



EXCEL QUEST

VOLUME - 31, JULY 2022



India bans single use plastic items from 1st July



Agneepath Scheme 2022



Holy Relics of Lord Buddha are being taken to Mongolia



Governor's Powers to call for a Floor Test



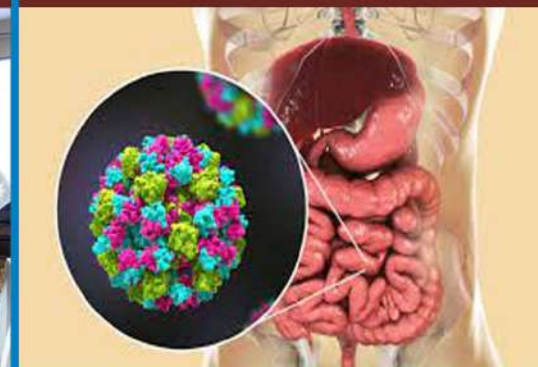
Law of Anti-Defection Law



West Seti Power Project: Nepal



NITI Aayog Launches the National Data & Analytics Platform



Norovirus and other 'stomach viruses'

A Monthly Magazine from

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Director's Message

Dear Aspirants,

The danger bells for the present economic crisis in Sri Lanka rang way back in 2015. After the end of Civil war in 2009, the government focussed more on providing goods to its domestic market rather than trying to boost its foreign trade. This led to the mismatch in imports and exports. The Institute of Public Studies of Sri Lanka warned the then newly elected Ranil Wickramasinghe's government about the same. To address the precarious scenario, the government presented a strong economic policy. But, the government could not push it through as it was a coalition government which eventually resulted in further deterioration of the situation.

The government rather than focussing on matters relating to economic affairs, focussed more on election related economic decisions such as offering freebies to appease the masses. It was a twin deficit scenario – a budget shortfall along with a current account deficit. The successive governments also could not improve this situation. A working paper on Sri Lanka's economy by Asian Development Bank in 2019 stated that “Twin deficits indicate that a country's national expenditure exceeds its national income, and that its production of tradable goods and services is inadequate.”

The government needed to boost its revenues as the foreign debt increased exponentially due to big infrastructure projects funded majorly by Chinese debt. Instead, the government introduced the largest tax cuts in 2019 to shore up political support further draining the exchequer. This move attracted punishment from the global markets. Creditors downgraded its rating which blocked it from raising more money from global markets. The tourism sector which has been a major revenue stream for the government was adversely impacted by the Easter bombings in 2019. The COVID-19 pandemic ravaged the sector further.

The government announced a total ban on import of Chemical fertilisers in May 2021 aspiring to become the world's first totally Organic country. Farmers were asked to move towards Organic farming where the use of Chemical fertilisers is nil. This resulted in decimation of the output of the rice crop and surge in the prices of staple food thereon. It also resulted in reduction of Tea yield by 40 percent. It crippled the \$1.5 billion industry that provided employment to nearly a million people. This move also impacted the Rubber and Coconut plantation industry whose exports were \$1.5 billion in 2020. Farmers opine that this move of the government was to mitigate the ballooning import bill but government denied the accusation and stated that this policy was in the pipeline since 2019. This policy decision could not serve any purpose but only resulted in reduction of agricultural output, skyrocketing food prices and decrease in export of agricultural produce.

The government also had to shut down its only Oil refinery as it had no Dollars to import Crude. There were serpentine queues outside fuel stations but the demand was not being met. Inflation was at an all-time high of 17.5% with Rice, Milk and other essential commodities witnessing exorbitant prices. People faced severe economic hardships and have been demanding the resignation of Rajapaksa led government. The protestors stormed the official residence of the President and he fled the country even without resigning. Wickreamesinghe was officially sworn in as the President.

Sri Lanka is a classic example of terrible governance and economic mismanagement. The logical step for the next government is to deliberate with IMF and devise a program to restructure loans held by China, India, Japan and other commercial lenders. The G7 has extended its support to Sri Lanka's attempts to reduce its debt repayments. The World Bank has agreed to lend \$600 million and India has offered \$1.9 billion to ease the burden. Without a strong political leadership, IMF loans and other bail outs would take longer to materialise and people would be left in dire need of daily essentials. World Bank has suggested the government to roll back the ban on Chemical fertilisers and invest in making fertilisers less damaging or environmentally sustainable. It also suggested using the foreign aid to develop and expand the Tourism sector. The new government should have the political will to raise the interest rates and taxes and focus on development rather than pointing fingers at the regimes of the past.

Best wishes,

Yours sincerely,



K. Rajendra Kumar IPS (Retd)

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1. NATIONAL

1.1 'Agnipath' scheme

- In a transformative step to provide opportunity to the Indian youth to serve in the Armed Forces, the Union Cabinet chaired by Prime Minister Narendra Modi approved an attractive recruitment scheme 'Agnipath'.
- Notably, soldiers recruited in the defence forces under the recruitment policy will be inducted in the Indian armed forces as 'Agniveers' a distinct rank in the Armed Forces, different from any other existing rank.
- It is pertinent to note that 46,000 Agniveers, in the age group of 17-and-a-half and 21 years, are likely to be recruited under the first phase of recruitment.



- Aspirants between the ages of 17.5 years and 21 years will be eligible to apply and the recruitment standards will remain the same; with recruitment rallies to be organised twice a year.
- Once selected, the aspirants will go through training for six months and then they will be deployed for three and a half years. During this period, they will be provided an attractive monthly package of Rs 30,000 per month with upgradation upto Rs 40,000 per month in 4th year.
- Agniveers, selected for enrolment in the Indian Armed Forces as regular cadre, would be required to serve for the engagement period of minimum 15 years and he/she will be governed by the existing terms and conditions of service of Junior Commissioned Officers/Other Ranks in Indian Army and their equivalent in Indian Navy and Indian Air Force and that of Non Combatant enrolled in the Indian Air Force.

The selection process

- The contours related to the selection process of scheme include an online centralised system for all three services along with specialised rallies and campus interviews from recognised technical institutes such as Industrial Training Institutes and National Skills Qualifications Framework, among others.
- Further, enrolment will be based on 'All India All Class' basis and the eligible age will be in range from 17.5 to 21 years. The candidates will have to meet the medical eligibility conditions laid down for enrolment in the armed forces as applicable to respective categories/trades.
- On Academic front, Agniveers will remain in vogue for enrolment in various categories. {For example: For entry into General Duty (GD) soldier, the educational qualification is Class 10}.

Seva Nidhi' programme:

- 30 percent of their salary will be set aside under a 'Seva Nidhi' programme, and the government will contribute an equal amount every month along with providing accrue interest. At the end of the four-year period, Agniveer will be accorded Rs 11.71 lakh as a lump sum amount, which will be tax-free. Additionally, they will also get a Rs 48 lakh life insurance cover for the four years.

1.2 National Statistics Day 2022: Data for Sustainable Development

- Objective: creation of public awareness, especially among the younger generation, on the role and importance of statistics in socio-economic planning and policy formulation for the development of the country.
- Day celebrates the birth anniversary of late Professor Prasanta Chandra Mahalanobis, in recognition of his valuable contribution to the field of Economic Planning and Statistics.
- Government of India in 2007, designated June 29 as the "Statistics Day".

Data for Sustainable Development

- Data is the basis of decision-making. In present times, analysis of data is of utmost importance to conclude at a point. However, in current times, there is also a need for sustainable development to maintain a balance between all the factors of life. This requires data analysis to predict and make proper decisions. New sources of data – such as satellite data -, new technologies, and new analytical approaches, if applied responsibly, can enable more agile, efficient, and evidence-based decision-making and can better measure progress on the Sustainable Development Goals (SDGs) in a way that is both inclusive and fair.

About Prof. Prasanta Chandra Mahalanobis:

- Professor Prasanta Chandra Mahalanobis, who was called 'PCM' by his colleagues, was a noted Indian scientist and applied statistician. He introduced the Mahalanobis distance, a statistical measure, and random sampling. He was also one of the members of the first Planning Commission of India and played a key role in shaping the first 5-year plan.



- Prof. Mahalanobis was instrumental in designing the way surveys are conducted today. He introduced the concept of pilot surveys and advocated the importance of sampling methods. Prof. Mahalanobis also introduced a method for the estimation of crop yields using statistical sampling. The Indian Statistical Institute (ISI) at Kolkata, set up by Prof. Mahalanobis in 1931, and was declared an autonomous “Institute of National Importance” through an act of Parliament in 1959, also celebrates June 29 as the “Worker Day”.

1.3 Plastic items to be banned from 1st of July

- Single use plastic items like ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice- cream sticks, polystyrene (Thermocol) for decoration, plastic plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, cigarette packets, plastic or PVC banners less than 100 micron, stirrers, are not going to be in use from 1st of July, 2022.



- To protect the environment single use plastic items are being banned in line with the clarion call given by Prime Minister Narendra Modi. All kinds of activities like manufacturing, import, stocking, distribution, sale and use of identified single use plastic items, which have low utility and high littering potential all across the country will be forbidden from July 1, 2022. A defining step to curb pollution caused by littered and unmanaged plastic waste, Ministry of Environment, Forest and Climate Change, Government of India had notified the Plastic Waste Management Amendment Rules, 2021 on 12 August 2021, deciding to phase out single use plastic items by 2022.

Adverse impacts of single use plastic

- Littered single use plastic items have several adverse impacts on both terrestrial and aquatic ecosystems, including marine environment. Since it is recognized globally, hence addressing pollution due to single use plastic items has become an important environmental challenge confronting all countries.

India piloted a resolution in this regard

- India had piloted a resolution on addressing single-use plastic products pollution in the 4th United Nations Environment Assembly held in 2019, recognizing the urgent need for the global community to focus on this very important issue. This resolution at UNEA 4 was a significant step. In the recently concluded 5th session of United Nations Environment Assembly in March 2022, India engaged constructively with all member states to develop consensus on the resolution for driving global action on plastic pollution.

Plastic Waste Management Amendment Rules

- The Plastic Waste Management Amendment Rules, 2021, also prohibit manufacture, import, stocking, distribution, sale and use of plastic carry bags having thickness less than seventy five microns with effect from 30th September, 2021, and having thickness less than thickness of one hundred and twenty microns with effect from the 31st December, 2022.

Extended Producer Responsibility

- The Ministry of Environment, Forest and Climate Change has also notified the guidelines on extended producers responsibility on plastic packaging as Plastic Waste Management Amendment Rules, 2022 on 16th February, 2022. Extended Producer Responsibility (EPR) is responsibility of a producer for the environmentally sound management of the product until the end of its life. The guidelines will provide framework to strengthen circular economy of plastic packaging waste, promote development of new alternatives to plastic packaging and provide next steps for moving towards sustainable plastic packaging by businesses.

Capacity building workshops

- For MSME units to provide them technical assistance for manufacturing of alternatives to banned single use plastic items, capacity building workshops are being organized with the involvement of CPCB/SPCBs/PCCs along with Ministry of Small Micro and Medium Enterprises and Central Institute

of Petrochemicals Engineering (CIPET) and their state centres. Provisions have also been made to support such enterprises in transitioning away from banned single use plastics. The Government has also taken steps to promote innovation and provide an ecosystem for accelerated penetration and availability of alternatives all across the country.

National and state level control rooms

- For effective enforcement of ban on identified SUP items from 1 July 2022, national and state level control rooms will be set up and special enforcement teams will be formed for checking illegal manufacture, import, stocking, distribution, sale and use of banned single use plastic items. States and union territories have been asked to set up border check points to stop inter-state movement of any banned single use plastic items.

Awareness measures

- CPCB Grievance Redressal App has been launched to empower citizens to help curb plastic menace. For wider public outreach, PRAKRITI – mascot was also launched on 5th April. The government has been taking measures for awareness generation towards elimination of single use plastics. The awareness campaign has brought together entrepreneurs and startups, industry, central, state and local governments, regulatory bodies, experts, citizens' organizations, R& D and academic institutions.
- However, the success of the ban will only be possible through effective engagement and concerted actions by all stakeholders and enthusiastic public participation.

1.4 Performance Grading Index for Districts (PGI-D), 2019-20

- The ministry of education's PGI-D for 2019 was released on 27th June. The index studied 83 indicators segregated into **6 categories**.

These are:

- 1) **Effective classroom**
- 2) **Infrastructure**
- 3) **Student's entitlement**
- 4) **School safety**
- 5) **Digital learning**
- 6) **Governance**

Rajasthan's Sikar is the top performer, followed by Jhunjhunu and Jaipur.

PGI-D grades the districts into 10 grades with the highest grade being '**Daksh**', given for scores over 90%.

The other grades are

Utkrush(81-90%),

Ati-Uttam(71-80%),

Uttam(61-70%),

Pracheta-I(51-60%),

P-II(41-50%),

P-III(31-40%), Akansh-1,2,3.A-3 is the lowest grade(<10%).

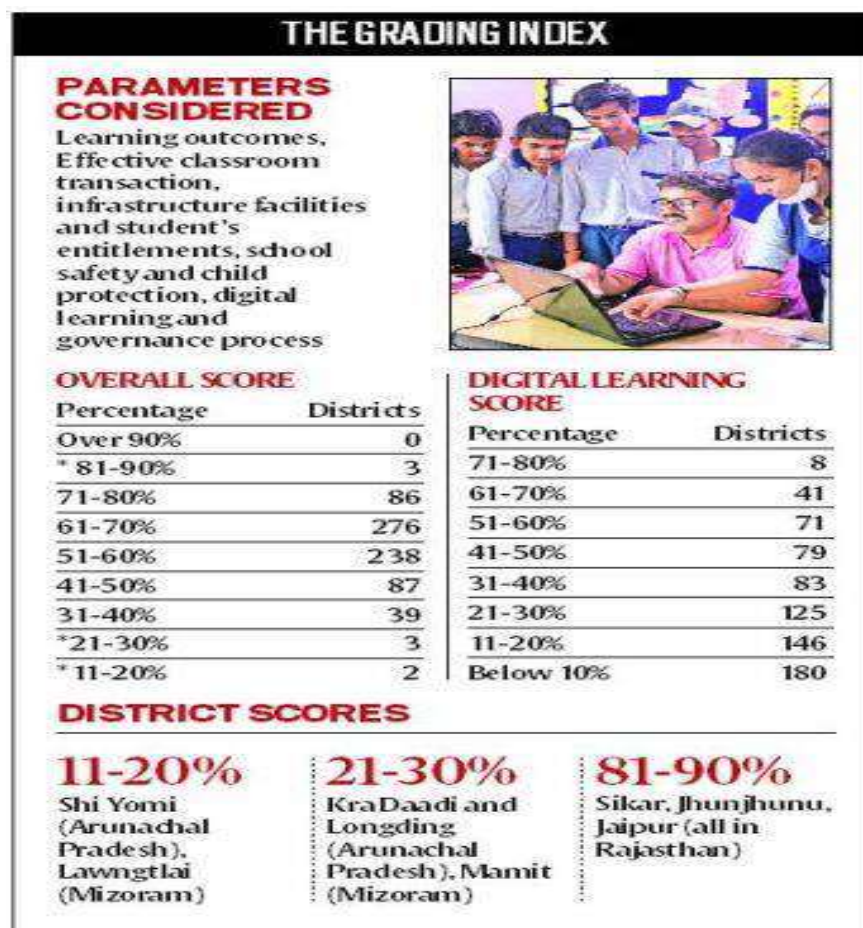
- Schools across India performed poorly under the category of digital learning, which threw up the lowest scores compared to the other parameters which were considered while creating the index.
- In the index, as many as 180 districts scored less than 10 per cent on digital learning, 146 districts scored 11 to 20 per cent, while 125 districts had scores between 21 and 30 per cent.

14 Districts in Punjab: Ati-Uttam.

13 Districts in Gujrat-Ati-Uttam.

12 States do have a single district in the ati-uttam or uttam category.

None of the States have Districts in the top category.



Rural-Urban Divide:

- The report also underlines the clear rural-urban divide in the area of digital learning. For instance, while districts in cities like Chandigarh and Delhi scored between 25 and 35 out of 50, places like Bihar's Araria and Kishanganj scored as low as 2.
- Backward districts like Assam's South Salmara-Mankachar and Tripura's Dhalai scored 1.
- The Centre had released the state-wise PGI index for the year 2019-20 in June 2021. Chandigarh and the states of Punjab, Tamil Nadu and Kerala were the best performers in the index.

1.5 Intensified Diarrhoea Control Fortnight – 2022

- Union Minister of State for Health & Family Welfare, Dr Bharati Pravin Pawar launched the IDCF programme, which will be implemented from 13th June to 27th June, 2022 in the States/UTs.
- “According to the latest report of SRS-2019, the child mortality rate in the country has come down considerably since 2014. This rate has come down from 45 per 1000 live births in 2014 to 35 per 1000 live births in 2019”, said Union Minister Dr. Pawar while launching the programme.
- Diarrhoeal disease is a major cause of concern among children under the age of five, especially in villages and small town area. Hence, to cater to the people belonging to economically lower strata of society the central government has launched the Intensified Diarrhoea Control Fortnight (IDCF)-2022. The drive is intended to attain zero child deaths due to childhood diarrhoea, explaining the cause, symptoms & prevention of the disease to the targeted group of people.

Cause of Diarrhoea among children

- “Dehydration is the biggest cause of diarrhoea in children, stated Dr. Pawar. Other reasons include a change in the baby’s diet to make up for a change in the mother’s diet when breastfeeding; Use of antibiotics by the baby, or use by the mother while breastfeeding, or any type of bacterial or parasitic infection.
- According to the latest survey (NFHS-5) conducted by the Ministry, only 60.6% children under the age of five with diarrhoea were given ORS and only 30.5% were given zinc”, further she informed. Then she stressed that more awareness campaigns are needed. so, that the rate of child mortality due to diarrhoea can be brought down to the minimum level.

What is Intensified Diarrhoea Control Fortnight – 2022 (IDFC)

- The Intensive Diarrhoea Control Fortnight (IDCF) has been organised since 2014 with an objective to ‘bringing the number of deaths due to diarrhoea in childhood to zero’. IDCF consists of a set of activities to be implemented in an intensified manner for prevention & control of deaths due to dehydration from diarrhoea across all States & UTs.

These activities mainly include-

- Intensification of advocacy & awareness generation activities for diarrhoea management
- Strengthening service provision for diarrhoea case management,
- Establishment of ORS-Zinc corners,
- Prepositioning of ORS by ASHA in households with under-five children
- Awareness generation activities for hygiene and sanitation.
- One of the main activities under IDCF program has been the activities by field workers including ASHA, ANM and anganwadi workers. Field workers visit the homes of families with children below five years of age and provide counselling in case of diarrhoea for distribution of zinc and ORS sachets. They also promote sanitation practices, breastfeeding practices and advise on preparation method of ORS through group meetings among mothers.

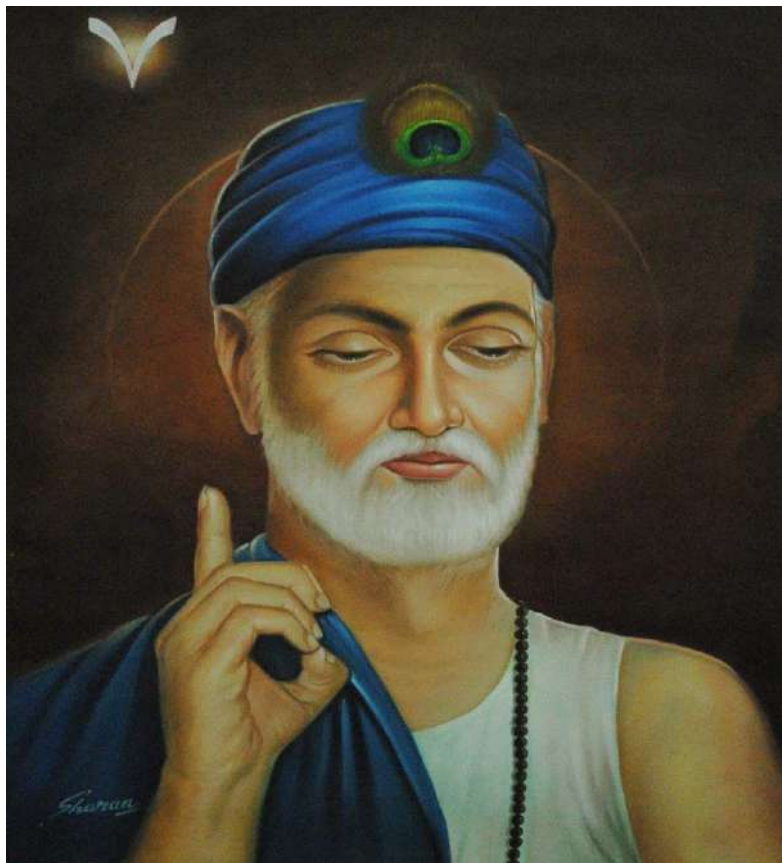
1.6 **Sant Kabir Das: Poet & social reformer**

“बुरा जो देखन मैं चला, बुरा न मिलिया कोय। जो दिल खोजा अपना, मुझसे बुरा न कोय।”- कबीर दास

- Sant Kabir Das, a poet, and social reformer, transformed human lives with his literary creations and gave numerous valuable life lessons that hold meaning in today's fast-paced time as well. He provided a direction to society for centuries.
- According to the Hindu lunar calendar, Kabir Das Jayanti, or his birth anniversary is celebrated on Jyeshth Shukla Purnima or the full moon in the month of Jyeshtha. Today, on his Jayanti, remembering Sant Kabir Das, whom PM Narendra Modi once referred to as a torch-bearer, an epitome of equality and religious harmony.

