

PERFECT

Complete Fortnightly for **UPSC** and **PCS** Exam



dhyeyaias.com

Year : 5 | No. : 04 | February 2023 / Issue 02 | Price : ₹ 55



Strategies Being Made To Strengthen Indian Navy

Socio-Economic Impact of Income Inequality in India

Relevance of the IWT & India's Perspective

India's Strides Towards Developing Indigenous Vaccines

Need For Reform In Management & Administration of Cooperatives In India

Need Of EIA In Urban Development Projects

Diminishing Militancy Due To Multi-Dimensional Development of North-East India

Prelims Special 2023 : International Relations

Why Perfect-7 Current Affairs Magazine?

1. First of all, Perfect-7 Current Affairs Magazine is published **every 15 days** to keep students up-to-date with current affairs, while other coaching institutes have monthly magazines which aggregate the current affairs of the month. Due to large number of current affairs, students are often unable to read all the articles. Eventually they become dependent on annual and half yearly magazines.
2. Perfect-7 magazine has been created keeping in mind the **UPSC and State PCS centric exams**, whereas the magazines of other coaching institutes include unnecessary and extra material in the name of UPSC and State PCS exams, causing confusion among the students.
3. **Perfect-7 magazine has 7 editorial articles by subject experts on important events during 15 days, 42 articles on important events, 7 brain-boosters in creative style, current affairs, one liner, preliminary and mains exam related questions etc.** are given. Along with this there is also a section on eminent personality which shows the contribution of the historical personality towards the country and society. In this way, no important information and news is missed in the period of 15 days for UPSC and State PCS exams.
4. Along with this, through the **case study section**, students learn about the situations, an officer has to face during his tenure and what could be the possible solution.
5. Perfect-7 Current Affairs Magazine, helps students to prepare well for DhyeyaIAS's most important exam program **PMI (Pre + Mains + Interview)**.
6. In current affairs based classes, preparation is done through Perfect-7 Magazine, which enables quality preparation of the students.
7. Perfect-7 magazine becomes available to students on **10th and 25th of every month**, whereas current affairs magazine provided by other institutes are of the previous month and they create confusion in the minds of students by mentioning the current month of publication.
8. Perfect-7 Magazine contains prelims and mains exam focused mock questions through which students can make their preparation more precise.

-: For any feedback Contact us :-

+91 6393005298

perfect7magazine@gmail.com

OUR OTHER INITIATIVES





Message



Vinay Kumar Singh

**Founder
Dhyeya IAS**

Current Affairs has an important role in the examinations conducted by Union Public Service Commission and State Public Service Commissions. It is necessary for the candidate to have knowledge of relevant information on issues of national and international importance. Perfect 7 Magazine is being presented fortnightly to the students to fulfill this requirement. Preparation of civil services exam is only completed when candidates have holistic knowledge and analysis of the dynamic nature of the current affairs. 'Perfect7' keeps this vision and approach and understands the multidimensional need of students at the content level, so this magazine has presented the current affairs with relevant issues of general studies. Keeping in mind the needs of mains exam, current articles on 7 burning issues, Ethics Case Studies, Biographies of important personalities, coverage of most useful topics of various sections of General Studies and the most important current affairs issues are being covered for Preliminary Examination in which emphasis is being given on national, international, environment, ecology, art and culture, science and technology, economic issues.

Brain boosters with 7 themes based graphics are being presented in a concise form to enhance the conceptual understanding of the students. Apart from this, updated information on Global Initiatives, Global Institutions, Structure of Organizations, Functioning, Important Reports, and Indices will be included in this magazine, which is asked prominently in the Civil Services Examination. To give emphasis on facts and analysis, keeping in view the trends of new nature of questions in Preliminary and Main Examination of Civil Services, an inclusive magazine is being provided to the students so that they can give the right direction to their preparation by understanding the new requirements of Civil Services Examination. Columns have been included in the format of the magazine keeping in mind the factual needs of the candidates, mental development, developing writing technique etc. Along with this, we have been introducing new segments according to the changing needs of the candidates and these initiatives will continue in future also. Hope this issue will prove useful for all of you. Your suggestions are always welcome.

