTA countries have in the past not met the prescribed rule of origin criteria. Huge quantities of Chinese goods are alleged to have been dumped into India through such misuse.
- In some cases, the Customs has detected that a few importers were smuggling restricted goods such as incense sticks in the guise of goods declared to be imported under an FTA.

Provisions Under CAROTAR, 2020

- An importer is now required to do due diligence before importing the goods to ensure that they meet the prescribed originating criteria.
- In order to claim a preferential rate of duty the importer will have to make a detailed declaration in the bill of entry that the imported goods originate from an FTA country and qualify for preferential treatment. This will be required in addition to producing the Certificate of Origin.
- Moreover, the importer will also be required to possess all the relevant information related to the country of origin criteria – such as the manufacturing process, regional value content, product specific content etc.
- The importer is required to maintain all supporting documents for at least five years from the date of filing of the bill of entry. The Customs can ask for supporting documents and information and when in doubt, deny the benefit of the FTA duty concession or allow it provisionally pending verification.

Benefits

- The new rules will support the importer to correctly ascertain the country of origin, properly claim the concessional duty and assist customs authorities in smooth clearance of legitimate imports under FTAs. It will also help to protect the rights of the importer.
- It will also help to protect the domestic industry by cutting down on frivolous imports at a preferential rate and boost the government's agenda of Aatmanirbhar Bharat.

Issues

- Most of the data requirements are based on the operations, finance and supply chain of the supplier (exporter); which is generally confidential information for any business and is difficult to be gathered or verified by the importers.

- While this issue is way more complicated for imports from unrelated parties, even in cases of imports from related companies, the importers being small subsidiaries (governed by the larger groups headquartered outside) find it substantially difficult to convince/ gather this information from exporters.
- Custom authorities have been given sweeping powers to reject the claims made for preferential duties, even without any cross-verification from the authorities of the exporting country.
- Due to this, it is possible that importers may refrain from the use of FTAs, which in turn could make the end product costly and impact the economy.

Conclusion

It is imperative that the custom authorities use the provisions to achieve the desired objectives of spotting suspicious claims and ensure that the provision does not end up in becoming an impediment in the flow of business, which can negatively impact the ease of doing business in the country.

7. US-China trade war seems to have increasingly spilled over new areas. The escalating tension has potential to disrupt global supply chains, and jeopardize the projected recovery in global growth. Comment.

Answer

- A trade war is a **back-and-forth dispute** wherein a country imposes tariffs on certain imports in order to restrict trade. In response, the country or countries affected by those tariffs impose their own fees on imports.
- In 2018, USA imposed tariffs on billions of dollars worth of Chinese products, and Beijing retaliated in kind, thereby starting a trade war between these two countries.
- These tensions over trade have increasingly spilled over into the areas of diplomacy and media. Recently, US had ordered the closure of the Chinese Consulate in Houston. China responded by ordering the closure of the US Consulate in Chengdu.
- In a globalized world, the production processes involve many countries which includes USA, China, India, Taiwan etc. Hence, the ongoing tension has potential to shake the global economy.

Implications

- **Effects on consumers** - Consumers in the US and China are unequivocally the losers from trade tensions. It could lead to an increase in the prices of domestic competitors. While importing firms will try to absorb some of the tariff costs through lower profit margins, the consumers will have to bear the cost.
- **Effects on producers** - US and Chinese producers of the goods affected by the tariffs as well as producers that use those goods as intermediate inputs, are potential losers. **Trade diversion** is one channel through which producers will be affected. Decline in import from one country will be offset by an increase in imports from third country.
- **Effect on Market** – There will be market segmentation in the price of traded goods. This was most clearly observed in the case of soybeans, where US exports to China fell dramatically in 2018 after China imposed tariffs.
- **Effect on other countries including India** - Trump's trade war is against China but as it happens **other countries including India are caught in its crossfire**. Due to tightly integrated supply chains, shocks could be propagated into the region, and could impact trade and growth.

- It will also **open up opportunities for other exporters, including India**. The cost advantage, however, will be important as well as the strength of currency or rather weakness to capture this market.
- **Global Peace and Security** – Increasing tension between these two countries increases the chance of confrontation. Many a times navies of both the countries have come across each other in South China Sea. It may disrupt global peace and cooperation.

Conclusion:

- The repercussions can be more volatility in both commodity prices and currencies as the trade war escalates. While a non-retaliatory situation would make the dollar stronger and pressurize other currencies, the continuation of the war can cause volatility.
- Global trade will get more volatile and might also affect investment flows. This will be more serious.
- At a time when humanity is fighting its own war against pandemic, US-China cooperation is vital. Not only will it promote peace, security and trust, it will also help the global economy to recover.

China Announces New Restrictions on US diplomats' Activities

- China has announced to impose **“reciprocal restrictions” on all American diplomats** on Chinese soil. This announcement came in response to curbs on Chinese embassy personnel in the United States.
- These unspecified countermeasures will apply to all US embassy and consulate staff, as well as the consulate-general in Hong Kong.

Background

- Earlier, US had put several restrictions on Chinese diplomats. These included - a requirement to seek approval for university visits, holding cultural events with more than 50 people outside embassy grounds, or meetings with local officials.
- In June 2020, the **US ordered China to close its consulate in Houston**, Texas, which prompted **Beijing to force the closure of the US consulate in Chengdu**.
- Relations between the two countries continue to deteriorate amid disputes **over trade, Taiwan, Tibet, human rights, Hong Kong and the coronavirus pandemic**.

8. **G-4 Nations have been demanding reform in United Nation Security Council (UNSC). Do you think G4 nations’ demand for UNSC reform matter? Discuss the impediments India is facing in its pursuit of a permanent seat in UN Security Council.**

Answer

Foreign Ministers of **G4 countries — India, Brazil, Japan and Germany** - met virtually to further their objective. It called for a decisive push for UNSC reforms during 75th United Nation General Assembly (UNGA). It was formed in 2004.

Why G4 Nations’ Demand For UNSC Reform Matter

- United Nations Security council reforms is imperative **to ensure equitable representation and reflect the geopolitical and economic realities of the present world order**.
- 75 years have passed since the creation of United Nations and the time has changed completely. G4 countries represent the changing world and must be represented in UNSC.

- **USA is now in favour of permanent seat without veto power.** UK shares similar view. France has been closest with intention to provide both seat and veto.
- Demand for membership without veto would make countries like Russia and China feel less threatened who have not been welcoming to idea of expansion.
- Expanded members would have the same responsibilities and obligations, as current permanent members, thus making the council reflective of current order.

Impediments To India's Membership:

India has been actively pursuing its quest for permanent membership of the UNSC. It has pushed for text-based negotiations in the UN as a step to move forward the agenda of UNSC reform. However, it is facing several challenges in doing so.

- **Resistance from P-5 countries** as these countries are reluctant to share the exclusive power with new entrants.
- **Absence of consensus on complex issues** such as the size of the expansion in the permanent and non-permanent categories, regional distribution, the working methods of the Security Council, its relationship with the UNGA, and veto powers.
- **Opposition from other countries** – G4's bids are often **opposed by Uniting for Consensus (UFC) movement or Coffee Club** (ground 12 countries including Pakistan led by Italy) and particularly their economic competitors or political rivals. UFC or coffee table countries are Italy, South Korea, Canada, Pakistan, Argentina, Mexico, Turkey, Malta, Costa Rica, Colombia and San Marino.
- **China Factor** as rise of India threaten China by creating its own rival power structure. Hence, it does not want India to be a member of Security Council. Except china, India's bid for permanent member of UNSC is now backed by four of the five permanent members.
- **Global image of India** as it is seen as a soft country. Many internal issues like prevalence of hunger, precarious health situation etc. is creating a negative global image. This is misinterpreted by P5 countries as India's inability to offer and sanction extreme measures.
- **India's economic contribution** - India's economic contribution to Security council budget is very minimal, which again discredits its claim to join council as a permanent group.

Conclusion

- Recently, in June 2020, **India was overwhelmingly elected as a non-permanent member** of UNSC for a two-year term.
- Not only that, adoption of a negotiating text for Security Council reforms and **re-election of Justice Dalveer Bhandari** as a judge at the International Court of Justice is reflective of the support India enjoys in the world body.
- However, we need more than goodwill among the world communities to gain the membership.
- In the 21st century, power boils down essentially to economic power. If India has to stake a claim to permanent membership, it has to single-mindedly focus on economic growth, with concomitant military might.

9. **India's defence acquisition has not progressed as desired. Discuss the various challenges faced by India's defence acquisition framework.**

Answer

- India's current acquisition framework consists, broadly, of a **two-tiered structure**, comprising the **Defence Acquisition Council (DAC)** and its **subordinate bodies** — the Defence Procurement Board, the Defence Research and Development Board and the Defence Production Board.
- This structure was created in 2001 in pursuance of the recommendations of the Group of Ministers (GoM), which was set up to review the “national security system in its entirety”.

Issues with Defence Acquisition Framework

- India's defence acquisition framework has **failed to ensure time-bound procurement** thus forfeiting available budgetary resources, as well as vulnerability to import-centric pressures, corruption and controversies.
- In its 2007 audit report, **CAG had noted that** the basic problem of India's defence acquisition framework was its **dispersed centres of responsibility** and **lack of professionalism** in acquisition.
- There are **too many independent actors** responsible for various acquisition functions that include drafting of technical features, issuance of tender document, undertaking of trials and evaluation etc.
- These actors are **neither trained** for their assigned **roles nor are they given adequate time to build institutional capacity**.
- So far, there has been **lip service to indigenisation/self-reliance**. Although the DPPs of recent years have tried to address this issue through a host of measures, the acquisition system still harbours its step-motherly attitude towards indigenous industry, particularly private sector companies.
- The **apathy towards domestic industry** has been **institutionalised by keeping the acquisition and production functions under two distinct power centres in the MoD**.
- These are the **offices of the DG (Acq.)** and **Secretary (Defence Production)** – the latter is responsible for indigenous arms production by both state and private entities. **Lack of convergence** has been observed between these two offices.
- Since the basic objectives of these two high offices are not necessarily driven by indigenous-centric procurement, the focus on indigenisation has become subservient to acquisition.

Way Forward

- India can learn a lot **France's success** in devising a **sound domestic-industry-driven procurement system**.
- It should focus to integrate the procurement and acquisition functions under one administrative head.
- Create a dedicated professional acquisition cadre to bridge the knowledge asymmetry between government and industry.

Conclusion

- **Creation of the post of Chief Of Defence Staff (CDS)** is a major step towards addressing the issues related to defence acquisition. It will act as the **focal point for drawing up a consolidated procurement plan** for the defence and security forces.
- Also, the draft Defence Procurement Procedure 2020 is a right step forward towards indigenisation of defence equipment.
- DAP 2020, by **simplifying the procedure** and **reducing the timeline**, will go a long way in ensuring probity, transparency and accountability in defence procurement.

New Defence Acquisition Policy

- Defence ministry has unveiled the new **Defence Acquisition Procedure (DAP)** which will come into **effect from October 1, 2020**. It will supersede the Defence Procurement Procedure of 2016.
- DAP 2020 has been aligned with the **vision Atmanirbhar Bharat** and empowering Indian domestic industry through Make in India initiative with the ultimate aim of turning India into a global manufacturing hub

Key Highlights**I. New Category Buy (Global – Manufacture in India)**

- New Category Buy (Global – Manufacture in India) has been introduced with **minimum 50% indigenous content** on cost basis of total contract value.
- Only the *minimum necessary will be bought from abroad* while the balance quantities will be manufactured in India.
- This would be **in preference to the ‘Buy Global’ category** as manufacturing will happen in India and jobs will be created in the country.

II. Greater indigenous content

- It promotes greater indigenous content in arms and equipment procurement. DAP 2020 stipulates 10 per cent higher indigenisation than DPP 2016.

III. Reservations for Indigenous firms

- The policy reserves several procurement categories for indigenous firms. It defines an **“Indian vendor” as a company** that is owned and controlled by resident Indian citizens, with **FDI not more than 49 per cent**.

IV. Offset liability

- The offset guidelines have been revised, wherein **preference will be given to the manufacturing of complete defence products over components** and various multipliers have been added to give incentivisation in the discharge of offsets.
- Also, the policy decided not to have an offset clause in procurement of defence equipment if the deal is done through inter-government agreement (IGA), government-to-government or a single vendor.

V. Leasing introduced as a new category

- Leasing has been introduced as a new category for acquisition in addition to **existing ‘Buy’ & ‘Make’ categories**.
- This has been done to get defence equipment at affordable rates. India now can formally take military equipment on lease from a friendly country.
- In fact, India already leases one of its most potent naval combat platforms from Russia — the **nuclear propelled attack submarine, INS Chakra**.

Following measures have been taken by the Government to achieve **self-reliance in defence production**:

- Two Defence Industrial Corridors have been established in Tamil Nadu and Uttar Pradesh.
- Defence Procurement Procedure was revised in 2016 to stimulate the growth of domestic Defence industry. A new category ‘Buy {Indian-IDD (Indigenously Designed, Developed and

Manufactured’}} was introduced to promote indigenous design and development of Defence equipment.

- ‘Make-II’ category encourages indigenous development by assurance for orders.
- Department of Defence Production has notified 127 items under Public Procurement Order 2017. Accordingly, DPSUs and OFB are required to give preference to domestic manufacturers while procuring these items.
- Defence Investor Cell (DIC) has been created in February, 2018 to provide all necessary guidance and information to investors, innovators, MSMEs and Start-ups interested in defence manufacturing in India.
- An innovation ecosystem to foster innovation and technology development in Defence and Aerospace titled Innovations for Defence Excellence (iDEX) has been launched in April, 2018.
- FDI Policy has been revised and FDI is allowed under automatic route upto 49% and upto 100% with Government approvals.
- Defence Products list requiring Industrial Licences has been rationalised.
- In March, 2019 Government has notified a Policy for indigenization of components and spares used in Defence Platforms.

PRELIMS MCQs**1. Consider the following statements about UMANG App**

1. It is developed by Ministry of Electronics and information Technology (MeitY) and National e-governance Division (NEGD).
2. The application will enable users to access e-Government services of only the central Government.

Which of the statements given above is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: A

Explanation:

- The Labour Ministry said that UMANG mobile application has been a big hit among the EPF (Employees Provident Fund) subscribers to access services, especially during COVID-19 pandemic.
- Adding to the 16 services already on the UMANG app, Employees' Provident Fund Organisation (EPFO) has now started another facility, enabling EPS (employees' pension scheme) members to apply for **Scheme Certificate under Employees' Pension Scheme, 1995**.

About UMANG (Unified Mobile Application for New Age Governance) App

- It is developed by Ministry of Electronics and information Technology (MeitY) and National e-governance Division (NEGD) to drive Mobile Governance in India.
- UMANG is one of the key initiatives under the Digital India program to develop a common, unified platform and mobile app to facilitate a single point of access to all government services of the central Government, the State Governments, local bodies and their agencies.
- The objective of the app is to act as an enabler and facilitator in developing overall mobile based service delivery ecosystem in India.
- It is envisaged to act as a master application, which will integrate major government services from various sectors such as Agriculture, Education, Health, Housing among others.
- Umang services has been made available on multiple channels like mobile application, web, IVR and SMS which can be accessed through smartphones, feature phone, tablets and desktops.

2. Consider the following statements about Adjournment Motion

1. It needs the support of 100 members to be admitted.
2. Both Lok Sabha and Rajya Sabha is permitted to make use of this device.

Which of the statements given above is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: D

Explanation:

- The opposition moved an adjournment motion notice in the Lok Sabha over the “**surveillance**” of **key Indian personalities**, including the President and Prime Minister, by a firm linked to the Chinese government.
- Opposition had asked the government to step in and order a probe into the **monitoring of over 10,000 people** in India by the Shenzhen-based Zhenhua Data Information Technology Co. Ltd.

Adjournment Motion

- It is introduced in the Parliament to draw attention of the House to a **definite matter of urgent public importance**, and needs the **support of 50 members** to be admitted. As it interrupts the normal business of the House, it is regarded as an extraordinary device.
- It involves an element of censure against the government and hence **Rajya Sabha is not permitted to make use of this device**. The discussion on an adjournment motion should last for not less than two hours and thirty minutes.
- The right to move a motion for an adjournment of the business of the House is subject to the **following restrictions**:
 - i) It should raise a matter which is definite, factual, urgent and of public importance;
 - ii) It should not cover more than one matter;
 - iii) It should be restricted to a specific matter of recent occurrence and should not be framed in general terms;
 - iv) It should not raise a question of privilege;
 - v) It should not revive discussion on a matter that has been discussed in the same session;
 - vi) It should not deal with any matter that is under adjudication by court; and
 - vii) It should not raise any question that can be raised on a distinct motion.

3. Consider the following statements about No-confidence Motion

1. It need to state the reasons for its adoption in the Lok Sabha.
2. It can be moved against an individual minister.

Which of the statements given above is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: D

Explanation:

- In an unprecedented move, as many as 12 Opposition parties came together to submit a **no-confidence resolution seeking the removal of Rajya Sabha Deputy Chairman**. They alleged that the Deputy Chairman "attempted to have the bills passed in haste and without application of mind, circumvented all demands for proper voting by Division.
- However, the Rajya Sabha Chairman rejected the notice for no confidence motion on the grounds that **proper procedure was not followed**.

Removal of Deputy Chairman of the Rajya Sabha

- The rules say that “a member holding office as Deputy Chairman of the Rajya Sabha may be removed from his office **by a resolution of the Rajya Sabha passed by a majority of all the then members of the Rajya Sabha**; but the resolution can be moved only when **at least fourteen days’ notice** has been given of the intention of moving”.
- However, the Opposition motion said: “Appropriate precedents in this regard are available in several treatises, including the ‘**Practice and Procedure of Parliament by M N Kaul and S L Shakdher**’ seventh edition and Article 90 of the Constitution. The precedents cited from the book by the Opposition include **resolutions moved against the first Lok Sabha Speaker G V Mavalankar in 1951, Speaker Sardar Hukam Singh in 1966 and Speaker Balram Jakhar in 1987.**
- Incidentally, the resolution against Mavalankar came up for discussion in 1954 and was negated by House after a discussion. The other two resolutions were also discussed and negated by the House.
- **Article 90** deals with “vacation and resignation of, and removal from, the office of Deputy Chairman a member holding office as Deputy Chairman of the Council of States”.

No-Confidence Motion

- **Article 75** of the Constitution says that the **council of ministers shall be collectively responsible to the Lok Sabha**. It means that the ministry stays in office so long as it enjoys confidence of the majority of the members of the Lok Sabha.
- In other words, the **Lok Sabha can remove the ministry from office by passing a no-confidence motion**. The motion needs the **support of 50 members** to be admitted. It is moved for ascertaining the confidence of Lok Sabha in the council of ministers.
- It **need not state the reasons for its adoption in the Lok Sabha**.
- It can be **moved against the entire council of ministers only**. If it is passed in the Lok Sabha, the council of ministers must resign from office.

4. Consider the following statements regarding National Statistical Office (NSO)

1. NSO is the statistics wing of the Ministry of Statistics and Programme Implementation.
2. NSO compiles and releases the Index of Industrial Production (IIP) every month.

Which of the statements given above is/are correct?

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

Answer: C

Explanation

The National Statistical Organisation (NSO) recently released the Health in India report. The report is based on the 75th round of the National Sample Survey (July 2017-June 2018) on household social consumption related to health.

Highlights Of The Report

- As per the report, across the country, only 59.2% of children under five years are fully immunised. This contradicts the Centre’s Health Management Information System portal data, which claimed that full immunisation coverage for 2017-18 stood at 86.7%.

- Full immunisation means that a child receives a set of eight vaccine doses in the first year of life.
- It includes one dose of BCG vaccine (for tuberculosis); one dose of measles vaccine; three doses of oral polio vaccine; and three doses of the DPT/pentavalent vaccine meant to protect a child from diphtheria, pertussis or whooping cough, tetanus, Hepatitis B, and meningitis and pneumonia caused by hemophilus influenza type B.
- About 97% of children across the country received at least one vaccination — mostly BCG and/or the first dose of OPV at birth — a statistic that remains steady across income groups and geographies.
- Among States, **Manipur (75%), Andhra Pradesh (73.6%) and Mizoram (73.4%)** recorded the highest rates of full immunisation. At the other end of the spectrum lies **Nagaland**, where only 12% of children received all vaccinations, followed by Puducherry (34%) and Tripura (39.6%).
- The vast majority of these vaccinations — 95% in rural India and 86% in cities — were carried out in **government health facilities and primary health centres**. These will be the same facilities used to distribute and administer the COVID-19 vaccine whenever it is made available.

National Statistical Office (NSO)

- The National Statistical Office (NSO) is the statistics wing of the Ministry of Statistics and Programme Implementation.
- It consists of the Central Statistical Office (CSO), the Computer center and the National Sample Survey Office (NSSO).

Mandate of NSO

- It acts as the nodal agency for planned development of the statistical system in the country and lays down and maintains norms and standards in the field of statistics.
- It compiles and releases the Index of Industrial Production (IIP) every month and also provides statistical information to evaluate the changes in the growth of organized manufacturing sector.
- It conducts large scale all-India sample surveys for studying the impact of specific problems for the benefit of different population groups in diverse socio economic areas.
- The survey areas include: employment, consumer expenditure, housing conditions and environment, literacy levels, health, nutrition, family welfare, etc.

5. Which of the following schemes is not a part of the Five Star Villages scheme:

- | | |
|--|---------------------------------|
| a) Pradhan Mantri Suraksha Bima Yojana | b) Kisan Vikas Patra |
| c) Pradhan Mantri Kisan Sampada Yojana | d) National Savings Certificate |

Answer: C

Explanation:

- The Department of Posts has launched a scheme called Five Star Villages, to **ensure universal coverage of flagship postal schemes in rural areas** of the country.
- **Objective:** The scheme seeks to bridge the gaps in public awareness and reach of postal products and services, especially in interior villages.
- **Strategy:** All postal products and services will be made available and marketed and publicized at village level, under the Five Star Villages scheme. Branch offices will function as one-stop shop to cater all post office - related needs of villagers.

- **The schemes covered under the Five Star scheme include:**
 - Savings Bank accounts, Recurrent Deposit Accounts, NSC / KVP certificates.
 - Sukanya Samridhi Accounts/ PPF Accounts.
 - Funded Post Office Savings Account linked India Post Payments Bank Accounts.
 - Postal Life Insurance Policy/Rural Postal Life Insurance Policy.
 - Pradhan Mantri Suraksha Bima Yojana Account / Pradhan Mantri Jeevan Jyoti Bima Yojana Account.
 - **Implementation:** The scheme will be implemented by a team of five Gramin Dak Sevaks who will be assigned a village for marketing of all products. This team will be headed by the Branch Post Master of the concerned Branch Office. Mail overseer will keep personal watch on progress of team on daily basis. The teams will be led and monitored by concerned Divisional Head, Assistant Superintendents Posts and Inspector Posts.
 - The scheme is being **launched on pilot basis in Maharashtra**; based on the experience here, it will be implemented nation-wide.
 - Universal coverage of one scheme will give one-star rating, similarly if a village has universal coverage of five schemes it will have five-star status.
- 6. Which of the following is incorrect regarding Literacy rate as per Census 2011?**
- a) Literacy rate is defined as the proportion of literates in the population of age seven years and above.
 - b) A person, who can only read but cannot write, is also considered a literate.
 - c) A person does not need any formal education to be considered a literate.
 - d) All of the above.

Answer: B

Explanation

The National Statistical Office (NSO) has released a report **Household Social Consumption: Education in India**, which also covers the literacy rates in the country. The data in the report is for the year 2017-18.

Literacy

- According to the 2011 Census, any person aged seven and above, who has the **ability to read and write**, with understanding in any language, is considered literate. A person, who can only read but cannot write, is not literate.
- Further, a person need not receive any formal education or acquire any minimum qualification to be treated as literate.
- **Literacy rate** is defined as the proportion of literates in the population of age seven years and above.

Highlights Of The Report

- In India, as per **Census 2011**, a total of 74.04 per cent were literate, which was an increase of 9.2 per cent from the last decade (2001-11). As per UNESCO, India will achieve universal literacy by 2060.

- As per the report, 77.7% people are literate in India. **Kerala** is the most literate state in the country, with 96.2 per cent literacy, while **Andhra Pradesh** features at the bottom with a rate of 66.4 per cent.
- The study shows that after Kerala, Delhi has the best literacy rate at 88.7 %, followed by Uttarakhand at 87.6 %, Himachal Pradesh at 86.6 % and Assam at 85.9 %.
- Rajasthan features as the second-lowest performer with a literacy rate at 69.7 per cent, followed by Bihar at 70.9 per cent, Telangana at 72.8 per cent, Uttar Pradesh at 73 per cent and Madhya Pradesh at 73.7 %.

KERALA TOPS THE LIST

Literacy rates for those aged 7 or more (%)			
Top 5 State/UT	Person	Bottom 5 State/UT	Person
Kerala	96.2	UP	73.0
Delhi	88.7	Telangana	72.8
U'khand	87.6	Bihar	70.9
Himachal	86.6	Rajasthan	69.7
Assam	85.9	Andhra	66.4

- Male-Female Literacy:** The gap between male and female literacy at the all-India level is 14.4 percentage points with male literacy at 84.7% and female literacy at 70.3%. Among states, Kerala has the smallest gap between male and female literacy at 2.2%.
- Urban-Rural Literacy:** Kerala also has the lowest gap between urban and rural literacy rates with 1.9 percentage points. The worst in this regard are the states of Telangana, where urban literacy is 23.4 percentage points higher than rural literacy, and Andhra Pradesh, where the difference is 19.2 percentage points
- The difference between urban male literacy and rural female literacy is an alarming 27.2 percentage points at the national level.
- Digital Literacy:** The NSO report shows that 20% of Indians above the age of 5 years had basic digital literacy. The basic digital literacy level doubled to just 40% in the critical age group of 15 to 29 years, which includes all high school and college students as well as young parents responsible for teaching younger children.

Internet Access In Homes

- The report also highlights the digital divide across states, cities and villages, and income groups.
- Across India, **only one in ten households have a computer** — whether a desktop, laptop or tablet. However, **almost a quarter of all homes have Internet facilities**, accessed via a fixed or mobile network using any device, including smartphones.
- Most of these Internet-enabled homes are located in cities, where 42% have Internet access. However, in rural India, only 15% are connected to the internet.
- The national capital, Delhi, 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.
- On the other end, in Odisha, only one in ten homes have Internet. There are ten other States with less than 20% Internet penetration, including States with software hubs such as Karnataka and Tamil Nadu.
- Assam shows the highest inequality in internet access based on economic status, with almost 80% of the richest urban homes having Internet access. However, 94% of those in the poorest rural homes in the State do not have internet access.
- Kerala shows the least inequality as more than 39% of the poorest rural homes have Internet, in comparison to 67% of the richest urban homes.

UNESCO

- The United Nations Educational, Scientific and Cultural Organization is a specialised agency of the United Nations (UN) aimed at promoting world peace and security through international cooperation.
- It pursues this objective through **five major program areas**: education, natural sciences, social/human sciences, culture and communication/information.
- UNESCO sponsors projects that improve literacy, provide technical training, advance science, protect independent media and press freedom, preserve regional and cultural history, and promote cultural diversity.
- UNESCO was founded in 1945 as the successor to the League of Nations' International Committee on Intellectual Cooperation.
- Headquartered in Paris, UNESCO has 193 member states and 11 associate members, as well as partners in the nongovernmental, intergovernmental, and private sector.

7. Consider the following statements:

1. Arsenic is a natural component of the earth's crust.
2. Excess intake of fluoride affects bones.

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

- According to Ministry of Jal Shakti, the number of arsenic-affected habitations in the country increased by 145 % in the last five years. The country had 1,800 arsenic-affected habitations in 2015, which increased to 4,421 by 2020.
- However, the number of fluoride affected habitations has significantly come down in the last five years — from 12,727 in 2015 to 5,485 in 2020.
- Habitations are the group of households at a community level in a village. These are the smallest level of settlements that can have between 10-100 households.
- Most of the arsenic-affected habitations lie in the **Ganga and Brahmaputra alluvial plains**; in the states of Assam, Bihar, UP and Bengal. **Assam** had the highest share of such habitations (1,853), followed by Bengal (1,383).
- Under **Jal Jeevan Mission (JJM)** that started last year priority has been given to such quality-affected habitations through community water purification plants (CWPP) to meet with drinking and cooking needs — until potable water supply through tap connection is provided.
- Under JJM, **upto 2 % of the allocation** to states/ UTs can be utilised for Water Quality Monitoring & Surveillance activities (WQM&S). This includes setting up and strengthening of water quality testing laboratories, surveillance by community using field test kits (FTKs), awareness generation and educational programmes on water quality.

Arsenic Contamination

- Arsenic is a natural component of the earth's crust and is widely distributed throughout the environment in the air, water and land. It is highly toxic in its inorganic form.
- People are exposed to elevated levels of inorganic arsenic through drinking contaminated water, using contaminated water in food preparation and irrigation of food crops, industrial processes, eating contaminated food and smoking tobacco.
- Long-term exposure to inorganic arsenic, mainly through drinking-water and food, can lead to chronic arsenic poisoning. Skin lesions and skin cancer are the most characteristic effects.
- According to WHO, the permissible limit of arsenic in groundwater is 0.1 mg per litre. In India the permissible arsenic level in drinking water was revised from 0.05 mg/l to 0.01 mg/l, in the recent past by the Bureau of Indian Standards.

Fluoride Contamination

- Ingestion of excess fluoride, most commonly in drinking-water, can cause fluorosis which affects the teeth and bones.
- Moderate amounts lead to dental effects, but long-term ingestion of large amounts can lead to potentially severe skeletal problems.
- Paradoxically, low levels of fluoride intake help to prevent dental caries. The control of drinking-water quality is therefore critical in preventing fluorosis.

8. Consider the following statements about Nutrition and Health:

1. **Body Mass Index** is a person's weight in kilograms divided by his/her height in meters.
2. **National Institute of Nutrition** is a research body of the Indian Council of Medical Research.

Which of the statements given above is/are correct?

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

Answer: B

Explanation:

- The National Institute of Nutrition (NIN) recently released its report on Nutrient Requirements for Indians.
- For the first time the NIN report contains the **Estimated Average Requirements** (EAR) and also the **Tolerable Upper Limits** (TUL) of nutrients. Until now, a single value **Recommended Dietary Allowance** (RDA) was used for all nutrients. The report also gives details of the reference Indian man and woman.
- While **RDAs** contain daily nutritional intake levels that would be sufficient to meet the nutritional needs of almost all healthy individuals, **EARs** are the average daily nutritional intake levels of the population.
- The **TUL** is the highest level of a daily nutrient intake that will most likely not lead to any adverse (negative) health effects in almost all individuals in the general population.
- A previous expert committee in 1989 had taken the body weight and height of only well-to-do Indian children and adolescents. Another expert panel in 2010 had taken nutrition profiles from only 10 states

for computing reference body weights. Both committees had arrived at the reference weights for men and women at 60kg and 50kg.