Kabir Das: The epitome of equality

- Kabir Das left a legacy that is benefitting mankind. Throughout his life, he worked towards social awakening. He spent his entire life on the quest to find the truth and counter falsehood. The Saint did not emphasize on 'belief', but 'knowing it'.



- A free spirit, and austere; he was soft and kind-hearted. His deeds made him worthy of being worshipped and not the occupation of the family he was born into. He, a seeker of truth, represented an idea that immortalized him. Not only did he give vision to the society but he also awakened its spirit. He came to Maghar from Kashi for this social awakening.

- Kabir was like a song, flavor, and essence of India's soul. He often expressed the feelings of the common Indian. A disciple of Guru Ramanand, he broke down the barriers of caste-based discrimination and declared that the entire mankind was one.

Literary Creations

- Sant Kabir was popular for his couplets that were not only unique but had messages for others to learn from. For instance, through "Bada Hua Toh Kya Hua, Jaise Pedd Khajur; Panthi ko Chaya Nahi, Fal Laage Aati Dur" Kabir Das talks about humility. Similarly, "Teerth Gaye To Ek Fal, Sant Mile Fal Char. Sadguru Mile Anek Fal, Kahe Kabir Vichar," Kabir Das says that a person gets one holy reward by going on a pilgrimage but his reward becomes fourfold if he is in the company of a saint.
- His writing often had references to Lord Rama. For eg, "Kya Kasi Kya Usar Maghar, Ram Hriday Baso Mora"; Hum Kashi Mein Prakat Bhaye Hain, Ramanand Chetaye." He also prompted people to find themselves by seeking truth and looking within. For eg; "Pothi Padhi-Padhi Jag Mua, Pandit Bhaya Na Koy. Dhai Akhar Prem Ka Padeh So Pandit Hoy." "Jab Main Tha Tab Hari Nahin, Jab Hari Hai, Main Nahi. Sab Andhiyara Mit Gaya, Deepak Dekha Mahi."
- His writings were simple to understand. However, through them, he could explain the most complex mysteries of life with simplicity and ease. For instance, he said, "look inwards to discover Lord Ram in you, Hari is present in your conscience, why to waste your time in the external rituals. Reform yourself and you will find the Lord."

Respects

- To pay tributes to the contribution of Saint Kabir, the Government of India celebrated a yearlong festival – Kabir Mahotsav in 2018 on the occasion of his 500th death anniversary.
- His messages are filled with the feeling of equality of all the religions and social harmony that they are like a source of light for us even today.

1.7 Holy Relics of Lord Buddha reaches Mongolia

- India is a country that believes in peace and harmony and wants to spread this message throughout the world through the teachings of Lord Buddha, India's cultural gift to the world.
- Aligning with this, Union Minister Kiren Rijiju on June 13 reached Ulaanbaatar, Mongolia with four Holy Relics of Lord Buddha. He is accompanied by a 25-member Indian delegation.
- In 2015, Prime Minister Narendra Modi gifted the main statue of Buddha at the Gandan Monastery in Ulaanbaatar.



- The relics will spread the message of peace and harmony during the 11-day exposition on the occasion of Mongolia's Buddha Purnima on June 14, 2022. The devotees would be able to pay respects and seek blessings starting from Vesak Day, June 14 until June 24.

Spreading peace & harmony

- The relics are reaching Mongolia after a span of 29 years. On the occasion, the Indian Ambassador to Mongolia, MP Singh said that the shared heritage of Buddhism has connected us (India & Mongolia). He further added that the relics will not only reinforce that shared heritage but also expand India's image. He also cited the momentous occasion as a most important diplomatic triumph for us.
- Meanwhile, Munkhbaatar Batchuluun, the Administrative Board Member of the Monastery recognized it as the rarest event in history and the most precious opportunity for Mongolians to witness, to get boundless blessings from it. India and Mongolia are geographically distant nations but both the nations share heritage, he added.
- On the occasion, Union Law and Justice Minister, Kiren Rijiju explained that Mongolia and India look upon each other as spiritual and cultural neighbours. Due to this commonality, Mongolia can also be said to be our 'Third Neighbour' even though we don't enjoy any common physical boundaries.

Details of the Display

- The Holy Relics will be displayed at the Batsagaan Temple within the premises of Gandan Monastery. The Holy Buddha Relics are from a site in Bihar, first discovered in 1898 which is believed to be the ancient city of Kapilvastu. Hence, it is known as the 'Kapilvastu Relics' and is housed in the National Museum.
- The Relics will be accorded the status of a State Guest and will be taken in the same climate control case as it has been kept at the National Museum in India. Furthermore, the Indian Air force made available a special airplane C-17 Globe Master to carry the holy relics.

- The relics were received in Mongolia by the Culture Minister of Mongolia; Advisor to the President of Mongolia and a large number of monks among other dignitaries. The Lord Buddha Relics available in Mongolia would also be displayed along with the relics from India. Further, two bullet-proof casings and two ceremonial caskets are being carried by the Indian Delegation for both the Relics.
- This historic milestone in India-Mongolia relations will further boost cultural and spiritual relations between the two countries. It is also an attempt to revive our relations with the countries with whom we have had cultural and spiritual ties since centuries ago. It shall be noted, that in 2015, PM Narendra Modi became the first-ever Prime Minister of India to visit Mongolia.
- The Government of India is making all efforts to spread Lord Buddha's message of peace and compassion all over the world, who is not only worshipped in India but the world over. Our Government is working on several projects to develop Buddhist sites, locations, and Buddhist centres in India. The inauguration of Kushinagar airport recently is one such example.
- The last time these relics were taken out of the country was in 2012 when their exposition was held in Sri Lanka and were on display at several locations across the island nation. However, later guidelines were issued and the Holy Relics were placed under the 'AA' category of those Antiquities and Art Treasures that should not be ordinarily taken out of the country for exhibition, considering their delicate nature. On the request of the Mongolian Government, Union Culture Minister, G. Kishan Reddy made a special exception and permitted the exposition of the Holy Relics of Lord Buddha to Mongolia.
- India has also printed 75 copies of 108 volumes of Mongolian Kanjur and handed them over to the Mongolian Government and various Buddhist Institutions there. The work of digitization of the Kanjur manuscripts is also in full swing. Around 500 Mongolian monks are studying in different monasteries and institutions in India for which India has facilitated their travel and Visas in the past few years.

1.8 Odisha's Mo Bus initiative wins the UN Public Services Award

- Odisha's Mo Bus initiative has been recognized on a global platform. The initiative has received the 2022 UN Public Services Award in the category "promoting gender-responsive public services to achieve the SDGs".

What is the Mo Bus initiative?

- The Mo Bus is a public transport service incorporated with "real-time technologies like live tracking, travel planner and e-ticketing". Each Mo Bus is equipped with CCTV surveillance to ensure the safety of the commuters. Reportedly, over 57% of the city's commuters are using the Mo bus now. For instance, the total ridership between June 1 to 15, 2022 on Mo Bus has been 22,03,806. The initiative was launched in 2018 by the Odisha government to transform the urban public transport scenario in the city and utilize smart technology.
- According to the UN, "40% of Mo Bus conductors are women and 100% of Mo E-Ride drivers are women, transgender people, and people from disadvantaged communities." Mo E-Ride is an e-rickshaw system that provides last-mile feeder service. The project is a boost to people's confidence in the use of

affordable intra-city services. Earlier, the Union Ministry of Housing and Urban Affairs also awarded Mo Bus service during the 12th Urban Mobility India Conference-cum-Expo 2019 in Lucknow. In 2021, the 14th Urban Mobility India Award on Odisha as the “State which had Implemented the Best Urban Transport Projects during the previous year”.

United Nations Public Service Awards:

- One of the most prestigious international awards, the United Nations Public Service Awards recognizes excellence in public services and rewards creative achievements. The objective of the award is to recognize institutions that contribute to public service more effectively and responsively. It was first launched in 2003. The Award is open to all public organizations, including local and national governments, and public institutions engaged in public-private partnerships working towards the achievement of the SDGs. The 2022 programme had a special category on institutional resilience and innovative responses to the COVID-19 pandemic to highlight the effective responses and the continuation of the critical public services during the crisis.

1.9 Global Trends Report 2022

- The 2022 annual Global Trends Report was published by **United Nations High Commissioner for Refugees (UNHCR)**.
- Presents key statistical trends and the latest numbers of refugees, asylum seekers, internally displaced and stateless persons worldwide as well as numbers of people who have returned to their countries or areas of origin.

Report published every year and reflects on the previous year.

Who is a refugee?

- A refugee is someone who fled his or her home and country owing to “a well-founded fear of persecution because of his/her race, religion, nationality, membership in a particular social group, or political opinion”, according to the United Nations 1951 Refugee Convention.

Major findings:

- 1) On Earth, **1 in every 78 people is now displaced**.
- 2) The **largest displacement** occurred in China in 2021 (6 million), the Philippines (5.7 million), and India (4.9 million).
- 3) By 2021 end, **the number of people displaced by war, persecution, violence, and human rights abuses** was 89.3 million. This **has increased by 8%** and has doubled as compared to the figure 10 years ago.
- 4) The UNHCR report, however, notes that the impact of climate change on displacement is not uniform.
- 5) In India’s case, **the report points out that around five million people were internally displaced**. The reason cited is due to disasters and climate change in 2021.

- 6) **Turkey hosted nearly 3.8 million refugees, the largest population worldwide.**
- 7) **The number of new individual asylum applications registered globally in 2021 increased by 25% to 1.4 million from 1.1 million.**
- 8) **The U.S. was the most popular choice among refugees** to seek asylum, followed by Germany, Mexico, Costa Rica, and France.
- 9) Russian invasion of Ukraine has caused the fastest and largest forced displacement crises after World War II from Africa to Afghanistan and beyond. It has pushed the figure over 100 million.

UNHCR(1950):

- Dedicated to saving lives, protecting rights, and building a better future for refugees, forcibly displaced communities and stateless people.

Hq: Geneva.

- **The 1951 Refugee Convention** and its 1967 Protocol are the key legal documents that form the basis of UNHCR. The 1951 convention finds its roots in Article 1 of the Universal Declaration of Human Rights 1948.
- It states that everyone has the right to seek and to enjoy asylum from persecution in other countries.
- Established in 1954, the UNHCR Nansen Refugee Award honours individuals, groups and organizations who go above and beyond the call of duty to protect refugees, as well as displaced and stateless people.
- Laureate of UNHCR Nansen Refugee Award for 2021 was the **Jeel Albena Association for Humanitarian Development (JAAHD)**, a humanitarian organization providing emergency services to internally displaced people in **northern Yemen**.

World Refugee Day:

June 20 is designated as World Refugee Day by the UN.

- The theme for World Refugee Day 2022 is **whoever, whatever, whenever. Everyone has got a right to seek safety.**
- **The day was first celebrated on June 20, 2001.**

1.10 Election to the Office of the Vice-President of India

Recently, the Election Commission announced the Vice-Presidential election to be held in August, 2022.

What are the Provisions Related to the Vice-President?**Vice President:**

- The Vice President is the second highest constitutional office in India. He/She serves for a five-year term, but can continue to be in office irrespective of the expiry of the term, until the successor assumes office.
- The Vice President may resign his office by submitting his resignation to the President of India. The resignation becomes effective from the day it is accepted.

- The Vice President can be removed from office by a resolution of the Council of States (Rajya Sabha), passed by a majority of its members at that time and agreed to by the House of the People (Lok Sabha). A resolution for this purpose may be moved only after a notice of at least a minimum of 14 days has been given of such an intention. The Vice President is the ex-officio Chairperson of the Council of States (Rajya Sabha) and does not hold any other office of profit.

Eligibility:

- Should be a citizen of India.
- Should have completed 35 years of age.
- Should be qualified for election as a member of the Rajya Sabha.
- Should not hold any office of profit under the Union government or any state government or any local authority or any other public authority.

Electoral College:

- As per Article 66 of the Constitution of India, the Vice-President is elected by the members of the Electoral College.

Electoral College consists of:

- ❖ Elected members of Rajya Sabha.
- ❖ Nominated members of Rajya Sabha.
- ❖ Elected members of Lok Sabha.

What is the Election Procedure?

- As per Article 68 of the Constitution, the election to fill the vacancy caused by the expiration of the term of office of the outgoing vice-president is required to be completed before the expiration of the term.
- Article 324 of the Constitution read with the Presidential and Vice-Presidential Elections Act, 1952 and the Presidential and Vice-Presidential Elections Rules, 1974, vests the superintendence, direction and control of the conduct of election to the office of the Vice- President of India in the Election Commission of India.
- The notification for election shall be issued on or after the sixtieth day before the expiration of the term of office of the outgoing Vice-President.
- Since all the electors are members of both Houses of Parliament, the value of the vote of each Member of Parliament would be the same i.e.1 (one).
- The Election Commission, in consultation with the Central Government, appoints the Secretary-General of Lok Sabha and Rajya Sabha, by rotation, as the Returning Officer.
- Accordingly, the Secretary-General, Lok Sabha will be appointed as the Returning Officer for the present election to the Office of the Vice-President of India.

- The Commission also decides to appoint Assistant Returning Officers in Parliament House (Lok Sabha) to assist Returning Officers.
- As per Rule 8 of the Presidential and Vice-Presidential Elections Rules, 1974, polls for the election are taken in the Parliament House.

1.11 Law of Anti-Defection Law

The practice of legislators from changing political parties during their term continues unabated in Indian legislatures despite the Tenth Schedule having been inserted into the Constitution in 1985.

Commonly known as the 'Anti - Defection Law', it was meant to arrest the practice of legislators from changing political affiliations during their term in office.

The political crisis in Maharashtra, and many others before it, are grim reminders of what the Tenth Schedule can and cannot do.

What Do We Mean by Anti - Defection Law?

- The anti-defection law punishes individual Members of Parliament (MPs)/MLAs for leaving one party for another.
- Parliament added it to the Constitution as the Tenth Schedule in 1985. Its purpose was to bring stability to governments by discouraging legislators from changing parties.
- The Tenth Schedule - popularly known as the Anti-Defection Act - was included in the Constitution via the 52nd Amendment Act, 1985.
- It sets the provisions for disqualification of elected members on the grounds of defection to another political party.
- It was a response to the toppling of multiple state governments by party-hopping MLAs after the general elections of 1967.
- However, it allows a group of MP/MLAs to join (i.e., merge with) another political party without inviting the penalty for defection. And it does not penalize political parties for encouraging or accepting defecting legislators.
- As per the 1985 Act, a 'defection' by one-third of the elected members of a political party was considered a 'merger'.
- But the 91st Constitutional Amendment Act, 2003, changed this and now at least two-thirds of the members of a party must be in Favour of a "merger" for it to have validity in the eyes of the law.
- The members disqualified under the law can stand for elections from any political party for a seat in the same House.
- The decision on questions as to disqualification on ground of defection are referred to the Chairman or the Speaker of such House, which is subject to 'Judicial review'.

- However, the law does not provide a timeframe within which the presiding officer has to decide a defection case.

What are the Grounds for Defection?

Voluntary Give Up:

- If an elected member voluntarily gives up his membership of a political party.

Violation of Instructions:

- If he votes or abstains from voting in such House contrary to any direction issued by his political party or anyone authorized to do so, without obtaining prior permission.
- As a pre-condition for his disqualification, his abstention from voting should not be condoned by his party or the authorized person within 15 days of such incident.

Elected Member:

- If any independently elected member joins any political party.

Nominated Member:

- If any nominated member joins any political party after the expiry of six months.

How Defection Affects the Political System?

Subversion of Electoral Mandates:

- Defection is the subversion of electoral mandates by legislators who get elected on the ticket of one party but then find it convenient to shift to another, due to the lure of ministerial berths or financial gains.

Affects the Normal Functioning of Government:

- The infamous “Aaya Ram, Gaya Ram” slogan was coined against the background of continuous defections by the legislators in the 1960s.
- The defection leads to instability in the government and affects the administration.

Promote Horse Trading:

- Defection also promotes horse-trading of legislators which clearly go against the mandate of a democratic setup.

What are the Challenges with Anti - Defection Law?

Paragraph 4 of the law:

- Paragraph 4 of the Anti - Defection Law creates an exception for mergers between political parties by introducing three crucial concepts:

Original Party:

- The political party to which a member belongs (this can refer to the party generally, outside of the House).

Legislature Party:

- Consisting of all elected members of a House for the time being belonging to one political party.

Deemed Merger

- Paragraph 4 does not clarify whether the original political party refers to the party at the national level or the regional level, despite the fact that that is how the Election Commission of India recognises political parties.

Paragraph 4 states that:

- A merger can take place only when an original party merges with another political party, and at least two thirds of the members of the legislature party have agreed to this merger.
- Paragraph 4 seems to be creating a “legal fiction” so as to indicate that a merger of two third members of a legislature party can be deemed to be a merger of political parties, even if there is no actual merger of the original political party with another party.

Undermining Representative & Parliamentary Democracy:

- After enactment of the Anti-defection law, the MP or MLA has to follow the party’s direction blindly and has no freedom to vote in their judgment.
- Due to Anti-Defection law, the chain of accountability has been broken by making legislators accountable primarily to the political party.

Controversial Role of Speaker:

- There is no clarity in the law about the timeframe for the action of the House Chairperson or Speaker in the anti-defection cases.
- Some cases take six months and some even three years. There are cases that are disposed off after the term is over.

No Recognition of Split:

- Due to the 91st Constitutional Amendment Act, 2003, the anti-defection law created an exception for anti-defection rulings.
- However, the amendment does not recognize a ‘split’ in a legislature party and instead recognizes a ‘merger’.

Affects the debate and discussion:

- The Anti-Defection Law has created a democracy of parties and numbers in India, rather than a democracy of debate and discussion.

- In this way, it does not make a differentiation between dissent and defection and weaken the Parliamentary deliberations on any law.

What are Different Suggestions related to the Anti-defection Law?

- The Election Commission has suggested it should be the deciding authority in defection cases. Others have argued that the President and Governors should hear defection petitions.
- The Supreme Court has suggested that Parliament should set up an independent tribunal headed by a retired judge of the higher judiciary to decide defection cases swiftly and impartially. Some commentators have said the law has failed and recommended its removal. Former Vice President Hamid Ansari has suggested that it applies only to save governments in no-confidence motions.

What can be done to Make Anti-Defection Law More Effective?**Rational use of the anti-defection law:**

- Several experts have suggested that the law should be valid only for those votes that determine the stability of the government. Example: passage of the annual budget or no-confidence motions.

Advice of Election Commission:

- Various commissions including National Commission to review the working of the constitution (NCRWC) have recommended that rather than the Presiding Officer, the decision to disqualify a member should be made by the President (in case of MPs) or the Governor (in case of MLAs) on the advice of the Election Commission.

Independent authority to deal with disqualification:

- Justice Verma in Hollohan judgment said that tenure of the Speaker is dependent on the continuous support of the majority in the House and therefore, he does not satisfy the requirement of such independent adjudicatory authority.
- Also, his choice as the sole arbiter in the matter violates an essential attribute of the basic feature.
- Thus, the need for an independent authority to deal with the cases of defection.

Promoting the principle of intra-party democracy:

- 170th Law Commission report underscored the importance of intra-party democracy by arguing that a political party cannot be a dictatorship internally and democratic in its functioning outside.
- Thus, the parties should listen to the opinions of the members and have discussions on the same. This would give the freedom of speech and expression to its members and promote inner-party democracy.

Analysis by Supreme Court:

- An academic revisiting of the Tenth Schedule by the Supreme Court, so as to guide future use of the anti-defection law, is timely and should happen soon.

1.12 Governor's Powers to call for a Floor Test

In Maharashtra's political crisis, the Governor's decision to call for the floor test has been in the spotlight once again.

What are the Constitutional Provisions related to the Governor in calling for a Floor Test?**About:**

- Article 174 of the Constitution authorizes the Governor to summon, dissolve and prorogue the state Legislative Assembly.
- Article 174(2)(b) of the Constitution gives powers to the Governor to dissolve the Assembly on the aid and advice of the Cabinet. However, the Governor can apply his mind when the advice comes from a Chief Minister whose majority could be in doubt.
- According to Article 175(2), the Governor can summon the House and call for a floor test to prove whether the government has the numbers.
- However, the Governor can exercise the above only as per Article 163 of the Constitution which says that the Governor acts on the aid and advice of the Council of Ministers headed by the Chief Minister.
- When the House is in session, it is the Speaker who can call for a floor test. But when the Assembly is not in session, the Governor's residuary powers under Article 163 allow him to call for a floor test.

Governor's Discretionary Power:

- Article 163 (1) essentially limits any discretionary power of the Governor only to cases where the Constitution expressly specifies that the Governor must act on his own and apply an independent mind.
- The Governor can exercise his discretionary power under Article 174, when the chief minister has lost the support of the House and his strength is debatable.
- Generally, when doubts are cast on the chief minister that he has lost the majority, the opposition and the Governor would rally for a floor test.
- On numerous occasions, the courts have also clarified that when the majority of the ruling party is in question, a floor test must be conducted at the earliest available opportunity.

What is the Supreme Court's View on the Governor's Power in Calling the Floor Test?

- In 2016, the Supreme Court in Nabam Rebia and Bamang Felix vs Deputy Speaker case (the Arunachal Pradesh Assembly case) said that the power to summon the House is not solely vested in the Governor and should be exercised with aid and advice of Council of Ministers and not at his own.
- The Court highlighted the facts that the Governor is not an elected authority and is a mere nominee of the President; such a nominee cannot have an overriding authority over the representatives of the people, who constitute the House or Houses of the State Legislature.
- Allowing the Governor to overrule the State Legislature or the State executive would not harmoniously augur well with the strong democratic principles enshrined in the provisions of the Constitution. Specially so, because the Constitution is founded on the principle of ministerial responsibility.