Best wishes.



Managing Editor	: Vijay Singh
	: Baghendra Singh
Editor	: Vivek Ojha
Co-Editor	: Ashutosh Mishra
	: Saurabh Chakraborty
Sub-Editor	: Aman Kumar
Publication Manager	: Dr. S. M. Khalid
Content Support	: Hari Om Pandey
	: Bhanu Pratap
	: Rishika Tiwari
	: Ritu, Pratyusha
	: Neeraj, Adnan
	: Saltanat, Lokesh
Chief Reviewer	: A. K. Srivastava
Research & Review	: Shashank Shekhar
Support	: Tripathi
Design and	: Arun Mishra
Development	: Punish Jain
Typist	: Sachin
	: Tarun
Technical Support	: Mohd. Waseef Khan
Office Attendent	: Raju
	: Chandan, Guddu
	: Arun, Rahul

Important Issues

5-18

1. Relevance Of The IWT & India's Perspective
2. Socio-Economic Impact Of Income Inequality in India
3. Strategies Being Made To Strengthen Indian Navy
4. India's Strides Towards Developing Indigenous Vaccines
5. Need For Reform In Management & Administration Of Cooperatives In India
6. Diminishing Militancy Due To Multi-Dimensional Development Of North-East India
7. Need Of EIA In Urban Development Projects

National	19-22	Brain Boosters	50-56
International	23-26	Prelims Special 2023	
Environmental	27-30	➤ International Relations	57-72
Science and Tech	31-35	➤ MCQs based on Preliminary Exam	73-78
Economy	36-40	MCQ Based on Current Affairs	79-81
Miscellaneous	41-44	Personality	82
News of National and International Importance ..	45-48		
Current Affairs at a Glance	49		

For Next Issue

- **Lithium Opening the doors of Development for India**
- **Operation Dost: India's Proactive Soft Diplomacy**
- **India becoming empowered by skill development**
- **The role of payment aggregators in financial inclusion**
- **PM PVTG Mission: Can be a milestone for tribal development**
- **Controversy over the appointment of governor and his actions**
- **SSLV Success: Beginning of a New Era in Indian space sector**

Relevance Of The IWT & India's Perspective

In the year 2016, after the terrorist attack in Uri, Jammu and Kashmir by Pakistani terrorists, Indian Prime Minister Narendra Modi made it clear regarding India's approach to the issue of the Indus Water Treaty (IWT) and terrorism, that India will follow the policy of zero tolerance and 'the blood and water cannot flow together in Kashmir'. What it meant is that if Pakistan does not stop terrorist attacks on India, India will take such actions that the waters of the Jhelum, Chenab, and Indus rivers will not reach Pakistan. Now recently, India demanded an amendment to the Indus Water Treaty for the first time in nearly 62 years of its history. It has given notice to Pakistan to change the terms of the Indus Water Treaty. In this way, the Central Government has indicated that it seeks to consider the Indus Water Treaty again. Further, India has given Pakistan a chance to hold talks at the official level in 90 days. Since Pakistan habitually approaches the World Bank repeatedly without talking directly to India on the issue of Indus Water Treaty, India has given Pakistan a chance to conduct Inter-Governmental Negotiation in 90 days to rectify the trend of violation of the Indus Water Treaty through notice. Now it is to be seen whether there is any change in the attitude of Pakistan.

India's stand regarding the Indus Water Treaty is clear. It says that the World Bank does not have the right to appoint a neutral expert on the Indus river water-sharing issue and decide to start the process of the Court of Arbitration. Arindam Bagchi, spokesperson of India's Ministry of External Affairs, had clearly stated shortly before that India feels that the World Bank is not in a position to interpret the Indus Water Treaty for India. This treaty is between two countries and India's understanding of this treaty is that it has graded provisions. Keeping this in mind, India sent Pakistan notice regarding the amendment of the Indus Waters Treaty of September 1960, on January 25 this year. This notice has been sent to Pakistan for the first time because of its stand on compliance with the dispute settlement mechanism associated with the implementation of this six-decade-old treaty. Along with this, India observed that the decisions of international organizations may have an impact on India's interests, or when any international organization supports Pakistan without any solid basis, then India is not bound to accept its ruling. India will not accept World Bank's arbitration to comply with a wrong thing or decision despite being right.