- The 2020 panel relies on nationally representative datasets such as, National Family Health Survey 4 (2015-16), National Nutrition Monitoring Bureau (2015-16), World Health Organisation (2006-07) and the Indian Academy of Paediatrics (2015) to derive the reference body weight values.
- The National Institute of Nutrition (NIN) has added another 5kg to the ideal weight of Indians.
- Along with this, the earlier height for a reference Indian man was 5.6 feet (171cm) and a woman was 5 feet (152cm). It is now revised to **5.8 feet (177cm) for a man** and **5.3 feet (162cm) for a woman**. This will now be taken for normal body mass index (BMI).
- As per the report, the current changes are due to the increase in nutritional food intake. Another reason for the change is that data from rural and urban areas was taken into account this time as against only urban data in 2010.

	2010	2020
Men		
Ideal weight	60kg	65kg
Reference height	5ft 6in (167.64 cm)	5ft 8 in (172.72 cm)
Women		
Ideal weight	50kg	55kg
Reference height	5ft (152.4 cm)	5ft 3in (160.02 cm)

Body Mass Index

- Body mass index (BMI) is a person's weight in kilograms divided by the square of height in meters. It is universally expressed in units of kg/m².
- It is generally used to broadly categorize a person as underweight, normal weight, overweight, or obese. Commonly accepted BMI ranges are underweight (under 18.5 kg/m²), normal weight (18.5 to 25), overweight (25 to 30), and obese (over 30).

Dietary Recommendations

- For the first time, recommendations have been made for dietary intakes of **carbohydrates**, setting the estimated energy requirement at 100 grams per day for ages one year and above with a recommended dietary allowance of 130 grams per day.
- For the first time, recommendations have been made for **fibre, based on energy intake**. As per the report, about 40 grams per 2,000 kilo calories of food consumption has been considered as safe.
- The **visible fat intake** for individuals with sedentary, moderate and heavy activity has been set at 25, 30 and 40 grams per day, respectively, for an adult man and 20, 25 and 30 grams per day, respectively, for an adult woman. The fat intake was common for both men and women in the 2010 recommendations.
- **Common salt** intake remains at 5 grams per day with the sodium intake limited to 2 grams. An intake of 3,510mg potassium is recommended per day.
- The calcium requirement proposed as RDA for an adult man and an adult woman is 1,000mg per day. It was 600mg per day in 2010. For a lactating woman, an additional amount of 200mg is added. For post-menopausal woman, the recommendation is 1,200mg per day.

National Institute of Nutrition

- The National Institute of Nutrition (NIN) is a premier nutrition research body of the Indian Council of Medical Research.
- The vision of NIN is elimination of all forms of malnutrition for a progressive healthy India.

- The institute majorly conducts research in obesity, diabetes, food chemistry, dietetics, and micronutrient deficiency.
- Its mandate is periodic assessment of nutrient intakes, health and nutrition status of the population for optimal health, and assist the government and regulatory bodies in policy making.

9. Human Capital Index is developed by:

- | | |
|---------------------------------------|----------------------|
| a) World Economic Forum | b) World Bank |
| c) United Nations Development Program | d) None of the above |

Answer: B

Explanation:

- The Human Capital Index 2020 report was recently released by the World Bank. It includes health and education data for 174 countries — covering 98 % of the world's population — up to March 2020.
- The HCI was launched in 2018 as part of the **Human Capital Project (HCP)**, a global effort to accelerate progress towards a world where all children can achieve their full potential.
- The HCI measures the human capital that a child born today can expect to attain by her 18th birthday, given the risks of poor health and poor education prevailing in her country. Thus, the HCI highlights how current health and education outcomes shape the productivity of the next generation of workers.
- The index incorporates measures of different dimensions of human capital: **health** (child survival, stunting and adult survival rates) and the **quantity and quality of schooling** (expected years of schooling and international test scores).

Highlights Of The Index

- India has been ranked at the **116th position in the HCI 2020**. However, India's score increased to 0.49 from 0.44 in 2018.
- The analysis shows that pre-pandemic, most countries had made steady progress in building human capital of children, with the biggest strides made in low-income countries.
- Despite this progress, and even before the effects of the pandemic, a child born in a typical country could expect to achieve just 56 per cent of their potential human capital. Moreover, this global average masks considerable variation across regions and economies.
- For instance, a child born in a low-income country could achieve just 37 percent of their potential human capital. For a child born in a high-income country, this figure is 70 percent.
- Along with broad economic development, specific policies contributed to some countries' progress in human capital. Effective policies included expanding the population coverage of health services; bolstering nutrition and access to sanitation; making school more affordable; and providing financial support to vulnerable families through mechanisms such as cash transfer programs and insurance.
- Strong gains were more likely in countries that were able to maintain commitment to reform across political cycles and to adopt an evidence-based, whole-of-society approach to policymaking.

Way Ahead

- Designing the needed interventions, targeting them to achieve the highest effectiveness, and navigating difficult trade-offs in times of reduced fiscal space, makes investing in better measurement of human capital more important than ever.

- Urgent action is needed to protect hard-won advances in human capital, particularly among the poor vulnerable.
- Ambitious, evidence-driven policy measures in health, education, and social protection can pave the way for today's children to surpass the human-capital achievements and quality of life of the generations that preceded them.

10. Consider the following statements about State Business Reform Action Plan (BRAP):

1. BRAP evaluates how Indian states have performed in improving ease of doing business.
2. BRAP is an annual exercise conducted by Department for Promotion of Industry and Internal Trade in collaboration with the World Bank.

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

- The Union government recently released the **State Business Reform Action Plan 2019** (BRAP) ranking. It shows how various Indian states have performed in improving Ease of Doing Business in their respective states.
- It is an annual exercise conducted by the **Department for Promotion of Industry and Internal Trade (DPIIT)** in collaboration with the **World Bank**. This was the fourth edition of the report, which was first released in 2015.
- The exercise is aimed at promoting competition among States, to improve the business environment in order to attract domestic as well as foreign investments.
- In order to rank States, DPIIT created ***181 reform initiatives covering 45 business regulatory areas*** in the Business Reform Action Plan 2019.
- These include easy access to information, paying taxes, obtaining utility permits, contract enforcement, labour and construction permit enablers, single-window approval systems and land administration, among others.

User Feedback

- One major change in the current rankings is the government's decision to link the state's performance to user feedback. Over 35,000 users were contacted to gather this feedback.
- Most states that have done well, have uploaded the evidence on the portal and they have given the user list for verification to get user feedback.

Rankings

- **Andhra Pradesh** for the third time in a row has topped the rankings. Registering an improvement of 10 places in the rankings, **Uttar Pradesh** occupied the second position in 2019 as against 12th in 2018.

- Telangana slipped to the third position from second in 2018. It was followed by Madhya Pradesh, Jharkhand, Chhattisgarh, Himachal Pradesh, Rajasthan, West Bengal, Gujarat and others, in that order.
- Lakshadweep, Delhi and UP saw the highest improvement in their rankings, moving up in the ranking by 19, 11 and 10 positions respectively.
- Industrially advanced states such as Gujarat, Maharashtra and Tamil Nadu, which have traditionally topped the list, have slipped down to 10th, 13th and 14th positions.
- The government says this trend was anticipated and is expected to strengthen further as states lower down the list take up reform initiatives.
- Odisha, Sikkim and Tripura remained the three states with the worst performance on the list. Odisha went down 15 positions in the latest report, which is the worst decline among all states.

States with fastest business reform

Andhra Pradesh
Uttar Pradesh
Telangana
Madhya Pradesh
Jharkhand

States with slowest business reforms

Meghalaya
Nagaland
Odisha
Sikkim
Tripura

One Product One District Programme

- The Union Government is also planning to launch the 'one product one district programme'. Under this programme, every district in the country will be focusing on the production of special products in the district.
- The government has already identified 24 products jointly with the private sector to increase manufacturing.
- It is expected that this programme will add at least ₹20 lakh crore worth of manufacturing output in India in the next five years.

Impact

- The ranking has led to a situation where multiple states are undertaking various reform initiatives, to improve their systems and processes.
- This will help the States to attract investments and improve the overall business environment.
- It will eventually lead to expansion of economic activity and creation of jobs in various States (including the ones which lag significantly in job creation).

Department for Promotion of Industry and Internal Trade (DPIIT)

- DPITT is a central government department under the **Ministry of Commerce and Industry**.
- It is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector.
- While individual administrative ministries look after the production, distribution, development and planning aspects of specific industries allocated to them, DPIIT is responsible for the overall industrial policy.
- It is also responsible for facilitating and increasing the foreign direct investment (FDI) flows to the country.

11. Which of the following is correct regarding Priority Sector Lending (PSL) norms?

- Foreign banks are not required to follow priority sector lending norms.
- Start-ups which qualify to be called MSMEs, would get loans under the PSL norms.

- c) Farmers with a landholding of up to 1 hectare are called small farmers, under the PSL norms.
 d) None of the above.

Answer: B

Explanation

- In order to bring sharper focus on inclusive development, the Reserve Bank of India (RBI) has released the **revised priority sector lending guidelines**.
- As per priority sector lending norms, commercial banks, including foreign banks, are required to give 40 % of their loans to certain specified sectors.
- Similarly, Regional Rural Banks and Small Finance Banks have to allocate 75 % of their loans for priority sector lending.
- While the rate of interest on PSL varies from sector to sector, it's considered cheaper and more accessible when compared to normal loans.
- The rate of interest on loans is decided as per the directives issued from time to time by the Department of Banking Regulation of the RBI.

MAKING IT INCLUSIVE

- Higher weighting assigned for lending to neglected districts and sectors
- Lending targets for small and marginal farmers and weaker sections increased
- Higher credit limit for farmer producer organisations
- Loan limits for renewable energy doubled
- Loan limit to build health infrastructure doubled

Revised Guidelines

A. Inclusion of Start-ups Under PSL

- Start-ups engaged in agriculture and allied activities, as well as those which qualify to be called MSMEs, would get loans under the priority sector target.
- Loans of up to Rs 50 crore to start-ups would qualify for priority sector lending.
- Inclusion of start-ups is part of the government's move to include the sector in micro, small and medium enterprises (MSMEs).

B. Weights For Districts As Per Credit Flow

- In order to address regional differences in the flow of priority sector credit, the RBI has decided to rank districts on the basis of per capita credit flow in these districts.
- It has built an incentive framework for districts with lower flow of credit and a disincentive framework for districts with higher flow of priority sector credit.
- A higher weightage of 125% will be assigned to districts where per capita priority sector lending is less than Rs 6,000. There are 184 districts that have been assigned this higher weight.
- A lower weightage of 90% would be assigned to districts where the per capita priority sector lending is above Rs 25,000. There are 205 districts, that have been assigned this higher weight.
- The remaining districts will continue to have 100% weightage.
- The list of districts provided by the RBI is valid up to FY 2024 and will be reviewed after that.

C. Guidelines Under Agriculture Sector

- The target for lending to the non-corporate farmers has been set at 12.14% in FY21 and over time banks should make efforts to reach the level of 13.5%.

- Farmers producers organisations (FPO) that undertake farming with assured marketing of their produce at a pre-determined price can now get loans up to Rs 5 crore.
- At the same time, crop loans to farmers can go up to Rs 2 crore per borrowing entity for medium- and long-term loans for agriculture and allied activities.
- The farmers can get loans up to Rs 50 lakh for 12 months against their warehouse receipts.
- Loans towards agriculture infrastructure can go up to of Rs 100 crore per borrower.

D. Increased Credit Limit

- Within agriculture credit, the target for lending to small and marginal farmers will gradually rise from 8% currently to 10% by FY24.

- As per the guidelines, farmers with landholding of up to 1 hectare are called **Marginal farmers**. Farmers with a landholding of more than 1 hectare and up to 2 hectares are called **Small farmers**.

PSL Targets For Small and Marginal Farmers & Weaker Sections

Financial Year	Small and Marginal Farmers	Weaker Sections
FY2021	8%	10%
FY2022	9%	11%
FY2023	10%	12%
FY2024	10%	12%

- Loans to **weaker sections** will gradually increase from the current limit of 10% to 12% by FY24.
 - Self Help Groups, persons with disabilities, minority communities, Scheduled Castes and Scheduled Tribes are some of the groups that come under **Weaker sections**.
 - Total priority sector lending for primary urban cooperative banks (UCB) will be raised to 75 per cent by March 2024, from the existing 40 per cent target.
- | Year | Target |
|-----------------|--------|
| Existing target | 40% |
| March 31, 2021 | 45% |

E. PSL For Renewable Energy

- The loan limits under PSL for renewable energy has been doubled to Rs 30 crore, for purposes like solar-based and biomass-based power generators, windmills, non-conventional energy-based street lighting systems and remote village electrification.
- For individual households, the loan limit will be Rs 10 lakh per borrower.

Priority Sector Lending Targets For Urban Co-op Banks

Year	Target
Existing target	40%
March 31, 2021	45%
March 31, 2022	50%
March 31, 2023	60%
March 31, 2024	75%

F. PSL for Social Infrastructure

- Bank loans up to a limit of Rs 5 crore per borrower for setting up schools, drinking water facilities and sanitation facilities including construction/ renovation of household toilets and water improvements at household level, will come under PSL.
- Credit limit for health infrastructure has been raised to Rs 10 crore from Rs 5 crore for projects related to Ayushman Bharat, in Tier II to Tier VI centres.

12. FDI limit in the defence sector under automatic route is:

- a) 49% b) 74%
- c) 100% d) None of the above

Answer: B

Explanation:

- The Central government has increased the foreign direct investment (FDI) limit in the defence sector from 49 % to **74 % under automatic route and beyond 74 % through the government route**.
- However, foreign investments in the defence sector would be subject to scrutiny on the grounds of national security and the government reserves the right to review any foreign investment in the sector that affects or may affect national security.
- The **national security clause** is in addition to the existing conditions specific to FDI in the defence manufacturing sector, including security clearance and some guidelines of the Ministry of Defence.
- As per the guidelines, the investee company should be structured to be self-sufficient in the areas of product design and development. The investee/joint venture company along with the manufacturing facility should also have maintenance and life cycle support facility of the product being manufactured in India.

Push In Defence Manufacturing

- Until now, the defence industry could bring FDI up to 49 per cent under the automatic route, and above it under government route, “wherever it is likely to result in access to modern technology or for other reasons to be recorded”.
- The government 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 last year, the defence industry, along with the aerospace and shipbuilding industry, was estimated to be worth Rs 80,000 crore, of which the share of PSUs was nearly 80%, or Rs 63,000 crore.
- Through a more liberalised FDI policy, the government wants foreign original equipment manufacturers to shift operations to India, and also encourage private players to play a larger role.
- The raising of FDI limit comes along with other measures for the defence sector, including a negative imports list and a dedicated budget for capital acquisition from the domestic industry.

13. Which of the following aviation bodies are statutory bodies?

1. Airports Authority of India
2. Aircraft Accidents Investigation Bureau
3. Airports Economic Regulatory Authority
4. Directorate General of Civil Aviation
5. Bureau of Civil Aviation Security

Choose the correct option using the codes below:

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

Answer: D

Explanation

- The Aircraft (Amendment) Bill, 2020 which was introduced to amend the Aircraft Act, 1934 has been passed in the Parliament.
- The Act regulates the manufacture, possession, use, operation, sale, import and export of civil aircrafts, and licensing of aerodromes.
- An **aerodrome** or airdrome is a location from which aircraft flight operations take place. Aerodromes include small general aviation airfields, large commercial airports, and military air bases

Key Provisions of The Bill**A. Statutory Status To Bodies Under Civil Aviation**

- The Bill converts three existing bodies under the Ministry of Civil Aviation into statutory bodies under the Act.
- These three authorities are: the Directorate General of Civil Aviation (DGCA); the Bureau of Civil Aviation Security (BCAS); and the Aircraft Accidents Investigation Bureau (AAIB).
- The **DGCA** will carry out safety oversight and regulatory functions with respect to matters under Bill.
- The **BCAS** will carry out regulatory oversight functions related to civil aviation security.
- The **AAIB** will carry out investigations related to aircraft accidents and incidents.
- Each of these bodies will be headed by a Director General who will be appointed by the Central Government.

B. Power Of Centre To Make Rules

- Under the Aircraft Act, 1934, the central government can make rules for registration of aircraft, regulating air transport services, and prohibition of flight over any specified area. The Bill adds the regulation of air navigation services to this list.
- The Bill also allows the centre to empower the Director General of BCAS or any authorised officer to issue directions and make rules on:
 - Conditions under which an aircraft may be flown;
 - Inspection of aircrafts; and
 - Measures to safeguard civil aviation against acts of unlawful interference.

C. Offences and Penalties:

- The offences included under the Act are carrying arms, explosives, or other dangerous goods on the aircraft; not following rules notified under the Act; and developing illegal construction around the airports.
- The bill raises the maximum limit on fines for all these offences from Rs 10 lakh to one crore rupees. No change has been made in terms of imprisonment, which is still up to two years.
- As per the Bill, the central government can also cancel the licences, certificates, or approvals granted under the Act, if any provision of the Act is not followed.
- Such licences include those given for the establishment of an air transport service, the establishment of aerodromes, and the operation, repair, and maintenance of aircraft.

D. Exemption for Armed Forces

- Aircraft belonging to the naval, military, or air forces of the Union are exempted from the provisions of the Aircraft Act, 1934.

- The Bill expands this exemption to include aircraft belonging to any other armed forces of the Union.

Note: The Airports Authority of India or AAI is a statutory body created through the Airports Authority of India Act, 1994. The Airports Economic Regulatory Authority is a statutory body constituted under the Airports Economic Regulatory Authority of India Act (AERA), 2008.

14. Infrastructure Investment Trusts are regulated in India by:

- | | |
|---|---|
| a) Reserve Bank of India | b) National Highways Authority of India |
| c) Securities and Exchange Board of India | d) None of the above |

Answer: C

Explanation:

The National Highways Authority of India (NHAI) is preparing to launch its Infrastructure Investment Trust (InvIT) issue. The InvIT issue will enable NHAI to monetise its completed National Highways that have a toll collection track record of at least one year.

Infrastructure Investment Trusts

- Infrastructure investment trusts are **institutions similar to mutual funds**. Its objective is to facilitate investment into the infrastructure sector in India.
- InvITs collect investment from various categories of investors and invest them into completed and revenue-generating infrastructure projects. It thus enables investment of money from individual and institutional investors in infrastructure projects to earn a small portion of the income as return.
- InvITs are regulated by **Securities and Exchange Board of India (SEBI)**. SEBI had notified the SEBI (Infrastructure Investment Trusts) Regulations, 2014 for registration and regulation of InvITs.

India's InvIT market

- The Indian InvIT market is not yet mature and has supported formation of 10 InvITs till date — in roads, power transmission, gas transmission and telecom towers sectors.
- From the 10 InvITs, only two InvITs are listed on the stock exchange. The InvITs listed on the stock exchange are IRB InvIT Fund and India Grid Trust.

Reasons For Launch of NHAI's InvIT

- In 2017, Centre had launched Bharatmala Pariyojana, its flagship highway development programme, for development of 24,800 km of roads at a total investment of Rs 5,35,000 crore.
- In order to complete the projects, NHAI needs adequate funds and one of the options is to monetise the completed and operational National Highway assets.
- NHAI's InvIT offer is a way for the government to attract alternative sources of financing to boost public spending in the roads and infrastructure sector.
- At a time when private sector investment in the economy has declined, fund-raising by NHAI and spending on infrastructure will not only give a boost to the economy, but will also attract private sector investment.

Benefits of InvITs for investors

- A retail investor or even large financial investors may not be able to invest in infrastructure projects such as roads, power, energy etc. InvITs enable these investors to buy a small portion of the units being sold by the fund.

- Since such trusts mostly include completed and operational projects with positive cash flow, the risks of investments are low.
- Unit holders also benefit from favourable tax norms, including exemption on dividend income and no capital gains tax if units are held for more than three years.

National Highways Authority of India

- National Highways Authority of India (NHAI) was constituted by the National Highways Authority of India Act, 1988 under the Ministry of Road Transport and Highways.
- It became operational in 1995 and was formally made an autonomous body.
- It has been set up as a Central Authority to develop, maintain and manage the National Highways for which the responsibility is given to it by the Union Government. It is also responsible for toll collection on several highways.

15. Consider the following statements regarding The Farmers Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020 (FPTC):

- 1. APMC mandis have been excluded from the definition of trade area under FPTC.**
- 2. As per FPTC, traders only need to have a valid Aadhaar card to trade in APMC mandis.**
- 3. No market fee will be levied on any trader for trade in the trade area.**

Which of the statements given above is/are correct?

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

Answer: C

Explanation:

- Farmers in various parts of the country have been protesting against three ordinances promulgated by the Centre in the month of June. Now in the Monsoon Session of Parliament, the government has passed three Bills to replace these ordinances. The bills are:
 - i) The Farmers' Produce Trade And Commerce (Promotion And Facilitation) Bill;*
 - ii) The Farmers Agreement on Price Assurance and Farm Services Bill; and*
 - iii) The Essential Commodities (Amendment) Bill.*
- Their concerns are mainly about sections relating to "trade area", "trader", "dispute resolution" and "market fee" in the Farmers' Produce Trade And Commerce (Promotion And Facilitation) Bill (FPTC)

Issues With Trade Area

- The FPTC defines a 'trade area' as any area or location that does not include the physical boundaries of market yards managed and run by the market committees formed under each state APMC Act.
- This provision **enables farmers to sell their produce directly**, without the need of going through the APMC mandis or middlemen.
- However, the provision has also led to concerns among farmers that if the mandi system comes to an end, the Minimum Support Price (MSP) mechanism would also be cancelled.
- But, the government has stressed that it has no plans of abolishing the MSP mechanism and is committed to continue it.

Issues With The Provision Of Trader

- FPTC defines a “trader” as a person who buys farmers’ produce through inter-State trade or intra-State trade or a combination of both. Thus, it includes processor, exporter, wholesaler, miller, retailer etc.
- A trader can operate in both - APMC mandi and trade area. Further, any trader with a PAN card can buy the farmers’ produce in the ‘trade area’.
- However, for trading in the APMC mandi, the trader would require a licence/registration as provided for in the State APMC Act. In the present mandi system, arhatiyas (commission agents) have to get a licence to trade in a mandi.
- The protesters say arhatiyas have more credibility as their financial status is verified during the licence approval process. As the traders operating outside the APMC mandis do not need a license, farmers cannot have a similar level of trust on the financial status of the trader.

Issues With The Provision Of Market Fee

- FPTC states that no market fee or cess or levy (applicable under any State APMC Act or any other State law) shall be levied on any farmer or trader for trade in a ‘trade area’.
- Under the existing system, such charges in states like Punjab come to around 8.5% — a market fee of 3%, a rural development charge of 3% and the arhatiya’s commission of about 2.5%.
- As per the government, removal of market fee will reduce the cost of transaction and will benefit both the farmers and the traders.
- However, the protestors claim that this provision does not provide a level playing field to APMC mandis and by removing the fee on trade, the government is indirectly incentivising big corporates.
- The corporates will use this difference to offer better prices to farmers in the initial days and when the APMC mandi system will collapse in some time, the corporates will monopolise the trade.

Issues With The Provision Of Dispute Resolution

- The protesters say that the provision on dispute resolution does not sufficiently safeguard farmers’ interests. As per the provision, in case of a dispute arising out of a transaction between the farmer and a trader, the parties may seek a mutually acceptable solution through conciliation by filing an application to the Sub-Divisional Magistrate.
- The Sub-Divisional Magistrate will refer the dispute to a Conciliation Board to be appointed by him, for the settlement of the dispute.
- Farmers claim that the bill does not allow farmers to approach a civil court and fear that the proposed system of conciliation can be misused against them.

Issues With Provisions On Essential Commodities

- The provisions under this will allow private players to buy the produce in harvest season when prices are generally lower, stock it, and sell it when prices increase. Thus, it will harm the farmers and will only benefit the middlemen and the traders.
- Small and marginal farmers will suffer the most as they depend immensely on the intermediaries to sell the produce.

Analysis

- Majority of agricultural marketing already happens outside the mandi network, with only 7,000 APMC markets operating across the country. Bihar, Kerala and Manipur do not follow APMC system at all.

- The Centre only purchases paddy, wheat and select pulses in large quantities, and only 6% of farmers actually sell their crops at MSP rates, according to the 2015 Shanta Kumar Committee's report.
- However, most private buyers are currently small traders at local mandis. The removal of stock limits and facilitation of bulk purchase and storage could bring large corporate players into the agriculture space.
- Although they will bring much-needed investment, they could also skew the playing field, with small farmers unlikely to match them in bargaining power.
- Further, there are innumerable past examples when the government's decision to protect the consumers from higher prices have resulted in farmers being robbed of the higher prices a free market could have provided them.

Way Ahead

- There is evidence that mere liberalisation does not lead to private investment in new markets. When Bihar removed the APMC system, markets suffered loss of fee revenue, with no significant private investments in the sector.
- If the Centre's intent is to strengthen competition, it should massively fund the expansion of the APMC market system, remove trade cartels, and provide farmers good roads, logistics of scale and real time information.
- Rather than opt for heavy centralisation, the emphasis should be on empowering farmers through State Farmers Commissions recommended by the National Commission on Farmers, to bring about a speedy government response to issues.
- Without strong institutional arrangements, laissez-faire policy may harm lakhs of unorganised small farmers, who have been remarkably productive and shored up the economy even during a pandemic.

16. Renati Cholas used which language in their inscriptions:

- | | |
|--------------|----------------------|
| a) Tamil | b) Telugu |
| c) Malayalam | d) None of the above |

Answer: B

Explanation

- A rare inscription dating back to the Renati Chola era has been unearthed in a remote village of Kadapa district. The inscriptions are found engraved on a dolomite slab and shale, which are part of a fragmentary pillar.
- Going by the language and characters, the inscription was written in archaic Telugu. It was assigned to the 8th Century A.D., when the region was under the rule of Chola Maharaja of Renadu.
- The inscription seems to throw light on the record of a gift of six Marttus (a measuring unit) of land gifted to one of the Brahmins serving the temple at Pidukula village. Various lines are indicative of the priority given to morality in those days.

Renati Cholas

- The Telugu Cholas of Renadu (also called as Renati Cholas) ruled over Renadu region, the present day Kadapa district.
- They were originally independent but were later forced under the suzerainty of the Eastern Chalukyas.

- They used the Telugu language in their inscriptions belonging to the 6th and 8th centuries.
- The earliest of this family was Nandivarman (500 AD) who claimed descent from the family of Karikala and the Kasyapa gotra.

17. Consider the following statements regarding International Atomic Energy Agency (IAEA):

1. IAEA is an autonomous intergovernmental organization dedicated to increasing the contribution of atomic energy to the world's peace.
2. Its Secretariat is headquartered in Vienna, Austria.

Which of the above statements is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: C

Explanation

Iran has agreed to give International Atomic Energy Agency (IAEA) inspectors access to two suspected former nuclear sites. IAEA had long been demanding the access of these two sites and asked questions about possible undeclared nuclear material and nuclear-related activities at the two locations. However, Iran kept blocking the access.

What Is The Issue

- The latest row over access comes as a landmark deal between Iran and world powers in 2015 continues to unravel.
- Under the deal, the **Joint Comprehensive Plan of Action (JCPOA)**, Iran committed to curtailing its nuclear activities in return for sanctions relief and other benefits.
- But Iran has slowly abandoned its commitments in retaliation for U.S' decision to renounce the deal and reimpose sanctions.

About International Atomic Energy Agency (IAEA)

- It is an autonomous intergovernmental organization dedicated to increasing the contribution of atomic energy to the world's peace and well-being.
- It also ensures that agency assistance is not used for military purposes.
- It was set up as the **world's "Atoms for Peace" organization** in 1957 within the United Nations family.
- The IAEA Secretariat is headquartered at the **Vienna International Centre in Vienna, Austria**.

Relationship With United Nations:

- As an independent international organization related to the United Nations (UN) system, the IAEA's **relationship with the UN is regulated by a special agreement**.
- In terms of its Statute, the IAEA **reports annually to the UN General Assembly** and, when appropriate, **to the UN Security Council** regarding States' non-compliance with safeguards obligations, as well as on matters relating to international peace and security.

18. Which of the following Indian political party is the first party to have been registered under American government's Foreign Agents Registration Act (FARA)?

- a) Bhartiya Janta Party b) Indian National Congress
c) Aam Adami Party d) None of the above

Answer: A

Explanation

- The US affiliate of the BJP, which is known as the Overseas Friends of BJP-USA (OFBJP-USA), recently registered itself as the **official representative of India's ruling party** under the American government's Foreign Agents Registration Act (FARA).
- It has become the first affiliate of an Indian political party to have been registered under FARA.
- Following the registration, the OFBJP will have to declare any meetings with U.S. legislators, organisation of events and funding from U.S. groups.

What Is FARA

- Enacted in 1938, the act requires the registration and disclosure of individuals or entities engaged in political activities on behalf of a foreign principal.
- Foreign principals are defined as a foreign government, a foreign political party, any person outside the US etc.
- Disclosure of the required information facilitates evaluation by the government and the American people of the activities of such persons in light of their function as foreign agents.
- It is considered a **tool to identify foreign influence in the US** and **address threats to its national security**.

19. Consider the following statements regarding Arab League:

1. The Arab League is a regional multi-national organization of Arabic-speaking countries on the African and Asian continents.
2. The league's headquarter is situated at Tunis.

Which of the above statements is/are Incorrect?

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

Answer: B

Explanation

- The Palestinian Authority **quit its rotating chairmanship of Arab League**. This step came after the Palestinians were unable to persuade the Arab League to condemn member nations that break ranks and normalize relations with Israel.
- Last month, UAE had signed a peace deal with Israel. This month, Bahrain followed the suit and signed a peace deal to normalise relationship with Israel.

[Also refer the topic **“Israel-UAE Peace Deal”** from The Recitals - August 2020]

About Arab League

- The Arab League is a regional multi-national organization of Arabic-speaking countries on the African and Asian continents. It has 22 member nations and 4 observer nations.
- The Arab league's mission is to promote trade and economic growth as well as sovereignty and political stability in the region.
- After Egypt signed a peace treaty with Israel in 1979, the other members of the Arab League voted to suspend Egypt's membership and to transfer the league's headquarters from Cairo to Tunis.
- Egypt was reinstated as a member of the Arab League in 1989, and the league's **headquarters returned to Cairo in 1990**.