- In 2020, the Supreme Court, in Shivraj Singh Chouhan & Ors versus Speaker, Madhya Pradesh Legislative Assembly & Ors, upheld the powers of the Speaker to call for a floor test if there is a prima facie view that the government has lost its majority.
- “The Governor is not denuded of the power to order a floor test where on the basis of the material available to the Governor it becomes evident that the issue as to whether the government commands the confidence of the House requires to be assessed on the basis of a floor test.

What is a Floor Test?

- It is a term used for the test of the majority. if there are doubts against the Chief Minister.
- (CM) of a State, he/she can be asked to prove the majority in the House.
- In case of a coalition government, the CM may be asked to move a vote of confidence and win a majority.
- In the absence of a clear majority, when there is more than one individual staking claim to form the government, the Governor may call for a special session to see who has the majority to form the government.
- Some legislators may be absent or choose not to vote. The numbers are then considered based only on those MLAs who were present to vote.
- Houses assembled together at the commencement of the first Session after each general election to the Assembly and at the commencement of the first session of each year and inform the Legislature of the causes of its Summons. Hence, statement 1 is correct.
- Article 208 deals with the Rules of Procedure in State Legislatures. It states that:
A House of the Legislature of a State may make rules for regulating subject to the provisions of this Constitution, its procedure and the conduct of its business.
Until rules are made under clause (1), the rules of procedure and standing orders are in force.

1.13 Judicial Activism, Restraint & Overreach

What does it mean?

Judicial Activism:

- Judicial activism signifies the proactive role of the Judiciary in protecting the rights of citizens.
- The practice of Judicial Activism first originated and developed in the USA.
- In India, the Supreme Court and the High courts are vested with the power to examine the constitutionality of any law, and if such a law is found to be inconsistent with the provisions of the constitution, the court can declare the law as unconstitutional.
- It has to be noted that the subordinate courts do not have the power to review constitutionality of laws.

Origin:

- The term judicial activism was coined by historian Arthur Schlesinger, Jr. in 1947. The foundation of Judicial Activism in India was laid down by Justice V.R Krishna Iyer, Justice P.N Bhagwati, Justice O.Chinnappa Reddy, and Justice D.A Desai.

Criticism:

- Judicial Activism has led to a controversy in regard to the supremacy between Parliament and Supreme Courts.
- It can disturb the delicate principle of separation of powers and checks and balances.

Judicial Restraint:

- Judicial Restraint is the antithesis of Judicial Activism.
- Judicial Restraint is a theory of judicial interpretation that encourages judges to limit the exercise of their own power.
- In short, the courts should interpret the law and not intervene in policy-making. Judges should always try to decide cases on the basis of:
 - i. The original intent of those who wrote the constitution.
 - ii. Precedent – past decisions in earlier cases.
 - iii. Also, the court should leave policy making to others.

Here, courts “restrain” themselves from setting new policies with their decisions.

Judicial Overreach:

- When Judicial Activism goes overboard, and becomes Judicial Adventurism, it is referred to as Judicial Overreach.
- In simpler terms, it is when the judiciary starts interfering with the proper functioning of the legislative or executive organs of the government.
- Judicial Overreach is undesirable in a democracy as it breaches the principle of separation of powers.
- In view of this criticism, the judiciary has argued that it has only stepped when the legislature or the executive has failed in its own functions.

Why is it required?**Judicial Activism:****Judicial activism has arisen mainly due to:**

- ❖ The failure of the executive and legislatures to act.
- ❖ Since there is a doubt that the legislature and executive have failed to deliver the desired results.
- ❖ It occurs because the entire system has been plagued by ineffectiveness and inactiveness.
- ❖ The violation of basic human rights has also led to judicial activism. Due to the misuse and abuse of some of the provisions of the Constitution, judicial activism has gained importance.

Necessity of Judicial Activism:

- To understand the increased role of the judiciary, it is important to know the causes that led to the judiciary playing an active role.
- There was rampant corruption in other organs of government.
- The executive became callous in its work and failed to deliver results required.
- Parliament became ignorant of its legislative duties.
- The principles of democracy were continuously degrading.
- Public Interest Litigations brought forward the urgency of public issues.
- In such a scenario, the judiciary was forced to play an active role. It was possible only through an institution like judiciary which is vested with powers to correct the various wrongs in society. In order to prevent the compromise of democracy, the Supreme Court and High Courts took the responsibility of solving these problems.
- For example, in *G. Satyanarayana vs Eastern Power Distribution Company* (2004), Justice Gajendragadkar ruled that a mandatory enquiry should be conducted if a worker is dismissed on the ground of misconduct, and be provided with an opportunity to defend himself. This judgement added regulations to labour law which was ignored by legislation. Similarly, *Vishaka vs State of Rajasthan* (1997) is an important case that reminds the need of Judicial activism. Here, the SC laid down guidelines that ought to be followed in all workplaces to ensure proper treatment of women. It further stated that these guidelines should be treated as a law until Parliament makes a legislation for enforcement of gender equality.

Some other famous cases of Judicial Activism include -**Kesavananda Bharati case (1973):**

- The apex court of India declared that the executive had no right to intercede and tamper with the basic structure of the constitution.

Sheela Barse v. State of Maharashtra (1983):

- A letter by Journalist, addressed to the Supreme Court addressing the custodial violence of women prisoners in Jail. The court treated that letter as a writ petition and took cognizance of that matter.

I. C. Golaknath & Ors vs State Of Punjab & Anrs. (1967):

- The Supreme Court declared that Fundamental Rights enshrined in Part 3 are immune and cannot be amended by the legislative assembly.

Hussainara Khatoon (I) v. State of Bihar (1979):

- The inhuman and barbaric conditions of the undertrial prisoners reflected through the articles published in the newspaper. Under article 21 of the Indian Constitution, the apex court accepted it and held that the right to speedy trial is a fundamental right.

A.K. Gopalan v. State of Madras (1950):

- The Indian Supreme Court rejected the argument that to deprive a person of his life or liberty not only the procedure prescribed by law for doing so must be followed but also that such procedure must be fair, reasonable and just.

Judicial Restraint:

- Judicial restraint helps in preserving a balance among the three branches of government, judiciary, executive, and legislative.
- To uphold the law established by the government in the legislature.
- To show solemn respect for the separation of governmental problems.
- To allow the legislature and the executive to follow their duties by not reaching in their arena of work.
- To mark a respect for the democratic form of government by leaving the policy on policymakers.

Trends in Judicial Restraint:

- S.R. Bommai v Union of India (1994) is a famous example often stated to show restraint practiced by Judiciary. The judgement stated that in certain cases the judicial review is not possible as the matter is political. According to the court, the power of article 356 was a political question, thus refusing judicial review. The court stated that if norms of judiciary are applied on matters of politics, then it would be entering the political domain and the court shall avoid it.
- Similarly, in Almitra H. Patel Vs. Union of India (1998) the Supreme court refused to direct the Municipal Corporation on the issue of assigning responsibility for cleanliness of Delhi and stated that it can only assign authorities to carry out duty that is assigned as per law.

Judicial Overreach:

- The direct effect of legislative and executive negligence or inability is "judicial overreach". Weak and injudicious results, not only in the making of laws, but also in their application. The Indian judiciary has been criticized by many legal scholars, lawyers and judges themselves, for playing an exceedingly activist role and overreaching.

Impact of Judicial Overreach:

- Since the legislature is lagging behind in its function, the judiciary tends to Overreach from its function causing a conflict between legislature and judiciary. The clear impacts from such an Overreach of Judiciary are as follows:
- There is a threat to the doctrine of separation of powers which undermines the spirit of the constitution. There is a lack of harmony between legislature and judiciary and an impression on the public of inaction by the legislature. In certain scenarios like that of environmental, ethical, political, expert knowledge is required which the judiciary might not possess. If it renders judgement while having no experience in these domains, then it not only undermines expert knowledge but also can prove harmful to the country.

- Judicial Overreach can lead to an expression of disregard by the judiciary in the elective representation. This can decrease the faith of the public in the institution of democracy.
- Hence, It is an obligation on the part of courts to remain under their jurisdiction and uphold the principle of separation of powers. The Supreme court has itself reminded other courts, in 2007, to practise Judicial restraint. It stated "Judges must know their limits and must try not to run the government. They must have modesty and humility, and not behave like emperors." Further, it said, "In the name of judicial activism, judges cannot cross their limits and try to take over states which belong to another organ of the state".

Examples of Judicial Overreach:

- A famous case of Judicial Overreach is censorship of the Film Jolly LLB II. The case was filed as a writ petition, and alleged that the film portrayed the legal profession as a joke, making it an act of contempt and provocation. The Bombay High Court appointed a three person committee to watch the movie and report on it. This was viewed as unnecessary, as the Board Of Film Certification already exists and is vested with the power to censor. On the basis of the report of the committee, four scenes were removed by the directors. It was seen as violative of Article 19(2), as it imposed restriction on freedom of speech and expression.
- On a PIL about road safety, the Supreme Court banned the Sale of Liquor, at retail shops, restaurants, bars within 500m of any national or state highway. There was no evidence presented before the court that demonstrated a relation of ban on liquor on highways with the number of deaths. This judgement also caused loss of revenue to state governments and loss of employment. The case was seen as an Overreach because the matter was administrative, requiring executive knowledge.

How is it Manifested?**Judicial Activism:****Through Judicial Review**

- Judicial review is the doctrine under which legislative and executive actions are subject to review by the judiciary.
- Judicial review is an example of check and balances in a modern governmental system.
- Judicial review is adopted in the Constitution of India from the Constitution of the United States of America.
- It gives power to the Supreme Court to examine the constitutionality of any law and if such a law is found to be inconsistent with the provisions of the Constitution, the Court can declare the law as unconstitutional.

Through Public Interest Litigation:

- Public interest litigation means a suit filed in a court of law for the protection of public interest.

- Judicial activism in India acquired importance due to public interest litigation. It is not defined in any statute or act.
- In India, PIL initially was resorted to towards improving the lot of the disadvantaged sections of the society who due to poverty and ignorance were not in a position to seek justice from the courts.
- Justices P.N. Bhagwati and V.R. Krishna Ayer has played a key role in promoting this avenue of approaching the apex court of the country.

Through Constitutional Interpretation:

- Constitutional interpretation comprehends the methods or strategies available to people attempting to resolve disputes about the meaning or application of the Constitution.
- The possible sources for interpretation include the text of the Constitution, its "original history," including the general social and political context.

Through Access to international statutes for ensuring constitutional rights:

- The court refers to various international statutes in its judgements. This is done by the apex courts to ensure the citizens of their rights.
- International Law is referred to by Supreme Court's judgments in many cases. Example: Recently, SC reaffirmed the rights of disabled person to live with dignity in Jeeja Ghosh v. Union of India. The court underlined the Vienna Convention on the law of treaties, 1963 which requires India's internal legislation to comply with international commitments.

Judicial Restraint:

- Through referring to the original intent of those who wrote the constitution:
- Judges look to the original intent of the writers of the Constitution.
- Judges refer to the intent of the legislatures that wrote the law and the text of the law in making decisions.
- Any changes to the original Constitution language can only be made by constitutional amendments.

Through Precedent:

- Precedent means past decisions in earlier cases.
- Judicially-restrained judges respect stare-decisis, the principle of upholding established precedent handed down by past judges.
- Through leaving the legislature and executive to decide policies:
- Judicial Restraint is practised when the court leaves policy making to others.
- The courts generally refer to interpretations of the constitution by the Parliament or any other constitutional body.

How do they Differ?**Judicial Activism VS Judicial Restraint:****On basis of Meaning:**

Judicial activism: interpretation of the constitution to advocate contemporary values and conditions.

Judicial restraint: limiting the powers of the judges to strike down a law.

On basis of Goals:

- **Judicial restraint:** the judges and the court encourage reviewing an existing law rather than modifying the existing law, whereas in judicial activism: it gives the power to overrule certain acts or judgments.

On the basis of Intent:

- Judicial activism judges should look beyond the original intent of the framers.
- In Judicial restraint, Judges should look to the original intent of the writers of the Constitution.

On basis of Power:

- In Judicial activism, the judges are required to use their power to correct any injustice especially when the other constitutional bodies are not acting.
- Judicial restraint is limiting the powers of the judges to strike down a law.

On basis of their Role:**Conclusion**

- Judicial activism has a great role in formulating social policies on issues like protection of the rights of an individual, civil rights, public morality, and political unfairness.
- Judicial restraint helps in preserving a balance among the three branches of government, judiciary, executive, and legislative.
- In India, Judiciary has played an active role through its activism, especially through PIL. This has restored the rights of disadvantaged sections of the society.
- The Supreme Courts and the High Courts have worked in favour of progressive social policies and citizens hold a high regard for the institution of judiciary.
- However, in a democracy, it is important to maintain the principle of separation of powers and uphold the legitimacy of the three organs of government.
- It can be possible only when the executive and legislature are attentive and functional.
- At the same time, the Judiciary should be cautious of stepping into spheres of activity that does not belong to it.

2. INTERNATIONAL RELATIONS

2.1 West Seti Power Project: Nepal

India will be taking over West Seti Hydropower Project nearly four years after China withdrew from it, ending a six-year engagement between 2012 and 2018.

- Earlier, the Indian Prime Minister visited Lumbini, where he celebrated 2566th Buddha Jayanti celebrations; also Nepal invited India to invest in West Seti Hydropower Project.

What is the West Seti Power Project?

- It is a proposed 750-megawatt Hydropower Project, which is to be built on the Seti river in far-western Nepal, which has remained on the drawing board for the last six decades.
- Lately, the government has remodeled the project as West Seti and Seti River (SR-6), a joint storage project, with the capacity to generate 1,200 megawatts of electricity.
- This storage or reservoir will fill up during the monsoon season and the water will be drawn to generate power during peak hours each day in the dry season.
- Its success is expected to restore India's image in Nepal and give it weightage in future considerations for hydropower projects, when competition is bound to be tough. West Seti, therefore, has the potential to be a defining model for Nepal India's power relations in future.



How have been India-Nepal Power relations?

- Nepal is rich in power sources with around 6,000 rivers and an estimated potential for 83,000 MW.
- Mahakali treaty was signed back in 1996, to produce 6,480 MW, but India has still not been able to come out with the Detailed project Report.
- The Upper Karnali project, for which the multinational GMR signed the contract, has not made any headway for years.

- India's success in executing the 900-MW Arun Three project in eastern Nepal's Sankhuwa Sabha, and whose foundation was laid in 2018 and which is set for completion by 2023 has helped build faith in India recently.
- During the Indian PM's visit to Nepal in 2014, he had said India must start executing its projects timely.
- Nepal's Constitution has a provision under which any treaty or agreement with another country on natural resources will require Parliament's ratification by at least a two-thirds majority. That will also mean homework will be required before any hydro project is signed and given for execution.
- Nepal has a massive power shortfall as it generates only around 900 MW against an installed capacity of nearly 2,000 MW. Although it is currently selling 364 MW power to India, it has over the years importing from India.

How have been India-Nepal Diplomatic Ties?

- After a standoff between Nepal and India led to the economic blockade of 2015, equations changed after the new PM Deuba took over Oli, who visited India recently where he decided to establish Fraternal Ties with India.
- Nepal is an important neighbour of India and occupies special significance in its foreign policy because of the geographic, historical, cultural and economic linkages/ties that span centuries.
- India and Nepal share similar ties in terms of Hinduism and Buddhism with Buddha's birthplace Lumbini located in present day Nepal.
- The two countries not only share an open border and unhindered movement of people, but they also have close bonds through marriages and familial ties, popularly known as Roti-Beti ka Rishta. The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal.
- Rivers originating in Nepal feed the perennial river systems of India in terms of ecology and hydropower potential.
- However, the border issue erupted in November 2019 when Nepal had released a new political map that claims Kalapani, Limpiyadhura and Lipulekh of Uttarakhand as part of Nepal's territory. The area of Susta (West Champaran district, Bihar) can also be noted in the new map.

Way Forward

- Until India agrees to value Nepal's water and the existing focus on power is not reviewed, mutual distrust will continue to eclipse the potential for progress of both sides in the long term.
- Once the projects are made multi-purpose with flood control, navigation, fisheries, irrigation contributing to agricultural growth etc, giving due value to water the cost of power will be much lower compared to existing rates, and people on both sides will have multiple benefits. The power trade agreement needs to be such that India can build trust in Nepal. Despite more renewable energy projects (solar) coming up in India, hydropower is the only source that can manage peak demand in India.

2.2 Listing of Terrorist under UNSC 1267 Committee

India and the US jointly proposed to list Makki, a top LeT (Lashkar-e-Taiba) Militant, under the UN Security Council's Al-Qaeda and ISIL (Islamic State of Iraq and the Levant) Sanctions Committee which is also known as the UNSC 1267 Committee.

- But, China, placed a "technical hold" on the proposal to list Makki and this measure can last for up to six months at a time.
- Islamic State in Iraq and the Levant (ISIL), also called Islamic State in Iraq and Syria (ISIS) is the Islamic State, transnational Sunni insurgent group operating primarily in western Iraq and eastern Syria.

What is United Nation Security Council?

About:

- The UNs Charter established six main organs of the UN, including the UNSC. Article 23 of the UN Charter concerns the composition of the UNSC.
- The other 5 organs of the UN are the General Assembly, the Trusteeship Council, the Economic and Social Council, the International Court of Justice, and the Secretariat.
- The UNSC has been given primary responsibility for maintaining international peace and security and may meet whenever peace is threatened.

Headquarter:

The council is headquartered at New York.

Members:

The UNSC is composed of 15 members, 5 permanent and 10 non-permanent.

Five Permanent Members:

- China, France, the Russian Federation, the United Kingdom, and the United States.

Ten Non-Permanent Members:

- Elected for two-year terms by the General Assembly.
- India, for the eighth time, has entered the UNSC as a non-permanent member last year (2021) and will stay on the council for two years i.e 2021-22.
- Each year, the General Assembly elects five non-permanent members (out of ten in total) for a two-year term. The ten non-permanent seats are distributed on a regional basis.

What is UNSC 1267 committee?

About:

- It was first set up in 1999, and strengthened after the September, 2001 attacks. It is now known as the Da'esh and Al Qaeda Sanctions Committee.

- It comprises all permanent and non-permanent members of the United Nations Security Council (UNSC).
- The 1267 list of terrorists is a global list, with a UNSC stamp. It is full of Pakistani nationals and residents.
- It is one of the most important and active UN subsidiary bodies working on efforts to combat terrorism, particularly in relation to Al Qaeda and the Islamic State group. It discusses UN efforts to limit the movement of terrorists, especially those related to travel bans, the freezing of assets and arms embargoes for terrorism.
- India has made at least three attempts in the last decade — in 2009, 2016 and 2017 — to list JeM chief as “global terrorist”. All attempts have been blocked by China at Pakistan’s behest.

Procedure of Listing:

- Any member state can submit a proposal for listing an individual, group, or entity. The proposal must include acts or activities indicating the proposed individual/group/entity had participated “in the financing, planning, facilitating, preparing, or perpetrating of acts or activities” linked to “ISIL (Da’esh), Al-Qaida or any cell, affiliate, splinter group or derivative thereof”.
- Decisions on listing and de-listing are adopted by consensus. The proposal is sent to all the members, and if no member objects within five working days, the proposal is adopted.
- An “objection” means curtains for the proposal.
- Any member of the Committee may also put a “technical hold” on the proposal and ask for more information from the proposing member state. During this time, other members may also place their own holds.
- The matter remains on the “pending” list of the Committee until such time as the member state that has placed the hold decides to turn its decision into an “objection”, or until all those who have placed holds remove them within a timeframe laid down by the Committee.
- Pending issues must be resolved in six months, but the member state that has placed the hold may ask for an additional three months. At the end of this period, if an objection is not placed, the matter is considered approved.

What is Foreign Terrorist Organisation?

- FTO are foreign organizations that are designated by the Secretary of State US.
- This plays a critical role in fight against terrorism and is an effective means of curtailing support for terrorist activities and pressuring groups to get out of the terrorism business.

Jaish-e-Mohammed (JEM)	2000	2001	Along with LET, it was responsible for the 2001 attack on the Indian parliament, among other attacks. JEM also has openly declared war on the United States.	Banned
Harakat-ul Jihad Islami (HUJI)	1980	2010	Initially it was formed to fight the soviet army, however after 1989, it redirected its efforts toward India, although it did supply fighters to the Afghan Taliban. HUJI today operates in Afghanistan, Pakistan, Bangladesh and India, and seeks annexation of Kashmir into Pakistan.	Banned
Harkat-ul-Mujahideen (HUM)	1985	1997	It operates mainly from Pak-Occupied Kashmir and from some Pakistani cities.	Banned
Hizb-ul Mujahideen	1989	2017	It is the militant wing of Pakistan's largest Islamist political party and is one of the largest and oldest militant groups operating in Jammu and Kashmir.	Banned
Al Qaeda	1988	1999	It has operated primarily from the former Federally Administered Tribal Areas and in the megacity of Karachi, as well as in Afghanistan.	Banned

2.3 FATF's Grey List

Recently, Pakistan got a reprieve from the Financial Action Task Force (FATF) as FATF announced that the country could be removed from the grey list. FATF is expected to decide whether to take Pakistan off the 'grey' list at the end of its plenary session in Berlin in October.

- Pakistan has been on the FATF grey list continuously since June 2018.

What is the Financial Action Task Force (FATF)?