At a time when Pakistan's economic condition is deteriorating, inflation, unemployment, poverty, terrorist attacks, communal tension, and political instability are at their peak and Pakistan is requesting to improve relations with India. With the Shanghai Cooperation Organization to be held in India this year, an invitation has also been sent to the Pakistani

Foreign Minister to participate in the meeting. In such a situation it is natural to question why has India given such notice to Pakistan for amendment of the Indus Water Treaty? However, in reality, the question should be why this work was not done earlier? The Indus Water Treaty was signed in 1960. The treaty continued amid tensions, disputes, and even amid wars between the two countries because of India's generosity and commitment to international agreements. Pakistan not only took this generosity of India lightly but kept raising unnecessary objections by ignoring the provisions of this treaty.

Pakistan accuses India of violating the Indus Water Treaty:

- Whenever India tried to materialize hydroelectric power projects for the development of the Jammu and Kashmir region, for energy security there or tried to execute any hydroelectric power project on Jhelum, Chenab or Indus rivers and their tributaries, Pakistan protested against these projects without any reason. Pakistan often alleges that the dams or barrages that India builds for hydroelectric power projects on the western rivers of the Indus water system are flawed in design, and they can incur huge losses to Pakistan. On this basis, Pakistan often objects to Indian hydropower projects such as Pakal Dul (1000 MW), Ratal (850 MW), Kishanganga (330 MW), Miyar (120 MW) and Lower Kalnai (48 MW) while it does not hesitate to enter into agreements regarding large hydroelectric project on the river Indus with China.
- Pakistan has been accusing India of water terrorism and has been saying that the water of Indus water system i.e. Jhelum, Chenab, Indus, Ravi, Sutlej and Beas in India's hands is like a weapon against Pakistan and India can bring floods in Pakistan or create drought conditions there whenever it wants. Pakistan perhaps has forgotten that in the 1960s, India was of opinion that Pakistan should not become a victim of human tragedy due to any water crisis, and thus it had accepted the mediation of the World Bank that it would allow the water of the Indus water system to flow through its territories to Pakistan. In return for such a great favour of India, Pakistan only remained retributive to India, which shows how ungrateful Pakistan is. Pakistan makes an issue out of small things to disturb any hydroelectric project of India and that too unnecessarily.
- It objects to trivial issues like the height of the dam or barrage built in order to set up a hydro power plant is high and should be reduced, or the water storage capacity in the barrage or dam is more, it should be reduced. Pakistan knows that India legally has the right to run hydroelectric projects and other uses of water according to the provisions

of the Indus Water Treaty, but Pakistan wants that the water of the Indus, Jhelum and Chenab, which were recognized as the western rivers in the Indus Water Treaty, 1960, should not be shared with India. Pakistan perhaps has forgotten that there are things such as international rules and regulations.

History of the Indus Water Treaty between India and Pakistan:

- The dispute regarding the sharing of the waters of the Indus River began in 1947 at the time of the partition itself. The then engineers of India and Pakistan together made a standstill agreement on two major rivers flowing from India to Pakistan. As per this standstill, Pakistan will continue to get water and this agreement was applicable till 31 March 1948. However, Pakistan alleged that on 1 April 1948, the agreement ceased to operate and India stopped the water of two major rivers.
- After this, there were conflicts between the two sides as no one was ready to negotiate on this issue. Then in 1951 former head of both the Atomic Energy Commission the 'Tennessee Valley Authority U.S.' David Lilienthal, visited the area to research regarding articles for a Collier's magazine. Lilienthal then suggested that India and Pakistan should work towards an agreement to jointly develop and administer the Indus River System, possibly with advice and funding from the World Bank, which was agreed upon by then-World Bank President Eugene Black as well. After this, Black contacted the heads of India and Pakistan in the year 1954 about this. After six years of negotiations, Indian Prime Minister Jawaharlal Nehru and Pakistani President Mohammad Ayub Khan signed the Indus Water Treaty in September 1960.
- Difficulties in this agreement started when India started building hydroelectric projects on the western rivers. Pakistan was concerned that these projects would reduce the flow of water to Pakistan. In 1978, experts from both the countries resolved the Salal Dam dispute by negotiation. Then came the issue of Baglihar Dam and it was settled in 2007 with the help of a neutral mediator from the World Bank. The Kishan Ganga project was also a controversial project and it reached the Court of International Arbitration, which gave a decision regarding this dispute in 2013. Indus Commission meetings have played a crucial role in resolving these disputes.