20. Gilgit-Baltistan is situated to

- a) The east of Pakistan's Khyber Pukhtunkhwa province
- b) The south of Afghanistan's Wakhan Corridor
- c) Both A and B
- d) Neither A nor B

Answer: C

Explanation

- Pakistan has decided to elevate Gilgit-Baltistan's status to that of a **full-fledged province**.
- Gilgit-Baltistan would be given adequate representation on all constitutional bodies of Pakistan, including the National Assembly and the Senate.
- Gilgit-Baltistan borders **Pakistan's Khyber Pukhtunkhwa province to the west**, a small portion of the **Wakhan Corridor of Afghanistan to the north**, **China's Xinjiang Uyghur Autonomous Region to the northeast**, the Indian-administered Jammu and Kashmir to the southeast, and the Pakistani-administered state of Azad Jammu and Kashmir to the south.

Impact Of This Step

- **Strengthening the Legal Hold of Pakistan** - Pakistan is trying to ensure that, should India and Pakistan (and China) come to the point of an open war in Kashmir, this part of Kashmir *remains constitutionally safe, and out of reach of any meddling United Nations resolutions* that will come into play as hostilities break out.
- **Legalises the China-Pakistan Economic Corridor (CPEC)**
- **Easing Chinese access** - The legalising of Pakistan's stranglehold over Gilgit-Baltistan means that roadblocks to Chinese investors in setting up industry or buying up land will be removed. The Chinese-financed **Moqpondass SEZ** will now go ahead.

India's Stand

- India has clearly conveyed to Pakistan that the entire union territories of Jammu and Kashmir and Ladakh, including the areas of Gilgit and Baltistan, **are an integral part of the country** by virtue of its **fully legal and irrevocable accession**.
- Hence, Government of Pakistan or its judiciary has **no locus standi** on territories illegally and forcibly occupied by it.

1. Queen's Counsel is a barrister or advocate, appointed Counsel to the UK Crown.
2. It is appointed on the recommendation of the Lord Chancellor.

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

Explanation

- ## Queen's Counsel

- ## Background

- ## About ICJ

- The International Court of Justice (ICJ) is the **principal judicial organ** of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- All members of the UN are parties to the statute of the ICJ, and nonmembers may also become parties.
- The Court's role is to settle in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.
- The Court is composed of **15 judges** who are elected for terms of office of nine years by the United Nations General Assembly and the Security Council.

22. Consider the following statements regarding Conference on Interaction and Confidence-Building Measures in Asia (CICA):

1. It is an inter-governmental forum for enhancing cooperation towards promoting peace, security and stability in Asia.
2. Its secretariat is situated at Nur-Sultan, Kazakhstan.
3. For becoming a member of CICA, a state must have at least a part of its territory in Asia.

Which of the above statements is/are Correct?

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

Answer: D

Explanation

- India's External Affairs Minister participated in the Special Ministerial Meeting of Foreign Ministers of the CICA. CICA is the **Conference on Interaction & Confidence Building Measures in Asia**.
- The meeting was held virtually and Kazakhstan has assumed the Chair of CICA.

About CICA

- It is an **inter-governmental forum** for enhancing cooperation towards promoting peace, security and stability in Asia.
- **Secretariat** - Nur-Sultan, Kazakhstan.
- The CICA Summit is convened every four years. For becoming a member of CICA, a state must have at least a part of its territory in Asia.
- India has been a member of CICA since its inception in 1999. India also **co-chairs two CICA CBMs** on '**Development of Secure and Effective Systems of Transportation Corridors,**' and '**Energy Security**'.

23. Consider the following statements regarding the International Covenant of Civil and Political Rights (ICCPR):

1. The Covenant ensures civil and political rights of individuals.
2. Right to marry has not been recognized as a right by ICCPR.
3. ICCPR is monitored by monitored by the United Nations Human Rights Committee.

Which of the above statements is/are Correct?

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

Answer: C

Explanation

- The International Commission of Jurists (ICJ) has criticized the conviction of lawyer Prashant Bhushan for criminal contempt by the Supreme Court.
- According to the commission, the judgement by SC **seemed to be inconsistent with the freedom of expression** law guaranteed by the **International Covenant on Civil and Political Rights** (ICCPR.) India is a party to ICCPR.

About International Commission of Jurists

- It is an international human rights non-governmental organization which consists of 60 eminent jurists. HQ- Geneva, Switzerland
- Its aim is to develop national and international human rights standards through the law.

International Covenant on Civil and Political Rights (ICCPR)

- It is a multilateral treaty which has been adopted by the United Nations General Assembly in 1966 and it came into effect in 1976.
- The ICCPR, together with the **Universal Declaration of Human Rights** and the **International Covenant on Economic Social and Cultural Rights**, are considered the International Bill of Human Rights.
- The ICCPR obligates countries that have ratified the treaty to protect and preserve basic human rights, such as: *the right to life and human dignity; equality before the law; freedom of speech, assembly, and association; religious freedom and privacy; freedom from torture, ill-treatment, and arbitrary detention; gender equality; the right to a fair trial; right family life and family unity; and minority rights.*
- ICCPR is **monitored by the United Nations Human Rights Committee.**

24. UNSC 1267 Sanctions Committee is related to

- a) Fight against terrorism.
- b) Prevent a non-nuclear country from acquiring nuclear technology
- c) Promotion of democracy by abolishing monarchies
- d) None of the above

Answer: A

Explanation

- Pakistan had initiated a move to list two Indians - **Angara Appaji** and **Gobinda Patnaik** - as designated terror operatives under the **UNSC's 1267 Committee for Counterterrorism Sanctions.**
- This attempt has been thwarted by the United Nations Security Council (UNSC). The UNSC led by the US, UK, France, Germany and Belgium decided to block Pakistan's move after Islamabad failed to produce evidence to back up its allegations.

UNSC 1267 Sanctions Committee

- This committee - in pursuant to resolutions 1267 (1999), 1899 (2011) and 2253 (2015) concerning ISIL (Da'esh), Al-Qaida, and associated individuals, groups, undertakings and entities - oversees the sanctions measures imposed by the Security Council.

- It is one of the most important and active UN committee working on efforts to combat terrorism, particularly in relation to Al Qaeda and the Islamic State group.

[For detailed discussion on UNSC 1267 Committee, please refer the Yellow Book on Internal Security]

25. Consider the following statements regarding the Organisation for the Prohibition of Chemical Weapons (OPCW):

1. It is an organ of United nation whose aim is to prohibit the use, stockpiling, or transfer of chemical weapons.
2. Its headquarters are located in The Hague, Netherlands.

Which of the above statements is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: B

Explanation

- Germany has claimed that **Novichok** was used to poison **Alexei Navalny** (a critic of Russian President Vladimir Putin who is in a coma in a Berlin hospital).
- Russia is being criticized for the weaponization of chemical as Moscow is a signatory of the **1997 Chemical Weapons Convention**.

What Is Novichok

- The name Novichok means “newcomer”. It is used for a **family of highly toxic nerve agents** with a composition slightly different from the better-known poison gases VX and sarin.
- Novichok agents are believed to be five to 10 times more lethal than these substances.
- In November 2019, members of the OPCW agreed to expand its list of banned “Schedule 1” chemicals to include Novichok agents. That ban went into effect in June 2020.

Chemical Weapons Convention (CWC)

- It is a multilateral treaty that bans weaponization of chemical weapons and requires their destruction within a specified period of time.
- It is **implemented by the Organization for the Prohibition of Chemical Weapons (OPCW)**.
- So far it has 193 members. Egypt, Israel, North Korea and South Sudan are not the member of convention.

Organisation for the Prohibition of Chemical Weapons (OPCW)

- It is an international organization established by the Chemical Weapons Convention (adopted 1992, entered into force 1997).
- Its **aim is to implement and enforce the terms** of the international treaty, which prohibits the use, stockpiling, or transfer of chemical weapons by signatory states.
- The OPCW was **awarded the Nobel Peace Prize in 2013**. Its headquarters are located in The Hague, Netherlands
- It is **not part of United Nation**. The OPCW reports on its inspections and other activities to the UN through the office of the secretary-general.

26. Consider the following statements regarding the Association of World Election Bodies (A-WEB):

1. It aims to foster efficiency and effectiveness in conducting free, fair, transparent and participative elections worldwide.
2. Election Commission of India is the current Chair of A-WEB.

Which of the above statements is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: C

Explanation

- India has completed **one year of chairmanship** at A-WEB. During **4th general assembly** of A-WEB in 2019, **India took over as the chair** of A-WEB for 2019-21.
- The Election Commission of India also organized an International Webinar on its completion of one year of Chairmanship of the A-WEB.
- **Theme** - Issues, Challenges and Protocols for Conducting Elections during COVID-19: Sharing Country Experiences

About A-WEB

- A-WEB is the largest association of Election Management Bodies worldwide.
- It was established in October 2013 in South Korea.
- HQ - Seoul, South Korea.
- It aims to foster efficiency and effectiveness in conducting free, fair, transparent and participative elections worldwide.
- In 2019, an **India A-WEB Centre has been established** at New Delhi, for world class documentation, research and training for sharing the best practices and capacity building of officials of A-WEB members.

27. Which of the following State has won the UN Award For Control Of Non-Communicable Diseases?

- | | |
|-------------------|----------------------|
| a) Andhra Pradesh | b) Kerala |
| c) Tamil Nadu | d) None of the above |

Answer: B

Explanation

- Kerala has won a United Nations award for its "**outstanding contribution**" towards the non-communicable diseases-related sustainable development goals.
- The **UN Interagency Task Force (UNIATF) award** on prevention and control of non-communicable diseases was announced by World Health Organization.
- The award recognises achievements during 2019 on the multi-sectoral action in the prevention and control of NCDs, mental health and the wider NCD-related SDGs.

28. Djibouti Code of Conduct is related to

- a) Maritime security against Piracy
- b) Fight against terrorism in Africa
- c) Promoting Unity and Brotherhood among African Nations
- d) None of the above

Answer: A

Explanation

India has joined the **Djibouti Code of Conduct (DCOC)**, also known as **Jeddah Amendment (JA)**, as an Observer. India joins Japan, Norway, the UK and the US as Observers to the DCOC/JA.

Significance for India:

- Boost to India's Indo-Pacific Policy
- Strategic footprints in Western Indian Ocean besides Eastern African coastal states
- Growth of Blue Economy
- Countering China

About Djibouti Code of Conduct:

- DCOC/JA is a **grouping on maritime matters** comprising 18 member states adjoining the Red Sea, Gulf of Aden, the East coast of Africa and Island countries in the IOR.
- It was established **under the International Maritime Organization (IMO)** in January 2009.
- It is aimed at **repression of piracy and armed robbery against ships** in the Western Indian Ocean Region, the Gulf of Aden and the Red Sea
- It provides a **framework for capacity building** in the Gulf of Aden and Western Indian Ocean to combat the threat of piracy.

29. Consider the following statements regarding Special Frontier Force (SFF):

1. SFF falls under the purview of Ministry of Defence.
2. SFF units are not part of the Indian Army.

Which of the above statements is/are Correct?

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

Answer: B

Explanation

There have been reports about Special Frontier Force (SFF) being involved in the operation to occupy previously **unoccupied heights in Chushul sector in eastern Ladakh**.

What Is SFF

- The SFF was **raised by the Intelligence Bureau** in the immediate aftermath of the 1962 China-India war. It recruited Tibetan exiles (now it has a mixture of Tibetans and Gorkhas).

- It falls under the **purview of the Cabinet Secretariat**. On the ground, it is headed by an Inspector General who is an Army officer of the rank of Major General.
- The original task of this unit was clandestine operations behind the lines in Tibet. It is believed that approximately 3,000 men of SFF played important role in the Chittagong Hill Tracts to aid the East Pakistani insurgents fighting for the independence of Bangladesh.
- The SFF units are **not part of the Army but function under its operational control**. SSF units have their own rank structures, of equivalent status with Army ranks. However, they are special forces personnel highly trained for a variety of tasks.

30. Consider the following statements regarding Assam Rifles:

1. Besides maintaining law and order in the Northeast, the Assam Rifles also guards the border with Myanmar in the region.
2. Assam Rifles comes under both the Ministry of Defence.

Which of the above statement is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: A

Explanation

- The Delhi High Court has granted 12 weeks to the **Union government to decide on whether to scrap or retain the dual control structure for Assam Rifles**.
- The direction came in response to a petition filed by Assam Rifles Ex-Servicemen Welfare Association. The petition was seeking direction to the government to bring Assam Rifles under one control, preferably under Indian Army (MoD).

What Is The Issue

- Under the existing mechanism, Assam Rifles comes under **both the Ministry of Defence (MoD) and Ministry of Home Affairs (MHA)**. The MHA only exercises administrative control of the Assam Rifles; its operational control is with the MoD (Army).
- This duality of administrative control and operational control leads to problems of coordination.
- The MHA believes that there is **no reason to make an exception** for the Assam Rifles given all other CAPFs are under the total control of the MHA.
- On the other hand, **the MoD's view is that the Assam Rifles has a history of working in close coordination with the Army** and that its duties and ethos have always been that of a military force instead of a police force.
- Although, the Assam Rifles personnel operate alongside the Army on similar duties, there is a **disparity in the pay scale**.
- Many believe that this dual control structure is arbitrary, unreasonable and in violation of the rights of Assam Rifles personnel.

What Is The Stand Of Centre On This Issue

- It is believed that an in-principle decision had been taken by the Centre to keep the **Assam Rifles under the MHA's exclusive control**, but a final decision was pending.

- In Nov' 2019, the MHA had called for the **merger of the Assam Rifles with the Indo-Tibetan Border Police (ITBP)**, and proposed that the former should serve under the operational control of the MHA.

About Assam Rifles

- Assam Rifles is one of the **six Central Armed Police Forces (CAPFs)** that come under the MHA's administrative control.
- The others are the *Border Security Force (BSF)*, the *Central Reserve Police Force (CRPF)*, the *Central Industrial Security Force (CISF)*, the *Indo-Tibetan Border Police (ITBP)* and the *Sashastra Seema Bal (SSB)*.
- Its history dating back to 1835 when its precursor, **Cachar Levy**, was formed in the Northeast to protect British Tea estates and their settlements against tribal raids.
- Over the period of time, it was expanded and rechristened **Assam Military Police Battalion**, with additional battalions.
- It was later **renamed as Assam Rifles**. This is where the **dual structure** was perhaps born because even as it continued to operate as a police force, the 'Rifles' tag indicated it was on a par with Army units.
- Besides **maintaining law and order in the Northeast** (a task it performs together with the Army), the **Assam Rifles also guards the border with Myanmar** in the region.

Assam Rifles Asked to Shift Base from Aizawl

The Mizoram government has asked the Assam Rifles to **shift its base from state capital Aizawl to Zokhawsang**, some 15 km away.

Reasons

- The state government has said that the relocation is necessary as the spread-out installation of the **Unit was hampering the work of smart city project**.
- However, there is a "cold war" between the state government and the Assam Rifles over alleged violation of Covid-19 guidelines by the troops and the force's "boycott" of Independence Day celebration.
- Shifting of Assam Rifles bases from urban centres in the Northeast has been a **sentimental issue, as the paramilitary force is seen as a reminder of many a conflict**.

A long-pending demand in Manipur was fulfilled in November 2004 when the **Assam Rifles moved out of Imphal's Kangla Fort**, from where Manipuri kings ruled for 2,000 years. The paramilitary force had occupied the fort for 113 years.

31. Recently, India conducted the flight test of ABHYAS - High-speed Expendable Aerial Target (HEAT) vehicles. This was conducted by

- | | |
|---------|----------------|
| a) ISRO | b) IAF |
| c) DRDO | d) Indian Army |

Answer: C

Explanation

- India has successfully conducted the flight test of ABHYAS - High-speed Expendable Aerial Target (HEAT) vehicles.

- The trial was carried out by the **Defence Research and Development Organisation (DRDO)** from the Integrated Test Range at Chandipur.
- ABHYAS has been designed and developed by the Aeronautical Development Establishment of the DRDO.
- The vehicle is a drone that will be **used as a target for various missile systems**. It can also be used as a decoy aircraft, if needed. This can be used as a target for evaluation of various Missile systems.

32. Consider the following offence:

1. **Offences under the Narcotic Drugs and Psychotropic Substances (NDPS) Act**
2. **Offences related to the smuggling in High-Quality Counterfeit Indian Currency**
3. **Offences under the Explosive Substances Act, 1908**
4. **Human Trafficking**

Which of the above offence(s) is/are under the jurisdiction of the National Investigation Agency (NIA) to investigate?

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

Answer: D

Explanation

The government has empowered the National Investigation Agency (NIA) to investigate offences under the Narcotic Drugs and Psychotropic Substances (NDPS) Act.

Reason:

- The rationale behind this step is to empower the agency so that the it **need not rely on local police or other agencies to unravel drug trade ties** that emerge in course of counter-terrorism operations.
- It would help expedite the NIA in its probes such as the **gold smuggling case in Kerala**, where links had emerged with drug trafficking.
- There is an enabling provision so that NIA officers **could seize narcotic substances**, if any, found during searches in cases investigated by them.
- In the absence of such an enabling order, NIA officers could not seize the narcotic substances and were required to ask the local police to take up a separate case.
- This step would be very helpful in busting the **linkages between terror modules and narco-terrorism** especially those related to syndicates in Jammu and Kashmir and Punjab as also the Northeast and in Naxal-hit areas.

National Investigation Agency

- It was constituted under the National Investigation Agency (NIA) Act, 2008. It is a central agency to investigate and prosecute offences:
 - affecting the sovereignty, security and integrity of India, security of State, friendly relations with foreign States.
 - against atomic and nuclear facilities.
 - smuggling in High-Quality Counterfeit Indian Currency.

- Basically, it is a Central Counter-Terrorism Law Enforcement Agency whose objective is also to combat terror in India.
- NIA is empowered to investigate various offences such as:
 - the smuggling in High-Quality Counterfeit Indian Currency
 - Human trafficking
 - Offences related to counterfeit currency or banknotes
 - Manufacture or sale of prohibited arms
 - Cyber-terrorism, and
 - Offences under the Explosive Substances Act, 1908
 - Offences under the Narcotic Drugs and Psychotropic Substances (NDPS) Act
 - Offences under Acts such as the Atomic Energy Act, 1962, and the Unlawful Activities Prevention Act, 1967

33. Which of the following personality is associated with STS-107 Mission?

- | | |
|-------------------|-------------------|
| a) Kalpana Chawla | b) Rakesh Sharma |
| c) Satish Dhawan | d) Neil Armstrong |

Answer: A

Explanation

- An American **commercial cargo spacecraft** bound for the **International Space Station** has been named after fallen NASA astronaut **Kalpana Chawla**, the **first India-born woman** to enter space, for her key contributions to human spaceflight.
- **Northrop Grumman**, an American global aerospace and defence technology company, announced that its next Cygnus capsule will be named the “**S.S. Kalpana Chawla**”, in memory of the mission specialist who died with her six crewmates aboard the space shuttle Columbia in **2003**.
- The S S Kalpana Chawla capsule is **scheduled to launch on the NG-14 mission atop** a Northrop Grumman Antares rocket from the Mid-Atlantic Regional Spaceport (MARS) at NASA's Wallops Flight Facility in Virginia on September 29. The spacecraft will arrive at and be attached to the space station two days later and will deliver approximately 3,629 kg of cargo to the space station.

About Kalpana Chawla

- Chawla was born in **Karnal, Haryana** on March 17, 1962. She had received a Bachelor of Science degree in aeronautical engineering from Punjab Engineering College in India in 1982.
- Chawla then moved to the United States. In 1984, she received a Master's degree in aerospace engineering from the University of Texas, and a Ph.D. in aerospace engineering from the University of Colorado in 1988. She became a US citizen in April 1991.
- Chawla **began her career at NASA in 1988**. In November 1996, Chawla was assigned as a mission specialist on **STS-87** aboard the **Space Shuttle Columbia**, becoming the first woman of Indian descent to fly in space.
- Chawla's **second spaceflight experience came in 2001** when she was selected for the crew of STS-107. The flight was dedicated to science and research, with approximately 80 experiments completed.

- Chawla lost her life during the **STS-107 mission** when the Space Shuttle Columbia disintegrated upon re-entering the Earth's atmosphere

34. Who among the following women has become the first Indian women pilot to fly Rafale?

- a) Shivangi Singh
- b) Namrata Joshi
- c) Gunjan Saxena
- d) None of the above

Answer: A

Explanation

- Flight Lieutenant **Shivangi Singh** will be the first woman pilot to fly Rafale, India's most modern multi-role fighter aircraft.
- She was commissioned into the IAF in 2017 as part of the **second batch of women fighter pilots**, is currently flying a MiG-21 Bison, the oldest combat aircraft in the force's inventory.

Women Officers to Join Helicopter Stream of Indian Navy

- Two women officers (**Kumudini Tyagi** and **Riti Singh**) have been selected to join as "Observers" (Airborne Tacticians) in the helicopter stream of the Indian Navy.
- The women officers will be the **first set of women airborne combatants** who would be operating from warships. So far, the entry of women in the Indian Navy was restricted to the fixed-wing aircraft that took off and landed ashore
- This would ultimately pave way for the deployment of women in frontline warships of the Indian Navy.

35. Consider the following sentences about Indra-exercise

1. It is a military exercise held between India and France.
2. First such exercise was held in 2019 and it is proposed to happen annually.

Which of the above sentences is/are incorrect?

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

Answer: C

Explanation:

- **India and Russia** held the 11th edition of **bilateral naval exercise, Indra 2020**, in the **Andaman Sea**, close to the strategic **Strait of Malacca**.
- The Indian Navy will be represented by guided missile destroyer **Ranvijay**, indigenous frigate **Sahyadri** and fleet tanker **Shakti**, along with their integral helicopters. Sahyadri has been presently redeployed to provide assistance to **MT New Diamond**, which has caught fire off the coast of Sri Lanka.
- Initially begun as a bilateral naval exercise between India and Russia in 2003, the joint exercise expanded into a tri-services exercises, with the first one held in 2017.
- It epitomises the long-term strategic relationship between the Indian and the Russian Navy.

- In July, the Indian Navy had conducted a **Passage Exercise (PASSEX)** with the US aircraft carrier **USS Nimitz** strike group in the same area near the Andaman and Nicobar (A&N) Islands.
- India had recently pulled out of the **Kavkaz 2020 military drill in Russia** which is scheduled to take place later this month.

36. Who among the following is regarded as Father of Indian Radio Astronomy?

- | | |
|--------------------|-------------------|
| a) APJ Abdul Kalam | b) Govind Swarup |
| c) Satish Dhawan | d) Homi J. Bhabha |

Answer: B

Explanation

- **Govind Swarup**, a noted **Physicist**, died in Pune following a brief illness at the age of 91.
- He has pioneered **radio astronomy** in India and is regarded as the “**Father of Indian Radio Astronomy**”.
- He was the **founder Director of TIFR – National Centre for Radio Astrophysics (NCRA) in Pune**.
- He was the key scientist behind the concept, design and installation of the **Ooty Radio Telescope (India) and the Giant Metrewave Radio Telescope (GMRT) near Pune**.
- Among the **rewards** that Swarup received during his lifetime are the **Herschel Medal** of the Royal Astronomical Society, **Padma Shri**, the **URSI Dellinger Medal**, and the **Grote Reber Medal** of Australia.

37. Consider the following statements about Graphene

1. Graphene is an allotrope of carbon consisting of a single layer of atoms arranged in two-dimensional honeycomb lattice.
2. It is harder than diamond yet more elastic than rubber.
3. It is tougher than steel yet lighter than aluminium.
4. Graphene is the strongest known material.

Which of the above sentences are correct?

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

Answer: D

Explanation

- Researchers from the City University of Hong Kong have produced **graphene masks with an antibacterial efficiency of 80 %**, which they say can be raised to almost **100 % with exposure to sunlight for 10 minutes**.
- Graphene is known for **antibacterial** properties. The researchers created a **laser-induced form of graphene and tested it on E coli**. It showed antibacterial efficiency of about 82 per cent. Most of the E coli were dead after 8 hours.
- It is reusable and less expensive.

Graphene

- Graphene is an **allotrope** of carbon consisting of a **single layer of atoms** arranged in **two-dimensional honeycomb lattice**.
- It is harder than diamond yet more elastic than rubber; tougher than steel yet lighter than aluminium. Graphene is the strongest known material.

Carbon Allotropes

- Diamond, graphite and fullerenes (substances that include nanotubes and buckminsterfullerene) are 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.

38. Consider the following sentences about Anti Satellite Missile

1. It is essentially a missile that can destroy or jam an enemy country's satellite in space.
2. It was developed by the Defence Research and Development Organisation under Mission Space Kavach.
3. A live orbiting satellite in the Middle Earth Orbit (MEO) was destroyed in a "Hit to Kill" mode with 10-centimetre accuracy.

Which of the above statement/s is/are correct?

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

Answer: A

Explanation

- A customized **My Stamp** on India's First **Anti Satellite Missile (A-SAT)** launch was released by the Department of Posts on the occasion of **Engineers Day**.
- In March 2019, Defence Research and Development Organisation (DRDO) successfully conducted an Anti-Satellite (A-SAT) missile test '**Mission Shakti**' from Dr APJ Abdul Kalam Island in Odisha. The entire process was **indigenous**.

Anti-Satellite Missile (A-SAT)

- It's essentially a **missile that can destroy or jam an enemy country's satellite in space**. Since most of the communication networks are satellite-based, this can have a disastrous impact on the country whose satellite gets targeted.
- This interceptor missile was a **three-stage missile with two solid rocket boosters**.
- There are two types of A-SATs: Kinetic and Non-Kinetic A-SATs.
 - **Kinetic A-SATs**, like ballistic missiles, physically strike an object in order to destroy it.
 - **Non-Kinetic A-SATs** are the ones that use non-physical means to disable or destroy space objects, which include frequency jamming, blinding lasers or cyber-attacks.
- Under Mission Shakti, a live orbiting satellite in the **Low Earth Orbit (LEO)** was destroyed in a "Hit to Kill" mode with 10-centimetre accuracy, with the satellite and the missile approaching each other at a high speed of nearly 11 km per second.

- With space becoming a vital dimension of any country's economic and military superiority, A-SAT (Anti-Satellite) weapons play a critical role in providing the necessary strategic deterrence.
- The anti-satellite weapons can even undertake pellet cloud attacks on enemy's low orbit satellites.
- Other ASAT capabilities include cyber-attacks on space systems, Electro-Magnetic Pulse (EMP) explosion devices, directed energy (laser based) weapons and targeted missiles for destruction of satellites to sabotage the enemy's military operations.
- The range of an ASAT is limited and depends on where it is launched from. Satellites above the range of 20,000 kilometres are out of range.
- The US first tested the ASAT technology in 1958 which was followed by the USSR in 1964. China joined the club in 2007. The successful demonstration has **placed India at par with the elite club of three nations -- US, Russia and China --** that possess this capability.
- The US and Russia have the capabilities of launching an ASAT from the ship, land and space, while India, presently, has used a land installation.

39. National Engineer's Day is celebrated on September 15 to appreciate the contributions of

- | | |
|---------------------------------|--|
| a) Chandrasekhara Venkata Raman | b) Avul Pakir Jainulabdeen Abdul Kalam |
| c) Mokshagundam Visvesvaraya | d) Homi J. Bhabha |

Answer : C

Explanation:

- Every year, India celebrates **September 15** as **National Engineer's Day** to appreciate the contributions of **Mokshagundam Visvesvaraya**.
- The **Bharat Ratna awardee**, Mokshagundam Visvesvaraya, more commonly known as Sir MV (15 September 1860 – 14 April 1962), was an Indian civil engineer and statesman and the 19th Diwan of Mysore, serving from 1912 to 1919.
- Known world over for his contribution to harnessing water resources, Visvesvaraya was responsible for the building and consolidation of dams across the country. He is also **credited with inventing the Block System** -- automated doors that close in the conditions of overflow.
- He patented and installed an **irrigation system** with water floodgates at the **Khadakvasla reservoir** near Pune to raise the food supply level and storage to the highest levels.
- This was also installed at **Gwalior's Tigra Dam** and **Mysuru's Krishnaraja Sagara (KRS) dam**, the latter of which created one of the largest reservoirs in Asia at the time.
- While serving as the **Diwan of Mysore**, he was awarded '**Knight**' in 1915 as a commander of the **British Indian** empire by King George V. He received the **Bharat Ratna** in 1955, became a member of the **London Institution of Civil Engineers** before he was awarded a fellowship by the **Indian Institute of Science (IISc)** Bangalore.
- "**Industrialise or Perish**" was Visvesvaraya's mantra. He penned his autobiography, **Memoirs of my Working Life**, in 1951.

40. Consider the following statements

1. Scientists say that Sun may be going through a long period of decreased activity known as the Maunder Minimum from 2020 to 2053.

- Which of the above sentences is/are correct?**

- Answer: D**

- Answer: A**

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- The availability of potassium in the soil solution or exchangeable form **depends on multiple factors like soil acidity, presence of other monovalent cations** like sodium and ammonium ions and the type of soil particles.
- Deficiency in potassium affects plants by **inhibiting the growth of the roots and the shoots**. Plants that are deficient in potassium are **more susceptible to salt, drought, chilling and other abiotic and biotic stresses**.
- The new study suggests that future research could be targeted towards JA that could help achieve both, nutrient- efficient crops and protection against pests.
- The **Green Revolution of the 1960s** was driven by another plant hormone called **Gibberellins (GA)**.

42. Recently which of the following ministry has given the approval for setting up of Plastic Parks in the country?

- a) Ministry of Environment, Forest and Climate Change
- b) Ministry of Chemicals & Fertilizers
- c) Ministry of Micro, Small and Medium Enterprises
- d) Ministry of Science and Technology

Answer: B

Explanation

- Department of Chemicals and Petrochemicals under the **Ministry of Chemicals & Fertilizers** has approved setting up of **10 Plastic Parks in the country**, out of which 6 parks have been given final approval in the States of Assam, Madhya Pradesh (two parks), Odisha, Tamil Nadu and Jharkhand.
- These parks will have an ecosystem with infrastructure building and enabling the common facility to consolidate and synergize the capacities of the domestic downstream plastic processing industry.
- Under the scheme, **Central Government provides grant funding up to 50% of the project cost**, subject to a ceiling of Rs. 40 crore per project. The remaining project cost is to be funded by the State Government, beneficiary industries and by loan from financial institutions.