About:

- The FATF is an inter-governmental body that sets international standards seeking to prevent international financial crimes that aid terrorism.
- The FATF was established in July 1989 by a G-7 Summit in Paris, initially to examine and develop measures to combat money laundering.

Mandate:

- After the 9/11 attacks, the FATF in October 2001 expanded its mandate to incorporate efforts to combat terrorist financing.
- In April 2012, it added efforts to counter the financing of proliferation of weapons of mass destruction.

- The FATF has developed the FATF Recommendations, or FATF Standards, which ensure a co-ordinated global response to prevent organised crime, corruption and terrorism.
- Over 200 jurisdictions around the world have committed to the FATF Recommendations through the global network of nine FATF-Style Regional Bodies (FSRBs) and FATF memberships.

Composition:

- The FATF currently comprises 37 member jurisdictions and two regional organizations (European Commission and Gulf Cooperation Council), representing most major financial centers in all parts of the globe.
- India has been a member of the FATF since 2010.
- India is also a member of its regional partners, the Asia Pacific Group (APG) and the Eurasian Group (EAG).

Headquarters:

- Its Secretariat is located at the Organisation for Economic Cooperation and Development (OECD) headquarters in Paris.

Lists under FATF:**Grey List:**

- Countries that are considered safe haven for supporting terror funding and money laundering are put in the FATF grey list.
- This inclusion serves as a warning to the country that it may enter the blacklist.

Black List:

- Countries known as Non-Cooperative Countries or Territories (NCCTs) are put in the blacklist. These countries support terror funding and money laundering activities.
- The FATF revises the blacklist regularly, adding or deleting entries.
- Currently, Iran and Democratic People's Republic of Korea (DPRK) are under High-risk Jurisdiction or black list.

Sessions:

- The FATF Plenary is the decision-making body of the FATF. It meets three times per year.

What is the grey list, and why is Pakistan on it?**About:**

- Grey listing means FATF has placed a country under increased monitoring to check its progress on measures against money laundering and terrorism financing.
- The “grey list” is also known as the “increased monitoring list”.

Countries in Grey List:

- As of March 2022, there are 23 countries on the FATF's increased monitoring list officially referred to as "jurisdictions with strategic deficiencies" that include Pakistan, Syria, Turkey, Myanmar, Philippines, South Sudan, Uganda, and Yemen.

Removal from the List:

- To be pulled out of the grey list, a country has to fulfill the tasks recommended by the FATF, for instance, confiscating properties of individuals associated with terrorist groups.
- If the FATF is satisfied with the progress, it removes the country from the list.
- The FATF most recently took Zimbabwe, and before that Botswana and Mauritius, off the grey list.
- Zimbabwe has strengthened the effectiveness of its AML/CFT regime and addressed related technical deficiencies to meet the commitments in its action plan regarding the strategic deficiencies that the FATF identified in October 2019.
- AML/CFT refers to "Anti-Money Laundering/Combating the Financing of Terrorism".
- In the case of Pakistan, it first entered the list in 2008, left it, and then was on it from 2012 to 2015. Since 2018, it has not been removed from the list.
- The FATF had issued the 27-point action plan after placing Pakistan on the 'Grey List' in June 2018. The action plan pertains to curbing money laundering and terror financing. A parallel action plan was handed out by the FATF's regional partner - the Asia Pacific Group (APG) - in 2019.

How does grey-listing impact a country?

- If a country is on grey list, it signals to the global financial and banking system about increased risks in transactions with the country in question.
- Also, given that major financial institutions like the IMF and World Bank are affiliated with FATF as observers, a grey-listed country faces complications in accessing international lending instruments.
- One instance is of a USD 6 billion IMF loan contract from July 2019 that emphasized the need for Pakistan to comply with the FATF's action.
- Pakistan's economy is in poor shape, and it is staring at low reserves of foreign exchanges, despite loan assistance from Saudi Arabia and China.

2.4 I2U2 Initiative

As part of I2U2 initiatives, India, Israel, UAE, and the US will hold its first virtual summit in July 2022.



What is I2U2 Initiative?

Background:

- I2U2 was initially formed in October, 2021 following the Abraham Accords between Israel and the UAE, to deal with issues concerning maritime security, infrastructure and transport in the region.
- At that time, it was called the 'International Forum for Economic Cooperation'.
- That was referred as the 'West Asian Quad'.

About:

- I2U2 initiative is a new grouping of India, Israel, USA and UAE.
- In the grouping's name, 'I2' stands for India and Israel, whereas 'U2' stands for USA and the UAE.
- This is a great achievement which tells the geopolitical changes that happen in the region. This will not only revitalize and re-energize the system of alliances and partnerships around the world, but also stitch together partnerships that did not exist previously or were not utilized to their full extent.

Significance:

Security Cooperation:

- This will help the countries in exploring security cooperation among the four nations within the framework of these new groupings.

Technological Hubs:

Each of these countries is a technological hub.

- Biotechnology, of course, is prominent in each of these countries as well.

Food Security:

- This initiative offers an opportunity to discuss food security.

Work Together in Different Fields:

- These countries could cooperate on a number of levels, whether it's technologies, trade, climate, fighting against Covid-19, or even security.

What will be the Significance of I2U2 for India?**Advantage from Abraham Accords:**

- India will get advantage of the Abraham Accords to deepen engagement with Israel without risking its ties with the UAE and the other Arab states.

Benefit Market:

- India is a massive consumer market. It's a massive producer of high-tech and highly sought-after goods as well. India will benefit from this grouping.

Alliances:

- It will help India in building alliances political alliances, social alliances.

2.5 Counteracting China's Influence by Improving Self- Capacity

With the rise of belligerent China and its increasing level of infrastructure buildup near India's border area, there is a need for India to enhance its infrastructure capabilities to deter China from pursuing any misadventure along the LAC (Line of Actual Control), and to further develop its long term strategy to contain China.

What's the Issue?

- China has been developing infrastructure along with LAC. The latest satellite images revealed that China was building a second bridge over the Pangong Tso. This bridge can carry tanks and facilitate faster movement of military forces between the north and south banks of the lake.

What kind of Infrastructure is being built by China?

- For Improving Air Assets: The first type of area is aimed at enhancing the capabilities of the PLAAF (Chinese air force), as earlier, it has a limited no of operational airfields in the Tibetan plateau, and problems of operating from high altitudes were a severe handicap for the People's Liberation Army (PLA) Air Force.
- After the Doklam incident in 2017, 37 airports and heliports within Tibet and Xinjiang have been newly constructed or upgraded, of which at least 22 are identifiable as military or dual-use facilities.
- Dual-use facilities are those infrastructures that can have both military and civilian applications. These facilities include:

Hardened shelters for housing military aircraft, Underground facilities to ensure survivability, Air defense missiles for protection, Runways extension, Helicopter operations facilities.

For Enhancing Logistics: The second area is focused on the ability of the PLA (People's Liberation Army) to rapidly mobilize its forces from its mainland bases to their battle locations through an improved road and rail network.

In between 2015 and 2020, Tibet's highways grew from 7,840 km to 11,820 km, a 51% increase,

In June 2021, a high-speed rail line connecting Lhasa and Nyingchi entered service, covering the 435 km distance in 2.5 hours.

- **For Ramping up Forward Movement:** The infrastructure is also being developed for speedy application of combat power at LAC.
- China has constructed at least eight key roads toward LAC from the G219 highway, These roads provide connectivity to areas opposite important Indian military posts in Ladakh, from Daulat Beg Oldie to Galwan Valley, Pangong Tso, and Chumar. In addition, infrastructure such as the bridge at Pangong Tso will assist in the faster north-south movement of troops.

What are China's Intentions?

- China's infrastructure buildup is aimed at reducing India's advantage in the employment of airpower during a conflict along LAC.
- It is to overcome their shortfalls, neutralize India's airpower edge over Tibet, and increase the PLA's combat capability for war fighting along LAC.

What are the Challenges for India?

- It would increase the PLA's combat capability for war fighting along LAC.
- With the improved infrastructure in Tibet and Xinjiang, China could quickly mobilize its troops on the border from its bases.
- China would be able to neutralize India's airpower edge over Tibet.

What is the response from the Indian side?

- The Indian Army has redeployed significant forces from the Pakistan border to the northern front.
- A major push has been given to infrastructure development, improving surveillance, and construction of roads.
- After the 2020 standoff in eastern Ladakh, the government has sanctioned the construction of 32 roads along LAC.

What could be the Way Forward?

- **Build Deterrence:** India must develop a strategy that strengthens its deterrent posture.
- Deterrence is based on a strong army deployment along with LAC.
- India must focus on capabilities that seek to impose punishing costs in the event of a conflict.

- **Tactical Thinking:** Apart from infrastructure development and troop deployments, which are necessary measures, there is the need for India to define a long-term military strategy.
- **Superior role of the IAF and Navy:** It is needed to ensure operational readiness and dominant role of air force in high-altitude operations as China doesn't have many forward bases in the region, further harsh climate of Tibetan plateau makes transportation and mobilization of troops very difficult.
- India also need to develop a dominant naval position in the Indian Ocean.
- **Going Beyond traditional means:** Capabilities must be developed in all domains to impose costs beyond the immediate area of conflict through long-range missiles, cyber warfare, space weapons, etc.

2.6 New Great Game in South Pacific

Recently, China and Solomon islands signed the security framework agreement, which would increase China's role in the region and Solomon Island's military and commercial ports, airbases, etc, the deal is just short of having a permanent Chinese base on the island.

This set the emergence of a new Great game i.e big power rivalry between the USA and China. There is a need for India to weigh all the options and keep the best foot forward in this multipolar world.



Why are South Pacific Islands Important?

- It's a strategic location, as they sit between the Pacific Ocean and Australia and New Zealand and also a part of the Indo-Pacific region.
- A sizable amount of shipping lanes pass through these islands. Pacific Island countries have substantial natural resources.
- They are rich in cultural diversity and are rapidly increasing their trade and digital links with global markets.

What are The Issues on These Islands?

- They are the most vulnerable in the world to the effects of climate change and disasters. They are small in size with limited natural resources and narrow-based economies, they are physically detached from major market, small populations spread across many islands, and they are vulnerable to external shocks.

What is the New Great Game in the South Pacific?**China's Expansion of Power in the Region:**

- China is worried about QUAD (India, US, Australia, and Japan) gaining more influence in the region, so it also started to woo these island nations.
- The great power competition in the Pacific, has led to some Pacific Island countries engaging in hedging behaviour.
- China is trying not just to increase its influence in the Pacific, but also to undermine the US and Australian influence.
- China has been engaged in a charm offensive, focussing on the Pacific Island Countries for some time, through sustained political, economic, and other efforts.
- Beijing sees the south pacific as its sphere of influence and is playing the long-term game by substantially increasing its presence in the region like the signing of an MoU (memorandum of understanding) with ten countries.
- Solomon island's decision to cut ties with Taiwan and follow 'one china policy

- **The US Apprehensions and its Countermeasure:**

US President Joe Biden became the first-ever US President to participate in the virtual gathering of the Pacific Island Forum (PIF) leaders.

Announced its intention to reopen its embassy in the Solomon Islands after it was closed in 1993.

US Secretary of State Antony Blinken also visited Pacific Island nations. He became the first US secretary to visit Fiji in 36 years.

White House delegation led by Indo-Pacific Coordinator Kurt Campbell also visited these islands.

Viewpoints of Pacific Island Nations:

- Some countries had raised concerns that it could become the epicenter of a future great power confrontation.
- While others have argued that it's their sovereign right to diversify security partners which are being guided by their national interest by reducing dependence on Australia

What are the Implications for India?

- It can be correlated with the Maldives, where earlier also China has invested in its debt trap policy.
- India needs to provide these small and vulnerable countries with sustainable economic help coupled with providing innovative solutions to climate change as well.
- India needs to step up its game, for example setting up the Forum for India–Pacific Islands Cooperation (FIPIC) and further enhancing cooperation between these island economies, to unlock the underutilized potential.

- India's focus has largely been on the Indian Ocean where it has sought to play a major role and protect its strategic and commercial interests. The FIPIC initiative marks a serious effort to expand India's engagement in the Pacific region.
- Though these countries are relatively small in land area and distant from India, many have large Exclusive Economic Zones (EEZs), and offer promising possibilities for fruitful cooperation.

Way Forward

- With the rising belligerence of China and counterbalancing by the USA, there is the emergence of new competition among superpowers.
- It's a manifestation of challenging times ahead in the South Pacific, India needs to navigate carefully in these troubled waters and churn out its best possible national interest without indulging in great power rivalry.

2.7 Shanghai Cooperation Organization (SCO)

The Union Cabinet was apprised about the Agreement signed among the Shanghai Cooperation Organisation (SCO) member states on cooperation in the field of youth work among the authorized bodies of the member states of SCO.

Following adoption of the agreement on cooperation in youth work by the member states in 2021, the agreement was signed by the Indian Minister of Youth Affairs and Sports.

What are the Key Highlights of the Agreement?

Objective:

- To strengthen mutual trust, friendly relations and cooperation among young people of SCO member States.
- Recognizing the importance of ensuring the development of youth cooperation as an element of deepening friendly relations among the SCO Member States.
- Seeking to further improve the conditions for youth cooperation based on international experience.

Areas of Cooperation:

- Strengthen cooperation in the field of work with youth and public youth organizations (associations) implementing state youth policy,
- Support initiatives aimed at enhancing international youth cooperation,
- Training of professional staff in the sphere of work with youth,

Exchange of scientific, reference and methodological materials, work experience of state bodies, youth public organizations, other organizations and associations involved in the implementation of state youth policy and support of youth initiatives, Carrying out joint research and activities on various youth policy issues and youth cooperation, Exchange of scientific publications, research works on topical issues of

preventing youth involvement in destructive structures, Promote joint economic and humanitarian initiatives aimed at engaging youth in entrepreneurship and innovative projects to increase their employment and well-being, Supporting the activities of the SCO Youth Council.

- The SCO Youth Council was created in 2009 at the initiative of the Youth Organizations of the SCO member states.

What is Shanghai Cooperation Organization (SCO)?

About:

- SCO is a permanent intergovernmental international organization.
- It's a Eurasian political, economic and military organization aiming to maintain peace, security and stability in the region. It was created in 2001.
- The SCO Charter was signed in 2002, and entered into force in 2003.

Genesis:

- Prior to the creation of SCO in 2001, Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan were members of the Shanghai Five.
- Shanghai Five (1996) emerged from a series of border demarcation and demilitarization talks which the four former Soviet republics held with China to ensure stability along the borders.
- Following the accession of Uzbekistan to the organization in 2001, the Shanghai Five was renamed the SCO.
- India and Pakistan became members in 2017.
- On 17th September, 2021, it was announced that Iran would become a full member of the SCO.

Objectives:

- Strengthening mutual trust and neighborliness among the member states.
- Promoting effective cooperation in -politics, trade & economy, research & technology and culture.
- Enhancing ties in education, energy, transport, tourism, environmental protection, etc. Maintain and ensure peace, security and stability in the region.
- Establishment of a democratic, fair and rational new international political & economic order.

Membership:

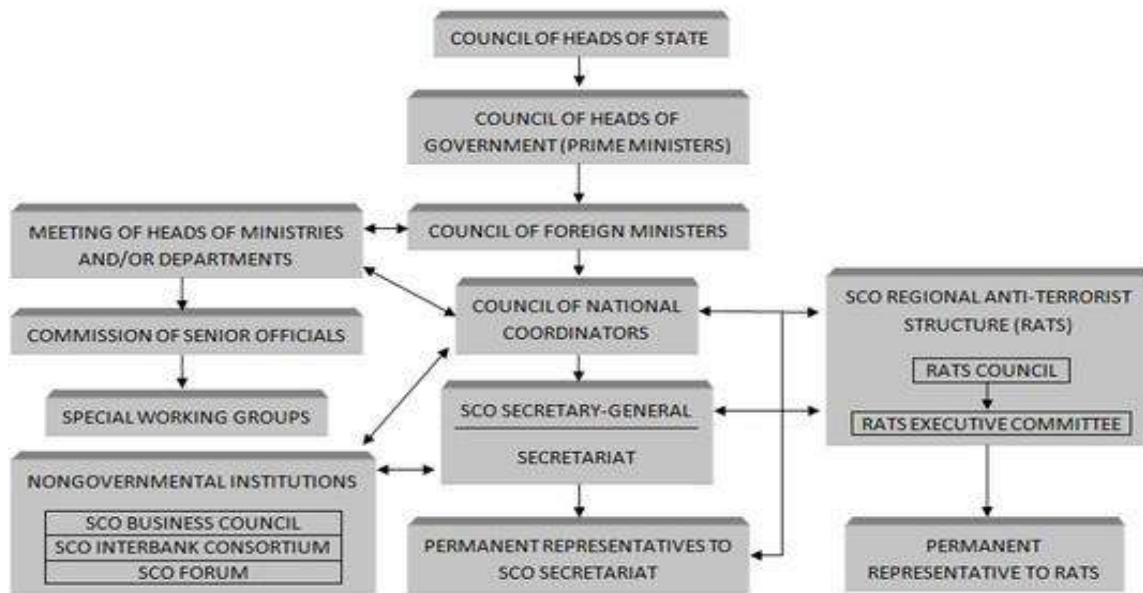
- Kazakhstan, China, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, India, Pakistan and Iran.

Structure:

- Heads of State Council – The supreme SCO body which decides its internal functioning and its interaction with other States & international organisations, and considers international issues.
- Heads of Government Council – Approves the budget, considers and decides upon issues related to economic spheres of interaction within SCO.

- Council of Ministers of Foreign Affairs – Considers issues related to day-to-day activities.
- Regional Anti-Terrorist Structure (RATS) – Established to combat terrorism, separatism and extremism.

THE STRUCTURE OF THE SHANGHAI COOPERATION ORGANISATION



SCO Secretariat Based in Beijing to provide informational, analytical & organizational support.

Official language:

- The official working language of the SCO Secretariat is Russian and Chinese.
- Membership in the AIIB is open to all members of the World Bank or the Asian Development Bank and is divided into regional and non-regional members.
- India is the second-largest shareholder, contributing USD 8.4 billion.
- SCO is a permanent intergovernmental international organisation. It's a Eurasian political, economic and military organisation aiming to maintain peace, security and stability in the region.
- India and Pakistan joined SCO as full member on 9 June 2017.

2.8 India and Russia Relationship

Recently India and Russia celebrated the 75th anniversary of their diplomatic relations. This has come amid Russia-Ukraine war.



What are the Different Aspects of Indo-Russia Relations?

Historical Background:

- The India and Russia ties have been a longstanding relation. Since the signing of the “Declaration on the India-Russia Strategic Partnership” in October 2000, India- Russia ties have acquired a qualitatively new character with enhanced levels of cooperation in almost all areas of the bilateral relationship including political, security, defence, trade and economy, science and technology, and culture.
- During the Cold War, India and the Soviet Union had a strong strategic, military, economic and diplomatic relationship. After the Dissolution of the Soviet Union, Russia inherited its close relationship with India which resulted in both nations sharing a Special Strategic Relation.
- However, the relations have taken a steep downfall over the past few years, especially in the post-Covid scenario. One of the biggest causes for this is Russia’s close relations with China and Pakistan, which have caused many geopolitical issues in the past few years for India.

Political Relations:

- The Annual Summit meeting between the Prime Minister of India and the President of the Russian Federation is the highest institutionalised dialogue mechanism in the strategic partnership between India and Russia.
- Prime Minister Narendra Modi and President Vladimir Putin held their first informal Summit in the city of Sochi in the Russian Federation in 2018.
- In 2019, President Putin signed the Executive Order on awarding PM Narendra Modi Russia’s highest state decoration – The order of St Andrew the Apostle. The order was presented to PM for his distinguished contribution to the development of a privileged strategic partnership between Russia and India and friendly ties between the Russian and Indian peoples
- Two Inter-Governmental Commissions – one on Trade, Economic, Scientific, Technological and Cultural Cooperation (IRIGC-TEC), and another on Military-Technical Cooperation (IRIGC- MTC), meet annually.

Trade Relations:

- The two countries intend to increase bilateral investment to US\$50 billion and bilateral trade to US\$30 billion by 2025.
- Bilateral trade during FY 2020 amounted USD 8.1 billion.
- From 2013 to 2016 there was a major decline in the trade percentage between the two countries. However, it increased from 2017 onwards and a constant increase was noticed in 2018 and 2019 as well.

Defence and Security Relations:

- India-Russia military-technical cooperation has evolved from a buyer-seller framework to one involving joint research, development and production of advanced defence technologies and systems

- Both countries regularly conduct the Tri-Services exercise 'INDRA'. The joint military programmes between India and Russia include:
- BrahMos cruise missile programme 5th generation fighter jet programme Sukhoi Su-30MKI programme Ilyushin/HAL Tactical Transport Aircraft KA-226T twin-engine utility helicopters some frigates

The military hardware purchased/leased by India from Russia includes:

S-400 Triumf

Kamov Ka-226 200 to be made in India under the Make in India initiative T-90S Bhishma

INS Vikramaditya aircraft carrier programme

- Russia also plays a very important role in assisting the Indian Navy with its submarine programmes:
- Indian Navy's first submarine, 'Foxtrot Class' came from Russia India is dependent on Russia for its nuclear submarine programme
- INS Vikramaditya, the sole aircraft carrier operated by India, is also Russian in origin.
- Nine of the fourteen conventional submarines operated by India are Russian.

What are Other Important Areas of Relations between India and Russia?