Important things about the Indus River System:

- The Indus system is one of the largest river systems in the world, under which the Indus and its tributaries Jhelum, Chenab, Ravi, Beas, Sutlej, Zaskar, Kabul and Gilgit are included. The Indus River originates from the Bokhar Chu Glacier near Mansarovar Lake in Tibet. Its length is 2880 km. This river first flows in the north-west direction, then it cuts the Himalayan mountain and enters India near Damchok.

- The Indus River, after flowing through two districts of Leh and Kargil in the Indian Union Territory of Ladakh, flows into Pakistan Occupied Kashmir. The Indus River is an antecedent river which cuts the Ladakh range at a place named Bunji, north of the Nanga Parvat, forming a gorge. Sutlej, Beas, Ravi, Chenab and Jhelum (in this order from south to north) are the most prominent of the five rivers of Punjab that meet on the left side of the Indus River. On the other hand, Kabul, Kurram, Gomal etc. are the main rivers that meet from the right side. The Indus River flows south-west and joins the Arabian Sea east of Karachi.
- As per the Indus Water Treaty 1960 between India and Pakistan, India can use 20 percent of the water of the Indus and its tributaries. At the same time, Pakistan was given the exclusive right to use the water of the western rivers Indus, Jhelum and Chenab and it also got the right to use 80 percent of the water of the entire Indus water system. India was also allowed to run hydro power projects on western rivers.
- After the Pulwama attack, India's then Transport and Water Minister Nitin Gadkari tweeted, "The Government of India has decided to stop our share of water going to Pakistan. We will divert water from eastern rivers to Jammu and Kashmir and Punjab to supply it to our people there." India is again taking a similar strong stand. India is aware of its responsibility but it cannot compromise its values. Pakistan refused to have any discussion in five meetings of the Permanent Indus Commission from 2017 to 2022, despite repeated attempts by India to mutually find a middle ground. Thus the continuous violation of the provisions of the Indus Water Treaty by Pakistan forced India to issue a notice regarding the amendment of the Indus Water Treaty.
- India should make full use of its share of water under the Indus Water Treaty because India has not been able to make full use of its share of water in the western rivers. Along with this, India should demand more share of water under this treaty. After the Uri terror attack, India explicitly linked the issue of review of the Indus Water Treaty with the question of cross-border terrorism. Later on, the construction of dams on eastern rivers especially on the Ravi river at Shahpur Kandi was started as well. Along with this, such planning was made that under this project, the Indian share of water will be used by the people of Jammu and Kashmir, and the rest of the water will be affected through the Ravi Beas link, to make it available to other basin states. There have been talks regarding building a barrage at Makora port to stop the water of the Ujh river going to Pakistan through river Ravi. By doing this water will be used in Punjab. It is worth mentioning that the Ujh river meets at Makoda port situated in Gurdaspur. India, which earlier did not think about using its share of water properly, is now taking necessary steps in this direction.

Socio-Economic Impact Of Income Inequality in India

Context:

Survival of the Richest: The India Story report, recently released by Oxfam, presented data on the widespread economic inequality in India. This economic disparity will act as a hindrance to the progress of socio-economic justice in the country.

Introduction:

Oxfam International published a report titled 'Survival of the Richest' on the first day of the summit of the Davos World Economic Forum annual meeting this year in Switzerland. It is noteworthy that Oxfam International releases its report every year in January at the opening of the Davos meetings. In this report, mainly the factors of economic inequality prevalent in India and all over the world and their causes and effects are discussed.