43. Nandankanan Zoological Park recently in news is located in which among the following state?

- a) Arunachal Pradesh
- b) Odisha
- c) Sikkim
- d) Kerala

Answer: B

Explanation

- Authorities of the **Nandankanan Zoological Park (NZP), Odisha** are concerned over the back-to-back deaths of two sloth bears at the park. The exact cause of deaths of these two bears is not yet known.
- In 2019, four out of the eight elephants in the park died within a span of one month due to Elephant Endotheliotropic Herpesvirus (EEHV) that decreased the platelet count in elephants, leading to internal bleeding.

- Nandankanan Zoological Park is a premier large zoo of India. Unlike other zoos in the country, Nandankanan is built right inside the forest and set in a completely natural environment.

Uniqueness of Nandankanan Zoological Park

- Nandankanan is the first zoo in the World to breed **White tiger and Melanistic tiger**.
- It is the only conservation breeding centre of **Indian Pangolins** in the world.
- It is the only zoological park in India to become an institutional member of **World Association of Zoos and Aquarium (WAZA)**.
- It is the only zoo in India after which an express train Puri-New Delhi express has been named as **"Nandankanan Express"**.
- It is the first zoo in India where **endangered Ratel** was born in captivity.
- It is the only zoo in India to have an **Open-top Leopard Enclosure** and it is the second largest heronry for **Open Billied Storks** in Odisha.

44. Consider the following statements about Environment Pollution (Prevention and Control) Authority (EPCA)

1. It is a statutory body constituted under Environment Protection Act, 1986.
2. It was constituted with the objective of controlling environmental pollution all over India.

Which of the statements given above is/are correct?

- | | |
|-----------------|--------------------|
| a) 1 Only | b) 2 Only |
| c) Both 1 and 2 | d) Neither 1 nor 2 |

Answer: A

Explanation:

- The Supreme Court-appointed Environment Pollution (Prevention and Control) Authority wrote to the chief secretaries of Punjab and Haryana stating **that early burning of crop residue was taking place** and urged them to address the issue "urgently".
- Last year, about 9.8 million tonnes of the total estimated crop residue of 20 million tonnes were burnt in Punjab, according to official figures. Similarly, in Haryana, of the total 7 million tonnes, 1.24 million tonnes of stubble were burnt.

About Environment Pollution (Prevention and Control) Authority (EPCA)

- EPCA, is a **statutory body** notified in 1998 by the Environment Ministry under **Environment Protection Act, 1986**, at the behest of the Supreme Court. The EPCA also assists the apex court in various environment-related matters in the region.
- **Objective:** EPCA was constituted with the objective of 'protecting and improving' the quality of the environment and 'controlling environmental pollution' **in the National Capital Region**.
- **Composition:** Besides the chairman, the EPCA has 14 members, some of whom are the environment secretary of the National Capital Territory of Delhi (NCT), chairperson of the New Delhi Municipal Council, transport commissioner of the NCT, the commissioners of various municipal corporations of Delhi and professors at IIT Delhi and Jawaharlal Nehru University.

- **Functions:**

- The initial mandate of the body was to ensure the shift of Delhi's bus and auto fleet to CNG.
- To enforce Graded Response Action Plan (GRAP) in NCR as per the pollution levels.

45. 'Fridays For Future' movement recently in news was related to?

- a) Disarmament of nuclear weapons
- b) Preventing Zoonotic Diseases
- c) Global climate strike
- d) None of the above

Answer: C

Explanation:

- Students and youth under the banner of Fridays For Future (FFF), a **global movement demanding climate justice**, protested outside the Union Environment Ministry.
- Their demand includes Scrapping Draft EIA 2020, saving the Aravallis, improved sewage management plants to prevent pollution of the Yamuna, public participation in policy-making and better environmental education in schools.

About 'Fridays For Future'

- The FFF is a **global climate strike movement** that started in August 2018, when 15-year-old Greta Thunberg began a strike in Sweden. In the three weeks leading up to the Swedish election, she sat outside the Swedish Parliament every school day, **demanding urgent action on the climate crisis that turned into a global movement.**
- One of the main goals of the movement is to put **moral pressure on policy-makers, to make them listen to scientists and then to take action to limit global warming.**

Revise Guidelines On Parole, Furlough and Premature Release Of Prisoners

Ministry of Home Affairs (MHA) has sent an advisory to States, asking them to exercise due diligence in releasing prisoners and follow the guidelines it issued.

Background

- In the wake of the pandemic, States are **under pressure to release prisoners in order to avoid overcrowding in prisons**. However, in the process a lot of prisoners are being released without adherence to guidelines.
- The move has been triggered by reports of several prisoners, particularly those serving a sentence of less than seven years, being released on parole and furlough and some of them going on to commit crimes.
- **Prison is a state subject** and all states have their own rules for parole, furlough, remission and premature release of the prisoners. However, it is important for **state authorities to review their guidelines** to ensure that the facility and concession given to inmates, by way of parole, furlough and premature release etc, is not abused and misused by them.

Revised Guidelines

MHA has asked states to **include four new provisions** in guidelines for release of prisoners:

- Grant of parole and furlough to those **offenders whose release may have adverse impact on the security of the State** or safety of individuals may be strictly restricted.
- **The parole rules of states, including the criteria, duration and frequency, may be reviewed** after making an assessment based on their experience 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, who may meet as per requirement, keeping in view all relevant factors, **especially for inmates sentenced for sexual offences and serious crimes** such as murder, child abduction, violence etc.
- It may be useful to invariably **include 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.

Differences Between Parole and Furlough

Parole

- Parole 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. In India, parole (as well as furlough) are covered under **The Prisons Act of 1894**. Each state in India has its own parole rules.
- **Parole is not seen as a matter of 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.
- **Parole 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.
- Parole is often not granted to convicts sentenced to death, or to those who, in the opinion of jail authorities, are likely to flee when released from prison.

- **Prisoners convicted of multiple murders or under the anti-terror Unlawful Activities Prevention Act (UAPA) are not eligible for parole.** Apart from regular parole, the superintendent of a jail can also grant parole up to a period of seven days in emergencies.

Furlough

- Furlough is given in cases of long-term imprisonment. The period of furlough granted to a prisoner is treated as remission of his sentence.
- 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.

Government Suspends FCRA Clearance Of 6 NGOs

- Union Home Ministry has suspended the license of the six NGOs under the **Foreign Contribution Regulation Act (FCRA), 2010**. Among the six NGOs, four are Christian associations. The reasons for the suspension or violation were **not specified**.
- Earlier in 2017, U.S.- based Christian donor, **Compassion International**, was forced to stop operations in India after the Ministry found that it funded NGOs that encouraged religious conversions.
- **An FCRA licence is mandatory** for a non-profit organisation to receive foreign funds. As of now, there are **22,457 NGOs or associations registered under the FCRA**, while the licenses of 20,674 were cancelled and 6,702 are deemed to have expired.

Salient Features of FCRA, 2010

- **FCRA 2010** and rules framed under it regulate the receipt and usage of foreign contribution in India. It is implemented by **Ministry of Home Affairs**, Government of India.
- The intent of the Act is to prevent use of foreign contribution or foreign hospitality for any activity detrimental to the national interest.
- It has a very wide scope and is **applicable to a natural person, body corporate, all other types of Indian entities** (whether incorporated or not) as well as **NRIs and overseas branches/subsidiaries** of Indian companies and other entities formed or registered in India.
- The Act
 - i) Prohibits acceptance and use of foreign contribution or foreign hospitality by a **certain specified category of persons** such as a candidate for election, judge, journalist, columnist, newspaper publication, cartoonist, member of any legislature etc.
 - ii) Regulates the inflow to and usage of foreign contribution by **NGOs** by prescribing a mechanism to accept, use and report usage of the same.
- f) **Acceptance of Foreign Funds:** The Act permits only NGOs having a definite cultural, economic, educational, religious or social programme to accept foreign contribution, that too after such NGOs either obtain a certificate of registration or prior permission under the Act.
- g) **Registration And Prior Approval Under FCRA:** In order to be registered under the FCRA, an NGO must be in existence for at least three years and must have undertaken reasonable activity in its field for which the foreign contribution is proposed to be utilised. Further, it must have spent at least INR 1,000,000 over three years preceding the date of its application on its activities. The **registration certificate is valid for a period of five years** and must be thereafter renewed in the prescribed manner.

- h) **Use Of Foreign Funding:** The Act imposes various conditions on the use of foreign funds
- i) All funds received by a NGO must be used only for the purpose for which they were received.
 - ii) Such funds must not be used in speculative activities identified under the Act.
 - iii) Except with the prior approval of the Authority, such funds must not be given or transferred to any entity not registered under the Act or having prior approval under the Act.
 - iv) Every asset purchased with such fund must be in the name of the NGO and not its office bearers or members.
- i) **Reporting Requirement:** Every NGO registered or having prior approval under the Act must file an annual report with the Authority in the prescribed form.
- j) **Cancellation of Registration Certificate:** Under the Act, the Authority is empowered to cancel the registration certificate of a NGO in the following circumstances:
- i) It has made false statement in any of its applications or submissions under the Act.
 - ii) It has violated any of the terms and conditions of registration.
 - iii) It has violated any of the provisions of the Act or any order passed under it.
 - iv) Authority is of the view that cancellation of registration is necessary in the public interest.
 - v) It has been inactive for two consecutive years in its chosen field of service.

Issues Associated With FCRA

- 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”. This **condition is manifestly overbroad and there is no clear guidance on what constitutes “public interest”**. Thus, an environmental or human rights organisation criticising the government can be accused of “acting against public interest”.
- The restrictions also 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**. Free speech is valuable not because everyone agrees, but because it enables a culture of dissent, deliberation, and debate.
- The foreign funding prohibition **negates the significance of voluntary, non-profit associations in a democracy**. Democracy requires critics and civil society. This is why invoking the FCRA to curb the work of NGOs is deeply troubling.
- By allowing only some political groups to receive foreign donations and disallowing some others, the government can **ensure a biased political debate**. This chilling effect on free speech can lead to self-censorship.
- **FCRA registration get expired after five years**, and had to be renewed afresh. This instantly hands the state a whip with which to bring errant organisations to heel.
- **The law put a restriction (50 %) on the proportion of foreign funds that could be used for administrative expenses**, thereby allowing the government to control how a civil society organisation (CSO) spends its money.

Proposed Amendments to FCRA

- Recently a **bill to amend the FCRA has been introduced in the Lok Sabha**. According to the government, the proposed amendments “seek to streamline the provisions of the FCRA by strengthening the compliance mechanism, enhancing transparency and accountability in the receipt and utilisation of foreign contribution worth thousands of crores of rupees every year.
- The proposed amendments seek to **bar public servants from receiving foreign funding**.

- The amendments seek to **make Aadhar mandatory** for all office bearers of NGOs and other organisations which are seeking foreign contributions.
- The bill also seeks to **limit the use of foreign funds received under FCRA** for administrative purposes from the current limit of 50 % to 20 %.
- After the amendments are passed, no organisation will be able to **transfer foreign contribution** to any person/association/company under Section 7 of the FCRA.
- **Renewal of license:** The government may conduct an inquiry before renewing the certificate to ensure that the person making the application: (i) is not fictitious or benami, (ii) has not been prosecuted or convicted for creating communal tension or indulging in activities aimed at religious conversion, and (iii) has not been found guilty of diversion or misutilisation of funds, among others conditions.
- **Suspension of registration:** Under the Act, the government may suspend the registration of a person for a period not exceeding 180 days. The Bill adds that such suspension may be extended up to an additional 180 days.

Basic Structure Doctrine: Kesavananda Bharati Case

Kesavananda Bharati, whose petition in the Supreme Court led to the **landmark verdict of 1973 that outlined the basic structure doctrine** of the Constitution, passed away on 6 September.

What Was The Case About?

- Kesavananda Bharati moved the Supreme Court on 21 March 1970, seeking relief against the **Kerala Land Reforms (Amendment) Act, 1969** and the 24th, 25th and 29th amendments of the Constitution.
- Kesavananda Bharati sought relief on the ground that his fundamental rights protected under Article 25 (Right to practice and propagate religion), Article 26 (Right to manage property of a religious denomination) and Article 31 (Right to property) of the Constitution had been affected by the above mentioned amendments.
- The case was primarily about **the extent of Parliament's power to amend the Constitution**.
 - First, the court was reviewing a 1967 decision in **Golaknath v State of Punjab** which, reversing earlier verdicts, had ruled that Parliament cannot amend fundamental rights.
 - Second, the court was deciding the constitutional validity of several other amendments. Notably, the right to property had been removed as a fundamental right, and Parliament had also given itself the **power to amend any part of the Constitution** and passed a law that **it cannot be reviewed by the courts**.
- The executive vs judiciary manoeuvres displayed in the amendments ended with the Kesavananda Bharati case, in which the court had to settle these issues conclusively. Politically, the case represented the fight for supremacy of Parliament led by then Prime Minister Indira Gandhi.

What Did The Court Decide

- In its majority ruling, the court held that **fundamental rights cannot be taken away by amending them**. While the court said that Parliament had vast powers to amend the Constitution, it drew the line by observing that **certain parts are so inherent and intrinsic to the Constitution that even Parliament cannot touch it**.

- However, 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**.

The Basic Structure Doctrine

- 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. The original Weimar Constitution, which gave Parliament to amend the Constitution with a two-thirds majority, was in fact used by Hitler to his advantage to make radical changes.
- 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. While *parliamentary democracy, fundamental rights, judicial review, secularism* are all held by courts as basic structure, the list is not exhaustive.

J&K Official Languages Bill, 2020

- The Union Cabinet approved the Jammu and Kashmir Official Languages Bill to be introduced in Parliament to make **5 languages - Urdu, Kashmiri, Dogri, Hindi and English** - the official languages for the Union Territory. Only English and Urdu were official languages in the former State.
- While passing the bill, it was pointed out that around 74% people in the Union Territory spoke Kashmiri and Dogri languages.
- Further, according to 2011 census, only 0.16 per cent population in Jammu and Kashmir spoke Urdu, while 2.3 per cent spoke Hindi.

Criticisms

- The move is **trespassing on the Jammu & Kashmir Re-Organization Act, 2019** which empowers the J&K legislative assembly to decide on the adoption of official languages.
- **Enforcing more than two languages in J&K will lead to linguistic polarisation** with genuine demands for the inclusion of Gojri, Pahari and Punjabi.”
- The **exclusion of Punjabi language** from the bill will cause a setback to the cultural heritage of Punjab and would be injustice to the significant Punjabi speaking population in the region
- Different political and ethnic groups in J&K have **demanding the inclusion of Gojri, Pahari and Punjabi in the proposed Bill**. Under the sixth schedule of the constitution of the erstwhile state of J&K, Kashmiri, Dogri, Balti (Pali), Dardi, Punjabi, Pahari, Ladakhi and Gojri were regional languages of the state.

Rashtriya Khel Protsahan Puruskar 2020

- **Air Force Sports Control Board** was conferred with ‘Rashtriya Khel Protsahan Puruskar 2020’ for the outstanding contribution in helping sportsperson to excel in their respective disciplines and implement robust sports welfare measures.
- Air Force Sports Control Board (AFSCB) is the apex body for planning and conduct of sports activities within the IAF and at Inter-Services level.

About Rashtriya Khel Protsahan Puruskar

- The Union Sports Ministry introduced **Rashtriya Khel Protsahan Puruskar scheme in 2009** to promote involvement of corporates and institutional boards in sports.
- Later the Ministry has **revised the scheme** and the award will be given in four categories such as, (a) identification and nurturing of budding/young talent, (b) encouragement of sports through Corporate Social Responsibility, (c) employment of sportspersons and sports welfare measures and (d) sports for development.

Office Of Profit

- President has dismissed a plea, to disqualify Rajya Sabha Member V Vijayasai Reddy, **accusing him of holding an office of profit.**
- A petition filed under **Article 102 (1) (a) of the Constitution of India**, claiming that he held office of profit as he had been appointed a Special Representative of the Andhra Pradesh Government at Andhra Bhavan in New Delhi.
- President referred the petition to the Election Commission (EC), seeking its opinion. The EC opined that in view of the provisions contained in the **Parliament (Prevention of Disqualification) Act, 1959**, Reddy did not incur disqualification for being a Member of Parliament.

What Constitute An Of Profit: An Analysis

- The three elements for attracting disqualification under **Article 102(1)(a)**, of the Constitution are:
 - there must be an office;
 - the office must be one where the holder derives profit;
 - such an office must be under the government.
- The law laid down in the judgment in **Dr Deorao Laxman Anande Vs Keshav Laxman Borkar 1958** interpreting Article 191 (a) notes that the post cannot be regarded as office for the following reasons:
 - a) non- remunerative and without a dedicated salary unlike ministerial posts.
 - b) No perks attached to the post / appointment
 - c) No dedicated office or office support systems designated
 - d) No exclusive responsibilities or functions , with the sole purpose being to assist the Minister-in-charge for any assistance he may need in connection with his work for the govt.
 - e) No exclusive prerogative to tender opinion on any subject of governance , or authority to execute ministerial work given.
 - f) No access to documents of information meant for the exclusive domain of the Minister
- Supreme Court judgements in **Jaya Bachchan v. Union of India (2006)** as well as **U.C. Raman v. P.T.A Rahim (2014)** pointed out that unless some remuneration is attached to the office or the office is capable of yielding some pecuniary gains it would not be an office of profit. The court ruled that post (Chairperson of Haj Committee) does not attract disqualification for it includes travelling allowance and daily allowances as opposed to a pay, salary, remuneration, etc. The Apex Court also clarified that 'profit' in office of profit constitutes only pecuniary benefits and does not include other factors such as status, power, influence etc emanating from such post. It has also been made clear by the court that compensatory allowances are meant to meet the out-of-pocket expenses and hence do not constitute any profit. *It becomes thus clear that an office to which no salary or remuneration is attached or which is not capable of yielding a profit is not an office of profit.*

- Former solicitor general Mohan Parasaran, quoting the Supreme Court in the ***Sivamurthy Swami Inamdar vs Agadi Sanganna case of 1971***, says the issue is clearly posed by the apex court: "what needs to be found out is whether the amount of money receivable by the person concerned in connection with the office he holds, gives to him some 'pecuniary gain', other than as 'compensation' to defray his out-of-pocket expenses, which may have the possibility to bring that person under the influence of the executive, which is conferring that benefit on him".

Code Of Ethics For All News Channels

Supreme Court (SC) had sought suggestions from the **News Broadcasters Association (NBA)** on how to control 'communal' content on news channels & strengthen its self-regulatory powers.

Background

- The SC order came in the background of a **plea seeking pre-telecast ban** on a programme called **"UPSC Jihad" of Sudarshan TV**. The SC had also questioned Sudarshan TV over its **"Bindas Bol" programme**, the promo of which had claimed that the channel would show the **"big expose on conspiracy to infiltrate Muslims in government service"**.
- The court said the content was prima facie **"plainly hurtful" to the community**. It is an affront to the dignity of the community.
- The court said NBA was **"toothless"** and its penalties hardly a deterrence for channels. Simultaneously, it had taken note of alleged **inadequacy of self-regulatory mechanism of the NBA** and had observed: **"The NBA says that Sudarshan TV is not its member so it cannot do anything."**
- At present, the **court has stayed the telecast of episodes** which deal with alleged infiltration of Muslims in bureaucracy.

Suggestions By NBA

- The NBA said its **code of ethics should be given a statutory recognition** by making it a part of the Programme Code under the Cable TV Rules so that these codes become binding on all news channels.
- **News Broadcasters Services Authority (NBSA)** should be granted recognition as an **"independent self-regulatory mechanism"** so that complaints against all news broadcasters, whether members of NBA or not, may be entertained by the NBSA and the orders passed by the NBSA would be binding and enforceable on all news broadcasters.
- Recognition to the NBSA would also strengthen the **News Broadcasting Standard Regulation** and the penalties mentioned therein could be made more stringent.
- Primarily, **submission to the NBSA regulatory mechanism should be made mandatory for granting/renewal of uplinking/downlinking permissions by the government**. The government should take into consideration any previous orders passed by the NBSA while granting or renewing uplinking/downlinking permissions.

The News Broadcasters Association

- NBA represents the private television news & current affairs broadcasters. It is the collective voice of the news & current affairs broadcasters in India.
- It is an organization funded entirely by its members. The NBA has presently 27 leading news and current affairs broadcasters (comprising 77 news and current affairs channels) as its members.

- The NBA presents a unified and credible voice before the Government, on matters that affect the growing industry.

News Broadcasting Standards Authority:

- It is an independent body **set up by the News Broadcasters Association**. Its task is to consider and adjudicate upon complaints about broadcasts.
- NBSA administers the Codes of Ethics & Broadcasting Standards, which has been voluntarily drawn by the News Broadcasters Association (NBA) for its member broadcasters.
- NBSA has no involvement in the day-to-day operations of the broadcasters. NBSA does not monitor programming, nor does it pre-clear or pre-censor programming. The broadcasters have complete creative and editorial independence.

Amnesty International

- NGO Amnesty International announced that it was shutting its offices in India and letting go of its staff, nearly 150 members following the **freezing of its bank accounts by the Enforcement Directorate**.
- Responding to Amnesty's announcement, the government said the group had **broken the law by circumventing rules around foreign donations**. India, by settled law, does not allow interference in domestic political debates by entities funded by foreign donations.
- The Ministry said Amnesty had been given permission under the Foreign Contribution (Regulation) Act (FCRA) only once in 2000, and since denied the same despite requests. It accused Amnesty UK of circumventing the regulations by **remitting large amounts of money to four entities registered in India, by classifying it as FDI**. According to the ED case, Amnesty International India had **"received foreign funds through a commercial route to the extent of Rs 36 crore"**.

About Amnesty International

- **Status:** Amnesty International (AI) is a non-governmental organization with its **headquarters in the United Kingdom**.
- **Mission:** Amnesty draws attention to human rights abuses and campaigns for compliance with international laws and standards.
- **Background:** Amnesty International was founded in London in 1961, following the publication of the article "The Forgotten Prisoners" in The Observer on 28 May 1961, by lawyer Peter Benenson.
- **Awards:** The organization was awarded the **1977 Nobel Peace Prize** for its "defence of human dignity against torture," and the United Nations Prize in the Field of Human Rights in 1978.

YuWaah Platform

The Ministry of Youth Affairs & Sports and the United Nations Children Fund (UNICEF) have signed a "Statement of Intent" to establish **YuWaah, Generation Unlimited (GenU)**, a global multi-stakeholder platform in India.

The Objectives Of This Project Are:

- **Providing entrepreneurship classes** with successful entrepreneurs and experts, towards establishing entrepreneurial mindset among young people.
- **Upskilling of young people on 21st century skills**, life skills, digital skills and support them through self-learning, for their productive lives and the future of work.

- **Create linkages with aspirational economic opportunities** to connect young people with employment opportunities, including building pathways to connect them with jobs or self-employment. For this, innovative solutions and technology platforms will be engaged to take maximize the scale and reach.
- **Providing career guidance** support to young people through career portal as well as through job-readiness and self-exploration sessions to make young people career-ready.

Destination North East Festival

- Union Home Minister inaugurated Destination North East 2020, a four-day festival to promote and showcase the region's tourism, culture, heritage and business.
- It is an **annual festival** organised by the **Ministry of Development of North-Eastern Region (DoNER)** with the objective of showcasing and celebrating the region to other parts of the country in order to strengthen national integration.
- The theme for this year's event is '**The Emerging Delightful Destinations**' and will be a virtual event due to the Covid-19 pandemic.

The Underlying Causes of Underdevelopment in the Northeast

- **Geographical Factors:** The region's accessibility has always remained weak due to geographical reasons and underdeveloped transport links with the rest of India. Also, as the region witnesses floods and landslides in the Brahmaputra and Barak Valleys of Assam, considerable strain is exerted on the economy of not only Assam but other North-Eastern states too.
- **Infrastructural Factors:** The region has about 6% of the national roads and about 13% of the national highways. However, the quality of these roads is poor and only in recent years, serious efforts have been made for the provision of these facilities. However, as infrastructural development entails long gestation periods the recent efforts made by North-Eastern Council (NEC) and DoNER did not have much of an economic impact.
- **Constraints on Industrial Growth:** At the time of Independence, there was a small but significant industrial sector in Assam. Post Independence, due to the partition of India, the industrial sector in Assam received a serious setback as its trade routes were cut-off with the rest of the country. This in turn hindered economic integration with other parts of India and also reduced the attractiveness of the region as a destination of investment.
- **Agriculture:** The agricultural growth has been uneven across states and between crops. The Green Revolution was limited to the North-Western parts of the country and has not benefited the North-Eastern region. The agricultural productivity is the lowest, irrigation facilities are almost non-existent in some areas and consumption of fertilisers is extremely low in the region.
- **Insurgency and Political Issues:** The North-Eastern states have witnessed a rise of insurgent activities and regional movements. Nagaland has been the epicentre of insurgency and the problem has now spilled over to the rest of the region. Often these insurgent groups indulge in subversive activities like damaging rail tracks, smuggling, extortion, kidnapping, strikes and curfews and illegal cross-country migration.
- **Natural Resource Base:** In spite of having huge natural resources, the resources are being exploited and mismanaged. The bulk of natural resource degradation is being caused by coal mining, fertiliser industry, paper industry, cement industry and militant activities.

Government Efforts For The Development Of North East Region

- **Digital North East Vision 2022:** It emphasizes leveraging digital technologies to transform lives of people of the north east and enhance the ease of living.
- **North Eastern Region Vision 2020 Document:** It provides an overarching framework for the development of the North Eastern Region to bring it at par with other developed regions
- **Act East Policy:** The north eastern region has been a priority in the government's Act East policy which envisages itself as an interface between India's north east and the ASEAN region. It is aimed at ensuring the overall development of north eastern states in terms of people to people contact, border trade through border haats, cultural ties, infrastructure projects, for example, Kaladan Multi-modal Transit Transport project, India-Myanmar-Thailand Trilateral Highway project, Rhi-Tiddim road project etc.
- **National Bamboo Mission:** It aims to promote the growth of the bamboo sector through as an area based regionally differentiated strategy. The Mission will focus on development of bamboo in limited States where it has social, commercial and economical advantage, particularly in the North Eastern region.
- **North East Special Infrastructure Development Scheme (NESIDS):** Under the Scheme, 100% centrally funding is provided to the State Governments of North Eastern Region for the projects of physical infrastructure relating to water supply, power and connectivity enhancing tourism and Social infrastructure relating to primary and secondary sectors of education and health.

Hindi Diwas 2020

- Every year, **September 14 is observed as Hindi Diwas** to commemorate the day the Constituent Assembly of India recognised and adopted Hindi as the official language of the Republic of India in 1949.
- Under the **Article 343** of the Indian Constitution, **Hindi written in Devanagari script** was adopted as the official language.
- Hindi is the **fourth most spoken language in the world**.

History

- The Indian National Congress in its 1925 **Karachi session** decided that **Hindustani -- the popular, undifferentiated blend of Hindi and Urdu** -- should be the lingua franca of the independent nation.
- However, this resolution was modified a few years later due to the influence of **Hindi Sahitya Sammelan** which suggested that Hindi should be the national language.
- Among those who lobbied to make Hindi our national language were people like Kaka Kalelkar, Maithili Sharan Gupt and Seth Govind Das, but the efforts only bore results on the fiftieth birthday of **Beohar Rajendra Simha**, which was on 14 September, 1949. Thus marking the first time Hindi Diwas was celebrated.

World Tourism Day 2020

- Ministry of Tourism celebrated World Tourism Day on 27 September 2020 through virtual platform.
- This year United Nations World Tourism Organisation (UNWTO) has designated 2020 as the **Year of Tourism and Rural Development**. This Year is an opportunity to promote the potential of tourism to create jobs and opportunities.

- Tourism is one of the world's most important economic sectors. It employs one in every ten people on Earth and provides livelihoods to hundreds of millions more. For some countries, it can represent over 20 percent of their GDP.
- **SAATHI Application:** During the event SAATHI Application was launched by Union Minister of Petroleum & Natural Gas and Steel. SAATHI is an initiative of the **Ministry of Tourism** with Quality Council of India to assist the hospitality industry to continue to operate safely and thereby instill confidence among the Staff, employees and the guests about the safety of the hotel/unit.

Reservation For Doctors

- In a major relief to medical officers, 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.
- The judgement came on a plea filed by petitioners, including doctors from various states, saying granting reservation benefits would encourage those working in government hospitals and in rural areas.
- The doctors had challenged the validity of the Postgraduate Medical Education Regulations, 2000, framed by the Medical Council of India. 50 % seats in *PG diploma courses* are reserved for medical officers in the government service but the MCI regulations had barred it in *PG degree courses*.
- The Central government and the MCI had opposed the plea and had said that granting reservations or a separate source of entry for in-service candidates would directly affect the authority of MCI to coordinate and determine standards of medical education.

SC Judgement

- The apex court, in its judgment, said that the state government has the power to give reservation in PG admissions to government doctors working in remote areas.
- It further held that the MCI has no power to provide or not provide reservation for in-service doctors in admission to PG courses and held the MCI regulation that barred such reservations as unconstitutional and arbitrary.
- The bench also said that state regulations must provide for work bonds for five years of service in rural/remote areas for the person who gets PG admission through this reservation.
- It also asked the states to formulate a scheme for rural/remote service by in-service doctors after completing PG degree.

International Literacy Day

- UNESCO declared September 8 as International Literacy Day at its General Conference in 1966. Following the UNESCO General conference, the first International Literacy Day was celebrated on September 8, 1967.
- The day aims at raising awareness and reminding people of the importance of literacy as a matter of dignity and human rights
- **Theme:** "Literacy teaching and learning in the COVID-19 crisis and beyond".
- The Literacy Day this year will focus on the innovative and effective teaching methods that can be used in youth and adult literacy programmes during the pandemic and also after that.

Literacy in SDGs

- Literacy goals are a key part of the UN's Sustainable Development Goals (SDG) and its 2030 Agenda for Sustainable Development.
- The SDG agenda contains 17 goals and 169 targets, adopted in 2015 to build on the Millennium Development Goals (MDGs), which were adopted in 2000. The SDGs are meant to be achieved by 2030.
- **SDG 4** aims to ensure *inclusive and equitable quality education* and promote *lifelong learning* opportunities for all.
- Some of the **other SDGs** are: End poverty in all forms, end hunger, achieve food security and improved nutrition, promote sustainable agriculture etc.

Indira Gandhi Peace Prize

- The Indira Gandhi Peace Prize for 2019 was recently conferred on renowned naturalist and broadcaster **Sir David Attenborough**.
- The Indira Gandhi Prize for Peace, Disarmament and Development was instituted in 1986.
- It is given to individuals or organizations who are working towards:
 - Ensuring international peace and development,
 - Ensuring that scientific discoveries are used to further the scope of freedom and better humanity,
 - Creating new international economic order.