Nuclear Relations:

- Russia is an important partner for India in the area of peaceful use of nuclear energy. It recognizes India as a country with advanced nuclear technology with an impeccable non- proliferation record.
- Kudankulam Nuclear Power Plant (KKNPP) is being built in India .
- Both India and Russia are implementing Rooppur Nuclear Power Project in Bangladesh

Space Exploration:

- Both sides cooperate in the peaceful uses of outer space, including satellite launches,
- GLONASS navigation system, remote sensing and other societal applications of outer space.
- An MoU ISRO and ROSCOSMOS on Joint Activities in the field of Human Spaceflight Programme was signed during the 19th Bilateral Summit.

Science and Technology:

- The Working Group on Science and Technology functioning under IRIGC-TEC, the Integrated Long-Term Programme (ILTP) and the Basic Science Cooperation Programme are the three main institutional mechanisms for bilateral Science and Technology cooperation, while the Science Academies of the two countries promote inter-academy exchanges.
- A number of new initiatives in this sphere include India-Russia Bridge to Innovation, cooperation in telemedicine, creation of a Traditional Knowledge Digital Library (TKDL), and the Russia India Network (RIN) of universities.

Cultural Relations:

- About 20 Russian Institutions, including leading universities and schools, regularly teach Hindi to about 1500 Russian students
- Apart from Hindi, languages such as Tamil, Marathi, Gujarati, Bengali, Urdu, Sanskrit and Pali are taught in Russian Institutions
- Indian dance, music, yoga and Ayurveda are among few other interests that people of Russia enjoy.

What is the Significance of Russia for India?**Balancing China:**

- The Chinese aggression in the border areas of eastern Ladakh, brought India- China relations to an inflection point, but also demonstrated that Russia can contribute to defusing tensions with China.
- Russia organized a trilateral meeting among the foreign ministers of Russia, India, and China following deadly clashes in the Galwan Valley in the disputed territory of Ladakh.

Emerging New Sectors of Economic Engagement:

- Apart from traditional areas of cooperation such as weapons, hydrocarbons, nuclear energy, and diamonds, new sectors of economic engagement are likely to emerge mining, agro-industrial, and high technology, including robotics, nanotech, and biotech.
- India's footprint in the Russian Far East and in the Arctic is set to expand. Connectivity projects may get a boost too.

Combating Terrorism:

- India and Russia are working to close the gap on Afghanistan and are calling for early finalization of the Comprehensive Convention on International Terrorism. Support At Multilateral Forums: Additionally, Russia supports India's candidacy for permanent membership of a reformed United Nations Security Council and of the Nuclear Suppliers Group.

Russia's Military Exports:

- Russia has been one of the largest arms exporters to India. Even as Russia's share in India's arms imports fell by over 50% in the last five-year period compared to the previous five years (2011–2015).
- In the last 20 years, India imported arms and weapons worth USD 35 billion from Russia, according to the Stockholm International Peace Research Institute which tracks global arms trade.

Way Forward**Russia to Provide Timely Maintenance Support:**

- Timely supply of spares and support to the large inventory of Russian hardware in service with the Indian military has been a major issue from India.

- To address this, Russia has made legislative changes allowing its companies to set up joint ventures in India to address it following an Inter-Governmental Agreement signed in 2019. This agreement needs to be implemented in a time-bound manner.
- Acknowledging importance of each other: Russia will remain a key defense partner for India for decades to come.
- On the other hand, Russia and China are currently in a quasi-alliance setup. Russia repeatedly reiterates that it does not see itself as anybody's junior partner. That's why Russia wants India to act as a balancer.
- Joint Military Production: The two countries have been discussing how they can cooperate in using India as a production base for exporting to third countries Russian-origin equipment and services.

2.9 Organisation of Islamic Cooperation

Recently, the Organisation of Islamic Cooperation (OIC) condemned and denounced the comments on Prophet Muhammad made by two Indians.

- Ministry of External Affairs rejected the OIC comments, adding that the views expressed by the individuals did not reflect the views of the Indian government.
- Earlier, India has lashed out at the OIC for being "communal minded" amid the Karnataka hijab row.

What is the Organisation of Islamic Cooperation?

About:

- The OIC claims to be the "collective voice of the Muslim world".
- It was established at a 1969 summit in Rabat (Morocco) after what it describes as the 'criminal arson' of Al-Aqsa Mosque in Jerusalem.

Members:

- It has 57 member Countries.
- India is not a Member of OIC.

Objectives:

- The OIC endeavours to establish solidarity among member States.
- To support restoration of complete sovereignty and territorial integrity of any member state under occupation.
- To protect, defend and combat defamation of Islam.
- To prevent growing dissension in Muslim societies and work to ensure that member states take a united stand at the U. N. General Assembly, Human Rights Council and other international fora.

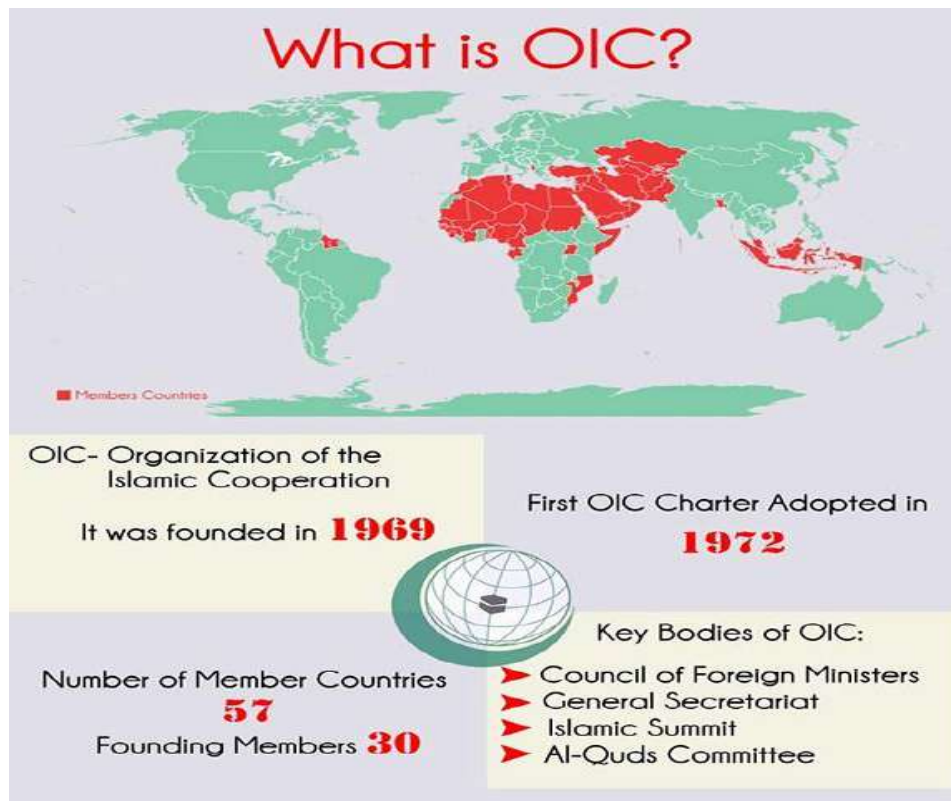
Headquarters: Jeddah, Saudi Arabia.

- The organisation plans to permanently move its headquarters to East Jerusalem once the disputed city is 'liberated'.

- Moreover, it aspires to hold Israel accountable for 'War Crimes' and violations of international law.

OIC charter:

- The organisation adheres to a charter that lays out its objectives, principles and operating mechanism.
- First adopted in 1972, the charter has been revised multiple times in line with emerging conditions in the developing world.
- The present charter was adopted in March 2008 at Dakar in Senegal.
- It enshrines that all members be guided and inspired by the noble Islamic teachings and values alongside committing themselves to the purposes and principles of the U. N. charter.



How does OIC Function?

Membership:

- U. N. members with a Muslim majority can join the organisation.
- The membership is to be ratified with full consensus at the OIC's Council of Foreign Ministers.
- The same provisions apply for acquiring an observer status.

Decision Making:

- All decision-making in the forum requires a quorum defined by the presence of two-thirds of the member states and complete consensus.
- In case a consensus cannot be reached, decisions shall be made by a two-thirds majority of members present and voting.
- The Council of Foreign Ministers is the chief decision-making body and meets annually to decide on how to implement the OIC's general policies.

- They take decisions and resolutions on matters of common interest, review their progress, consider and approve programmes and their budgets, consider specific issues bothering member states and recommend establishing a new organ or committee.

Finance:

- The OIC is financed by the member states proportionate to their national incomes. A member's voting rights are suspended when their arrears equal or exceed the amount of contributions due from them for the preceding two years.
- The member is only allowed to vote if the Council of Foreign Ministers is satisfied that the failure is due to conditions beyond the member's control.

Islamic Summit:

- It is composed of Kings and Heads of State, is the supreme authority of the organisation.
- Convening every three years, it deliberates, takes policy decisions, provides guidance on issues relevant to the organisation and considers issues of concern to the member states.

Council of Foreign Ministers:

- The Council of Foreign Ministers is the chief decision-making body and meets annually to decide on how to implement the OIC's general policies.
- They take decisions and resolutions on matters of common interest, review their progress, consider and approve programmes and their budgets, consider specific issues bothering member states and recommend establishing a new organ or committee.

Standing Committees:

- The OIC also has standing committees for cooperation on information and cultural affairs, economic and commercial matters, scientific and technological initiatives and for Jerusalem.

What are the Criticism of the OIC?**Prioritise Rights of Muslim Minorities:**

- The OIC had become a premise for 'window dressing', more interested in the rights of Muslim minorities in places such as Palestine or Myanmar than the human rights violations of its member states.
- Incompetent at investigating Human Rights Violations:
- The body lacks power and resources to investigate human rights violations or enforce its decisions through signed treaties and declarations.

Centred around Quranic Values:

- The organisation is largely restricted to arbitrating in conflicts where both parties are Muslims.
- This is because the organisation is centred around Quranic values, which, it believes, makes it a qualified arbitrator.

Failed to Establish a Cooperative Venture:

- The OIC has failed to establish a cooperative venture among its members, who were either capital-rich and labour-scarce countries or manpower-rich and capital scarce.
- The organization has not evolved to become a significant player either in international politics or in the area of economic cooperation.

What is the Status of India's relationship with OIC as an Organisation?

- As a country with the world's second largest Muslim community, India had been invited to the founding Conference at Rabat in 1969, but was humiliatingly ejected at Pakistan's behest. India stayed away because of a multiplicity of reasons:
- It did not want to join an organisation founded on religion.
- There was the risk that improving bilateral relations with individual member states would come under pressure in a grouping, especially on issues such as Kashmir.
- At the 45th session of the Foreign Ministers' Summit in 2018, Bangladesh, the host, suggested that India, where more than 10% of the world's Muslims live, should be given Observer status, but Pakistan opposed the proposal.
- After building close ties with powerful members such as UAE and Saudi Arabia, India has been confident of riding over any statement by the grouping.
- India has consistently underlined that J&K is an "integral part of India and is a matter strictly internal to India", and that the OIC has no locus standi on the issue.
- In 2019, India made its maiden appearance at the OIC Foreign Ministers' meeting, as a "guest of honour".
- This first-time invitation was seen as a diplomatic victory for India, especially at a time of heightened tensions with Pakistan following the Pulwama attack.

2.10 Dealing with Indo-Pacific Countries

In recent times there has been a shifting of goal posts by major world powers from other areas of conflict to the Indian and Pacific Ocean. This has largely been due to Chinese belligerence in the South China Sea by hegemonizing its intention over the entire seawater defying the laid down UN conventions and international maritime laws.

The present geo-political situation in the Indo-Pacific is fraught with major irritants destabilising the region. There is a need to establish common standards to form the basis of deeper integration in the future and to ensure equal access to global commons for all the countries as a right under international law.

What are the Recent Geo-Political Developments in the Indo-Pacific Region?

- US' Indo-Pacific Strategy: Recently, the US administration has announced its long-awaited Indo-Pacific strategy which focusses on building collective capacity to deal with challenges in the region.

- These include a focus on challenges from China, advancing the US relationship, a ‘Major Defence Partnership’ with India and supporting its role as a net security provider in the region.
- EU’s Indo-Pacific Strategy: The European Union (EU) has recently come up with an Indo-Pacific strategy that aims to enhance its engagement across a wide spectrum.
- The EU already sees itself and the Indo-Pacific as “natural partner regions”.
- It is a significant player in the Indian Ocean littoral states, the ASEAN area and the Pacific Island states.

AUKUS Grouping:

- In September 2021, the US has announced a new trilateral security partnership for the Indo-Pacific, between Australia, the UK and the US (AUKUS).
- The security grouping AUKUS will focus on advancing strategic interests in the Indo-Pacific region.
- The major highlight of this arrangement is the sharing of US nuclear submarine technology to Australia.

Indo-Pacific Economic Framework:

- Nearly every one of the nations in this part of the world recognises the assertiveness and aggressiveness of China.
- To deal with China, the US at the recently held Quad Summit in Tokyo launched the Indo-Pacific Economic Framework (IPEF) to offer the region better alternatives to fulfil its developmental goals.
- The IPEF will work on fine-tuning four major pillars: standards and rules for digital trade; resilient supply chains; green energy commitments; and fair trade.

Why is the Indo-Pacific Significant?

- The Indo-Pacific region has more than half of the world’s population with 2 billion people living under democratic rule.
- This region generates a third of the world’s economic output, more than any other region of the World.
- Three of the most important allies of the United States namely Japan, South Korea and Australia are located here.
- More than one-third of the foreign trade of the world takes place in this region.
- The world’s largest economies are located in the Indo-Pacific region namely, China, India, Japan, Indonesia, South Korea, Thailand, Australia, Taiwan, Malaysia and Philippines.

What are the Major Challenges in the Indo-Pacific Region?**Aggressive Policies of Certain Countries:**

- The Indo-Pacific region has been under pressure and East Asia, in particular. South Korea and Japan face regular nuclear and missile threats from North Korea.
- China, too, not only challenges international maritime laws in the South China Sea, but also confronts Japan over the Senkaku Islands dispute.

- Six nations, including China and Taiwan, are involved in the dispute over the Spratly Islands, which are supposedly sitting on vast reserves of oil and natural gas.
- China has vigorously militarised some portions of the disputed isles, islets and coral reefs; and countries like Vietnam and the Philippines are anxious not to be left behind.

Unwillingness to Act Against China:

- There is a limit to which countries in the region will want to get on the anti-China bandwagon, economic or strategic.
- Whether it is in East, Southeast or South Asia, every country has its own unique relationship with China.
- Though South Korea and Japan are part of a strong American security/strategic partnership, they will be keen on maintaining their economic status with China.
- This is also true for the ASEAN Nations.
- India may be a part of the Quad, but is quite mindful that it is the only country in the group that shares a land border with China which is laced with disputes.

Issues with IPEF:

- The first indications are that while the IPEF may be a good idea, there is discontent that the framework does not address issues of trade and tariffs.
- Also considering that the U.S.'s previous initiatives (the Blue Dot Network and the Build Back Better World (B3W) Initiative) have made little headway in changing the region's infrastructural needs, the IPEF faces a credibility challenge.

What needs to be Pacify the Indo-Pacific?

- **Pondering Over Strong Actions:** In response to geopolitical tensions, countries have increasingly emphasised resilience and national security considerations over the economic gains from free trade and investment flows but they should be very careful about taking extreme measures, preemptively before conflicts arise.
- Whether to disconnect themselves from global supply chains and strive for reshoring or to go for "friend-shoring" and to cut off countries that are not allies or friends.
- Such actions shut off avenues for regional growth and cooperation, deepen divisions between countries, and may precipitate the very conflicts that should be avoided.
- Over the next decade, a range of major events could occur that would have a significant impact in this region such as large-scale interstate conflicts over disputed territories.
- Appropriate policies and actions need to be taken by India to promote and defend its own interests in the Indian Ocean.

Establishing Common Standards:

- The immediate focus for the stakeholders should be on establishing the common standards, which could form the basis of deeper integration in the future.
- Such standards will cover labour rights, environmental standards, protection of intellectual property rights and rules covering the digital economy.

Initiatives for Peace Mongering:

- The countries in the region should have equal access as a right under international law to the use of common spaces on sea and in the air that would require freedom of navigation, unimpeded commerce and peaceful settlement of disputes in accordance with international law.
- It is important to establish connectivity in the region based on respect for sovereignty and territorial integrity, consultation, good governance, transparency, viability and sustainability.

A Combined Indo-Pacific Strategy:

- The Indo-Pacific strategies of the countries have to devolve themselves on strengthening relations with all the stakeholder countries.
- The areas which need addressal are improvement in defence cooperation so as to strengthen each other's military capabilities, reduce external military threat, promote economic assistance and look at threatening environmental issues such as ozone depletion and greenhouse emissions.
- Seven key players identified which would need to get together to enhance cooperation and counter the Chinese challenge would be the US, India, Japan, Australia, South Korea, Indonesia and Taiwan.

3. ECONOMY

3.1 India's Pharma exports grow by 103% since 2013-14

- Pharma exports in 2021-22 sustain a positive growth despite global trade disruptions
- Pharma trade balance continues to be in India's favour
- Around 55 % of Indian pharma exports cater to highly regulated markets
- Indian pharma exports witnessed a growth of 103% since 2013-14, from Rs. 90, 415 Crores in 2013-14 to Rs. 1,83,422 Crores in 2021-22. The exports achieved in 2021-22 is the Pharma Sector's best export performance ever. It is a remarkable growth with exports growing by almost USD 10 billion in 8 years.
- Building on the outstanding performance in the previous FY 2020-21, Indian pharma exports once again registered a healthy performance in 2021-22. The pharma exports in 2021-22 sustained a positive growth despite the global trade disruptions and drop in demand for COVID related medicines. The trade balance continues to be in India's favour, with a surplus of USD 15175.81 Million.
- Indian pharma companies enabled by their price competitiveness and good quality, have made global mark, with 60 per cent of the world's vaccines and 20% of generic medicines coming from India.
- India ranks 3rd worldwide for production by volume and 14th by value. Behind India's pharma success story is our world class manufacturing excellence, robust infrastructure, cost-competitiveness, trained human capital and innovation. The current market size of the Indian pharmaceutical industry is around USD 50 billion.
- The share of pharmaceutical and drugs in our global exports is 5.92%. Formulations and biologicals continue to account for a major share of 73.31% in our total exports, followed by Bulk drugs and drug intermediates with exports of USD 4437.64 million. India's top 5 pharma export destinations are USA, UK, South Africa, Russia and Nigeria.
- It is also noteworthy that around 55 % of our pharma exports cater to highly regulated markets. Indian pharma companies have a substantial share in the prescription market in the US and EU. The largest number of FDA approved plants outside the US is in India.
- Even in the year, 2020-21, Indian drugs and pharmaceuticals had registered a sharp growth amid the COVID despair, achieving an export of USD 24.4 Bn with a YoY growth of 18%.
- The extraordinary exports growth in 2020-21 was achieved braving the frequent lock downs, global supply chain disruptions and the depressed manufacturing sector. Indian pharma industry played a pivotal role in fighting against the COVID pandemic and demonstrating to the world that we continue to be a reliable and dependent partner when it comes to dealing with a global health crisis.
- Indian vaccine industry developed Covid vaccine with indigenous technology in collaboration with India's research institution like ICMR and NIV with in shortest time on par with highly developed countries like America and EU. India provided 115million doses of vaccines to more than 97 countries.

- As part of the trade agreements, India also signed cooperation agreement with UAE and Australia which will give enhanced access to Indian pharma products to these markets.

3.2 India's Edible Oil Position is Comfortable despite Ban by Indonesia

- Soyabean production for the year 2021-22 at 126.10 LMT, higher than last year's production of 112 LMT
- Higher sowing of Mustard seeds by 37% in all major producing States
- Centre keeping close watch on prices of Edible oils so that appropriate measures can be taken to keep a check on the prices
- India has optimum stock of all Edible Oils. As per the industry sources, the present stock of all edible oils in the country is 21 LMT approx. and 12 LMT approx. is in transit arriving in May, 2022. Therefore, the country has sufficient to cover the lean period due to ban on export by Indonesia.
- On the oilseeds front, DA&FW's second advance estimate released in February, 2022 shows a very positive picture of Soyabean production for the year 2021-22 at 126.10 LMT which is higher than last year's production of 112 LMT. As a result of higher sowing of Mustard seeds by 37% in all major producing States including Rajasthan in comparison with last year, the production may rise to 114 LMT in 2021-22 season.
- The Department of Food and Public Distribution is monitoring the price and availability situation and meetings are held regularly with major Edible Oil processing Associations to discuss further reduction in the domestic edible oil prices and MRP to give relief to consumers.
- Palm oil (Crude + Refined) constitutes roughly around 62% of the total edible oils imported and are imported mainly from Indonesia and Malaysia, while Soyabean oil (22%) is imported from Argentina and Brazil and Sunflower oil (15%) is imported mainly from Ukraine and Russia.
- International prices of Edible Oils are under pressure due to shortfall in global production and increase in export tax/levies by the exporting countries. India is one of the largest producers of oilseeds in the world and this sector occupies an important position in the agricultural economy, accounting for the estimated production of 37.14 million tons of nine cultivated oilseeds during the year 2021-22 as per the 2nd Advance Estimates released by the Department of Agriculture and Farmers Welfare.
- A close watch is being kept on day to day basis on prices of Edible oils so that appropriate measures can be taken to keep a check on the prices of edible oil for ensuring that the prices remain stable and interest of consumers are protected. The Inter-Ministerial Committee held weekly on Agri-Commodities chaired by Secretary (Food) closely monitors the prices and availability of agricultural commodities including edible oil keeping in view the interest of the farmers, industry and consumers. The committee reviews price situation on weekly basis, consider relevant measures in relation to edible oils and other food items depending on the domestic production, demand, domestic and international prices and international trade volumes. Special teams have also been constituted by both Central & State Governments to

prevent hoarding and profiteering under the Essential Commodities Act. These surprise checks shall continue to check unscrupulous elements.

3.3 India's Services exports set a new record of USD 254.4 Billion in FY 2021-2022, beats previous high of USD 213.2 Billion in 2019-20

- Services exports hit an all-time monthly high of USD 26.9 Billion in March 2022
- Telecommunications, computer, and information services, other business services and Transport top contributors in Services exports
- India's overall exports (i.e. Services and Merchandise) touched USD 676.2 Billion in FY 2021-2022 as both Services and Merchandise hit record high exports
- India's Services exports set a new record of USD 254.4 Billion in the financial year 2021-2022. The new record achieved in 2021-22 beats the previous high of USD 213.2 Billion in 2019-20. Also, Services exports hit an all-time monthly high of USD 26.9 Billion in March 2022.
- Telecommunications, computer, and information services, other business services and Transport are the top contributors in Services exports during April-December 2021 (latest available). Component-wise Services trade is given in table below.
- India's overall exports (i.e. Services and Merchandise) touched USD 676.2 Billion in financial year 2021-2022 as both Services and Merchandise hit record high exports in financial year 2021-2022. India's overall exports were USD 526.6 Billion and USD 497.9 Billion in 2019-20 and 2020-21 respectively.
- India's Merchandise exports had crossed USD 400 Billion milestone in Financial Year 2021-2022 and stood at USD 421.8 Billion which is a phenomenal increase of 44.6 percent and 34.6 percent over 2020-21 and 2019-20 respectively.

3.4 India sees the emergence of the 100th unicorn

- The 100 unicorns of India valued at USD 332.7 billion.
- In the first four months of 2022, India sees the rise of 14 unicorns
- The wave of Unicorns in India has soared to new heights as the country witnessed the birth of its 100th Unicorn on 2nd May 2022. Today, 1 out of every 10 unicorns globally have been born in India.
- The term 'Unicorn' refers to the rarest of the rare startups who become Unicorns attaining a valuation of more than USD 1 billion. The Indian Startup Ecosystem, the third-largest in the world in number of Unicorns, as of 5th May 2022, is home to 100 unicorns with a total valuation of USD 332.7 billion.
- 2021 experienced a huge surge in the number of unicorns, registering a total of 44 startups entering the Unicorn club through the year with a total valuation of USD 93 billion.
- In the first four months of 2022, India has given birth to 14 unicorns with a total valuation of USD 18.9 billion.

- The entrepreneurial spirit exists throughout the length and breadth of the country and is evident by the spread of the Department for Promotion of Industry and Internal Trade (DPIIT) recognized startups across 647 Indian districts encompassing all 36 States and Union Territories.
- Since the launch of the Startup India initiative on 16th January 2016, more than 69,000 startups have been recognized in the country till 2nd May 2022. Innovation in India is not just limited to certain sectors; we have recognized startups solving problems in 56 diverse sectors with 13% from IT services, 9% healthcare and life sciences, 7% education, 5% professional and commercial services, 5% agriculture, and 5% food & beverages.
- While every startup has its unique journey to becoming a unicorn, the minimum and maximum time taken by a startup to become a unicorn in India are 6 months and 26 years, respectively. Till FY 2016-17, approximately one unicorn was being added every year. Over the past four years (since FY 2017-18), this number has been increasing exponentially, with a whopping 66% Year-on-Year growth in the number of additional unicorns being added every year.
- As we hit the milestone of a century in Indian unicorns, the homegrown startup ecosystem continues to work effectively towards the mission of self-reliance and self-sustainability as they have been in the past. The vision of Atmanirbhar Bharat is rooted deeply in the Startup Ecosystem and shall continue to prevail in the coming years.

3.5 Pradhan Mantri Suraksha Bima Yojana (PMJJBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMSBY) and Atal Pension Yojana (APY) complete 7 years of providing social security net

- Union Finance Minister Smt. Nirmala Sitharaman said low-cost insurance schemes and the guaranteed pension scheme are ensuring that Jan Suraksha now covers the last person of the society
- **PMJJBY: More than 12.76 crore Cumulative Enrolments**
- **PMSBY: More than 28.37 crore Cumulative Enrolments**
- **APY: Over 4 Crore subscribers**

1. Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)

Scheme:

- PMJJBY is a one-year life insurance scheme renewable from year to year offering coverage for death due to any reason.

Eligibility:

- Individuals in the age group of 18-50 years having a savings bank or a post office account are entitled to enroll under the scheme. People who join the scheme before completing 50 years of age can continue to have the risk of life covered up to age of 55 years upon payment of premium.

Benefits:

- Life cover of Rs. 2 Lakh in case of death due to any reason against a premium of Rs. 330/- per annum.

Enrolment:

- Enrolments under the scheme can be done by visiting the branch/ BC point or website of the bank of the account holder or at the post office in case of post office savings bank account. The premium under the scheme is auto debited every year from the subscriber's bank account based on a one-time mandate from the account holder. Detailed information about the scheme and the forms (in Hindi, English and Regional languages) are available on <https://jansuraksha.gov.in>.

Achievements:

- As on 27.04.2022, the cumulative enrolments under the scheme have been more than 12.76 crore and an amount of Rs. 11,522 crore has been paid for 5,76,121 claims.

2. Pradhan Mantri Suraksha Bima Yojana (PMSBY)**Scheme:**

- PMSBY is a one-year accidental insurance scheme renewable from year to year offering coverage for death or disability due to accident.

Eligibility:

- Individuals in the age group of 18-70 years having a savings bank or a post office account are entitled to enroll under the scheme.

Benefits:

- Accidental death cum disability cover of Rs.2 lakh (Rs.1 lakh in case of partial disability) for death or disability due to an accident.

Enrolment:

- Enrolment under the scheme can be done by visiting the branch/ BC point or website of the bank of the account holder or at the post office in case of post office savings bank account. The premium under the scheme is auto debited every year from the subscriber's bank account based on a one-time mandate from the account holder. Detailed information about the scheme and the forms (in Hindi, English and Regional languages) are available on <https://jansuraksha.gov.in>.

Achievements:

- As on 27.04.2022, the cumulative enrolments under the scheme have been more than 28.37 crore and an amount of Rs. 1,930 crore has been paid for 97,227 claims.

3. Atal Pension Yojana (APY)**Background:**

- The Atal Pension Yojana (APY) was launched to create a universal social security system for all Indians, especially the poor, the under-privileged and the workers in the unorganised sector. It is an

initiative of the Government to provide financial security and cover future exigencies for the people in the unorganized sector. APY is administered by Pension Fund Regulatory and Development Authority (PFRDA) under the overall administrative and institutional architecture of the National Pension System (NPS).

Eligibility:

- APY is open to all bank account holders in the age group of 18 to 40 years and the contributions differ, based on pension amount chosen.

Benefits:

- Subscribers would receive the guaranteed minimum monthly pension of Rs. 1000 or Rs. 2000 or Rs. 3000 or Rs. 4000 or Rs. 5000 at the age of 60 years, based on the contributions made by the subscriber after joining the scheme.

Disbursement of the Scheme Benefits:

- The monthly pension is available to the subscriber, and after him to his spouse and after their death, the pension corpus, as accumulated at age 60 of the subscriber, would be returned to the nominee of the subscriber.
- In case of premature death of subscriber (death before 60 years of age), spouse of the subscriber can continue contribution to APY account of the subscriber, for the remaining vesting period, till the original subscriber would have attained the age of 60 years.

Contribution by Central Government:

- The minimum pension would be guaranteed by the Government, i.e., if the accumulated corpus based on contributions earns a lower than estimated return on investment and is inadequate to provide the minimum guaranteed pension, the Central Government would fund such inadequacy. Alternatively, if the returns on investment are higher, the subscribers would get enhanced pensionary benefits.

3.6 Ministry of Agriculture and Farmers Welfare signs MoU with UNDP for strategic partnership on Agriculture, Crop Insurance and Credit

- The Ministry of Agriculture & Farmers Welfare (MoA&FW), Government of India and the United Nations Development Programme (UNDP) have signed a Memorandum of Understanding (MoU) wherein UNDP will provide technical support towards Centre's aspirational Pradhan Mantri Fasal Bima Yojana (PMFBY) scheme & Kisan Credit Card – Modified Interest Subvention Scheme (MISS).
- KCC-MISS and PMFBY were launched with the aim to tackle the problematic areas of previous Schemes and to map out a structure that affords better implementation options for all stakeholders while achieving the desired results. To that effect, several new provisions have been incorporated in the Schemes. One of the biggest features of the current schemes is that they apply uniformly across the entire country and have a provision to cover all crops.

- As per the MoU, UNDP will provide responsive, demand-driven technical assistance for effective implementation of agriculture credit and crop insurance, as well as providing capacity development and Information, Education & Communication (IEC) support to existing national and state institutions, keeping in mind the interest of small and marginal farmers, women farmers, sharecroppers, tenant and non-loanee farmers.

3.7 NITI Aayog Launches the National Data & Analytics Platform

- NITI Aayog launched the National Data & Analytics Platform (NDAP) for open public use today. The platform aims to democratize access to public government data by making data accessible, interoperable, interactive, and available on a user-friendly platform. It hosts foundational datasets from various government agencies, presents them coherently, and provides tools for analytics and visualization. This public launch follows a beta release of the platform in August 2021 that had provided access to a limited number of users for testing and feedback.
- NDAP follows a use-case based approach to ensure that the datasets hosted on the platform are tailored to the needs of data users from government, academia, journalism, civil society, and the private sector. All datasets are standardized to a common schema, which makes it easy to merge datasets and do cross-sectoral analysis.

3.8 India focused on food security and ensuring affordable foodgrains

- India is a reliable supplier, will fulfil all commitments including needs of neighbours and vulnerable countries
- Wheat stocks are comfortable, export curbs will combat market speculation
- The government has said that the decision to restrict wheat exports will control food prices, strengthen the food security of India and countries facing a deficit, and that India remains a reliable supplier as it is honouring all contracts.
- Shri Sudhanshu Pandey, Secretary Department of Food and Consumer Affairs, and Shri Manoj Ahuja, Secretary Agriculture, the Commerce Secretary said that all exports orders where the letter of credit has been issued would be fulfilled. He added that directing the wheat exports through government channels would not only ensure fulfilling the genuine needs of our neighbours and food-deficit countries but also control inflationary expectations.
- Talking about the availability of wheat, Shri Subrahmanyam said, “Apart from the food security of India, the Government is committed to ensuring food security of neighbours and vulnerable countries,” he said.
- He said that the control order serves three main purposes: “It maintains the food security for the country, it helps others who are in distress, and maintains India’s reliability as a supplier,” he said.
- He said that in the government’s order on exports was giving a clear direction to the wheat market. “We do not want wheat to go in an unregulated manner in places where it might just get either hoarded or it

may not serve the purpose of serving the food requirements of vulnerable nations. That's why government to government window has been kept opened," he said.

- Shri Sudhanshu Pandey, Secretary Department of Food and Public Distribution said that the country has adequate food stocks.
- He added that after consulting with the states, the Centre has reallocated some quantities by changing ratios of wheat and rice. For example, states getting wheat and rice in the ratio of 60:40 will get it in the ratio of 40:60. Similarly, the ratio of 75:25 is made 60:40. Where rice allocation was zero, they will continue to get wheat. For all small states-NE states and special category states, allocation has not been changed.
- As a result of the reallocation, "With this, we have boosted the availability of wheat to about 110-111 LMT more. Adding it to 185 LMT, it become 296 LMT which is almost as last year's," he added.
- Shri Manoj Ahuja, Agriculture Secretary said heat waves had affected wheat crops especially in North-Western India this year, but the difference in availability compared to last year is marginal.
- "Last year the production figures of wheat were 109 LMT for the country. This year in February, we have come out with advanced estimates for this year's production and we have estimated 111 LMT. Our estimates shows 105-106 LMT of wheat availability this year and we are quite same in terms of quantity and availability as last year," he added.

3.9 Ministry of Skill Development and Entrepreneurship (MSDE) partners with Indian School of Business (ISB) to further built capacity of officers from its ecosystem

- In line with the Prime Minister Shri Narendra Modi's ambitious programme 'Mission Karmayogi,' which is a first-of-its-kind experiment in the direction of capacity building and modernising the mindset, methodology, and skill set of government employees, the Ministry of Skill Development and Entrepreneurship (MSDE) recently partnered with the Indian School of Business (ISB) to conduct capacity-building programmes for MSDE officials.
- A total of 120 Officers (30 per batch) across divisions under MSDE would be undergoing a comprehensive five day long residential training across ISB Hyderabad and Mohali campuses. The first batch of 30 Officers have completed their training from ISB Mohali campus with a convocation ceremony held for the Officers.
- The MSDE Management Development Programme is aimed at upskilling the MSDE officers facilitating capacity building training of a mixed batch of officials including officers from MSDE, Industrial Training Institutes (ITI) Principals, Sector Skill Councils, CEOs, State Skill Mission Directors, and Jan Sikshan Sansthan (JSS) & National Skill Development Corporation (NSDC). The MoU between MSDE and ISB was signed in the presence of Shri. Rajesh Aggarwal, Secretary, Ministry of Skill Development and Entrepreneurship.

- The primary goal of the programme is to strengthen leadership skills while developing a strategic mindset that will aid in gaining insights into data analytics and digital transformation. Through strategic leadership and management development programmes, the MSDE and ISB are encouraging officials to instill a culture of innovation within their respective organisations. The batches are strategically designed to encourage cross-learning while embracing new challenges and comprehending complexities to ensure sustained success.
- The training at ISB was also graced by Sh. Parveen Pardesi, Member Admin, CBC who delivered a holistic lecture on the Role of Governance in building a Skill Ecosystem.
- Expressing his view on the development programme, Shri Rajesh Aggarwal, Secretary, Ministry of Skill Development and Entrepreneurship said that with India sprinting towards becoming a superpower, it is essential for government employees to upskill themselves to become productive contributors to the economic growth of India. We intend to promote cross-learning through these development programs, which will eventually lead to a practical understanding of the core components of business strategy and we look forward to creating a new generation of upskilled workforce that drives the innovative future of India, he added.
- As per the advisory issued by Capacity Building Commission under *Department of Personnel and Training* (DOPT), a standing Capacity Building Unit for MSDE was created via office memorandum dated 17 January 2022, which shall be responsible for coordination with Capacity Building Commission and implementation of various capacity building interventions for all employees under MSDE on a continuing based approach upon Training Need Analysis (TNA).
- Key initiatives undertaken by Capacity Building exercise at MSDE, induction programs for India Skill Development Service (ISDS) officers; self- defense training of all the MSDE women employees; 5 days Art of Living training program in stress management for 765 officials MSDE officials; and capacity building in management and leadership of 120 officials including officers from MSDE ecosystem.

3.10 eM and SEWA ink MoU to enable engagement of last-mile women-led enterprises as sellers and service providers on GeM

- GeM to train SEWA members to assist and enable women-led micro and small enterprises, women entrepreneurs, SHGs etc. with GeM processes
- Government eMarketplace [GeM] and Self Employed Women's Association [SEWA] inked a Memorandum of Understanding [MoU] for the advocacy, outreach, mobilization and capacity-building of last-mile women-led micro and small enterprises, women entrepreneurs, SHGs, Associations, Cooperatives, Collectives, Not-for-Profit Section 8 Companies, and various Voluntary Organizations [VO] as sellers and service providers in public procurement. The MoU was signed by Shri PK Singh, CEO, GeM, and Ms. Rehana Riyawala, Vice-President, SEWA in New Delhi on 19th May 2022.

- GeM will train SEWA members to assist and enable women-led micro and small enterprises, women entrepreneurs, SHGs among others, with GeM processes related to seller registration and on-boarding on the platform, upload/ update of product/ service catalogues, acceptance of orders, participation in bids floated by Govt buyers, fulfilment of orders and invoice generation to receive payments directly into their bank accounts through the unified online national public procurement platform.
- Vernacular language-based training curriculum in print and digital media for women entrepreneurs and SHGs based on the requirement of the participants will be developed by GeM in consultation with SEWA. Training sessions will be conducted through in-person and virtual training modes for SEWA members in district and block-level, who in turn will train last-mile women entrepreneurs and SHGs with various buyer and seller functionalities on the GeM portal.
- GeM has sought to address the twin challenges of “access to markets” through GeM Outlet Stores and “access to finance” through GeM Sahay application for such under-served seller groups. Marketplace filters and icons on product display page for Women MSE entrepreneurs have been enabled on the portal to help government buyers meet the 3 percent [%] procurement target set aside for women-led MSEs in accordance with the Public Procurement Policy for MSEs [PPP-MSE] for promotion of women-led micro, small enterprises. Further, GeM has created 200+ handicraft, handloom and office accessories product categories, along with 8 dedicated outlet stores to showcase and promote products made by women entrepreneurs from the informal sector. Creation of “Stitching and tailoring”, “canteen and catering”, “housekeeping” service categories tailored to generate employment and business opportunities for women in urban and rural areas are also available on the portal.
- Social inclusion being one of its core values, Government e Marketplace [GeM] is focused on increasing participation from last-mile women-led micro and small enterprises, women entrepreneurs, and SHGs who face challenges in accessing government markets. Last-mile under-served seller groups in rural areas, namely; women-led micro and small enterprises, women entrepreneurs, SHGs and others such as khadi and tribal entrepreneurs, farmer producer organizations [FPO], Startups, artisans and weavers, divyangjan and Hunar-Haat craftsmen, bamboo producers, and allied stakeholders’ such as Corporates, Private Companies Colleges, Scientific and Technical Research Institutions, and Universities, among others in public procurement will benefit from this MoU.
- Speaking at the ceremony, Shri PK Singh, CEO, GeM mentioned that “inclusion is a core value at GeM, and this partnership will leverage the wide network of women entrepreneurs through SEWA to ensure the inclusion and participation of last-mile women entrepreneurs and women SHGs on GeM”. Presently, 1.31 lakh+ women MSE entrepreneurs are registered on the GeM portal and they have fulfilled approx. 5.7 lakh+ orders worth INR 10,752 Crore in gross merchandise value.
- Smt. Rehana Riyawala, Vice-President, SEWA said that “the signing of MoU with GeM will usher access to an untapped market in public procurement for millions of women entrepreneurs from the informal sector”. Engagement of last-mile women-led micro and small enterprises, SHGs among others

with Local Bodies, Panchayati Raj institutions located in block and district-level will spur hyper-local procurement of goods and services leading to employment- generation and wealth-creation in rural India.

- The MoU will align the untapped entrepreneurial energy of last-mile producers and service-providers in rural India with local government buyers. Social and economic inclusion of last-mile women-led micro and small enterprises, women entrepreneurs, and SHGs from the informal sector in public procurement will lead to integration of local value-chains through “Vocal for Local” and “Make in India” initiatives of the Government, thereby furthering the aim of ensuring a self-reliant “Atmanirbhar Bharat”.

Government e Marketplace [GeM]

- GeM is a Section 8 company setup under the administrative control of the Department of Commerce, Ministry of Commerce and Industry, for procurement of goods and services by Central Ministries, State Departments, PSEs and Autonomous Bodies.

Self-Employed Women’s Association [SEWA]

- SEWA is the premier Women’s organization in India that aligns women organizations with Government programs, facilitating market linkages for informal women workers to develop their livelihoods and strengthening collective bargaining power of women workers by offering them new livelihood opportunities, amongst various other objectives.

3.11 India gets the highest annual FDI inflow of USD 83.57 billion in FY21-22

- India rapidly emerges as a preferred investment destination; FDI inflows have increased 20-fold in last 20 years.
- FDI equity inflows in Manufacturing rise by 76% in FY 2021-22
- FDI inflows rise by 23% post-Covid
- Karnataka emerges as the top FDI equity inflow recipient state in India
- Top FDI equity inflows from Singapore (27%) followed by U.S.A (18%)
- Computer Software and Hardware becomes the top recipient sector of FDI Equity inflow with a share of around 25%
- India has recorded highest ever annual FDI inflow of USD 83.57 billion in the Financial Year 2021-22. In 2014-2015, FDI inflow in India stood at mere 45.15 USD billion as compared to the highest ever annual FDI inflow of USD 83.57 billion reported during the financial year 2021-22 overtaking last year’s FDI by USD 1.60 billion despite military operation in Ukraine and COVID-19 pandemic. India’s FDI inflows have increased 20-fold since FY03-04, when the inflows were USD 4.3 billion only.
- India is rapidly emerging as a preferred country for foreign investments in the manufacturing sector. FDI Equity inflow in Manufacturing Sectors have increased by 76% in FY 2021-22 (USD 21.34 billion) compared to previous FY 2020-21 (USD 12.09 billion).