International Day of Peace

- International Day of Peace, also known as the World Peace Day, is observed every year on September 21.
- The International Day of Peace was established in 1981 by the United Nations General Assembly. Two decades later, in 2001, the General Assembly unanimously voted to designate the Day as a period of non-violence and cease-fire.
- On this day, the United Nations calls on everyone, everywhere, to observe 24 hours of non-violence and ceasefire.
- 'Shaping Peace Together' is the theme for world peace day this year.

Groundwater Extraction Guidelines

- The Central Ground Water Authority (CGWA) under the **Ministry of Jal Shakti** has notified new guidelines to regulate extraction of groundwater in the country.
- The guidelines will be applicable throughout the country. Moreover, States can suggest additional conditions/criteria based on the local hydro-geological situations.
- New groundwater guidelines were required because the guidelines issued by the Centre in December, 2018 were abolished by the National Green Tribunal in January 2019.

Central Ground Water Authority

- The CGWA has been constituted under the Environment (Protection) Act, 1986.
- It has the power to regulate, management and development of ground water in the country and to issue necessary regulatory directions for the purpose.

- Since then, there were no guidelines under which No Objection Certificate for groundwater withdrawal can be issued.

Groundwater Status In The Country

- Out of the total 6,881 assessment units, 1186 units (17%) have been categorised as 'over-exploited', 313 units (5%) as 'critical', 972 units (14%) as 'semi-critical' and 4310 units (63%) as 'safe'.
- Majority of the over-exploited units are concentrated in parts of Punjab, Haryana, Delhi, western UP, Rajasthan, Gujarat, Karnataka, Andhra Pradesh, Telangana and Tamil Nadu.

New Guidelines

- All existing and new industries/mining/ infrastructure projects extracting ground water will have to take No Objection Certificate (NOC) for extraction of ground water and pay groundwater extraction charges based on the amount of groundwater extracted..
- The NOC will be taken from the Central Ground Water Board (CGWB) or the state/UT groundwater authorities concerned. The NOC issued under the new guidelines will be valid for 2-5 years depending on the entity.
- Sale of ground water by a person/ agency not having valid NOC is not permitted. Thus, all private tankers extracting ground water for bulk water supply will have to seek an NOC. They will also have to pay extraction charges based on the amount of water extracted.

NEW GUIDELINES TO SAVE GROUNDWATER

KEY PROVISIONS:

- All new/existing industries will be required to seek NOC under expanded compliance norms
- Installation of Sewage Treatment Plants (STPs) will be mandatory for all residential apartments/ Group Housing Societies, where groundwater requirement is more than 20 m³/day, for getting NOCs
- NOC to be granted only in such cases where the local government water supply agency is unable to supply requisite amount of water
- NOC will not be granted to industries and commercial units in over-exploited assessment areas



Guidelines For Over-Exploited Regions

- In over-exploited areas, NOC will not be given for ground water extraction to any new industry except those falling in the category of Micro, Small and Medium Enterprises (MSME).
- Further, NOC will not be given to new packaged water industries in over-exploited areas, even if they belong to the MSME category.
- Since mining and infrastructure projects are location specific, there will be no ban on grant of NOC for such projects in over-exploited areas.
- However, in over-exploited areas, use of ground water for construction activity (under infrastructure projects) will be permitted, only if no treated sewage water is available within 10 km radius of the site.
- No NOC will be given for extraction of groundwater for Water Parks, Theme Parks and Amusement Parks in over-exploited areas.

Guidelines For Domestic Use

- NOC will be required for groundwater extraction for drinking and domestic use for residential apartments or group housing societies in urban areas. However, NOCs will be granted to the housing societies only in such cases where the local government agency is unable to supply the required amount of water.
- Further, residential societies will have to install sewage treatment plants (STPs) for getting NOCs if their groundwater requirement is more than 20 cubic metre /day. Under the condition, water from STPs will be utilised for toilet flushing, car washing, gardening, etc.

Exemptions

The guidelines have exempted **5 categories** from getting an NOC —

- i) Individual domestic consumers in both rural and urban areas for drinking water and domestic uses;
- ii) Rural drinking water supply schemes;
- iii) Armed Forces Establishments and Central Armed Police Forces establishments in both rural and urban areas;
- iv) Agricultural activities; and
- v) Micro and small enterprises extracting less than 10 cubic metre/day of groundwater.

Penalty

- Violation of NOC conditions will attract a penalty from Rs 2 lakh to Rs 10 lakh.
- Industries and mining projects will also have to pay an **environmental compensation charge**, fixed by the Central Pollution Control Board (CPCB), for not obtaining NOCs under the new conditions.

Accidental Deaths & Suicides Data

The National Crime Records Bureau (NCRB) recently released the 'Accidental Deaths & Suicides' data for the year 2019.

Data on Suicides

- Suicides in the country went up slightly from 1,34,516 (in 2018) to 1,39,123 (in 2019). The majority of suicides were reported in **Maharashtra**, followed by Tamil Nadu, West Bengal, Madhya Pradesh and Karnataka.
- At nearly a quarter of the suicides (32,563), the **daily-wage earners** comprised the largest chunk of such deaths.
- **House wives** made up the second largest chunk among suicide deaths, at 21,359 or 15.4 per cent of the total, in 2019. However, their share as well as that of those engaged in the farming sector in suicides has been declining.
- The suicide rate in the deeply stressed farming sector accounted for 7.4 per cent of the total suicides in the country, resulting in deaths of 5,957 farmers and 4,324 agricultural labourers.
- Majority of victims engaged in farming sector were reported in Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh, Chhattisgarh & Telangana.
- The suicide rate in cities (13.9%) was higher than the national rate (10.4). The numbers of suicides in 53 megacities showed an increasing trend during 2016 to 2019, with a 4.6% increase last year.
- Four metropolitan cities, Chennai, Delhi, Bengaluru and Mumbai reported higher cases.

Categories	% of Total Suicides
Daily Wage Earners	25
House wives	15.4
Farming Sectors (Farmers + Agricultural Labourers)	7.4

Accidental Data

- Accidental deaths in the country increased by 2.3%. Compared to 4,11,824 in 2018, the figure stood at 4,21,104 last year.
- The rate (per lakh population) increased from 31.1 to 31.5. The highest rate was reported from **Puducherry**, followed by Chhattisgarh, Maharashtra, Goa and Madhya Pradesh.
- **Maharashtra** reported the highest deaths (70,329), amounting to nearly one-sixth of the total figure.

- The major causes were traffic accidents (43.9%), sudden deaths (11.5%), drowning (7.9%), poisoning (5.1%), falls (5.1%) and accidental fire (2.6%). A majority (57.2%) of deaths was in the age groups of 18-45 years.
- The 53 megacities reported 61,404 accidental deaths — the maximum in Mumbai, followed by Delhi, Bengaluru, Pune, Jaipur (2,628) and Surat.

National Crime Records Bureau (NCRB)

- The National Crime Records Bureau is an Indian government agency responsible for collecting and analysing crime data as defined by the Indian Penal Code (IPC) and Special and Local Laws (SLL).
- It is headquartered in New Delhi and is part of the Ministry of Home Affairs (MHA).
- NCRB was set-up in 1986 to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.
- **Mission**
 - To empower Indian police with information technology and criminal intelligence to enable them to uphold law and protect people.
 - To provide leadership and excellence in crime analysis particularly for serious & organized crime.

Kiran Helpline

- A 24x7 toll-free mental health rehabilitation helpline KIRAN was recently launched.
- This helpline has been developed by the Department of Empowerment of Persons with Disabilities (**DEPwD**), **Ministry of Social Justice & Empowerment**.
- It will offer mental health rehabilitation services with the objective of early screening, first-aid, psychological support, distress management, mental well-being, promoting positive behaviours, psychological crisis management etc.
- It will function as a lifeline to provide 1st stage advice, counselling and reference to anyone in need of support across the country.
- This assumes great significance in view of the growing incidence of mental illness, particularly in the wake of COVID-19 Pandemic.

Alternative Medicine Bills

The Parliament has passed three Bills related to alternative medicine during the Monsoon Session.

Institute of Teaching and Research in Ayurveda (ITRA) Bill, 2020

- The bill paves the way to establish a state-of-the-art Ayurvedic institution called the Institute of Teaching and Research in Ayurveda (ITRA) at **Jamnagar, Gujarat**, and to confer the status of *Institution of National Importance (INI)* to it.
- The ITRA will be established by merging three Ayurveda institutes at Jamnagar into one. The Institute would aim to develop teaching patterns in medical education in Ayurveda as well as pharmacy.
- This education would be undertaken at the undergraduate and postgraduate levels, and it would set standards for all other Ayurvedic medical colleges in India.
- ITRA will be the first institution with INI status in the AYUSH Sector, and this will enable the institution to be independent and innovative in deciding course content and pedagogy.

National Commission for Indian System of Medicine (NCISM) Bill, 2020

- The Bill sought to repeal the Indian Medicine Central Council Act, 1970.
- It provides for the constitution of a National Commission for Indian System of Medicine (NCISM), which would consist of 29 members appointed by the Centre.
- The responsibilities of NCISM will be to frame policies for the regulation of medical professionals and institutions for Indian System of Medicine and assess the human resources and infrastructure required in relation to healthcare.
- Moreover, the Bill also required state governments to set up State Medical Councils for Indian System of Medicine within three years of the passing of the Bill, i.e., by September 2023.
- Apart from this, the Bill aims to establish a system of medical education, which would ensure that:
 - there are adequate and highly qualified medical professional available in the Indian System of Medicine.
 - Medical professionals of Indian System of Medicine adopt latest medical research
 - Medical institutions underwent periodic assessment,
 - An effective mechanism was in place for redressal of grievances.

National Commission for Homoeopathy (NCH) Bill, 2020

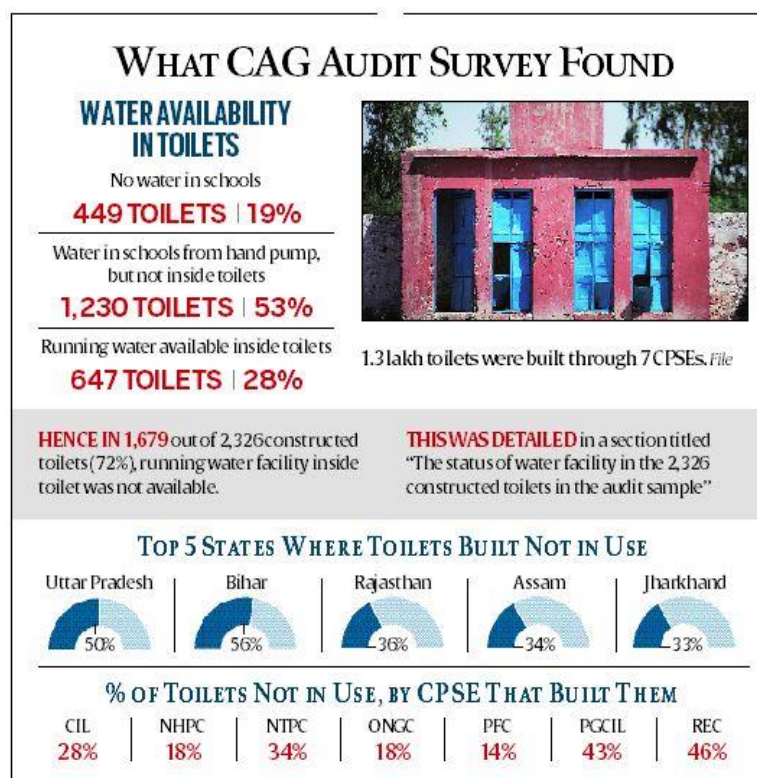
- On the lines of the National Commission for Indian System of Medicine Bill, 2020, this Bill sought to repeal the Homoeopathy Central Council Act, 1973, and establish a quality education system for homoeopathy medicine.
- The Bill has the same objectives as that of the Indian System of Medicine Bill, only with a narrow focus on the branch of Homoeopathy.
- Moreover, instead of NCIMS, this Bill seeks to establish a National Commission for Homoeopathy (NCH), which, again, has the same functions as the NCIMS, modified to only be applied to Homoeopathy.
- Moreover, within three years of the passage of this Bill as well, the state governments would be required to set up State Medical Councils for Homoeopathy.

CAG Audit of Toilets

- The **Swachh Vidyalaya Abhiyan** was launched by the Ministry of Human Resource Development in 2014 to meet the Right to Education Act's mandate that all schools must have separate toilets for boys and girls.
- Lack of dedicated funds, poor maintenance and poor water availability in toilets were identified as major challenges, and therefore central public sector enterprises (CPSEs) were roped in to bridge the gap over a one year period.
- The CPSEs contributed towards construction of toilets under Corporate Social Responsibility. Around 53 CPSEs participated in this project and constructed 1,40,997 toilets.
- A CAG audit survey of toilets built for schools, by seven Central Public Sector Enterprises, was recently tabled in the Parliament.
- About 1.3 lakh toilets were constructed through seven CPSEs. The audit focused on these toilets and conducted physical survey of a sample of 2,695 toilets across 2,048 schools in 15 States.

Findings Of The Audit

- Almost 40% of those surveyed by the CAG were found to be non-existent, partially constructed or unused.
- In the 1,967 coeducational schools surveyed, the objective of providing separate toilets for boys and girls was not fulfilled in 27% of the schools.
- The survey found that 72% of constructed toilets had no running water facilities inside, while 55% had no hand washing facilities at all and 30 % had no soap or disinfectants.
- This assumes significance at a time when schools are inching towards reopening amid the Covid-19 pandemic, with hand washing being a big part of preventive medical advice against the spread of the infection.
- With regard to maintenance and sanitation, 75% of toilets did not follow the norm for daily cleaning at least once a day.



Aatmanirbhar Bharat ARISE-Atal New India Challenges (ANIC)

- Atal Innovation Mission (AIM) recently launched the Aatmanirbhar Bharat ARISE-Atal New India Challenges (ANIC), to spur applied research and innovation in Indian MSMEs and startups.
- AIM has launched the challenge in collaboration with the **Indian Space Research Organisation (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.
- The above-mentioned collaborators will focus on challenges in 15 sectors by putting out problem statements for the participants.
- The programme will support deserving applied research-based innovations by providing funding support of up to INR 50 lakhs for 9-12 months for startups to develop a minimum usable prototype.
- One of the proposed objectives of the challenges is to provide a steady stream of innovative products and solutions where the central government and its various ministries or departments will potentially become the first buyers of the new product and technology.
- The challenge will stimulate Make-in-India innovations in the associated MSME startups' sector, along with making India innovative, resilient, tech-driven and R&D-oriented.

Start-up Ranking 2019

- The Department for Promotion of Industry and Internal Trade (DPIIT) has released the States' Start-up Ranking Framework 2019.

- The DPITT started conducting the ranking exercise in 2018, to push states to improve the start-up ecosystem in their respective states.
- It also aims to encourage mutual learning among all states and provide support in policy formulation and implementation in the start-up field.

Ranking Process

- The rankings are based on the initiatives taken by States to develop the start-up ecosystem for promoting innovation and entrepreneurship. A total of 22 states and 3 Union Territories (UTs) participated in the exercise.
- In the 2019 rankings, States are ranked on performances in **seven categories** such as *institutional support, easing compliances, relaxation in public procurement norms, incubation support, seed-funding support, venture funding support and awareness and outreach*.
- Based on these categories, the states have been recognized as: **Best Performers, Top Performers, Leaders, Aspiring Leaders and Emerging Startup Ecosystems**.
- To establish uniformity and ensure standardisation in the ranking process, States and UTs have been divided into two groups, 'X' and 'Y'.
- **Group 'X'** has all the states and Delhi, except north-eastern states and other UTs, and **Group 'Y'** has all north-eastern states except Assam, and all UTs except Delhi.
- The ranking also involved getting feedback from beneficiaries, to actually check the levels of implementation. User feedback accounted for about 76 per cent of scores given to the states and UTs.

2019 Rankings

- In Group X, Gujarat has emerged as the **best performer** in developing the start-up ecosystem and in Group Y, Andaman and Nicobar Islands has emerged as the best performer.
- Following are the results of the other four categories (as mentioned above):
 - **Top performers:** Karnataka and Kerala.
 - **Leaders:** Bihar, Maharashtra, Odisha, Rajasthan, and Chandigarh.
 - **Aspiring Leaders:** Haryana, Jharkhand, Punjab, Telangana, Uttarakhand and Nagaland.
 - **Emerging Startup Ecosystems:** Andhra Pradesh, Assam, Chhattisgarh, Delhi, Himachal Pradesh, Madhya Pradesh, Tamil Nadu, Uttar Pradesh, Mizoram and Sikkim.

Significance

- The exercise has helped the Centre and states to come together to cooperate, collaborate and compete, to promote start-ups.
- It has become a tool to focus the energies of participating states in achieving the right goals and to support their start-up ecosystem holistically.
- The ranking will not only help states and UTs, but will also be of great help to entrepreneurs in launch and expansion of new projects.

Efforts To Boost The Start-Up Ecosystem In India

- The government had launched the **Startup India Action Plan in 2016** to promote entrepreneurship in the country. The plan aims to give incentives such as tax holiday, inspector raj-free regime and capital gains tax exemption.

- Funding of start-ups has been supported through the '**Fund of Funds**', along with many public sector undertakings contributing with dedicated funds to start-ups.
- Furthermore, around 600 start-up centric reforms were reported in one year by all states and UTs.
- India has become the **third-largest start-up ecosystem** in the world with over 36,000 start-ups recognised under the Startup India initiative.

Way Ahead

- While releasing the report, the Commerce Ministry said that the industry, high net-worth individuals as well as mutual funds and pension funds should also participate in funding the start-ups.
- In order to promote Aatmanirbar Bharat, the Ministry also suggested startups to focus on **three Ps – product, process and people**:
 - Reimagine **products** through innovation and new technologies.
 - Redesign and re-engineer **processes** that result in reforming regulatory practices and
 - Work on **people**-centric ideas.

CAG Audit Of GST Compensation Cess

- The Comptroller and Auditor General (CAG) has found that in first two years of the GST implementation, Union government had wrongly retained ₹47,272 crore of GST compensation cess.
- This amount was supposed to be used specifically to compensate states for loss of revenue, due to implementation of GST since 2017.

Highlights From The CAG Audit

- As per CAG, out of the ₹62,612 crore GST Compensation Cess collected in 2017-18, ₹56,146 crore was transferred to the GST Compensation Cess Fund (CCF). In the following year (2018-19), only ₹54,275 crore out of ₹95,081 crore collected was transferred to the fund.
- According to CAG, this short-crediting was a violation of the GST Compensation Cess Act, 2017.
- The amount which was not transferred to the GST CCF was retained in the Consolidated Fund of India, due to which it became available for "other purposes".
- This also helped the Centre to *overstate its revenue and understate its fiscal deficit*.
- The CAG has also highlighted the **violation of accounting procedure** in respect of the GST compensation cess. As per the approved accounting procedure, GST compensation cess should be transferred to the Public Account by debit to Major Head '2047-Other fiscal services'. However, the Ministry of Finance operated the Major Head '3601-Transfer of Grants in aid to States'. This wrongful operation has implications on the reporting of Grants in aid, as the GST Compensation Cess is the right of the States and is not a Grant in aid.

Cess

- Cess is a form of tax charged over and above the base tax. A cess is usually imposed additionally when the state or the central government looks to raise funds for specific purposes.
- For example, the government imposes an education cess to generate additional revenue for funding primary, secondary, and higher education.

Non-Transfer Of Other Cess

- Apart from the GST compensation cess, the CAG mentioned instances of non-transfer of entire amounts of other cesses to their respective Reserve Funds.

- Some of these funds include - **Road and Infrastructure Cess, Cess on Crude Oil, Universal Service Levy, and National Mineral Trust Levy.**
- Out of the Rs 2,74,592 crore received from 35 cesses, levies and other charges in 2018-19, only Rs 1,64,322 crore had been transferred to various Reserve Funds and the rest was retained in the CFI.
- This makes it difficult to ensure that money collected through these cesses had actually been utilised for the purpose they were collected for.

Note: Please refer Recitals (August) for details on GST compensation Cess

Vodafone Case Ruling

The Permanent Court of Arbitration (PCA) in The Hague recently ruled in favour of Vodafone International in its dispute with the Indian government.

Background

- Vodafone's tax dispute stems from its \$11 billion deal to buy the Indian mobile assets from Hutchison Whampoa in 2007. The Indian government had said that Vodafone was liable to pay taxes on the acquisition. The company contested India's claim.
- Since the stake purchase transaction took place outside India between two overseas entities, Vodafone was emphatic from the start that it was not liable for any tax relating to the deal.
- In 2012, the Supreme Court had ruled in favour of the telecom provider but the government changed the rules through an amendment to Finance Act, thereby giving Income Tax Department the power to retrospectively tax such deals.
- As the name suggests, retrospective taxation allows a country to pass a rule on taxing certain products, items or services and deals and charge companies from a time behind the date on which the law is passed.
- After the amendment, the onus to pay the taxes fell back on Vodafone. The amendment was criticised by investors globally.
- By 2014, all attempts by the telco and the Finance Ministry to settle the issue had failed. Vodafone Group then invoked Clause 9 of the Bilateral Investment Treaty (BIT) signed between India and the Netherlands in 1995.

BIT

- In 1995, India and the Netherlands had signed a BIT for promotion and protection of investment by companies of each country in the other's jurisdiction.
- While the treaty was between India and the Netherlands, Vodafone invoked it as its Dutch unit. Vodafone International Holdings BV had bought the Indian business operations of Hutchinson Telecommunication International Ltd.
- This made it a transaction between a Dutch firm and an Indian firm. The BIT between India and the Netherlands expired on September 22, 2016.

PCA's Ruling

- The PCA ruled that the retrospective tax amendment violated the India-Netherlands bilateral investment treaty and the United Nations Commission on International Trade Law (UNCITRAL).
- The tribunal said the government's demand is in breach of fair and equitable treatment and it must cease seeking the dues from Vodafone.

- It also directed India to pay £4.3 million (\$5.47 million) to the company as compensation for its legal costs.

Way Ahead

- The ruling brings an end to one of the most controversial disputes in India under international treaty agreements that it enters into with countries to protect foreign investments.
- India is entangled in more than a dozen such cases against companies, including Cairn Energy, over retrospective tax claims and cancellation of contracts.
- To reduce future arbitration claims, India has ended such agreements with over 50 countries and is working on a new law to protect foreign investors by offering relief from possible policy changes even as it upholds the right to tax them.
- The government must not seek to litigate the Vodafone issue any further. The cost of doing otherwise will only undermine overseas investors' faith in India's commitment to international treaties and the rule of law. Moreover, the exchequer could end up paying billions of dollars in damages if it loses.
- A tax policy that is predictable and easy to follow is the best possible way to encourage investments, which is the path India should follow.

Permanent Court of Arbitration

- The Permanent Court of Arbitration (PCA) is an intergovernmental organization located in The Hague, Netherlands.
- It was established by the Convention for the Pacific Settlement of International Disputes, concluded at The Hague in 1899 during the first Hague Peace Conference.
- It is not a court in the traditional sense, but provides services of arbitral tribunal to resolve disputes that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.
- The organization is not a United Nations agency, but the PCA is an official United Nations Observer.

SAROD Ports

- The Ministry of Shipping recently launched 'SAROD-Ports' (Society for Affordable Redressal of Disputes - Ports). It is a dispute redressal mechanism for all kinds of disputes related to maritime sector.
- It is similar to the provision available in the highway sector in the form of SAROD-Roads constituted by the National Highways Authority of India (NHAI).

Background

- In the last two decades, there has been an increasing shift towards PPP projects and landlord port models by the major ports, where terminals for specific cargo segments are developed and operated by private players on Build-Operate-Transfer basis.
- However, in many cases there have been disputes with the major Port Trust related to terms of concession including revenue share, meeting of guaranteed standards and volumes, facilities and maintenance work to be done by the Port Trust etc.

- These disputes in many instances have dragged on for several years, as the parties may first go for arbitration and then fight the cases in higher courts. This results in high arbitration and litigation costs for both the ports as well as the private players.

SAROD Ports

- SAROD ports will advise and assist in the 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 and disputes between Licensee/Concessionaire and their contractors arising out of and during the course of execution of various contracts.
- SAROD-Ports will consist members from the Indian Ports Association (IPA) and Indian Private Ports and Terminals Association (IPTTA).

Suspicious Activity Reports (SARs)

- An ongoing investigation has revealed how financial transactions by Indian citizens and firms have been red-flagged to the top US financial watchdog, the Treasury Department's Financial Crimes Enforcement Network (FinCEN), for possible money laundering, financial fraud or drug dealing.
- These cross-country investigations are based on suspicious activity reports (SARs) by compliance officers in financial institutions, on transactions that involve clients with high-risk profiles.
- SARs are so secret that banks are not allowed to confirm their existence. Indeed, even the account holder is unaware when an SAR is filed related to a transaction in that account.
- SARs are filed with FinCEN within 30 days of the transaction's occurrence: criminal funds or any form of dirty money; insider trading; potential money laundering; terror financing; any transaction that raises suspicion. Non-filing of SARs can invoke hefty penalties.
- A SAR is not an accusation, it is a way to alert regulators and law enforcement to possible irregular activity and crimes.
- FinCEN shares SARs with law-enforcement authorities including FBI, US Immigration and Customs; they are used to detect crime but cannot be used as direct evidence to prove legal cases.
- In the world of international finance where money moves under several layers to escape or avoid taxation, SARs are the first red flags.

Equivalent of FinCEN in India

- The Financial Intelligence Unit-India (FIU-IND) performs the same functions as FinCEN in the US. Under the Finance Ministry, this was set up in 2004 as the nodal agency for receiving, analyzing and disseminating information relating to suspect financial transactions.
- The agency is authorised to obtain cash transaction reports (CTRs) and suspicious transaction reports (STRs) and cross border wire transfer reports from private and public sector banks every month under the Prevention of Money Laundering Act (PMLA).
- It is mandatory for banks in India to furnish a monthly CTR to the FIU on all transactions over Rs 10 lakh or its equivalent in foreign currency or a series of integrally connected transactions that add up to more than Rs 10 lakh or its equivalent in foreign currency.
- The STRs and CTRs are analysed by FIU and suspicious or doubtful transactions are shared with agencies like the Enforcement Directorate, the Central Bureau of Investigation and the Income Tax

for the purpose of launching probes to check possible instances of money laundering, tax evasion and terror financing.

Significance of SARs for India

- The message for agencies in India is that their cases of financial fraud and corruption are being flagged by the world's most powerful regulator.
- There are details of banking transactions that give a clear indication of round-tripping, money laundering or dealings with shell-like entities.
- For the Indian banking sector, the FinCEN Files raise very pertinent questions: To what extent are the Indian investigative agencies aware of these suspicious transactions that involve Indian citizens and firms.
- Considering that 44 Indian banks, both public and private, have been named, did these banks report these particular transactions, and flag them to the FIU-IND. And if they did, what was the outcome.

Rogan Art

- The pandemic has posed a challenge to the centuries old Rogan art. The word rogan comes from Persian, meaning varnish or oil. It is an art of **cloth printing** practiced in the **Kutch District** of Gujarat.
- In this art form, paint made from thick brightly coloured castor seed oil is used to paint on fabric. Castor is a crop commonly grown in Kutch region of Gujarat and the artists source it from the local farmers.
- An extraordinary aspect about this technique is that during the entire process of the gummy paint being carefully twisted into motifs, the blunt needle never comes into contact with the cloth.
- After drying, the rogan painted cloth is used for making sarees, decorative wall hangings, pillow covers, tablecloths, and even file folders.
- The intricate motifs – geometric flowers, peacocks, the tree of life, etc. – are drawn from the history and folk culture of the Kutch region.

Kakatiya Dynasty

- A temple constructed by emperor **Ganapati Deva**, a mighty ruler of Kakatiya dynasty, in Dharanikota near present Andhra Pradesh capital Amaravathi has been converted into an abode of local goddess Balusulamma (Goddess Durga).
- The presiding deity at this 13th century temple was Kakati Devi, the deity of Kakatiya rulers. Due to no upkeep, the presiding deity got damaged.
- The villagers of Dharanikota, who had no knowledge about the past of the temple, installed Balusulamma idol and started worshipping.
- The Kakatiya dynasty was a South Indian dynasty whose capital was Orugallu, now known as Warangal. It was eventually conquered by the Delhi Sultanate.
- The demise of Kakatiya dynasty resulted in confusion and anarchy under alien rulers for sometime, before the Musunuri Nayaks brought stability to the region.
- There are hundreds of Hindu temples built under the patronage of Kakatiya kings like Ganapati Deva, Rudrama Devi and Prataparudra of Kakatiya dynasty.
- The Thousand pillar temple or Rudreshwara Swamy Temple is one such historic Hindu shrine. The temple is dedicated to the Hindu gods of Vishnu, Shiva and Surya.

Chendamangalam Weavers

- Care 4 Chendamangalam, which works with weavers in Kerala, recently conducted a fundraiser for Chendamangalam workers.
- Chendamangalam is a small town near Ernakulam. The town was part of the ancient port complex of Muziris and known for its fine cotton spun by the Devanga Chettiars, a community of weavers originally from Karnataka.
- The Paliam family, once prime ministers to the Cochin maharajas, invited the Chettiars to settle in Chendamangalam and produce these handcrafted products.
- Known across the globe for hand-woven textiles, Chendamangalam Handloom products have been in business for more than half a century.
- The GI-tagged Chendamangalam sari is recognisable by its puliyilakara border, a thin black line that runs along with the sari's selvedge.

The 1619 Project

President Donald Trump has criticised the 1619 project and threatened to withhold federal funding from public schools whose curriculum is based on the 1619 Project.

What Is 1619 Project

- The Project is a **special initiative of The New York Times Magazine**. It was launched in 2019 to mark the completion of 400 years since the **first enslaved Africans arrived in colonial Virginia's Jamestown in August 1619**.
- The project consists of 30 written and visual pieces by intellectuals, examining how social structures that developed in the US as a consequence of slavery affect present-day laws, policies, systems and culture. It also highlights the *contributions of Black people in America's nation-building*.
- The collection aims to **reframe US history by considering 1619 as its birth year**.

Why It Is Being Criticized

- The central idea that US history should be reframed around the date of August 1619 has been opposed by many.
- They insist that the nation's story should be told the way it has been over the years— beginning with the year 1776, when the Declaration of Independence was signed, or from 1788, when the US Constitution was ratified.
- Also, the introductory essay suggests that America's founding fathers sought freedom from the British Empire **largely to preserve the institution of slavery**, and not for lofty ideals. This has annoyed many historians.
- US President Trump describes this project as “**cancel culture**” and “**revisionist history**”.

US-Maldives Defence Cooperation Agreement

- The US has signed a framework for defence cooperation with the Maldives.
- This has been signed in order to deepen engagement in support of maintaining peace and security in the strategic Indian Ocean.
- It 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

- The Trump administration looks for **strengthening alliances in the Indo-Pacific** to counter China's growing presence in the region.
- The **Indo-Pacific is a bio-geographic region of Earth's seas**, comprising the tropical waters of the Indian Ocean, the western and central Pacific Ocean. Peace and security in this region were tied to the best interests of both countries.
- This deal assumes significance against the backdrop of growing transnational threats such as piracy, violent extremism, terrorism, illicit trade, and amidst the coronavirus pandemic.
- The Central Indo-Pacific includes the numerous seas and straits connecting the Indian and Pacific oceans. Not only this region is **resource rich but freedom of navigation in this region is vital** for the world's economic growth.

Significance for India

- India has long watched the **island Nation being drawn towards China** with growing alarm. During the tenure of previous government (during the regime of Abdulla Yameen), relationship between India and Maldives were not good.
- Also, it is interesting to note that the **U.S. decision to deepen military ties with the Maldives was taken in consultation with India**.
- India has long expressed discomfort with the idea of extra-regional powers meddling in its backyard. This consultation vindicates India's position.
- Given India-USA ties, India sees the pact as useful also because India's own direct involvement in Maldivian security matters is often viewed with suspicion domestically. The framework can provide an indirect route to India if needed.

Changes in Qatar's Labour Laws

Qatar has introduced major changes to its labour market thereby heralding a new era. The reforms were announced by the Emir of Qatar in October 2019. Now they were signed into law.

Key Highlights

- **Abolition of Kafala System** – Under kafala (Arabic word for sponsorship) system, migrant workers needed to obtain their employer's permission – a no-objection certificate (NOC) – before changing jobs. Now this system stands abolished and migrant workers can change jobs before the end of their contract subject to a notice period.
- **Non-discriminatory Minimum Wage** – The new law increases the minimum wage by 25 per cent to \$274 or 1000 Qatari riyals and an additional 300 QAR for food and 500 QAR for accommodation in case not provided by the company.
- **Applicable to All** - These reforms will be applicable to workers of all nationalities and in all sectors. It will also include domestic workers who were previously excluded.

Why Qatar Has Initiated These Reforms

- Qatar is hosting the 2022 FIFA World Cup. In the run-up to the sporting event, the country has faced flak for its labour laws, seen by many as being **exploitative of migrant labourers**.
- The Kafala System had **tied the presence of migrant workers** in the country to their employers. It created a power imbalance and **led to abuse and exploitation**.

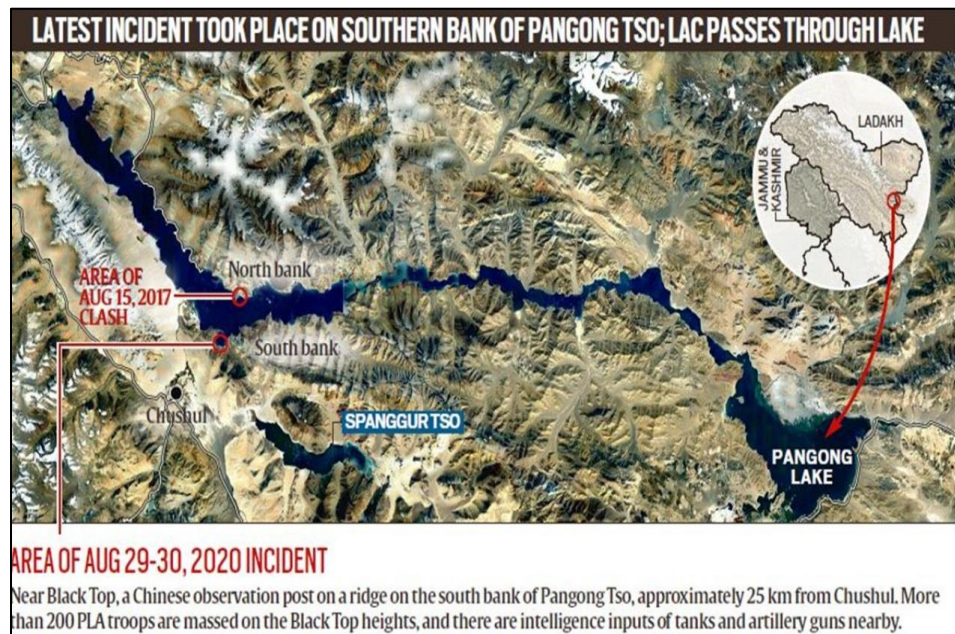
- The adoption of these laws supports **transition towards a more skilled and productive workforce**, which is a key goal in the **Qatar's 'National Vision 2030'**.
- It will also help promote economic recovery from the fallout of the Covid-19 pandemic, as well as the growth of the economy over a longer term.

Pangong Tso Standoff

- The Indian Army thwarted an attempt by China to change the status quo near the LAC.
- It deployed its troops to a previously un-deployed **area on the southern bank of the Pangong Tso Lake** in eastern Ladakh.

Geographical Location

- Pangong Tso is an endorheic lake (landlocked) that is partly in India's Ladakh region and partly in Tibet.
- Situated at an elevation of about 4,270 m, it is a nearly 135-km long, narrow lake — 6 km at its widest point.
- The **Karakoram Mountain** range which flanks the Ladakh region on the North ends at the Northern bank of the Pangong Tso lake.
- On the Southern bank of the lake, there are broken mountains sliding towards the Spangur lake in the South.



Who Controls Pangong Tso

- Nearly two-thirds of the lake is controlled by China, with just about 45 km under Indian control.
- But India and China have unsettled borders, and the perception of the LAC differs in multiple sectors, including on Pangong Tso. These **differing perceptions of the LAC** are one of the main causes of face-offs.

Pangong Tso South Bank: Importance

- The region south of the lake is also strategically important for both countries. The area, known as the **Chushul approach**, is one of the few sectors that can be **used as launchpads for an offensive, because of the plains**.

Firing on LAC

The Indian and Chinese militaries accused each other of opening fire during a confrontation near Chushul, close to the LAC in Ladakh.

This was the **first time in 45 years** that **firearms were discharged** on the LAC. The last incident was in **October 1975**, when the Chinese ambushed and killed four jawans of the Assam Rifles on the LAC near Tawang.

- Terrain on the southern bank close to the lake is **flatter than the northern bank**, and **amenable to limited mechanised warfare** in the Chushul sector. The heights surrounding the area are in range of 16,000 -18,000 ft.
- Further to the south-east of the Pangong Tso is the **Spangur Gap between the mountains**, which can be used by the **Chinese to advance towards Leh** in a warlike situation.
- This area can also be exploited by the enemy to **get access** to the strategically important **Durbuk-Shyok-Daulat Beg Oldi (DSDBO) road**.
- The southern bank gives the Indian troops an advantage in terms of monitoring the activities in the northern bank.

[Also refer the topic “**India-China Border Dispute**” and “**India-China Border Clash**” from May 2020 and June 2020 edition of CA magazine respectively]

UK Signs First Major post-Brexit Trade Deal with Japan

- The UK has struck its first major post-Brexit trade pact after signing a deal with Japan. The deal aims to boost trade between the countries by about £15bn.
- Britain had formally left EU in January 2020. Since then it has focused on negotiating new trade deals with countries around the world.

Significance

- **UK-Japan Comprehensive Economic Partnership Agreement (CEPA)** would make 99% of UK's exports to Japan tariff-free.
- It secures new wins for British businesses in manufacturing, food and drink, and tech industries.
- Strategically, the deal is an important step towards joining the Trans-Pacific Partnership and placing Britain at the centre of a network of free trade agreements.
- Major Japanese investors in the UK such as **Nissan and Hitachi would benefit** from reduced tariffs on parts coming from Japan and streamlined regulatory procedures.

Need for FTA with EU

- Many analysts believe that this deal largely mirrors the agreement which already exists between the EU and Japan. And with trade with Japan accounting for just 2% of the UK's total, **the expected boost to GDP of 0.07% over the long term** is a tiny fraction of what might be lost from leaving the EU.
- Hence, they contend that UK should focus on securing a **Free Trade Agreement with the EU** which is critical to the future of businesses in the UK.

[For detailed discussion of BREXIT, please refer yellow book of International Relation]

SCO Meet

- The Shanghai Cooperation Organisation (SCO) Defence Ministers meeting and SCO meeting of the Council of Foreign Ministers (CFM) were held separately.
- It was the 3rd CFM meeting that India attended as a full member of SCO. India has been taking active part in various SCO dialogue mechanisms under the Chairmanship of Russian Federation this year.
- These meetings took place at a time when India and China are at the loggerheads over the situation at the LAC.

- The SCO was founded at a summit in Shanghai in 2001 by the Presidents of **Russia, China, Kyrgyz Republic, Kazakhstan, Tajikistan and Uzbekistan**. India and Pakistan were admitted as **observers of the grouping in 2005**. Both the countries were admitted as **full members of the bloc in 2017**.

The SCO-CFM is the highest forum of SCO after the Council of Heads of State (CHS) and the Council of Heads of Government (CHG). It deliberates on important regional and international issues and considers documents for approval and adoption by the Council of Heads of State.

SCO Amidst Growing Tension With China at LAC

- It should be kept in mind that **Bilateral issues are not directly discussed at SCO meetings**, but they could influence some declarations and joint projects.
- For example, India pointedly avoids endorsing declarations of support for China's Belt and Road Initiative (BRI). Or China may refuse to accept **India's Arunachal Pradesh** as part of **SCO economic zone**.

Should India Quit SCO

- India joined the SCO **to improve its contact with the Central Asian states**, because it didn't want to cede a strategically important region to Russia and China.
- Due to this platform, India's contacts with Central Asian leaders have become far more frequent.
- Its understanding of **internal regional dynamics and the interplay of great powers** has become more granular, permitting greater calibration of its outreach to Central Asian countries.
- Also, **Central Asian states want India to remain in the region** because it gives them greater strategic manoeuvrability vis-a-vis Russia and China.

SAARC Virtual Meet of Foreign Ministers

- The virtual meeting of Foreign Ministers of the South Asian Association for Regional Cooperation (SAARC) took place.
- Nepal is the current Chair of SAARC.
- A meeting of SAARC Finance Ministers, where an Additional Secretary represented India instead of Finance Minister, and Pakistan was represented by its Special Advisor on Finance, took place earlier.
- These meeting indicate the **revival of SAARC cooperation** amidst the COVID-19 pandemic crisis. This also includes the creation of an **India-led SAARC COVID-19 Emergency Fund**, and **exchanges between regional health professionals** this year.

[For detailed discussion on SAARC and Pandemic, please refer the topic "**South Asian Association for Regional Cooperation Covid-19 emergency Fund**" from March 2020 edition of CA magazine]

India Wins Crucial Election to UN Commission on Women

India has entered in the prestigious **Commission on the Status of Women (CSW)**, a body of the **UN Economic and Social Council (ECOSOC)**. India defeated china to gain entry in the commission. India will be a member of the commission **for four years** from 2021.

Key Highlights

- India, Afghanistan and China contested the election. India and Afghanistan won the ballot among the 54 ECOSOC members.
- China got fewer than the 28 votes necessary to win the poll.

Significance

- The victory is significant amid China's rapidly growing influence in the UN and its claim of promoting the activities of the CSW.
- The victory was achieved in the **25th year of the famous Beijing World Conference on Women** (1995).
- The election result is being seen as **sending a strong signal about China's own record** of women's equality and empowerment.
- India's win at the CSW is highly significant as it comes on the eve of India gearing up to sit at the UN Security Council high table as non-permanent member for a two-year term beginning January 1, 2021.

Chinese Control at UN

- Currently, China heads **four out of 15 of the UN's specialised agencies**. These are the International Civil Aviation Organisation (ICAO), the International Telecom Union (ITU), the Food and Agriculture Organisation (FAO) and the UN Industrial Development Organisation (UNIDO).
- This control over a fourth of UN bodies helps **China extend its influence in global decision** making as well as its Belt and Road Initiative.
- For example, ITU could allow Chinese company Huawei to put pressure in negotiating telecom standards. ICAO can be used to influence world transport routes.

About Commission on the Status of Women (CSW)

- CSW is a **functional commission** of the UN Economic and Social Council (ECOSOC).
- It **promotes women's rights**, highlights the reality of women's lives throughout the world and helps in shaping global standards on gender equality and empowerment of women.
- Forty-five of the UN's member states serve as members of the commission at any one time.
- The members are **elected by the ECOSOC** on the basis of **equitable geographical distribution** — 13 members from Africa, 11 from Asia, nine from Latin America and the Caribbean, eight from Western Europe and other states and four from Eastern Europe.

UN Women

- The United Nations Entity for Gender Equality and the Empowerment of Women, also known as UN Women, works for gender equality and the empowerment of women.
- Headquartered in New York City, it is a member of the United Nations Development Group, which became operational in 2011.
- The organization works with governments and civil society to design laws, policies, programmes and services needed to ensure that the standards are effectively implemented and truly benefit women and girls worldwide.
- It works globally to make the vision of the Sustainable Development Goals a reality for women and girls.

ECOSOC Rebukes Israel for Violating Women's Rights

The Economic and Social Council of UN has rebuked Israel for allegedly violating women's rights.

Key Highlights

- The Jewish state was accused of being a **major obstacle for Palestinian women** with regard to the fulfilment of their rights, and their advancement, self-reliance and integration in the development of their society.

- The council declared that women and girls are impacted by the continuing systematic violation of the human rights of the Palestinian people by Israel, the occupying Power.
- **India voted against Israel on this matter.**

Pakistan Blocks New Indian Envoy

- Pakistan has denied visa to Indian diplomat Jayant Khobragade, rejecting his appointment as India's chargé d'affaires in Islamabad.
- Pakistan's objection is apparently related to Khobragade's seniority as it thinks he is too senior to lead the Indian mission.
- India believes though it is not for Pakistan to dictate appointment of Indian diplomats in Islamabad and is likely to respond with reciprocal action in due course.

➤ Jayant Khobragade's name had been officially proposed as India's chargé d'affaires in Islamabad in June ➤ In the same month, India had scaled down diplomatic ties with Pakistan by asking for a 50% reduction in mission strength ➤ India sees Pakistan's rejection of Khobragade as an attempt to hit back over	its decision to downgrade ties and over the Kashmir issue ➤ Pakistan's objection is apparently related to Khobragade's seniority as it thinks he is too senior to lead Indian mission ➤ India, however, says it's not for Pak to dictate appointment of Indian diplomats in Islamabad and is likely to respond with reciprocal action
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India Attends Meeting On Afghan Peace Process

- External Affairs Minister of India attended virtual meeting on **Afghan peace negotiations** at Doha. The Afghan peace process comprises the proposals and negotiations in a bid to end the ongoing war in Afghanistan.
- During the meeting, India highlighted the fact that the peace process must promote human rights and democracy, ensure interest of minorities, women and the vulnerable sections, and effectively address violence across the country.
- India's long-held position is that the peace process should be "**Afghan-led, Afghan-owned and Afghan-controlled.**"
- India has been a **major stakeholder** in peace and stability of Afghanistan. It has already **invested \$2 billion in aid and reconstruction** activities in the country.

US-India Strategic Partnership Forum (USISPF)

- The **3rd** USISPF Annual Leadership Summit was held virtually.
- Theme - "**US-India Navigating New Challenges**"
- It covered various subjects such as India's potential in becoming a Global Manufacturing Hub, Opportunities in India's Gas Market, Ease of Doing Business to attract FDI in India, Common Opportunities and Challenges in Tech Space.
- The USISPF is a **non-profit organization established in 2017** with an objective to strengthen the USA-India bilateral and strategic partnership.

Virtual Bilateral Summit Between India and Sri Lanka

India Prime Minister and his Sri Lankan counterpart Mahinda Rajapaksa held a virtual bilateral summit. This was their first official engagement after parliamentary elections in the island nation last month. This was also **India's first such summit with a neighbour.**

Key Highlights

- India has announced **USD 15 million grant assistance** to Sri Lanka for the **promotion of Buddhist ties between the two countries**. This grant will help deepen people to people linkage between the two countries in the sphere of Buddhism.
- It was decided that **India will facilitate the visit** of a delegation of Buddhist pilgrims from Sri Lanka in the **first inaugural flight to Kushinagar in Uttar Pradesh**.
- **Jaffna Cultural Centre**, an iconic project built with Indian assistance, is almost complete and PM Rajapaksa extended an invitation to PM Modi to inaugurate the project.
- Both sides have reached an understanding to **extend the MoU on High Impact Community Development Projects (HICDPs)** for a 5-year period beginning 2020.
- India also proposed **launching a bilateral air bubble with Sri Lanka** for travel between both countries. It also urged Colombo to **relax temporary restrictions on import of a few Indian products**.
- India is currently discussing Sri Lanka's **request for the \$1.1 billion bilateral currency swap**. India is also discussing the issue of **deferring the debt repayments by Sri Lanka**.
- India has **already provided a \$400 million currency swap facility** to Sri Lanka in order to assist with economic recovery.

India – Denmark Virtual Summit

Virtual bilateral summit between Prime Minister Modi and his Danish counterpart Mette Frederiksen took place.

Key Highlights

- Both the leaders decided to elevated their relations to a **“green strategic partnership”**.
- This partnership will focus on *expanding economic ties, green growth and cooperation on global challenges such as climate change*.
- India PM proposed the creation of **“India-Denmark energy parks”** and a **“India-Denmark skill institute”** to train Indian manpower.
- The two sides also agreed to hold regular consultations on climate change and renewable energy and to cooperate in water efficiency and water loss, with the Jal Shakti ministry and the Danish Environmental Protection Agency and Danish environment ministry being tasked to **develop a work plan for 2021-23**.
- India has also invited **Denmark to join the supply chain resilience initiative**, which is proposed between Japan, Australia to diversify supply chains and reduce dependence on any one nation.
- The issue of **Danish national Kim Davy**, the main accused in the **1995 Purulia arms drop case** (which had taken India-Denmark ties to an all-time low in 2012) also figured in the meeting. Both sides agreed that concerned officials will work for an early resolution of the matter.
- Indian PM accepted the invitation to attend the 2nd Nordic summit in Copenhagen after the COVID situation had improved. On its part, Denmark agreed to join the International Solar Alliance.

In 2012, India had scaled down diplomatic ties with Denmark to signal its displeasure with the refusal of Danish officials to appeal in the Supreme Court against a lower court's order barring Davy's extradition.

The two countries finally put their ties back on an even keel in 2018, when they decided to separate the Davy issue from the overall relationship.

More About Green Strategic Partnership

- The new “green strategic partnership” will build on an **existing Joint Commission for Cooperation** (created in 2009, for cooperation in politics, economics and commerce, science and technology, energy, environment and education).
- It will also complement existing joint working groups on renewable energy, urban development, agriculture, innovation, shipping, labour mobility and digitisation.
- The new partnership is expected to lead to joint ventures and technology transfers, and help expand cooperation in renewable energy, environment, circular economy, water and waste management and air pollution.

India-Angola First Joint Commission Meeting

- India and Angola held the **first Joint Commission Meeting online**. The meeting was co-chaired by EAM S Jaishankar and his Angola counterpart Tete Antonio.
- During the meeting, two sides agreed to diversify their trade relationship and discussed cooperation in health, pharmaceuticals, defence, agriculture, food processing, digitization and telecom.
- MoUs on health, training and visa facilitation were signed. It was agreed that the **2nd session** of the Angola-India Joint Commission would be held in **New Delhi in 2022**.
- Angola is the second largest crude oil supplier after Nigeria in the sub Saharan desert. Hence, it assumes significance for India’s energy security.

India-Israel to Develop hi-tech Weapon Systems

- India and Israel have formed a new sub working group to **promote co-development and co-production of high-tech weapon systems**.
- This sub working group will **explore defence industrial cooperation** with focus on areas like transfer of technology, technology security, artificial intelligence, innovation and joint export to third nations.
- The creation of the sub working group between the two nations comes at a time when India is inducting Barak-8 surface-to-air missile systems under three joint DRDO-IAI projects worth over Rs 30,000 crore.
- It should be noted that **Israel has been among one of the top four arms suppliers** to Indian armed forces, with annual sales worth over a billion dollars.

India & Japan Sign Agreement on Reciprocal Provision of Supplies and Services

India and Japan have signed a key agreement for **reciprocal provision of supplies and services between their defence forces**. This is expected to drive closer military cooperation and contribute to regional security.

More About The Agreement

- The agreement signed is called **Acquisition and Cross-Servicing Agreement (ACSA)**.
- It establishes a framework such as the settlement procedures for the reciprocal provision of supplies and services between forces of the two nations.
- It will facilitate “**smooth and prompt provision of supplies and services**” between the two sides.

- The agreement 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.
- India has similar agreements with the **US, Australia, France, Oman and Singapore**. On the other hand, **India is only the second country after Australia** with which Japan has such an agreement.

India - Japan: Imperatives For Better Ties

A. Strategic

- **China** remains an unspoken factor in India – Japan relation. Japan has a boundary dispute with China over Senkaku island in East China Sea. India has been at the receiving end of China's attitude since Independence particularly in Ladakh and Arunachal Pradesh.
- Both country's insistence on increased engagement between India's 'Act East Policy' and Japan's 'Open Indo-Pacific Strategy' further makes them a natural partner.

B. Security

India and Japan have large Exclusive Economic Zones and maritime interests (including safe passage of Japanese oil tankers plying from the Persian Gulf to Strait of Malacca through Arabian Sea, Indian Ocean and Bay of Bengal under protection from Indian Navy and the Coast Guard).

C. Economic

- Japan is trying to **jump-start a Japanese economy** which badly needs new sources of exports and revenue for ailing Japan Inc. India, with its 1.2 billion increasingly wealthy consumers and bottomless investment opportunities, can provide just what Japan requires.
- India has **significant reserve of rare earth metal** which is badly needed for the Japanese economy which uses these minerals to manufacture different products.
- **Japanese workforce is ageing**. In this case, it is looking towards India for the supply of young workforce to revive its economy.

D. Multilateral imperatives

Both countries need their mutual support on crucial global issues including the issue of climate change, countering terrorism, reform of the United Nations Security Council (UNSC).

BRICS Culture Ministers' Meet

The **5th BRICS Culture Ministers' Meeting** was held online under the Chairpersonship of Russian Federation.

Key Issues Discussed/Reviewed:

- **Impact of the epidemiological situation on the cultural sphere** in the BRICS countries
- Possible implementation of **joint cultural online-projects within BRICS** was reviewed.

Suggestions/Events Proposed By India Are:

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

- 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.
- The exhibition is proposed to be organized in 2021 coinciding with the BRICS event that India would be hosting in 2021.

BRICS NSA Summit:

- National Security Advisors (NSAs) of BRICS nations conducted a virtual meeting. The **meeting was proposed by Russia**, the current presidency of BRICS.
- **Theme** - Challenges and threats to global, regional and national security in today's world.
- The meeting also discussed **an anti-terrorism draft strategy** which is yet to be approved.
- The meetings acquired added significance, as it comes on the backdrop of strained diplomatic relations between India and China.
- BRICS represents over **3.6 billion people** and have a **combined GDP of \$16.6 trillion**.

World Solar Technology

- The first-ever World Solar Technology Summit was held in September 2020.
- Organised by the **International Solar Alliance (ISA)** in collaboration with Federation of Indian Chambers of Commerce and Industry (FICCI)
- **Aim** – To focus on state-of-the-art technologies and next-generation technologies that will help boost efforts towards harnessing solar energy more efficiently.
- The ISA also launched the **ISA Journal on Solar Energy (I JOSE)** on the occasion. This journal would help authors from across the globe to publish their articles on solar energy.

G7 Backs Extension of G20 Debt Freeze

G7 finance ministers, in a recently held meeting, backed an extension of a **G20 bilateral debt relief initiative** for the world's poorest countries. The online meeting hosted by US Treasury Secretary.

G20 Debt Service Suspension Initiative (DSSI)

- In April 2020, G20 nations agreed to freeze bilateral government loan repayments for low-income countries until the end of the year.
- This decision was a part of a plan to tackle the health and economic crises triggered by the coronavirus pandemic and prevent an emerging markets debt crunch.
- So far, it has helped 43 countries defer \$5 billion in official debt service payments.

What Is G7

- G7 was set up in 1975. Its aim is to act as an informal forum bringing together the leaders of the world's leading industrial nations.
- Member countries are: Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
- Russia was inducted as a member of this group in 1998, which led G7 to become G8.
- However, after the annexation of Crimea by Russia, it was suspended from the group in 2014.

Virtual Summit of Education Ministers of G-20 nations

- A virtual meeting of G20 Education Ministers was held recently. It was hosted by the Saudi Arabia, current chair of G20.
- The member countries discussed the three identified areas of Education – *Continuity in Times of Crises, Early Childhood Education and Internationalization in Education*.

About G-20

- G-20, is a group of finance ministers and central bank governors from **19 individual countries and European Union**.
- G-20 is a forum, not a legislative body, its agreements and decisions have no legal impact, but they do influence countries' policies and global cooperation.
- Established in 1999, G20 was elevated from a forum of Finance Ministers and Central Bank Governors **to that of Heads of State/Government** in 2008 **to effectively respond to the global financial crisis of 2008**.
- **Members include** - Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, **Russia**, Saudi Arabia, South Africa, Turkey, United Kingdom, United States and the European Union.

Universal Eligibility Condition for World Bank Loan

- The World Bank has clarified that the \$1 billion loan provided to India, in May 2020, comes with a **condition of universal eligibility in procurements**.
- The agency has further clarified that it would have the *right to review the procurement documents, inspect all accounts, records and other files relating to the project*.

What is Universal Eligibility Condition?

- Under this condition, **all preferential market access policies**, shall not be applicable on purchases made while implementing the national project.
- In other words, the local firms **shall not enjoy concession benefits**. They will **have to be treated equally** just like other universal (or foreign) firm.
- Hence, it will be a setback for initiatives like Make in India and Atma Nirbhar Bharat.

Uttar Pradesh Special Security Force

- The Uttar Pradesh government has notified the creation of a special force named the UP Special Security Force.
- It will be responsible for the security of metro railways, courts, airports, banks and other vital installations in the state.

Key Highlights

- It has been created under the provisions of the Uttar Pradesh Special Security Force Act, 2020.
- Five battalions of the SSF would be constituted in the first phase, and it will be headed by an ADG-rank officer.
- UPSSF will be given **special powers** and its members would be **able to make arrests or search without a warrant issued by a magistrate**.

Controversy

- Formation of UPSSF has been criticized on three grounds: **The powers given to the force, the ambit of what the force will protect and the protection given to the members of force in case they violate their power.**
- Protection available to the force is a sweeping protection – **no court will be able to take cognizance of the offence against any member of the force** without prior sanction from the state government.
- Many analysts believe that the problem in Uttar Pradesh is not that court premises or industrial undertakings are insecure. The problem here is that **common citizens have to face violence on a daily basis.** Hence, creation of such force was unwarranted.

Comparison with Other Security Forces

- The CISF Act, the Maharashtra State Security Corporation Act and Odisha Industrial Security Force Act have created similar special force. **All three of them have power to arrest without a warrant.**
- These Acts also have similar provisions for not just making arrests, but also “search without warrant”.
- However, the difference between UP act and other similar acts lies in the kinds of institutions that the force has to protect, and the protection that is granted to members of the force.
- The UPSSF has a wider remit – it will **provide security to not just to a body but also to “a person”, and to “the residential premises”.**
- The UPSSF’s definition of “Installation”, also includes “statue” and “monument”. The UP Act defines “Establishment” as both public and private buildings.

Golden Arrows

- The Indian Air Force inducted the newly acquired Rafale fighter jets into the Golden Arrows squadron of the IAF at the Ambala airbase.
- The IAF had recently **resurrected the Golden Arrows squadron**, which was originally raised at Air Force Station, Ambala on Oct 1, 1951.
- The 17 Squadron has many firsts to its credit; in 1955 it was equipped with the first jet fighter, the legendary De Havilland Vampire.
- The Rafale jets, known for air-superiority and precision strikes, are **India's first major acquisition of fighter planes in 23 years** after the Sukhoi jets were imported from Russia.

Fugitive Economic Offender

- A court in Delhi has declared **four directors of Gujarat-based pharma firm Sterling Biotech** as fugitive economic offenders in a Rs 8,100-crore bank fraud case.
- The promoters of this company, who fled India sometime in 2017, are accused of swindling several banks to the tune of Rs14,500 crore by taking loans and laundering the money in other countries.

Who are Fugitive Economic Offenders (FEO)?

- An FEO is defined by **The Fugitive Economic Offenders (FEO) Act, 2018.**
- A fugitive economic offender is a person against whom an arrest warrant has been issued in relation to a scheduled offence and who has left India to avoid criminal prosecution or one who refuses to return to the country to face criminal prosecution.

- The FEO Act aims to provide for measures to deter fugitive economic offenders from evading the process of law in India by staying outside the jurisdiction of Indian courts.

Why Was Such A Law Required

- Economic offences relate to fraud, counterfeiting, money-laundering, tax evasion, etc. Among the laws available for prosecuting these offences are: The Prevention of Money-Laundering Act (PMLA), 2002, The Benami Properties Transactions Act, 1988, and The Companies Act, 2013.
- Sections of The Indian Penal Code, 1860 and The Code of Criminal Procedure, 1973, also cover offences such as forgery and cheating.
- However, it was observed that **existing civil and criminal laws did not contain specific provisions to deal with such offenders.**
- Also, it was also argued that procedures under these laws were **time-consuming**, led to roadblocks in investigation and **impacted the financial health of banks.**

Mass Spectrometer

- Researchers from the Delhi-based **Institute of Genomics and Integrative Biology (IGIB)** and the **National Centre for Disease Control (NCDC)** have developed a technique which uses **mass spectrometer** to detect novel coronavirus (SARS-CoV-2).
- The new method can directly detect the virus without amplifying the RNA for detection, as is the case with RT-PCR.
- It **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. Though seven peptides were found to be unique to SARS-CoV-2, only two peptides are used for quick virus detection. One of the peptides is **spike protein** and the other is a **replicase protein.**
- Using this method, the researchers have been able to detect novel coronavirus with 95% sensitivity and 100% specificity with respect to RT-PCR (reverse transcription polymerase chain reaction).
- **Mass Spectrometry** is an **analytical technique** that measures the mass-to-charge ratio of charged particles for determining masses of particles and the elemental composition of a sample of molecules as well as for elucidating the chemical structure of molecules such as peptides.