- The following trends in India's Foreign Direct Investment inflow are an endorsement of its status as a preferred investment destination amongst global investors.
- It may be noted that FDI inflow has increased by 23% post-Covid (March, 2020 to March 2022: USD 171.84 billion) in comparison to FDI inflow reported pre-Covid (February, 2018 to February, 2020: USD 141.10 billion) in India.
- In terms of top investor countries of FDI Equity inflow, 'Singapore' is at the apex with 27%, followed by U.S.A (18%) and Mauritius (16%) for the FY 2021-22. 'Computer Software & Hardware' has emerged as the top recipient sector of FDI Equity inflow during FY 2021-22 with around 25% share followed by Services Sector (12%) and Automobile Industry (12%) respectively.
- Under the sector 'Computer Software & Hardware', the major recipient states of FDI Equity inflow are Karnataka (53%), Delhi (17%) and Maharashtra (17%) during FY 2021-22. Karnataka is the top recipient state with 38% share of the total FDI Equity inflow reported during the FY 2021-22 followed by Maharashtra (26%) and Delhi (14%). Majority of the equity inflow of Karnataka has been reported in the sectors 'Computer Software & Hardware' (35%), Automobile Industry (20%) and 'Education' (12%) during the FY 2021-22.
- The steps taken by the Government during the last eight years have borne fruit as is evident from the ever-increasing volumes of FDI inflow being received into the country, setting new records. The Government reviews the FDI policy on an ongoing basis and makes significant changes from time to time, to ensure that India remains attractive and investor friendly destination. Government has put in place a liberal and transparent policy for FDI, wherein most of the sectors are open to FDI under the automatic route. To further liberalise and simplify FDI policy for providing Ease of doing business and attract investments, reforms have been undertaken recently across sectors such as Coal Mining, Contract Manufacturing, Digital Media, Single Brand Retail Trading, Civil Aviation, Defence, Insurance and Telecom.

4. ENVIRONMENT

4.1 World Environment Day

- On the Occasion of World Environment Day, Prime Minister Shri Narendra Modi launched a global initiative 'Lifestyle for the Environment LiFE Movement'.
- World Environment Day is celebrated on 5th June every year to encourage awareness and environmental protection.
- The launch will initiate 'LiFE Global Call for Papers' inviting ideas and suggestions from academics, universities & research institutions etc. to influence and persuade individuals, communities and organisations across the world to adopt an environment-conscious lifestyle.
- This is the need of the hour to solve the challenge faced by the planet using human-centric, collective efforts and robust action that further sustainable development.

What is LiFE?

- The global initiative was proposed at COP26, 2021.
- The idea promotes an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption'.
- The LiFE Movement aims to utilise the power of collective action and nudge individuals across the world to undertake simple climate-friendly actions in their daily lives. The LiFE movement, additionally, also seeks to leverage the strength of social networks to influence social norms surrounding climate.
- The Mission plans to create and nurture a global network of individuals, namely 'Pro-Planet People' (P3), who will have a shared commitment to adopt and promote environmentally friendly lifestyles. Through the P3 community, the Mission seeks to create an ecosystem that will reinforce and enable environmentally friendly behaviours to be self-sustainable.
- The Mission envisions replacing the prevalent 'use-and-dispose' economy governed by mindless and destructive consumption with a circular economy, which would be defined by mindful and deliberate utilization
- Mission LiFE borrows from the past, operates in the present and focuses on the future. Reduce, Reuse and Recycle are the concepts woven into our life.

Conservation of Environment in India

- India's forest cover is increasing and so is the population of lions, tigers, leopards, elephants and rhinos.
- India's commitment to reach 40% of installed electric capacity from non-fossil fuel-based sources has been achieved, 9 years ahead of schedule.
- The target of 10% ethanol blending in petrol has been achieved 5 months ahead of the November 2022 target. This is a major accomplishment given that blending was hardly 1.5% in 2013-14 and 5% in 2019-20.

- The Prime Minister recalled that Mahatma Gandhi talked about a zero-carbon lifestyle.

World Environment Day

- World Environment Day (WED) is celebrated annually on 5 June.
- It was first held in 1973.
- It has been a platform for raising awareness on environmental issues such as
 - Marine pollution,
 - Alien overpopulation(invasive alien species),
 - Global warming,
 - Sustainable consumption and Wildlife crime.
- It is a global platform for public outreach, with participation from over 143 countries annually.
- Each year, the program has provided a theme and forum for businesses, non government organizations, communities, governments and celebrities to advocate environmental causes.
- The theme of World Environment Day 2022 is Only One Earth, focusing on "Living Sustainably in Harmony with Nature".

4.2 50 years since Stockholm conference

- The 50th anniversary of the Stockholm conference is being observed.
- Stockholm+50 is being held in Stockholm, Sweden. It commemorates the 50 years since the United Nations (UN) Conference on the Human Environment (also known as the Stockholm Conference) was held in 1972.

Stockholm conference:

- The United Nations Conference on the Human Environment was held in Stockholm between June 5 to June 16, 1972.
- It was the first such worldwide convergence on planetary environment, with the theme 'Only One Earth'.
- It resulted in the Stockholm Declaration which contained principles and an Action Plan containing recommendations for environmental policy.
- The three dimensions of this conference were:
 - Countries agreeing not to "harm each other's environment or the areas beyond national jurisdiction".
 - An action plan to study the threat to Earth's environment.
 - Establishment of an international body called the UN Environment programme (UNEP) to bring in cooperation among countries.

Importance of Stockholm, 1972:

- It is the first global conference on the environment happened when the environment was not a global concern or a subject of importance for any nation.
- Previously, the UN charter never contained the domain of environment to deal with.
- No country had an environment ministry until 1972.
- Afterwards, countries like Norway and Sweden set up their ministries for the environment.
- In 1985, India set up its ministry of environment and forest.
- After 1972, environmental issues like species extinction and mercury poisoning started making headlines and public consciousness increased.
- The Stockholm conference started the contemporary “environmental era”.

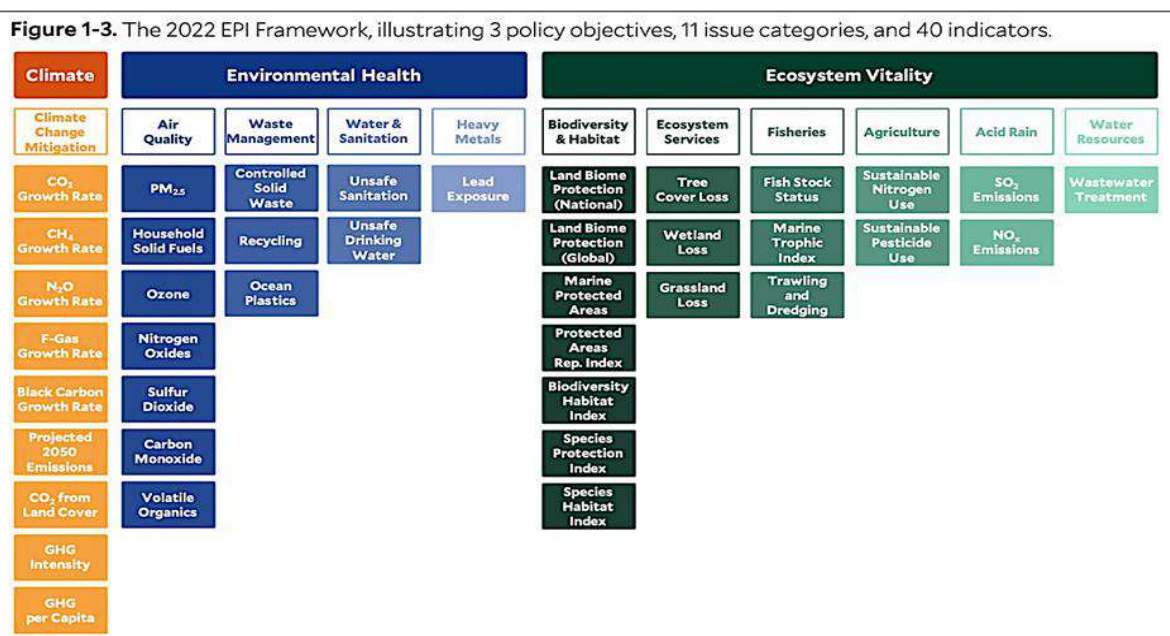
4.3 Environmental Performance Index

Context

- India scored the lowest among 180 countries in the 2022 Environment Performance Index (EPI), an analysis by researchers of Yale and Columbia University.

About EPI

- The index provides a data-driven summary of the state of sustainability around the world.
- The EPI, a biennial index, was started in 2002 as Environmental Sustainability Index by the World Economic Forum in collaboration with the Yale Center for Environmental Law and Policy and the Columbia University Center for International Earth Science Information Network.
- The EPI ranks 180 countries on 40 performance indicators.
- The 2022 EPI introduces four innovative air quality indicators to more comprehensively track the public health outcomes of poor air quality. New indicators measure exposure to nitrogen oxides (NOX), sulfur dioxide (SO₂), carbon monoxide (CO), and volatile organic compounds.



India's Performance

- With a paltry score of 18.9, India's 180th ranking comes after Pakistan, Bangladesh, Vietnam and Myanmar — the bottom five together make up the poorest performing countries for environmental health.
- India was ranked 168th in EPI-2020, with a score of 27.6.
- India has also scored low on rule of law, control of corruption and government effectiveness.

Overall Findings of the Report

- The United States placed at the 20th spot of the 22 wealthy democracies in the global west and 43rd overall. The relatively low ranking reflects the rollback of environmental protections in the recent past including the withdrawal from the Paris Climate Agreement and weakened methane emission rules.
- Countries such as India and Nigeria are in the bottom rankings. Their low EPI scores indicate the need for greater attention to the spectrum of sustainability requirements with high priority focus on critical issues such as air and water quality, biodiversity and climate change.
- As per EPI estimates, only a handful of countries, including Denmark and the United Kingdom, are on track to meet net zero emission goals by 2050.
- Nations such as China, India, and Russia are headed towards the wrong direction with rapidly rising greenhouse gas emissions.
- The EPI projections indicate that four countries — China, India, the United States, and Russia — will account for over 50% of residual global greenhouse gas emissions in 2050 if the current trends hold

Significance of EPI:

- EPI enables decision-makers to recognize the drivers of top-tier performance.
- Analysis of the EPI data demonstrates that financial resources, good governance, human development, and regulatory quality matter for elevating a country's sustainability.
- Highlighting these connections, the EPI helps to promote sustainable development in support of a more environmentally secure and equitable future

Ministry of Environment response

The Ministry of Environment does not accept its analysis and conclusions for the following reasons: -

- A new indicator in the Climate Policy objective is Projected GHG Emissions levels in 2050. This is computed based on average rate of change in emission of the last 10 years instead of modelling that takes into account a longer time period, extent of renewable energy capacity and use, additional carbon sinks, energy efficiency etc. of respective countries.
- Both forests and wetlands of the country are crucial carbon sinks which have not been factored in while computing the projected GHG emissions trajectory upto 2050 given by EPI 2022.
- Historical data on the lowest emission trajectory has been ignored in the above computation.

- The weight of indicators in which the country was performing well has been reduced and reasons for change in assignment of weights has not been explained in the report.
- The principle of equity is given very low weightage in the form of the indicators like GHG emission per capita and GHG Emission intensity trend. The CBDR-RC principle is also barely reflected in the composition of the index.
- India has already achieved the target of 40% of installed electricity capacity from non- fossil fuel based sources.
- The Copernicus air pollutant concentration data based on which DALYs are derived have higher uncertainty in regions with less extensive monitoring networks and emissions inventories. This limitation reduces the chance of accurate assessment of Air Quality.
- The indicators on Water quality, Water use efficiency, Waste Generation per capita which are closely linked to Sustainable Consumption and Production are not included in the Index.
- The Index emphasizes the extent of Protected Areas rather than the quality of protection that they afford. Management Effectiveness Evaluation of Protected areas and eco-sensitive regions is not factored into the computation of Biodiversity Indices.
- Again the index computes extent of ecosystems but not their condition or productivity. Efforts must be made to include metrics that truly capture ecosystem productivity such that regulatory, provisioning as well as cultural services provided by various ecosystems like forests, wetlands, croplands are assessed and reflected in performance.
- Indicators like Agro biodiversity, soil health, food loss and waste are not included even though they are important for developing countries with large agrarian populations.

4.4 Fishing cats

Context:

- According to a census conducted by Chilika Development Authority, the Chilika Lake has 176 Fishing Cats.



- The Census was conducted in Collaboration with The Fishing Cat Project (TFCP). This is the world's first population estimation of the fishing cat, which has been conducted outside the protected area network.

Scientific Name: *Prionailurus viverrinus*.

Habitat:

- Wetlands are the favorite habitats of the fishing cat. In India, fishing cats are mainly found in the mangrove forests of the Sundarbans, on the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats.
- The fishing cat is nocturnal and apart from fish also preys on frogs, crustaceans, snakes, birds, and scavenges on carcasses of larger animals.

Protection

- The fishing cat is listed as Endangered on the IUCN Red List, which means that it faces a high threat of extinction in the wild.
- The Convention on International Trade in Endangered Species (CITES) lists the fishing cat on Appendix II part of Article IV of CITES, which governs international trade in this species. In India, the fishing cat is included in Schedule I of the Indian Wildlife (Protection) Act, 1972 and thereby protected from hunting. Under this Act offenders found guilty can be punished with imprisonment for a term of up to three years or with a fine, which may extend to Rs. 25,000 or with both.

Threats

- Major threats facing the fishing cat is the destruction of wetlands, which is its preferred habitat. As a result of human settlement, drainage for agriculture, pollution, and wood-cutting most of the wetlands in India are under threat of destruction. Another threat to the fishing cat is depletion of its main prey-fish due to unsustainable fishing practices. It is also occasionally poached for its skin.

4.5 Relocation of Cheetah in India

- India will be soon releasing cheetahs from South Africa and Namibia into the wild at Kuno Palpur in Sheopur district of Madhya Pradesh.
- It will initiate India's ambitious plan of transcontinental relocation of cheetahs.
- The country's last spotted cheetah died in Chhattisgarh in 1947 and it was declared extinct in the country in 1952.
- The Wildlife Institute of India (WII) some years back prepared a cheetah reintroduction project.
- Cheetah is the world's fastest land mammal that lives in Africa and Asia.

African Cheetah

- Scientific Name - *Acinonyx Jubatus*

Characteristics:

- They have slightly brownish and golden skin which is thicker than the Asiatic Cheetahs.
- They have much more prominent spots and lines on their face as compared to their Asian cousins.

Distribution:

- Found all over the African continent in thousands of numbers.

Protection: IUCN Red List: Vulnerable. CITES: Appendix 1. WPA: Schedule-2.



African cheetah

Asiatic cheetah

Asiatic Cheetah:

- **Scientific Name:** Acinonyx Jubatus Venaticus
- **Characteristic:** Slightly smaller than the African Cheetahs.
- They have pale yellowish fawn coloured skin with more fur under their body, specifically on the belly.
- **Distribution:** Found only in Iran with less than 100 individuals left.
- **Protection:** IUCN Red List: critically endangered. CITES: Appendix 1. WPA: Schedule-2.

Cheetah Reintroduction Action Plan:

- Currently, India is set to bring cheetahs from South Africa to Madhya Pradesh which is suggested to be the first trans-continental shifting of a large carnivorous animal to India.
- Several sites were chosen, of which Kuno-Palpur National Park, located in Chambal Valley, Madhya Pradesh was seen as the most suitable as the area had a large conducive habitat area available.
- This is based on the Supreme Court's order, 2021 to introduce African Cheetahs in a "carefully chosen location" on an experimental basis.

Kuno palpur

- KunoPalpur is a wildlife sanctuary in Sheopur district of Madhya Pradesh in Central India.

- It is in news since last few years due to lion & Cheetah rehabilitation project. KunoPalpur Wildlife Sanctuary is underway to become India's second home for the Asiatic lion.
- Kuno National Park, is like an ornament in the Vindhyan Hills of Central India. It is a rare jungle, an oasis nestled between an otherwise rocky and unforgiving landscape.
- forest of Kardhai, Khair and Salai can be seen
- Biogeographically this area falls under the Kathiawar-Gir dry deciduous forest eco-region and the forest types found in this area include the Northern tropical dry deciduous forest, Southern tropical dry deciduous forest, Dry Savannah forest & grassland, Tropical riverine forest.
- It is equally rich in the faunal species and thus provide a rare amalgamation of various favourable factors for wildlife.

4.6 State of Environment Report 2022

Context

Recently, Centre for Science and Environment (CSE) has released a new report titled 'State of Environment Report 2022' where it has alarmed about the rising heavy metal pollution in Indian rivers.

Heavy metal pollution

- Three out of every four river monitoring stations in India posted alarming levels of heavy toxic metals such as lead, iron, nickel, cadmium, arsenic, chromium and copper.
- In about a fourth of the monitoring stations, high levels of two or more toxic metals were reported.
- Of the 33 monitoring stations in Ganga, 10 had high levels of contaminants.
- India has 764 river quality monitoring stations, which are spread across 117 rivers and tributaries.
- Central Water Commission tested water samples from 688 stations for heavy metals between August 2018 and December 2020.

Causes:

- Heavy metal pollution has been caused in our rivers, soils, and environment as a result of rapidly growing agriculture and metal industries, improper waste management, heavy use of fertilizers, and pesticides.
- Agricultural and industrial operations, landfilling, mining, and transportation are the primary sources of heavy metals in groundwater.
- Through the agricultural water runoff heavy metals reach upto river.
- Discharge of wastewater from industries (like the

Consequences:

These toxic heavy metals entering the environment may lead to bioaccumulation and bio-magnifications.

- Bioaccumulation: The net accumulation of a pollutant in an organism from all sources, including water, air, and food, is known as bioaccumulation.'
- Biomagnifications: Biomagnification is the accumulation of a chemical by

<p>tannery industry which is a big source of chromium heavy metals) directly into river bodies intensified the severity of the heavy metal pollution.</p> <ul style="list-style-type: none"> Heavy metals have the property of long persistent in plants, animals and environment. 	<p>an organism as a result of water and food exposure, resulting in an increase in concentration that is higher than would have been expected from equilibrium.</p>
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Waste water treatment

- Of the 588 water quality stations monitored for pollution, total coliform and biochemical oxygen demand (BOD) were high in 239 and 88 stations across 21 States.
- BOD is an indicator of poor wastewater treatment from industry, agriculture and domestic households.
- Central Pollution Control Board also reported that India dumps 72% of its sewage waste without treatment. Moreover, ten States do not treat their sewage at all.

Coastline erosion

- Over a third of India's coastline saw some degree of erosion between 1990 and 2018.
- Among all the states, West Bengal is the worst hit with over 60% of its shoreline under erosion due to reasons like increase in frequency of cyclones, sea level rise and anthropogenic activities such as construction of harbours, beach mining and building of dams.
- The global average of the Ocean Health Index, which measures how sustainably humans are exploiting ocean resources, has improved between 2012 and 2021. However, India's score in the index has declined over the same period.

Forest cover

- India's total forest cover has registered an increase of 0.5% between 2017 and 2021. The increase, however, was more in the open forest category, which includes commercial plantations.
- This has happened at the cost of moderately dense forest, which is normally the area closest to human habitations.
- At the same time, very dense forests, which absorb maximum carbon dioxide from the atmosphere, occupy just 3% of total forest cover.
- India has a forest cover of 77.53 million hectares. But recorded forests the area under the forest department with forest cover are only 51.66 million. This gap of 25.87 million hectares a size bigger than Uttar Pradesh remains unaccounted.

4.7 Single-use Plastic Ban in India

Context: The Central government has banned the use of 'single-use plastic' from July 1, 2022.

About the News

- As per the notification, the manufacture, import, stocking, distribution, sale and use of single-use plastic including polystyrene and expanded polystyrene commodities will stand banned from July 2022.

- The items that will be banned include earbuds; balloon sticks; candy and ice-cream sticks; cutlery items including plates, cups, etc.; invitation cards; cigarette packs; PVC banners measuring under 100 microns; and polystyrene for decoration.
- Polythene bags under 75 microns, sachets using plastic material for storing, packing or selling gutkha, tobacco and pan masala.
- The items chosen are of low value and of low turnover and are unlikely to have a big economic impact.

Why these items?

- The choice of items for the ban was based on the difficulty of collection, and recycling.
- When plastic remains in the environment for long periods of time and does not decay, it turns into micro plastics, first entering our food sources and then the human body, which is extremely harmful.
- The largest share of single-use plastic is that of packaging with as much as 95% of single use belonging to this category from toothpaste to shaving cream to frozen foods.
- Petroleum based plastic is not biodegradable and usually goes into a landfill where it is buried or it gets into the water and finds its way into the ocean.



- Although plastic will not biodegrade (decompose into natural substance like soil,) it will degrade (break down) into tiny particles after many years. In the process of breaking down, it releases toxic chemicals (additives that were used to shape and harden the plastic) which make their way into our food and water supply.
- These toxic chemicals are now being found in our bloodstream and the latest research has found them to disrupt the Endocrine system which can cause cancer, infertility, birth defects, impaired immunity and many other ailments.

Enforcement of the ban

- The ban will be monitored by the CPCB from the Centre, and by the State Pollution Control Boards (SPCBs) that will report to the Centre regularly.
- Local authorities have been directed to issue fresh commercial licenses with the condition that SUP items will not be sold on their premises, and existing commercial licences will be cancelled if they are found to be selling these items.
- Violation of the ban will be penalised under the Environment Protection Act 1986 which allows for imprisonment up to 5 years, or a penalty up to Rs 1 lakh, or both.

**Global ways of dealing with single-use plastic**

- In 2022, 124 countries, parties to the United Nations Environment Assembly, including India, have signed a legally binding resolution to address the full life of plastics from production to disposal, to end plastic pollution.
- As of July 2019, 68 countries have plastic bag bans with varying degrees of enforcement.
- Bangladesh: It became the first country to ban thin plastic bags in 2002.
- New Zealand: It became the latest country to ban plastic bags in July 2019.
- China: It issued a ban on plastic bags in 2020 with phased implementation.
- The US: Eight states in the US have banned single-use plastic bags, starting with California in 2014. Seattle became the first major US city to ban plastic straws in 2018.
- European Union: In 2021, the Directive on Single-Use Plastics took effect in the European Union (EU) that bans certain single-use plastics for which alternatives are available

4.8 Global Sustainable Development Report, 2022

The Sustainable Development Report, 2022 has been released.