Bradykinin Storm

- A supercomputer's recent analysis of data on the contents collected from the COVID-19 patients has shown a phenomenon called a '**bradykinin storm**'. This might **explain how the virus works in the body**, including some of the more puzzling extreme events.
- Bradykinin is a **compound that is related to pain sensation and lowering blood pressure** in the human body.
- SARS-CoV-2 **uses a human enzyme called ACE2** like a 'Trojan Horse' to sneak 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 caused the levels of ACE to fall in the lungs, and consequently pushed up the levels of ACE2. As a chain reaction, this increases the levels of the molecule bradykinin in the cells, causing a bradykinin storm. **Bradykinin causes the blood vessels to expand** and become leaky, leading to swelling of the surrounding tissue.

- In addition, the levels of a substance called **hyaluronic acid**, which can absorb more than 1,000 times its own weight in water to form a hydrogel, increases.
- In effect, 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 is preventing 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.
- Scientists have advocated **targeting the bradykinin pathway** to evolve more therapeutic interventions **to offset the severe effects of COVID-19**.

National Immunogenicity & Biologics Evaluation Center (NIBEC)

- National Immunogenicity & Biologics Evaluation Centre (NIBEC) has been inaugurated by the Secretary, Department of Biotechnology (DBT), Government of India.
- The centre has been set up for assessing clinical Immunogenicity of viral vaccines.
- It has been established jointly by Bharati Vidyapeeth University through its constituent unit **Interactive Research School for Health Affairs (IRSHA)** and **Biotechnology Industry Research Assistance Council (BIRAC-DBT)**, through **National Biopharma Mission**.
- The Department of Biotechnology (DBT), under Ministry of Science & Technology, promotes and accelerates the development of biotechnology in India, including growth and application of biotechnology in the areas of agriculture, healthcare, animal sciences, environment and industry.

Interactive Research School for Health Affairs (IRSHA)

- IRSHA, established in 2001, is a unique constituent unit of Bharati Vidyapeeth (Deemed to be University), totally dedicated to research.
- The institute is mandated **to conduct research in priority areas of human health** in coordination with other constituents of the university like Medical, Ayurveda, Homeopathy, Dental colleges, Rajiv Gandhi Institute of IT & BT, Environmental sciences etc.
- The core area of research includes Mother and child health, Cancer, Diabetes, Obesity, Osteoarthritis & Herbal medicine.

For the National Biopharma Mission and BIRAC, please refer to The Recitals - July 2020.

Entrepreneurship in Residence (EIR) Programme

- A brochure featuring **Entrepreneurs in Residence (EIR)** under the **National Initiative for Developing and Harnessing Innovations (NIDHI)** programme was launched by the **Department of Science and Technology (DST)**.
- The NIDHI-EIR Program was conceived to **inspire the S&T qualified youth in India to take up entrepreneurship as a viable career** and help shape India's future and the economy.
- The programme supports aspiring or budding entrepreneurs of considerable potential for pursuing a promising technology business idea with a **subsistence grant up to Rs 30000 per month** with a maximum cap for total support of Rs 3.6 lakh to each EIR over a maximum of 18 months.
- The programme aims to provide guidance to these aspiring entrepreneurs from experienced, innovative and highly successful entrepreneurs on the business concept strategy.

- This program is important in that it creates a pipeline of startups with a focus on young budding entrepreneurs.
- The **National Initiative for Developing and Harnessing Innovations (NIDHI)** was announced by the DST as an **umbrella programme for nurturing ideas and innovations** (knowledge-based and technology-driven) **into successful startups**.

Integrated Road Accident Database Project (iRAD)

- The **Ministry of Road Transport & Highways** is in the process of implementing '**Integrated Road Accident Database Project (iRAD)**' which will be applicable across the country.
- In the first instance, it has been decided to implement the proposal in **six States**, viz. Maharashtra, Karnataka, Madhya Pradesh, Rajasthan, Uttar Pradesh and Tamil Nadu.
- The development and implementation of iRAD has been entrusted to **IIT Madras and National Informatics Centre Services Inc.**
- This project **capture the spot accident data** using a mobile app configured for this purpose. This data can then be utilized for various purposes like finding the causes of the accidents and remedial measures to improve the road infrastructure, to record the accidents data for the use of police, health services and other concerned departments.

Flying V Aircraft

- 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**'.
- Flying V is a **futuristic fuel-efficient long-distance aircraft** that could one day carry passengers in its wings.
- 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, are now involved in the project.
- The Flying-V design, which derives its name from its noticeable 'V' shape, **integrates the passenger cabin, the cargo holds 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 most advanced aircraft.



Hypersonic Technology Demonstrator Vehicle

- The **hypersonic air-breathing scramjet technology** was successfully demonstrated by the **Defence Research and Development Organisation (DRDO)** with a flight test of the **Hypersonic Technology Demonstrator Vehicle (HSTDV)**, which will lead to the development of **hypersonic cruise missiles and vehicles** in future.
- The successful test will pave the way for missiles that can travel at six times the speed of sound. India will reportedly make its first hypersonic missile in the next five years.

- The test was conducted from **Dr APJ Abdul Kalam Launch Complex** at APJ Abdul Kalam island off the coast of Odisha.
- India became the **fourth country** to have demonstrated this technology after the USA, Russia and China.

Real Mango

- In a nationwide investigation, the **Railway Protection Force (RPF)** has disrupted the operation of **illegal software called “Real Mango”** used for cornering confirmed Railway reservation.
- In course of systematic unravelling of the working of the illegal software by the RPF, it has been found that:
 - Real mango software **bypasses V3 and V2 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
 - The software **logs in** to the IRCTC website **through multiple IRCTC Ids**.
 - The illegal software is **sold through five-tiered structure**: System Admin & his team, Mavens, Super sellers, Sellers and Agents.
 - System admin is receiving **payment in bitcoins**.
- The information supplied by RPF helped Centre for Railway Information Systems (CRIS) at IRCTC to **strengthen security features in the Passenger Reservation System (PRS)**.

e-Gopala App

- Prime Minister of India launched the **e-Gopala App**, a **comprehensive breed improvement marketplace** and information portal for direct use of farmers.
- It will be a digital medium which will **help livestock owners to choose advanced livestock**s. This app will give all information related to **productivity, health and diet** to the cattle owners.
- At present **no digital platform** is available in the country for farmers **managing livestock including buying and selling of disease-free germplasm** in all forms, availability of quality breeding services and guiding farmers for animal nutrition, treatment of animals using appropriate medicine.
- There is no mechanism to send **alerts on due date for vaccination, pregnancy diagnosis and calving** among other issues and inform farmers about various government schemes and campaigns in the area.
- The **e-Gopala** app will provide **solutions** to farmers on all these aspects

Methanol Plant

- **Rashtriya Chemicals and Fertilizers Ltd (RCF)**, a PSU under the Ministry of Chemicals and Fertilizers, has started its **Methanol Plant at Trombay Unit, Mumbai**.
- With this, RCF has entered the selected list of Methanol producers in the country, providing alternatives to import and thus contributing towards Government's ambitious 'Atmanirbhar Bharat' Abhiyaan.

Methanol

- **Methanol**, also known as **methyl alcohol**, is a chemical with the formula CH_3OH (a methyl group linked to a hydroxyl group).
- It is a **light, volatile, colourless, flammable liquid** with a distinctive alcoholic odour similar to that of ethanol.
- A **polar solvent**, methanol acquired the name **wood alcohol** because it was once produced chiefly by the destructive **distillation of wood**. Today, methanol is mainly produced industrially by hydrogenation of carbon monoxide.
- It is a **non-drinking** type of alcohol (poisonous for human consumption) which is mostly used to create fuel, solvents and antifreeze.

Chinese Apps Banned

- The **Ministry of Electronics and Information Technology** has banned 118 Chinese apps which are prejudicial to **Sovereignty and Integrity of India, Defence of India, Security of State and Public Order**.
- This is the second time the government of India has banned Chinese apps in the country. The first set of apps banned in India included 59 of them followed by 47 more China based applications.
- The ministry has banned the apps by invoking its power under **section 69A of the Information Technology Act** read with the relevant provisions of the **Information Technology (Procedure and Safeguards for Blocking of Access of Information by Public) Rules 2009**.
- The Ministry received many complaints from various sources about misuse of some mobile apps for stealing and surreptitiously transmitting users' data in an unauthorized manner to servers which have locations outside India.

Section 69A of the Information Technology Act

- Section 69A of the Information Technology Act, 2000 was **introduced by an amendment to the Act in 2008**. It gives Central government the **power to block public access to any information online** — whether on websites or mobile apps.
- Under Section 69A, if a website threatens India's defence, its sovereignty and integrity, friendly relations with foreign countries and public order, the government can ban it, **after following due procedure**.
- The detailed procedures to do so are listed under the Information Technology (Procedure and Safeguards for Blocking Access of Information by Public) Rules, 2009.
- Apart from this, **a court may also issue directions for blocking information online**. The Department of Telecommunications, too, can issue blocking orders to internet service providers, to enforce licensing conditions.
- In **Shreya Singhal v/s Union of India case (2015) judgement**, the Supreme Court of India **upheld the validity of Section 69A** and the extant blocking procedures. The court said that the law was constitutional and a website could be **blocked only on the basis of reasoned order**.
- The Supreme Court clarified that the **blocking orders can be challenged under Article 226 of the Constitution**.

Intermediate Mass Black Hole

- In 2019, **Laser Interferometer Gravitational-wave Observatory (United States)** and the detector **Virgo (Italy)** detected signals from gravitational waves from a **collision between two black holes**. It is the **first “intermediate mass” black hole** ever observed.
- All the black holes observed so far belong to either of **two categories**. One category ranges between a **few solar masses** (one solar mass is the mass of our Sun) **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 our sun.
- According to traditional knowledge, stars that could give birth to black holes between 65 and 120 solar masses do not do so — stars in this range blow themselves apart when they die, without collapsing into a black hole.
- Signal, GW190521, likely represented the instant that the two merged- the larger black hole was of 85 solar masses and the smaller black hole is at 66 solar masses.
- One of the two merging black holes (with 85 solar masses) **falls in an “intermediate mass” range** — a misfit that cannot be explained by traditional knowledge of how black holes form.

Black Holes

- 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.
- Because no light can get out, people can't see black holes. They are invisible. Space telescopes with special tools can help find black holes.
- A black hole's “surface,” called its **event horizon**, defines the **boundary where the velocity needed to escape exceeds the speed of light**, which is the speed limit of the cosmos. Matter and radiation fall in, but they can't get out.
- In 2019, astronomers using the **Event Horizon Telescope (EHT)** — an international collaboration that networked eight ground-based radio telescopes into a single Earth-size dish — **captured an image of a black hole for the first time**. It appears as a dark circle silhouetted by an orbiting disk of hot, glowing matter.
- NASA's **Hubble, Chandra, Swift, NuSTAR, and NICER space telescopes**, as well as other missions, continue to take the measure of black holes and their environments and their role in the evolution of galaxies and the universe at large.

Gravitational Waves

- Gravitational waves are **invisible ripples that form when a star explodes** in a supernova; when two big stars orbit each other; and when two black holes merge.
- Travelling at the speed of light, gravitational waves squeeze and stretch anything in their path.
- Gravitational waves were **proposed by Albert Einstein in his General Theory of Relativity**.
- It was only in 2015, however, that the first gravitational wave was actually detected — by LIGO. Since then, there have been a number of subsequent detections of gravitational waves.

Chandrayaan 1

- ISRO's maiden mission to the Moon, **Chandrayaan-1**, has sent images which show that the **Moon may be rusting along the poles**.
- Occurrence of the rust is a conundrum because 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.
- Scientists at NASA believe that this could be because the Earth's own atmosphere is lending a helping hand. In other words, the Earth's atmosphere could be protecting the Moon as well.
- Thus, the Chandrayaan-1 Moon data indicates that the Moon's poles are home to water.

Chandrayaan 1

- Chandrayaan-1, **India's first mission to the Moon**, was launched successfully in 2008 from SDSC SHAR, Sriharikota.
- The spacecraft was orbiting around the Moon at a height of 100 km from the lunar surface for **chemical, mineralogical and photo-geologic mapping of the Moon**.
- Chandrayaan-3 will be launched somewhere 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**.

Giant Radio Galaxies

- Researchers working on **giant radio galaxies (GRG)** at **Inter-University Centre for Astronomy and Astrophysics (IUCAA)** and **Leiden University, Netherlands** have found nearly 400 new GRGs, its largest sample to date. **GRGs were discovered in 1974**.
- 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. 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**.
- The total linear extent or size comprising jets is much larger than the galaxy as seen in optical light. The **length of jets indicates how powerful and active a black hole is** as well as about the environment density of black holes.
- **Giant radio galaxies (GRGs)** are a fraction of radio galaxies which, under special conditions, **grow to giant scales or mega-parsec scales** (millions of light years across, where one light year ~ 9.46 x 1,015 metres).
- The study of GRGs gives **important clues to** unveiling the physics and phenomenology of the **black hole accretion process** or how these massive black holes accrete mass and the efficiency with which they produce these magnificent jets.

Life on Venus

- An announcement by an international team of astronomers about the discovery of **phosphine gas** in the atmosphere of Venus triggered global excitement about the **possibility of the presence of lifeforms** on the neighbouring planet.
- Apart from being produced in **industrial processes**, phosphine, a **colourless but smelly gas**, is known to be made only by **some species of bacteria** that survive in the absence of oxygen.

- Scientists have reported traces of phosphine in a concentration of approximately **20 parts per billion**, thousands to millions of times more than what could otherwise be expected through any naturally occurring chemical process.
- There are some **other ways** in which this chemical might be produced, for example, in the underbelly of **volcanoes or meteorite activity**, **but** that would have shown in **much lower concentrations**.
- So, the **only possible explanation** for the origin of this **phosphine**, based on our current knowledge, could be in the biological processes, the way it is produced on Earth, by some microbes.

But Venus Cannot Support Life, Can It?

- There are several things that we know of Venus that make life, as we know it, unsustainable on that planet. The **temperature** of Venus is **too high**, and its atmosphere is highly **acidic**, just two of the things that would make life impossible.
- But this **phosphine** could be **remnants** from a time when Venus was a much more hospitable place.

Venus Missions

- Spacecraft have been going to Venus since the 1960s, and some of them have even made a landing.
- In fact, the **Indian Space Research Organisation (ISRO)** is also planning a mission to Venus, tentatively called **Shukrayaan**, in the near future.

Tata CRISPR Test

- The Tata CRISPR test is the **world's first diagnostic test** to deploy a **pecially adapted Cas9 protein** to successfully detect the virus causing Covid-19.
- It is developed by **CSIR-IGIB 'Feluda'** (Council of Scientific and Industrial Research-Institute of Genomics and Integrative Biology) and received regulatory approvals from the Drug Controller General of India (DCGI) for commercial roll-out in accordance with the Indian Council of Medical Research (ICMR) guidelines.
- The Tata CRISPR test achieves the **accuracy levels of the traditional RT-PCR** (real-time polymerase chain reaction) tests, with quicker turnaround time, less expensive equipment, and better ease of use.
- The test has met high benchmarks, with 96% sensitivity and 98% specificity for detecting the novel coronavirus.
- It uses indigenously developed **CRISPR technology** for the detection of the genomic sequence of the SARS-CoV-2 virus.

Congo Fever

- The Palghar administration has asked authorities to remain alert against a possible spread of the **Congo fever** in the Maharashtra district.
- The **Crimean Congo Hemorrhagic Fever (CCHF)**, commonly known as the Congo fever, is a widespread disease **caused by a tick-borne virus (Nairovirus)** of the **Bunyaviridae family**.
- The disease was **first described in the Crimea in 1944** and given the name Crimean haemorrhagic fever. In 1969, it was recognized that the pathogen causing Crimean haemorrhagic fever was the **same as that responsible for an illness identified in 1956 in the Congo**. The linkage of the two place names resulted in the current name for the disease and the virus.
- The virus causes severe viral haemorrhagic fever outbreaks, with a case **fatality rate of 10 to 40 %**.

- There is **no vaccine available for either people or animals** against the disease.
- Human-to-human transmission can occur resulting from close contact with the blood, secretions, organs or other bodily fluids of infected persons.
- Hospital-acquired infections can also occur due to improper sterilisation of medical equipment, reuse of needles and contamination of medical supplies,
- CCHF is **endemic in all of Africa, the Balkans, the Middle East and in Asia.**

MedSpark

- MedSpark, one of the **first medical device parks** in the country, will be set up in **Kerala**. It will be established in the Life Science Park, Thonnakkal, Thiruvananthapuram.
- It will **focus on the high-risk medical device sector** to provide a full range of services for the medical devices industry like R&D, testing and evaluation of medical devices, manufacturing support, technology innovation, and knowledge dissemination.
- MedSpark is envisaged as a **joint initiative** of **Sree Chitra Tirunal Institute for Medical Sciences & Technology (SCTIMST)** and the **Kerala State Industrial Development Corporation Ltd (KSIDC)**. SCTIMST is an **autonomous institute** of the **Department of Science and Technology (DST)**, Government of India.
- The park is being established under the **Technical Research Centre for Biomedical devices program of the DST.**
- This will **benefit small and medium-sized medical devices industries**, which dominate the medical devices sector.
- **Funding from the state and central governments** through various schemes will meet the capital expenditure and deficit in income against expenses during the initial stages.

CAT QUE VIRUS (CQV)

- In a study published in the **Indian Journal of Medical Research**, scientists from the Pune-based Maximum Containment Laboratory and ICMR-National Institute of Virology have noted the presence of antibodies against the **Cat Que virus (CQV)** in two human serum samples.
- The presence of the Cat Que virus has been largely reported in **Culex mosquitoes in China** and in **pigs in Vietnam.**
- For the study, 1020 human serum samples that showed acute febrile illness during 2014-2017 were collected.
- All these samples, however, were found to be negative for CQV when subjected to the real-time RT-PCR test.

Scrub Typhus

- An outbreak of **scrub typhus** has claimed the lives of five people in **Nagaland's Noklak** district bordering Myanmar. More than 600 others tested positive for the disease but recovered after treatment.
- Scrub typhus, also known as **bush typhus**, is a **bacterial disease** caused by ***Orientia tsutsugamushi***.
- It spreads to people through bites of larval mites of the family trombiculid, also called **Chiggers**.

- The **symptoms** include fever, headache and bodyache. Scrub typhus should be treated with the antibiotic **doxycycline**.

Sandalwood Spike Disease

- India's sandalwood trees are facing a serious threat with the return of the destructive **Sandalwood Spike Disease (SSD)**.
- The infection has **resurfaced** in the aromatic tree's natural habitats in **Karnataka and Kerala**.
- The natural population of sandalwood in **Marayoor of Kerala** and various reserve forests in **Karnataka**, including **Malai Mahadeshwara Wildlife Sanctuary**, are heavily infected with SSD for which there is no cure as of now.
- Presently, there is no option but to cut down and remove the infected tree to prevent the spread of the disease.
- It is caused by **phytoplasma, bacterial parasites** of plant tissues, which are **transmitted by insect vectors** and involved in **plant-to-plant transmission**.
- The disease was first reported in **Kodagu, Karnataka in 1899**.
- With between 1 and 5% of sandalwood trees lost every year due to the disease, scientists warn that it could wipe out the entire natural population if measures are not taken to prevent its spread.

Brucellosis

- The health commission of Lanzhou City in **China** announced that a leak in a biopharmaceutical company last year caused an outbreak of **brucellosis disease**. More than 3,000 people have been infected with the disease since then and no fatalities have been reported so far.
- Brucellosis, also known as **Malta fever** or **Mediterranean fever**, is a **bacterial disease** that mainly infects **cattle, swine, goats, sheep and dogs**.
- **Humans** can get infected if they come in *direct contact with infected animals* or by *eating or drinking contaminated animal products* or by *inhaling airborne agents*. Human to human transmission of the virus is rare.
- According to **WHO**, most cases of the disease are caused by ingesting unpasteurised milk or cheese from infected goats or sheep.
- Brucellosis is one of the most important **zoonotic diseases** worldwide and also endemic in India causing huge economic losses to dairy industry due to infertility, abortion, birth of weak offsprings and reduced productivity.
- A new Vaccine "**Brucella abortus S19Δ per vaccine**" has been developed by the Indian Council of Agricultural Research's -Indian Veterinary Research Institute (ICAR-IVRI) for **brucellosis** prevention in the dairy sector.

Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) Programme

- Biotech-KISAN is a **Department of Biotechnology, Ministry of Science and Technology** initiative that empowers farmers, especially women farmers.
- It aims to understand the problems of water, soil, seed and market faced by the farmers and provide simple solutions to them.
- The Scheme is a **farmer-centric** scheme for farmers, developed by and with farmers.

- It is **Pan-India** hub-and-spoke model that stimulates entrepreneurship and innovation in farmers.
- It is being implemented in **15 agro-climatic zones** of India in phased manner with the following **objectives**:
 - Linking available science and technology to the farm by first understanding the problem of the local farmer and providing solutions to those problems.
 - Working together, in close conjunction, of scientists and farmers is the only way to improve the working conditions of small and marginal farmers.
 - This programme aims to work with small and marginal farmers especially the woman farmer for better agriculture productivity through scientific intervention and evolving best farming practices in the Indian context.

VAJRA Scheme

- **VAJRA (Visiting Advanced Joint Research) Faculty Scheme** is a dedicated program exclusively for overseas scientists and academicians *to work as adjunct / visiting faculty* for a specific period of time in **Indian Public funded academic and research institutions**.
- The scheme lays **special emphasis on Non-resident Indians (NRI) and Persons of Indian Origin (PIO) / Overseas Citizen of India (OCI)**
- The Scheme recognizes the value of collaborative research as a crucial element for information sharing among researchers for updating and acquiring knowledge and skills, and also to draw different perspectives to solve a shared problem.
- The scheme was **launched by the Science and Engineering Research Board (SERB)**, a statutory body of the **Department of Science and Technology (DST)**.

Science & Technology Indicators (STI) 2019-20

- **Department of Science and Technology (DST)** released the latest Science & Technology Indicators (STI) for 2019-20. The indicators **did not reveal anything that was not known**, but it reiterated a sorry state.
- It revealed that **between 2005-06 and 2017-18**, a total of 510,000 patent applications were filed in the country, but of these more than **three-quarters were filed by foreign entities or individuals**. In other words, in these 13 years, just 24 per cent of patent claims came from Indians.
- **Reason for Poor Performance**
 - **Poor investment in R&D** by the government as well as by the private sector,
 - The pathetic state of higher education;
 - Lack of employable personnel who have neither the skills nor the aptitude in a variety of fields
 - Lack of funds and a lack of conducive environment for start-ups.

Data Sonification

- NASA's **Chandra X-Ray Center (CXC)** has unveiled a **new 'sonification' project** that **transforms data from astronomical images into audio**.
- **Data sonification** refers to the **use of sound values to represent real data**. It is the auditory version of data visualisation. In NASA's recent Chandra project, for instance, data is represented using a number of musical notes.

- NASA's distant telescopes in space **collect inherently digital data, in the form of ones and zeroes**, before converting them into images. The images are essentially visual representations of light and radiation of different wavelengths in space, that can't be seen by the human eye.
- The Chandra project has created a celestial concert of sorts by translating the same data into sound. **Pitch and volume are used to denote the brightness and position of a celestial object or phenomenon.**
- The data has been collected by **NASA's Chandra X-Ray Observatory, Hubble Space Telescope and Spitzer Space Telescope.**
- So far, the Chandra project has released the images of the **Galactic Centre**, the remains of a supernova called **Cassiopeia A**, as well as the **Pillars of Creation Nebula**, which are all located in a region around 26,000 light years away from Earth.
- **The Galactic Centre**
 - Galactic Centre is the **rotational centre of the Milky Way galaxy.**
 - It comprises a collection of celestial objects — neutron and white dwarf stars, clouds of dust and gas, and most notably, a **supermassive black hole called Sagittarius A***, that weighs four million times the mass of the sun.
- **Cassiopeia A**
 - Cassiopeia A is one of the most **well-known remnants of a once-massive star** that was destroyed by a supernova explosion around 325 years ago.
 - It is located around 11,000 light years away from Earth in the northern Cassiopeia constellation.
- **The Pillars of Creation**

The iconic Pillars of Creation is located in the **centre of the Eagle Nebula**, which is also known as **Messier 16.**

RAISE 2020

- The **Ministry of Electronics and Information Technology (MeitY)** and **NITI Aayog** has organized a Mega Virtual Summit on Artificial Intelligence (AI), **RAISE 2020- 'Responsible AI for Social Empowerment 2020,'.**
- RAISE 2020 is a first of its kind, global meeting of minds on Artificial Intelligence to drive India's vision and roadmap for **social transformation, inclusion and empowerment** in areas like Healthcare, Agriculture, Education and Smart Mobility, among other sectors, through responsible AI.
- The summit has facilitated an exchange of ideas to create mass awareness about the need to ethically develop and practice AI.
- It also aims to help **create a data-rich environment**, which is a stepping stone to eventually transform lives globally.

VAIBHAV Summit

- **Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit** was inaugurated on 2nd October 2020, **the birth anniversary of Mahatma Gandhi.**
- VAIBHAV Summit is a **collaborative initiative by S&T and Academic Organisations** of India to enable deliberations on thought process, practices and R&D culture with a problem-solving approach for well-defined objectives.

- **Key areas of summit are** Quantum technologies, artificial intelligence and machine learning, communications technologies, computational and data sciences and aerospace technologies, etc.
- The VAIBHAV initiative aims to bring out the **comprehensive roadmap to leverage the expertise and knowledge of global Indian researchers** for solving emerging challenges.
- The aim of the summit is to reflect in-depth on the collaboration and cooperation instruments with academia and scientists in India. The goal is to create an ecosystem of Knowledge and Innovation in the country through global outreach.

Indian Institutes of Information Technology (Amendment) Bill, 2020

- The Parliament has passed the **Indian Institutes of Information Technology (IIITs) (Amendment) Bill, 2020**. IIIT Laws (Amendment) Bill, 2020 will **amend IIT Act of 2014 and IIIT (Public-Private Partnership) Act, 2017**.
- The bill will confer the **status of National Importance to five Indian Institutes of Information Technology (IIITs) — Surat, Bhopal, Bhagalpur, Agartala and Raichur** by granting them statutory status along with the already existing 15 IIITs under the IIIT(PPP) Act, 2017.
- These IIITs, at present, are functioning as Societies registered under the **Societies Registration Act of 1860**. They will now be covered under the IIIT (PPP) Act, 2017, similar to the other 15 IIITs established under the scheme through public-private partnership.
- It will also **entitle the institutions to use the nomenclature of Bachelor of Technology (B.Tech) or Master of Technology (M.Tech) or PhD degree** as issued by a University or Institution of National Importance.
- The **central government will contribute 50%** towards the expenses of institutes functioning under the PPP mode. **35% will be borne by the states and 15% by the industries**.
- Every Institute shall be open to all persons irrespective of gender, caste, creed, disability, domicile, ethnicity and social or economic background.

GPay Allowed To Share Customer's UPI Data Under Law: Google

- Google India Digital Services Limited told the Delhi High Court that its GPay App, being a **TPAPs (Third Party Application Providers)**, is allowed under the law **to share customer's UPI (Unified Payments Interface) transaction data** with third parties and group companies.
- The tech-giant's submission came in response to a petition seeking action against GPay for allegedly violating the RBI's guidelines related to data localisation, storage and sharing norms.
 - The plea claimed that the company was storing personal sensitive data in contravention of UPI procedural guidelines of October 2019.
 - UPI procedural guidelines allow such **data to be stored only by Payment Service Provider (PSP) bank systems** and not by any third party application.
- **Google's Response**
 - Google India said the National Payments Corporation of India's (NPCI) **'procedural guidelines' do not impose an absolute prohibition or restriction** on a TPAP's ability to share data or information, if it was done with prior permission of the NPCI and the bank concerned.
 - NPCI's procedural guidelines **make a clear distinction between 'Customer Data'** (name, mobile number, gender, address, email ID, location etc.) **and 'Customer Payment Sensitive Data'** (account number, expiry date of debit card, last six digits of debit card, UPI PIN etc.). As

per Google India, while it was permitted to store 'Customer Data', it was not permitted to store 'Customer Payment Sensitive Data'.

- **RBI's Response**

- Reserve Bank of India (RBI) has told the Delhi High Court that **Google Pay is a third-party app provider (TPAP)** and does not operate any payment systems.
- Therefore, its operations are **not in violation** of the Payment and Settlement System Act of 2007.

Payment and Settlement System (PSS) Act of 2007

- The PSS Act, 2007 provides for the regulation and supervision of payment systems in India and designates RBI as the authority for that purpose and all related matters.
- The Reserve Bank is authorized under the Act to constitute a Committee of its Central Board known as the **Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)**, to exercise its powers and perform its functions and discharge its duties under this statute.
- Under the PSS Act, 2007, two Regulations have been made by the RBI, namely,
 - i) **Board for Regulation and Supervision of Payment and Settlement Systems Regulations, 2008:** It deals with the composition of the BPSS, its powers and functions, exercising of powers on behalf of BPSS, meetings of the BPSS and quorum, the constitution of Sub-Committees/Advisory Committees by BPSS, etc.
 - ii) **Payment and Settlement Systems Regulations, 2008:** It covers matters like form of application for authorization for commencing/ carrying on a payment system and grant of authorization, payment instructions and determination of standards of payment systems etc.

Tidal Disruption Events

- **Tidal disruption events (TDE)** occur when a star passes too close to a compact object, such as a **supermassive black hole (SMBH)**, that the tidal field of the compact object is able to overcome the stellar self-gravity and tear the star apart.
- The basic theory of tidal disruption events has been developed in the late '70s and throughout the '80s.
- The tidal disruption events are crucial and useful phenomena **to detect and predict the mass of supermassive black holes in quiescent galaxies.**

Solar Cycle 25

- Scientists from **NASA and the National Oceanic and Atmospheric Administration (NOAA)** have announced their predictions about the **new solar cycle, called Solar Cycle 25**, which they believe has begun.
- Since the Sun's surface is a very active space, electrically charged gases on its surface generate areas of powerful **magnetic forces**, which are called magnetic fields.
- Since the gases on the **Sun's surface** are constantly moving, these magnetic fields can get stretched, twisted and tangled creating motion on the surface, which is referred to as solar activity. Solar activity varied with the stages of the solar cycle, which lasts on **average for a period of 11 years.**
- Scientists track a solar cycle by using sunspots, which are the dark blotches on the Sun that are associated with solar activity. Sunspots are associated as the origins for giant explosions such as solar flares that can spew light, energy and solar material into space.