What is the Sustainable Development Report, 2022?

- **Released by:** Group of independent experts at the Sustainable Development Solutions Network (SDSN).
- **Purpose:** It is a global assessment of countries' progress towards achieving the Sustainable Development Goals. It is a complement to the official SDG indicators and the voluntary national reviews.

What are the key findings of the report related to India?

- **India's Rank:** India's rank in the report has slipped for the third consecutive year. It has been ranked 121 out of the 163 countries in 2022. India ranked 117 in 2020 and 120 in 2021.
- **Observations on India's progress on SDGs:** India is not placed well to achieve the SDG goals and its preparedness has worsened over the years in comparison with other countries.
- The country continues to face major challenges in achieving 11 of the 17 SDGs which has pushed down its ranking.

India's Ranking

- India's rank in the global Sustainable Development Report, 2022 has slipped for the third consecutive year.
- India has been ranked 121 in the index with an SDG index score of 60.3. It ranked 117 in 2020 and 120 in 2021.
- The country continues to face major challenges in achieving 11 of the 17 SDGs, which has pushed down its global ranking on SDG preparedness.
- The progress in around 10 of these goals is similar to those in 2021.
- These include SDG 2 on ending hunger, SDG 3 on good health and well being and SDG 6 on clean water and sanitation. But ensuring decent work (SDG 8) has become more challenging.
- According to the report, India is on track to achieving SDG 13 on climate action.
- This decline in India's overall performance is primarily due to eight states — Bihar, Telangana, Rajasthan, Uttar Pradesh, Karnataka, Andhra Pradesh, Punjab and Jharkhand — whose scores have dipped under SDG 13 in the two years.

Sustainable Development Goals

- The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.
- The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.
- Countries have committed to prioritize progress for those who are furthest behind. The SDGs are designed to end poverty, hunger, AIDS, and discrimination against women and girls.

The creativity, knowhow, technology and financial resources from all of society is necessary to achieve the SDGs in every context

5. SCIENCE & TECHNOLOGY

5.1 DRDO successfully tests 'ABHYAS' a high-speed expendable aerial target

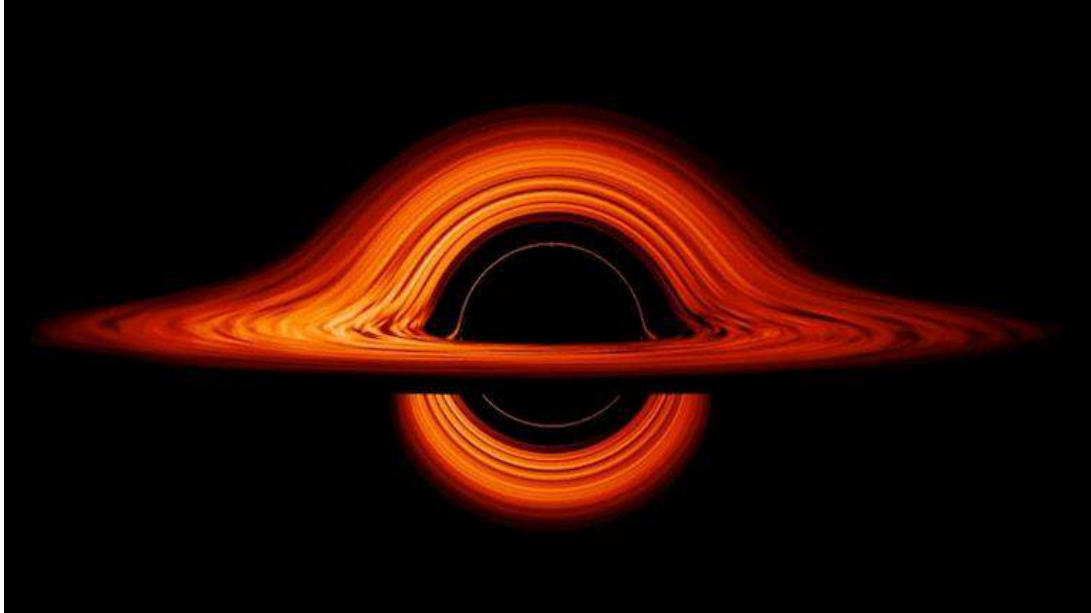
- Defence Research and Development Organisation (DRDO) has successfully tested the made-in-India 'ABHYAS' - a High-speed Expendable Aerial Target (HEAT) from the Integrated Test Range (ITR) in Odisha's Chandipur.



- Designed and developed by Aeronautical Development Establishment (ADE), a Bengaluru based DRDO laboratory along with other DRDO laboratories, ABHYAS is an indigenous unmanned aerial target system to meet the requirement of Indian Armed Forces to eliminate air-borne threats.
- ABHYAS – High speed Expendable Aerial Target (HEAT) consists of twin under-slung boosters which provide the initial acceleration to the vehicle. Further, the aerial vehicle is powered by a small gas turbine engine to sustain a long endurance flight at high subsonic speed. The vehicle can be used as an aerial target for evaluation of various missile systems.
- “The target aircraft was equipped with Micro-Electromechanical Systems-based Inertial Navigation System for navigation along with the Flight Control Computer for guidance and control along with Indigenous Radio Altimeter for very low altitude flight and Data Link for encrypted communication between the Ground Control Station and Target Aircraft. The vehicle is also programmed for fully autonomous flight,” the statement from the Ministry of Defence mentioned.
- In a series of successful trials, DRDO previously tested ABYAS in December and October 2021.

5.2 Consortium of International astronomers discovers 'Super Massive Black Hole'

- A consortium of astronomers from Argentina, Spain, Italy, USA and India has discovered a binary 'Super Massive Black Hole', which will be a strong candidate for future detection of gravitational waves (GWs).



- An international collaboration of astronomers discovered the black hole system in the gravitationally lensed blazar (AO 0235+164) with the use of extensive optical photometric observations carried out around the globe during the last 4 decades (1982 – 2019).
- A binary supermassive black hole discovered in a system which could be the site of future gravitational waves detection.

Deciphering the process of discovery

- The international astronomers in the joint capacity discovered the periodic double-peaked flaring events at an interval of around 8 years, and the separations between two peaks of these flares are around 2 years.
- Notably, the team of astronomers detected five sets of double-peaked flaring activities during time ranges — January 1982 – October 1984, March 1989 – July 1993, April 1996 – March 2001, June 2006 – June 2009 and May 2014 – May 2017.
- Further, it was predicted that the next such 2 years long flaring episode would happen between November 2022 and May 2025.
- To confirm the next periodic pattern, a global optical photometric monitoring campaign has been started by the Whole Earth Blazar Telescope (WEBT) consortium. Further, the observational campaign will be led by Dr. Alok C. Gupta, Scientist – F (Professor), Aryabhata Research Institute of Observational Sciences (ARIES), Nainital.
- An intensive multi-wavelength (WEBT) campaign will be conducted during this period to test the persistence of this apparent nearly-periodic oscillation (QPO) in AO 0235+164.
- The blazar AO 0235+164 is the first binary SMBH gravitationally lensed system, which will be a strong candidate of its kind for future detection of gravitational waves (GWs) using the pulsar timing array and future space-based GW detectors.

- It is pertinent to note that, Dr. Alok C. Gupta also participated in the study which has been recently published in the journal Monthly Notices of the Royal Astronomical Society (MNRAS). The study was led by Mr. Abhradeep Roy, a Ph.D. student of the Department of High Energy Physics (DHEP), Tata Institute of Fundamental Research (TIFR), Mumbai including other members of the Indian team include Prof. V. R. Chitnis, Dr. Anshu Chatterjee and Dr. Arkadipta Sarkar from TIFR, Mumbai.

Blazars:

- The super massive black holes
- Blazars, which are super massive black holes (SMBH) feeding on gas in the heart of a very distant galaxy, are among the most luminous and energetic objects in the Universe.
- When the jet, composed of ionized matter traveling at nearly the speed of light, is pointed towards an observer, it is called a blazar. The blazar AO 0235+164 is unique as it is gravitationally lensed by intervening galaxies (phenomenon by which light shining from far away to be bent and pulled by the gravity of an object between its source and the observer).

5.3 Ramsay Hunt Syndrome

Recently Justin Bieber put up a photo of himself on instagram and announced that right side of his face has been paralysed because of a rare disease called Ramsay Hunt Disease.



- Ramsay Hunt Syndrome, or herpes zoster oticus, is a rare neurological disorder which usually leads to paralysis of the facial nerve and a rash that generally affects the ear or mouth.
- The condition is caused by the same virus that causes chickenpox in children and shingles in adults — the *varicella zoster virus*.
- The illness can occur in anyone who has had chickenpox, and is most common in older adults, particularly people over 60.

What are the symptoms of Ramsay Hunt Syndrome?

- The most common symptoms are a red, rainfall rash around the ear, facial weakness and paralysis.

- Ear pain, hearing loss, tinnitus, dry mouth and eyes, and difficulty closing one eye are also common symptoms of the condition.

Is Ramsay Hunt Syndrome contagious?

- No, but reactivation of the virus can cause a bout of chickenpox in people who haven't previously had the illness or been vaccinated for it.

Can Ramsay Hunt Syndrome be treated?

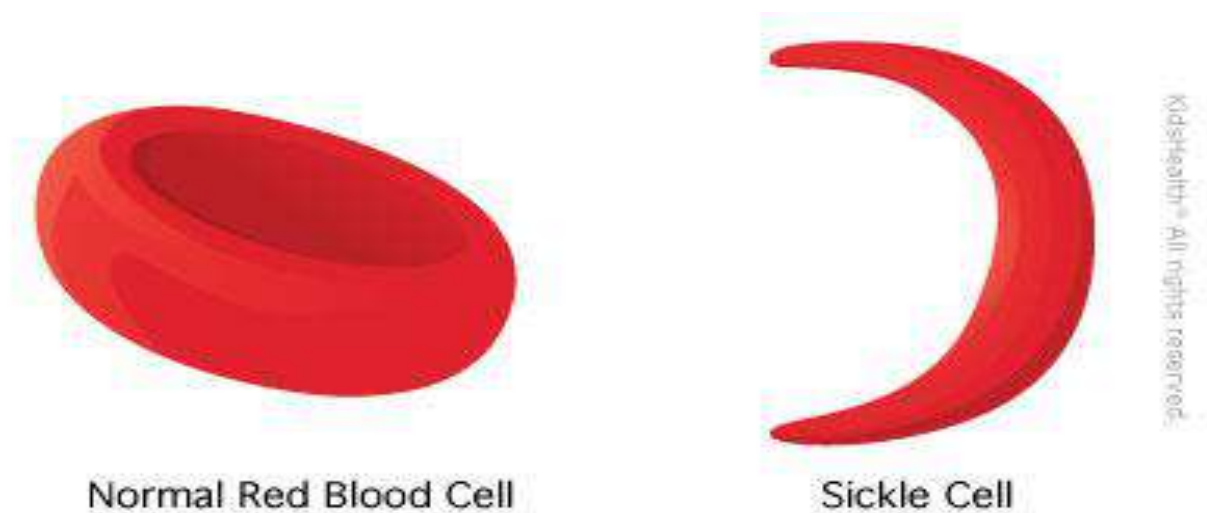
- While the illness almost always goes away, in rare instances, facial paralysis and hearing loss can be permanent, doctors told The New York Times.

Is there a Covid-19 connection?

- Some studies have suggested that there may be links between the Covid-19 vaccine and the Ramsay Hunt Syndrome. A study conducted by the Graduate Medical Education, Gujarat Adani Institute of Medical Sciences, stated that there “may be a possible association between Covid-19 vaccine and shingles.”

5.4 World Sickle Cell Day 2022

It is observed on June 19 to bring awareness among the general public regarding sickle cell anaemia. Sickle Cell disease is a type of anaemia where the red blood cells deform into crescent moon shapes due to an inherited genetic abnormality inherited from both parents.



TYPES OF SICKLE CELL DISEASE:

The Three prominent types of Sickle Cell anaemia:

- 1) **Sickle Cell Anemia (SS)**
- 2) **Sickle Hemoglobin-C Disease (SC)**
- 3) **Sickle Beta Thalassemia, which is divided into Beta-Plus and Beta-Zero Thalassemia**

- 1) SS is the most common and most severe type of sickle cell disease. The haemoglobin S (Hb SS) gene is inherited from both parents.
- 2) SC is the second-most common form of sickle cell anaemia where the Haemoglobin C gene is inherited from one parent while the S gene is inherited from the other. It is less severe than SS.
- 3) In Sickle Beta-Plus Thalassemia, the beta-globin gene is affected and beta-protein production is compromised, shrinking the red blood cells. Beta-zero thalassemia is more severe and the chances of recovery are low.

SYMPTOMS:

- The symptoms of sickle cell disease include anaemia, persistent lack of energy, irritability in infants, kidney problems, urinary tract infection, inflammation of the hands and feet, pain in limbs, back, recurrent infections and jaundice. Chest pain, cough, pneumonia, enlargement of the spleen and bacterial sepsis may occur as well.

TREATMENT:

- The disease is diagnosed through blood tests and analysis via protein electrophoresis or high-performance liquid chromatography. Treatment is done through intravenous fluids and blood transfusions, to rejuvenate the RBCs.
- The patient is supplied with oxygen artificially to improve blood-oxygen levels and antibiotics are provided to combat infections.
- Vaccines are also given to improve immunity, while bone marrow transplants are done on children below 16 years of age with severe symptoms.

5.5 West Nile fever

Recently a 47 year old from Kerala died due to WNF.

The West Nile Virus is a mosquito-borne, single-stranded RNA virus. It is a flavivirus related to the viruses that cause St. Louis encephalitis, Japanese encephalitis, and yellow fever.

Vector: Culex species of mosquitoes.

Host: birds.

- According to WHO, mosquitoes become infected when they feed on infected birds, and circulate the virus in their blood for a few days. The virus eventually gets into the mosquito's salivary glands. During later blood meals (when mosquitoes bite), the virus may be injected into humans and animals, where it can multiply and possibly cause illness.
- **Symptoms:** fever, headache, fatigue, body aches, nausea, rash, and swollen glands.

5.6 Liquid nano urea

It is essentially urea in the form of a nanoparticle. Urea is a chemical nitrogen fertiliser, white in colour, which artificially provides nitrogen, a major nutrient required by plants.



- Produced by Indian Farmers Fertiliser Cooperative (IFFCO) at its Nano Biotechnology Research Centre (NBRC) at Kalol.
- It comes in a half-litre bottle priced at Rs 240, and carries no burden of subsidy currently. By contrast, a farmer pays around Rs 300 for a 50-kg bag of heavily subsidised urea.
- The international market price of a bag of urea is between Rs 3,500 and Rs 4,000, and significant quantities of it is imported.
- The government's fertiliser subsidy payout this financial year will be Rs 2 lakh crore, up 25 per cent from the Rs 1.6 lakh crore it paid last year.
- While conventional urea has an efficiency of about 25 per cent, the efficiency of liquid nano urea can be as high as 85-90 per cent. Conventional urea fails to have the desired impact on crops as it is often applied incorrectly, and the nitrogen in it is vaporised or lost as gas. A lot of nitrogen is also washed away during irrigation.
- Liquid nano urea is sprayed directly on the leaves and gets absorbed by the plant. Fertilisers in nano form provide a targeted supply of nutrients to crops, as they are absorbed by the stomata, pores found on the epidermis of leaves.
- The size of a nano nitrogen particle varies from 20-50 nm.
- IFFCO is setting up additional facilities for production of nano fertilisers at Aonla, Phulpur, Bengaluru, Paradeep, Kandla, Deoghar and Guwahati, besides expanding the Kalol plant, for the production of nano urea, nano DAP and nano micronutrients. These units will have a production capacity of 2 lakh bottles per day.

5.7 Monkeypox

- It is an infectious disease Caused by a virus which is closely related to smallpox, it belongs to the family **Poxviridae**.
- Monkeypox was first discovered in 1958 when outbreaks of a disease causing a pox were discovered in monkeys held in captivity for research. It was first seen in humans in 1970 in the Democratic Republic of the Congo (DRC) and it is now endemic in Central and West Africa.

Symptoms: Fever, headache, muscle ache, backache, swollen lymph nodes, chills and exhaustion.

It also causes pustules all over the body.

Diagnosis: PCR

- People to people spread is possible however under close proximity.
- Currently no cure is there however we can use the old smallpox vaccine.

Note:

- **In 1980**, the World Health Assembly declared smallpox eradicated (eliminated), and no cases of naturally occurring smallpox have happened since.

5.8 Agni IV

- It was recently tested from the Abdul Kalam island, Odisha, reaffirming the credible *minimum deterrence capability*.
- It is an intermediate range surface to surface ballistic missile capable of carrying nuclear warheads.



Range: 4000 kms.

- It uses solid propellant, can be launched from a canister with high precision.
- It has MIRV (multiple independently targetable re-entry vehicle) capabilities.

- The Strategic Forces Command is operationally responsible for all of India's nuclear assets. India can launch nuclear missiles from land, air and from submarines, and is one of the few countries that has the nuclear triad.

5.9 Gait test

Gait is defined as a manner of walking or moving on foot. Gait analysis is a technique in podiatry medical care and the treatment of the foot. The analysis can help experts zero in on the source of an injury or pain that determines the way in which an individual stands or walks.

Note: podiatry, also called Chiropody, medical specialty dealing with the diagnosis and treatment of diseases and disorders of the human foot.

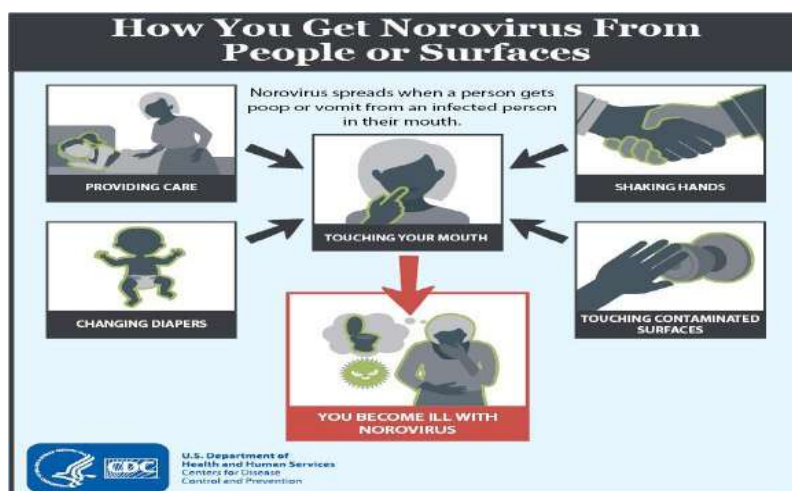
It has been borrowed by the forensic experts to identify suspects in criminal cases. Recently a rape accused was identified using this test, the test was admitted as a proof by the court.

How it works:

- Experts compare the gait of a person seen in CCTV footage from the crime spot with a sample of the suspect's walk. Using computer software, the two images are compared.
- Movement of the feet and hands, the length of the stride, as well as the full gait cycle from the time one foot touches the ground to when it touches the ground again after a step has been taken.
- The gait test was also used in a murder case in Tamil Nadu last year.
- It was used to establish the identity of the assailants of journalist Gauri Lankesh in Bengaluru in 2017.
- It was also used in a rape case in Surat in 2018, where the investigators said that the analysis enabled them to compare the walking style, body movements and other factors.

5.10 Norovirus

- 13 people in kerala were tested positive for Norovirus.
- It is a **group of viruses that leads to gastrointestinal illness**. It causes **inflammation of the lining of the stomach and intestines**, in addition to **severe vomiting and diarrhoea**.
- Noroviruses belong to the **family Caliciviridae**.



- The virus can affect **people across all age groups** but is known to **cause serious symptoms in children, the elderly and people with comorbidities.**



- **No specific treatment available to cure the virus**, however, **generic medications for diarrhoea and vomiting** can help cure the disease. Infected individuals are also advised to **drink a lot of water** to help prevent dehydration.

How to prevent Norovirus?

- Norovirus can be prevented by following the below-mentioned instructions:
 - 1) **Maintain hand hygiene**, i.e., washing hands with soap and warm water before consuming food and after using the loo. Avoid sanitiser as alcohol doesn't kill the virus.
 - 2) **Disinfect your home** with the help of a bleach-based home cleaner.
 - 3) **Avoid cooking meals** for 48 hours **if you are ill.**
 - 4) **Use boiled water** for drinking and cooking purposes.

5.11 BepiColombo

It is Europe's first mission to Mercury. It was launched on 20 October 2018.

It is on a seven-year journey.



- When **it** arrives at Mercury in late 2025, it will endure temperatures in excess of 350 °C and gather data during its one-year nominal mission, with a possible one-year extension.
- **BepiColombo** is a joint mission between ESA and the Japan Aerospace Exploration Agency (JAXA), executed under ESA leadership.
- The **mission** comprises two spacecraft: the Mercury Planetary Orbiter (MPO) and the Mercury Magnetospheric Orbiter (Mio).

Why is BepiColombo mission challenging?

- **Mercury's** closeness to the Sun makes the mission very challenging. It is difficult for a spacecraft to reach the planet and survive in harsh environmental conditions.

What have been the past missions to Mercury?

Mariner 10 – NASA Flyby Mission to Venus and Mercury (1973).

MESSENGER – NASA Orbiter to Mercury (2004).



CAMPUS



LECTURE HALL - 1



LIBRARY



LECTURE HALL- 2



CANTEEN



LECTURE HALL - 3

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