Sunspot

- A Sunspot is an **area on the Sun that appears dark** on the surface and is relatively cooler than the surrounding parts.
- These spots, some as large as 50,000 km in diameter, are the visible markers of the **Sun's magnetic field**, which forms a blanket that protects the solar system from harmful cosmic radiation. When a Sunspot reaches up to 50,000 km in diameter, it may release a huge amount of energy that can lead to solar flares.
- The beginning of a solar cycle is typically characterised by only a few sunspots and is therefore referred to as a **solar minimum**. Experts announced that the solar minimum for Solar Cycle 25 occurred in December 2019. It took time for them to announce this because of the variability of the Sun.
- Scientists predict that a **solar maximum (middle of the solar cycle)** will be reached by **July 2025** and that this solar cycle will be as strong as the last solar cycle, which was a “**below-average cycle**” but not without risks.

Effects on Earth

- When charged particles from **coronal mass ejections (CMEs)** reach areas near the Earth, they can **trigger intense lightning** in the skies referred to as **auroras**.
- When CMEs are particularly strong, they can also interfere with the power grids, which can cause electricity shortages and power outages.
- NASA notes that solar flares and CMEs are the **most powerful explosions** in our solar system.
- Solar flares can have a major effect on **radio communications, Global Positioning Systems (GPS)** connectivity, power grids, and satellites.

Significance of Dead Coral Reefs

A recent study by researchers from the University of Queensland (UQ), Australia, have reported that more life can be supported by ‘dead’ coral rubble than live coral.

Findings Of The Study

- **Dead coral reefs support ‘cryptic’ animals** — including fishes, snails, tiny crabs and worms — who hide under this rubble to save themselves from predation.
- Researchers have designed a three-dimensional-printed coral stacks called **Rubble Biodiversity Samplers (RUBS)** to survey ‘cryptic’ organisms. The 3D-printed coral mimicked surrounding reef rubble and invited unwitting reef organisms to be monitored.
- Live’ coral reefs are under threat from rising temperatures, as they are sensitive to temperature changes. Oceans are massive sinks for greenhouse gases and as they heat up, seawater chemistry changes, calcifying coral reefs, affecting their photosynthesis processes. When corals become stressed due to any changes, including pollution or warming, they can expel algae and get bleached, meaning the ‘death’ of the coral.

Crypsis

- In ecology, crypsis is the ability of an animal to avoid observation or detection by other animals.
- **Cryptic species:** one of two or more morphologically indistinguishable biological groups that are incapable of interbreeding.

What Are Coral Reefs?

- Coral reefs are **large underwater structures composed of the skeletons of colonial marine invertebrates called coral**. The coral species that build reefs are known as hermatypic, or "hard," corals because they extract calcium carbonate from seawater to create a hard, durable exoskeleton that protects their soft, sac-like bodies.
- **Each individual coral is referred to as a polyp**. Coral polyps live on the calcium carbonate exoskeletons of their ancestors, adding their own exoskeleton to the existing coral structure.
- More than half of the earth's coral reefs is distributed over only five countries: Indonesia, Australia, the Philippines, France (including its overseas territories) and Papua New Guinea. **Australia's Great Barrier Reef** is the largest living structure on the planet.

Why Do Coral Reefs Matter?

- Coral reefs take up only 0.1 percent of the seabed but **support 25 percent of marine life**.
- **The World Wildlife Fund (WWF) estimates that coral reefs provide an annual \$30bn worth of goods and services**. About one billion people have some dependence on coral reefs for food and income from fishing. A well-managed square kilometre of coral reef can yield 15 tonnes of seafood per year - or 750 times the world's per capita fish consumption of about 20 kilogrammes.
- **Coral reefs generate additional value by supporting tourism**. A report by Australia's Climate Council found that the loss of the Great Barrier Reef would cost adjacent regions one million visitors a year, put 10,000 jobs at risk and take \$1bn in tourism spending from the economy.
- **Coral reefs also protect coastlines from powerful waves and flooding** and prevent coastal erosion. A 2014 study published in Nature magazine found that **coral reefs reduce wave energy by an average of 97 percent**. Up to 200 million people may be receiving protection from reefs, the researchers found.

Coral Bleaching

- Coral bleaching happens when **corals lose their vibrant colors and turn white**. Corals are bright and colorful because of **microscopic algae called zooxanthellae**. The zooxanthellae live within the coral in a mutually beneficial relationship, each helping the other survive.
- But when the ocean environment changes—if it gets too hot, for instance—the coral stresses out and expels the algae. As the algae leaves, the coral fades until it looks like it's been bleached. If the temperature stays high, the coral won't let the algae back, and the coral will die.
- The leading cause of coral bleaching is **climate change**. A change in water temperature—as little as 2 degrees Fahrenheit—can cause coral to drive out algae. Coral may bleach for **other reasons, such as extremely low tides, pollution, or too much sunlight**.
- Apart from climate change, other threats included coastal development, land-based run-off and direct human use, such as activities like illegal fishing



Stubble Utilization By PEDDA

Punjab Energy Development Agency (PEDDA), along with the science and the technology department, is trying to weed out the problem of stubble burning by creating alternatives for stubble utilization.

Efforts By PEDDA For Stubble Utilization

- **Biomass Power Plants:** PEDDA 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, which is less than 5 per cent of the total 20 million tonnes paddy stubble generated in Punjab, is used annually to generate power. Two more biomass power projects with 14 MW capacity are under execution and will be commissioned from June 2021.
- **BIO-CNG:** Eight projects of BIO-CNG are under execution in the state. Most of these projects will be commissioned in 2021 and 2022. These will need around 3-lakh metric tonnes of paddy stubble annually.
- **A Bioethanol project of 100 KL (kilo litre)** — which will require 2 lakh metric tonnes of paddy stubble annually — located at Talwandi Sabo in Bathinda. Ethanol can be used to run vehicles after blending with diesel and petrol.
- After commissioning of all these projects, Punjab will be able to utilise 1.5 million tonnes (7 per cent of the total) paddy stubble.

Benefits Of A Paddy Straw-Based Industry

- **Benefits to farmers:** Farmers can benefit hugely if they can sell paddy stubble to the industry instead of burning it.
- **Environment benefits:** Fertile soil will be saved from burning every year in which a huge amount of organic matter also gets burnt.
- **Job opportunities** to educated unemployed youth in rural Punjab where such projects will be set up can get big job opportunities.

Alternative Uses of Crop Stubble

- **Production of Bio-oil:** Bio-oil is a high density liquid obtained from biomass through rapid pyrolysis technology. It can be stored and transported like petroleum based product and can be combusted directly in boilers, gas turbines etc. for heat and power applications, including transportation. Further, **bio-oil is free from SO₂ emissions and produces low NO₂.**
- **Torrefaction:** This technology involves heating up straw, grass, saw mill residue and wood biomass to 250 - 350 degrees Celsius. This changes the elements of the biomass into 'coal-like' pellets. These pellets can be used for combustion along with coal for industrial applications like steel and cement production.
- **Use of Rice Residue as Bedding Material for Cattle:** It has been found that the use of paddy straw bedding during winter helped in improving the quality and quantity of milk as it contributed to animals' comfort, udder health and leg health.
- **Use of Crop Residue for Mushroom Cultivation:** Paddy Straw Mushrooms (*Volvariella Volvacea*) also known as grass mushroom are so named for their cultivation on paddy straw used in South Asia. One kg of paddy straw yields 300- 600 g of these mushrooms.
- **Straw incorporation' and 'straw mulching':** In both these measures, the residue is incorporated in the field itself and is thus used to increase the nutrient value or fertility of the soil.

Way forward

- Current usage of stubble in these plants is very small compared to the generation of stubble. **Punjab needs varieties of stubble-based industry** here where more and more stubble is required.
- Joint efforts are required on the part of the state, Centre and industries, including public and private participation, to convert all of Punjab's stubble into farmers' income.

- **Businessmen and NRIs should be encouraged** to set up paddy stubble-based industry in Punjab.
- The youth, particularly engineers, graduates in science and technology can start such projects under the '**start-up**' **concept**, which will create entrepreneurship among them and the government must help them by getting sanctioned loans and providing a market, for which there is plenty of scope.

Low Ozone Over Brahmaputra River Valley

Scientists at the Aryabhata Research Institute of Observational Sciences (ARIES) have found that the concentration of near surface ozone in Brahmaputra River Valley (BRV) region is low compared to the other urban locations in India.

What Is Ground-Level Ozone?

- Unlike natural stratospheric ozone, which protects us from the sun's ultraviolet radiation, **ground-level ozone is a pollutant.**
- **Tropospheric, or ground-level ozone**, is created by chemical reactions between oxides of nitrogen (NO_x) and volatile organic compounds (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.

Findings Of The Study

- The study assessed seasonal, day of the week, and characteristics of ozone to identify the emission source of ozone and its precursors, especially methane (CH₄) and NMHCs, along with studying the relationships between the meteorological parameters, ozone and its precursors in a tropical setting.
- The examination of nitric oxide, nitrogen dioxide, and ozone concentrations in this study suggested that this **site is well influenced by local sources such as adjacent major national highway.**
- During the daylight hours, the site is in or nearly in a **photo-stationary state, indicating a low impact of organic species on the ozone concentrations.**

Project Dolphin

- Prime Minister recently announced the government's plan to launch Project Dolphin. The proposed project is **aimed at saving both river and marine dolphins.**
- The initiative got in-principle approval in December last year at the first meeting of the National Ganga Council (NGC), headed by the Prime Minister.
- So far, the National Mission for Clean Ganga (NMCG) has been taking some initiatives for saving dolphins. Now, Project Dolphin is expected to **be implemented by the Ministry of Environment, Forest and Climate Change.**
- The **Gangetic dolphin** is one of five species of river dolphin found around the world. It is found mainly in the Indian subcontinent, particularly in Ganga-Brahmaputra-Meghna and Karnaphuli-Sangu river systems.

Why Is It Important To Save Dolphins?

- Aquatic life is an **indicator of the health of river ecosystems.** As the Gangetic dolphin is at the top of the food chain, protecting the species and its habitat will ensure conservation of aquatic lives of the river.

- There was a time when Gangetic dolphins could be spotted in the Ganga at several places, from its delta in the Bay of Bengal to upstream in the Himalayan foothills. It was also found in the Ganga's tributaries. During the 19th century, dolphins were seen in the Yamuna up to as far as Delhi. However, the **construction of dams and barrages, and increasing pollution have led to a decline in the population of aquatic animals in the rivers in general and of dolphins in particular.**
- Various estimates suggest that the Gangetic dolphin population in India could be about only 2,500-3,000.

Conservation Efforts by Government

- **Wildlife Act Protection:** The government in 1986 included Gangetic dolphins in the First Schedule of Indian Wildlife (Protection), Act 1972. 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 government also prepared **The Conservation Action Plan for 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”.
- **National Aquatic Animal:** On October 5, 2009, the then Prime Minister, declared the Gangetic river dolphin as the national aquatic animal. A notification was issued by the Ministry of Environment and Forests the following year. Now, the National Mission for Clean Ganga celebrates **October 5 as National Ganga River Dolphin Day.**

To read more about Ganges River dolphin, refer July Recitals 2020

International Day of Clean Air For Blue Skies

- The very **first International Day of Clean Air for blue skies** will be held on September 7th, 2020.
- In 2019, during its 74th session, the **United Nations General Assembly adopted the resolution to hold an International Day of Clean Air for blue skies every year.**
- It invited the United Nations Environment Programme (UNEP) to facilitate the observance of the International Day, in collaboration with other relevant organizations. **WHO** is working with **BreatheLife partners** to coordinate activities for the day.

Blue Flag International Certification

- On the eve of International Coastal Clean-Up Day, Union Ministry of Environment announced that, for the first time eight beaches of India are recommended for the coveted International eco-label, the Blue flag certification.
- The event also saw the launch of **India's own eco-label BEAMS** (Beach Environment & Aesthetics Management Services) by e-hoisting the flag -#IAMSAVINGMYBEACH simultaneously at these eight beaches.

What Is 'Blue Flag' Certification

- The 'Blue Flag' beach is an '**eco-tourism model**' and marks out beaches as providing tourists and beachgoers clean and hygienic bathing water, amenities, a safe and healthy environment, and sustainable development of the area. The 'Blue Flag' certification can be **obtained by a beach, marina, or sustainable boating tourism operator**, and serves as an eco-label.

- The certification is awarded by the **Denmark-based non-profit Foundation for Environmental Education (FEE)**, which sets stringent environmental, educational, safety-related and access-related criteria that applicants must meet and maintain. It is awarded annually to beaches and marinas in FEE member countries.
- **The Blue Flag Programme started in France in 1985** and has been implemented in Europe since 1987, and in areas outside Europe since 2001, when South Africa joined. **Japan and South Korea** are the only countries in south and south-eastern Asia to have Blue Flag beaches. **Spain** tops the list with 566 such beaches;
- **Forty-seven countries currently participate in the program**, and 4,573 beaches, marinas, and boats have this certification.
- **Odisha's Chandrabhaga beach** is **Asia's first beach** to get a Blue Flag certification.

Beach Environment & Aesthetics Management Services (BEAMS)

- Society of Integrated Coastal Management (SICOM) in pursuit of promoting its policies for sustainable development in coastal regions have embarked upon a highly acclaimed program "BEAMS" under its ICZM (Integrated Coastal Zone Management) project.
- **Objective:** Abate pollution in coastal waters, promote sustainable development of beach facilities, protect & conserve coastal ecosystems & natural resources, and challenge local authorities & stakeholders to strive and maintain high standards of cleanliness, hygiene & safety for beachgoers in accordance with coastal environment & regulations.
- This program promotes beach recreation in absolute harmony with nature.

Additional Information

Integrated Coastal Zone Management

- The concept of ICZM was **introduced in 1992 during the Earth Summit at Rio de Janeiro** and most of the coastal countries in the World have been adopting ICZM principles for managing their coastal zones.
- Thus, adoption of ICZM principles for managing and sustainably developing our coastal regions is helping India in keeping with its commitments to international agreements on ICZM.

Society of Integrated Coastal Management (SICOM)

- SICOM has been established **under the aegis of the Ministry of Environment, Forests and Climate change (MOEF&CC)** with a vision for vibrant, healthy and resilient Coastal and Marine Environment for continuous and enhanced outflow of benefits to the Country and the Coastal Community.
- **Objective and Functions of SICOM**
 - To support the implementation of the Integrated Coastal Zone Management of India.
 - To promote Research & Development (R&D) and stakeholder participation in the management of the Coastal areas of India.
 - To support to check violations to CRZ through improved technology-enabled enforcement strengthened institutions and regulatory and legal reforms.
 - SICOM has also embarked upon the Pilot Blue Flag programme first time in India under Beach Environment & Aesthetic Management Services (BEAMS) for Pilot Beaches.
 - To undertake any additional work or function as may be assigned by MOEF&CC from time to time in the areas of coastal management and other related activities.

Foundation for Environmental Education (FEE)

- It is a non-governmental, non-profit organization promoting sustainable development through environmental education.
- FEE is active through five programmes; **Blue Flag, Eco-Schools, Young Reporters for the Environment (YRE), Learning about Forests (LEAF) and Green Key.**
- It is **headquartered in Copenhagen, Denmark.**

Living Planet Report 2020

World Wide Fund for Nature has released Living Planet Report 2020 on September 10, 2020.

Key Findings Of The Report

- **The population of vertebrate species declined by around 68 % between 1970 and 2016.** It tracked almost 21,000 populations of more than 4,000 vertebrate species between 1970 and 2016.
- **Wildlife populations in freshwater habitats suffered a decline of 84 %, equivalent to 4 % per year,** particularly in Latin America and the Caribbean.
- The **Living Planet Index (LPI)** — a measure of the state of the world's biological diversity based on population trends of vertebrate species in terrestrial, freshwater and marine habitats — was used by the report to calculate this decline.
- There is a **94% decline in the LPI for the tropical subregions of the Americas,** 65% decline in LPI for Africa and 45% for Asia and Australia.
- **About 58% of the earth's land surface is under immense human pressure** and only 25% can be considered wilderness. Only Russia, Canada, Brazil and Australia contain most of the places without a human footprint while all of India's geographical area is highly modified by humans.
- **Riverine ecosystems** in India are under threat as the **size of wetlands in India has shrunk to only 0.03% area** of the total geographic area. Also there has been a **reduction in the population of endangered species** such as the rare Gangetic Dolphin.
- **Freshwater megafauna**—those that are large and grow to over 30 kg such as river dolphins, otters, beavers, hippos, the Chinese sturgeon and the Mekong giant catfish have recorded strong population declines. **Megafauna** were more vulnerable because they were subjected to intense anthropogenic threats and overexploitation.

What Is Causing Fresh Water Biodiversity Loss?

Freshwater biodiversity is declining far faster than that in our oceans or forests. At least **85% of the earth's wetlands are already lost** and freshwater species are at highest risk compared to forest or marine species. The main reasons for the biodiversity loss includes,

- **Sand mining:** It is illegal to mine for sand from rivers in many states, but it goes on unabated, even in river stretches within protected areas.
- **Dam construction:** Large fishes are heavily impacted by dam construction that **blocks their migratory routes** to spawning and feeding grounds.
- **Food production:** Food production causes **70% of terrestrial biodiversity loss and 50% of freshwater biodiversity loss.** This is critical for India because it is the world's largest producer of milk, pulses and jute, and ranks as the second-largest producer of rice, wheat, sugarcane and groundnut

- **Habitat degradation** through pollution or flow modification, overexploitation, and invasive species are among the biggest threats facing freshwater species.
- **Exploitation of species** for human consumption.

Five Main Threats To Biodiversity Caused By Human Activities

- **Changes in land and sea use, including habitat loss and degradation:** Changes in land and sea use such as modification, fragmentation and pollution resulting from agricultural activities, mining, etc. has been identified to be the largest threat across all regions. 75% of the ice-free land surface on the planet has already been altered, most of the oceans polluted, and more than 85% of the area of wetlands lost.
- **Species overexploitation:** Intentional (like poaching) or unintentional killing (like bycatch in fishing) of species is the second major cause of biodiversity loss.
- **Alien invasive species and disease:** Nearly 37% of all recorded alien species were introduced between 1970 and 2014, impacting human livelihoods and biodiversity.
- **Pollution:** Pollution affects species directly by making environment unsuitable for survival or indirectly by hindering food availability.
- **Climate Change:** Increased frequency of extreme weather events and increasing sea levels pose a threat to species.

Way Forward

- **Revisit the plans for large dams** in the Himalayas and inter-linking of rivers which may destroy the last remaining free-flowing stretches of rivers and their aquatic biodiversity.
- **Food wastage should be limited:** Food lost in supply chains or wasted by consumers account for 6% of global greenhouse gas emissions (which is three times the emissions due to aviation). Thus, introduction of national food wastage targets and policies will prove to be an effective step forward.
- **Environmental interventions:** In 2019 and 2020, there have been unprecedented natural events such as locust attacks, bushfires, droughts and extreme heatwaves etc, all because of climate change and environmental degradation. This calls for **environmental interventions** to safeguard human health by protecting environmental health.
- **Transformational change is an urgent requirement:** Many countries were already lagging in achieving global targets and goals such as SDGs. This gets further exacerbated if biodiversity loss, which is intertwined with other SDGs such as poverty alleviation and health, is not addressed. A transformational change is what is needed now with changes in production and consumption patterns of food and energy, favouring healthier and more environmentally friendly diets.

India Fact Sheet

- There are 351 polluted river stretches in India as per Central Pollution Control Board's 2018 assessment, up from 302 in 2016. 45 out of the 351 polluted stretches are critically polluted
- Yamuna in Delhi; Damanganaga in Silvassa and Daman; Mithi in Mumbai; Ghaggar in Haryana; many stretches of Ganga are among critically polluted.
- There are at least 1000 dams on the Ganga river basin obstructing the flow of various tributaries, according to a recent assessment by INTACH.
- India ranks third in the list of countries with the largest number of threatened turtle and tortoise species in the world after China and Vietnam according to Turtle Conservation Coalition.

- Only 1272 Gangetic dolphins were recorded in 3350 km of riverine stretch surveyed by WWF India in Uttar Pradesh, covering Ganga, Yamuna, Chambal, Ken, Betwa, Son, Sharda, Geruwa, Gahagra, Gandak and Rapti.

World Risk Index (WRI) 2020

India ranked **89th** among 181 countries on the World Risk Index (WRI) 2020.

Key Findings

- India was **'poorly prepared' to deal with 'climate reality'**, due to which it was more vulnerable to extreme natural disasters.
- **Sri Lanka, Bhutan and the Maldives fared better than India** in their abilities to cope with extreme disasters. India also lagged behind these three neighbours in terms of **lack of adaptive capacities** or the preparedness to deal with extreme events.
- **India and other south Asian nations did improve their ranking** marginally in the World Risk Index during the course of a year. Bhutan improved its ranking the most, followed by Pakistan.
- However, **all south Asian countries fared poorly in the 2020 index** (as compared to 2019) on strengthening their abilities to prepare and adapt to extreme events.

Vulnerability Of Small Island Nations And Africa

- **Oceania** was the continent **most at risk**, followed by Africa and the Americas.
- **Vanuatu** was the country with the **highest disaster risk worldwide**.
- Small island states, especially in the South Pacific and the Caribbean, were disproportionately represented among high-risk countries, due to their **high exposure to extreme natural events**. These also included countries at risk from the rise in sea level as a result of global warming.
- **The small island states had limited financial resources** and had made small contributions to climate change, but were affected the most by its consequences. Hence, merely providing financial resources for adaptation to climate change was not sufficient. They needed to be compensated for the climate damage and losses already incurred.
- The report identified **Africa as a hotspot of vulnerability**. More than two-thirds of the most vulnerable countries in the world were located on the continent. The Central African Republic was the most vulnerable country, followed by Chad, the Democratic Republic of Congo.
- **Qatar had the lowest risk** (0.31) according to the global index.

World Risk Index (WRI)

- The WRI is part of the **World Risk Report 2020 released by the United Nations University Institute for Environment and Human Security (UNU-EHS) and Bundnis Entwicklung Hilft**, in cooperation with the University of Stuttgart in Germany.
- The WRI, **released annually since 2011**, indicates which countries are in the greatest need to strengthen measures for coping with and adapting to extreme natural events.
- The WRI is calculated on a country-by-country basis, through the multiplication of exposure and vulnerability.

Cyanobacteria

- Toxins in water produced by cyanobacteria **killed more than 300 elephants in Botswana this year.**
- **Cyanobacteria are microscopic organisms common in water** and sometimes found in soil. It is a group of **photosynthetic bacteria**, some of which are **nitrogen-fixing**, that live either freely or in a symbiotic relationship with plants or lichen-forming fungi.
- **Not all produce toxins** but scientists say toxic ones are occurring more frequently as climate change drives up global temperatures.
- **Some cyanobacterial blooms can harm people and animals** and scientists are concerned about their potential impact as **climate change leads to warmer water temperatures, which many cyanobacteria prefer.**
- **Southern Africa's temperatures are rising at twice the global average**, according to the Intergovernmental Panel on Climate Change. It amounts to having the right conditions, in the right time, in the right place and these species will proliferate.



Methane Deposits In KG Basin

- **The Krishna-Godavari (KG) basin** holds a massive reserve of **methane hydrate and a rich source of cleaner natural gas**, claims a study by the Pune-based Agharkar Research Institute (ARI) of the Science & Technology Ministry.
- Until recently, there have been only a few investigations of the methanogenic communities associated with methane hydrate-bearing sediments.
- This study has shown that methanogens under these elevated pressure and temperature conditions are well adapted to these conditions and are different in methane-producing activities.

Methanogens are microorganisms that produce methane as a metabolic byproduct in hypoxic conditions.

Biogenic methane is produced from biological (plant and animal) sources.

About Methane

- Methane is gas that is found in small quantities in earth's atmosphere. It is a flammable, powerful **greenhouse gas** and is used as a clean and economical fuel.
- **Methane hydrate** is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.
- It is estimated that one cubic meter of methane hydrate contains 160-180 cubic meters of methane. Even the lowest estimate of methane present in the methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.

Climate Smart Cities Assessment Framework (CSCAF 2.0)

- Minister of State for Housing and Urban Affairs (MoHUA) has launched the Climate Smart Cities Assessment Framework (CSCAF) 2.0, along with the '**Streets for People Challenge**'.
- In the last decade, an increasing frequency of cyclones, floods, heat waves, water scarcity and drought-like conditions have had adverse impacts on many cities. Such extreme events and risks

cause loss of life as well as impact the economic growth. Thus, the CSCAF initiative intends to inculcate a climate-sensitive approach to urban planning and development in India.

- **Objective:** To provide a clear roadmap for cities towards combating Climate Change while planning and implementing their actions, including investments.
- The framework has 28 indicators across five categories namely; (i) Energy and Green Buildings, (ii) Urban Planning, Green Cover & Biodiversity, (iii) Mobility and Air Quality, (iv) Water Management and (v) Waste Management.
- The **Climate Centre for Cities** under **National Institute of Urban Affairs (NIUA)** is supporting MoHUA in implementation of CSCAF.

About The Streets for People Challenge

- It aims to inspire cities to create walking-friendly and vibrant streets through quick, innovative, and low-cost measures. It is the response to the need for **making our cities more walkable and pedestrian friendly**.
- The Challenge builds on the advisory issued by MoHUA for the holistic planning for pedestrian-friendly market spaces, earlier this year.
- The interventions can include 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.
- The challenge, is organised by the Smart Cities Mission of the Ministry, under which cities with a population of over 5 lakh, and capital cities, can apply.
- Fit India Mission, under Ministry of Youth Affairs and Sports, along with the India program of the Institute for Transport Development and Policy (ITDP) have partnered with the Smart Cities Mission to support the challenge.

Whale Mass Stranding

- Over 450 long-finned pilot whales have died in Australia in what is being called the biggest stranding of whales on record in Australia.
- **Cetacean stranding**, more commonly referred to as beaching, refers to the phenomenon of dolphins and whales stranding themselves on beaches. There are around 2,000 strandings each year worldwide, with most resulting in the death of the animal.

Why Do Whales Beach Themselves

- While individual strandings are mostly attributed to injury or sickness, it is **not clear why exactly whales beach themselves in groups**.
- One reason could be that some whales **follow schooling fish or other prey into shallow waters**, which causes the whales to become disoriented, as a result of which they get stranded.
- Another reason could be **panic from being trapped by a predator such as killer whales or sharks**. Another possibility is that whales might be drawn to land by prey-rich currents.
- Further, the **shape of the beach and the coastline** could also have a role to play. For instance, if the beach has gently-sloping shorelines, whales that are dependent on echolocation for navigation can be deceived.
- Some scientists believe **sonar signals and other man-made loud underwater noises** may contribute to beaching events. These frequencies do not affect all species but can be deadly for some.

Low sonar can cause hemorrhaging in animals exposed to the sonar, and others will beach themselves to escape the sound.

Komodo Dragon

A new study conducted by the University of Adelaide and Deakin University, Australia reported that the Komodo dragon **could become extinct in the next few decades** due to climate change unless measures are taken to change the status quo.

About Komodo Dragon

- Komodo dragons are the **heaviest lizards on Earth**. The dragon is a monitor lizard of the family Varanidae.
- **Native Habitat:** It occurs on Komodo Island and a few neighbouring islands of the Lesser Sunda Islands of Indonesia. They live in tropical savanna forests but range widely over the islands, from beach to ridge top.
- **Conservation Status:** It is listed as **Vulnerable by the IUCN**.
- The Komodo dragon has venom glands loaded with toxins that lower blood pressure, cause massive bleeding, prevent clotting, and induce shock.



Kalinga Cricket Frog

Indian scientists have reported a first-of-its-kind discovery of **morphological phenotypic plasticity (MPP)** in the Kalinga cricket frog.

What Is Morphological Phenotypic Plasticity (MPP)

- MPP is the **ability of an organism to show drastic morphological (physical features) variations** in response to natural environmental variations or stimuli.
- Scientists claim the morphological phenotypic plasticity found in the Kalinga cricket frog is first such in India.



About Kalinga Cricket Frog

- The **Kalinga** frog species was identified and its documentation was done in 2018.
- It was **thought to be endemic to the hill ranges of the Eastern Ghats**, however in the present research communication, scientists have **reported the Kalinga cricket frog from the central Western Ghats**, with the evidence of considerable MPP.
- The Kalinga cricket frog is **one of the largest of its group** and grows up to 6.5 cm.
- Cricket frogs are **indicators of healthy ecosystem** and live in wide habitat ranges in agricultural fields, streams, swamps and wetlands.

Kharai Camel

In an important decision to protect the mangroves in Gujarat's Kachchh district, which is also the habitat of the **indigenous Kharai camels**, the National Green Tribunal has asked the authorities to ensure a free and continuous flow of estuarine water in the creeks.

About Kharai Camel

- The Kharai is a **unique breed of camel found only in Kutch**, which feeds on mangroves.
- They have the special ability to survive on both - **dry land and sea**. They **swim in seawater and feed on saline plants and mangroves**.
- The Kharai was recognised as a separate breed in 2015 by the Indian Council of Agricultural Research (ICAR). Camel milk has been recognised by FSSAI (Food Safety and Standards Authority of India) and AMUL for its immense **therapeutic properties in degenerative diseases like autism, TB, diabetes and even some types of cancers**;
- With the destruction of mangroves in Gujarat there are barely about 3,000 of these unique camels, that live in the mangroves, left in the country.

**World Bamboo Day (WBD) 2020**

- Every year, September 18 is observed as the World Bamboo Day by the **World Bamboo Organisation**, in order to generate awareness about conserving and promoting the bamboo industry.
- The theme for 11th edition of WBD 2020 is '**BAMBOO NOW**'.
- **India is the world's second-largest cultivator of bamboo after China**, with 136 species and 23 genera spread over 13.96 million hectares, according to the State of Environment report 2018.

Government Initiatives to Promote Bamboo

- The **National Bamboo Mission**, under the **Ministry of Agriculture & Farmers Welfare**, has been initiated to provide a boost to livelihood and environmental acreage.
- In 2017, Parliament '**declassified**' bamboo as '**a tree**' on non-forest lands to increase the supply and usage of bamboo.
- A scheme called **SFURTI** (Scheme of Fund for Regeneration of Traditional Industries) is being implemented by the Ministry of Micro, Small, and Medium Enterprises (MSME) in order to boost traditional industries and bamboo artisans.

World Rhino Day

- Every year on September 22, the world celebrates World Rhinoceros Day.
- The World Rhinoceros Day was announced by the **World Wildlife Fund (WWF) in 2010**. Meant for Asian and African species of rhinoceros, the day celebrates the animal and encourages people to take steps for its conservation.
- **Conservation status:**
 - **Javan Rhinos, Sumatran rhinos and black rhinos** are declared as '**critically endangered**'.
 - The White Rhinos have been declared 'near threatened' while one-horned rhinos are said to be vulnerable to extinction.