Survival of the Richest: The India Story

Oxfam has released a special report focused on India. This report has been released titled Survival of the Richest: The India Story. Its main points are as follows:

- 60% of India's total wealth is owned by 5% of the richest people. And India's poorest 50% of the population has only 3% of the wealth.
- India's 21 biggest billionaires have more wealth than the country's 700 million people.
- In India, where the number of billionaires was 102 in the year 2020, in 2022 this figure has reached 166, that is, the number of billionaires has increased by 64 in two years.
- From the beginning of the Corona pandemic in 2020 till November 2021 when most Indians faced job-related problems and faced savings crises, the wealth of Indian billionaires increased by 121 percent in the same period. According to the report, even in this era of Corona pandemic, the wealth of India's billionaires has increased by Rs. 3608 crores per day.
- 1% of people represent 40% of wealth creation during 2012-2021. Whereas 50% of the population created only 3% of the wealth.
- After the year 2021, India's 10 richest people saw an increase of 32%.
- Thus we can say that not only has the wealth of rich people increased in India but there has been a wide disparity between the rich and the poor.

To what extent are government policies responsible for these conditions?

Last year, Oxfam's report Inequality Kills told that the policies of the Government of India are supporting the capitalists.

- **Reducing Corporate Tax:** In the year 2019, the government reduced the Corporate tax from 30% to 22%. Whereas for newly formed companies it was kept at only 15%. This shortfall in taxation resulted in a revenue loss of about 1.84 lakh crore.
- **Increase in GST and excise tax:** To reduce the loss from corporation tax, GST and excise duty on petrol and diesel were increased, the burden of which fell on the general public. As a result of these policies, 50% of the country's poor people are paying 6 times more indirect taxes than the country's 10% rich. On the other hand, if we talk about the GST of 2022, then 50% of the poor people of the country have paid two-thirds of the GST, while 10% of the rich people are paying only 4% of the GST.
- **Monetary Policy and Inflation:** While on one hand, the EMI rate increased due to an increase in the repo rate, on the other hand in the last 6 years about 11 lakh crore rupees of public sector banks were declared NPA. As a result, the profits of corporates increased by 70% while the income of households decreased by 84%.

Effects of economic inequality:

- **Delay in the establishment of social economic justice:** Socio-economic and political justice has been envisaged in the Indian Constitution. But this type of increasing inequality is becoming an obstacle to the establishment of social and economic justice. It is noteworthy that social justice and economic justice are related to each other. Thus economic inequality will affect both.
- **Rise in gender inequality:** Widespread economic inequality has also increased gender inequality. Reports suggest that women workers get only 63 paise as compared to Rs 1 earned by male workers. This violates the principle of equal pay for equal work as laid down in the Directive Principles of State Policy.
- **Increase in crime:** Crime is mainly the disobedience of social, moral, and legal orders. According to the famous sociologist Healy, crime is the result of the social environment, and inequality in society acts as a fertile ground for the promotion of crime. Thus it can be said that economic disparity can also play an important role in increasing crime somewhere.

- **Trust deficit between private companies and the public:** This situation gives rise to a trust crisis between private companies and the public in India. This will act as a hindrance to productivity and economic development somewhere in the future.
- **Constraints in sustainable development:** The growth of corporate companies is indeed very essential for the economic growth of the country. But if this economic growth is at the cost of the interests of the poor people, then it will not only affect the concept of the welfare state but will create a conflict between development and inequality and will become an obstacle in the path of sustainable development.

In addition to these effects, economic inequality can lead to corruption, crony capitalism, money power in elections, etc., which will affect the socio-economic and political fabric of India.

What can be done to reduce these side effects?

Measures suggested in the report:-

- India's 100 richest people have a wealth of 660 million which can finance the Indian government budget for about 18 months. According to the analysis, if only a 2% tax is imposed on the total wealth of Indian billionaires, then it can meet all the needs of malnourished children for the next 3 years.
- If India imposes a tax of 2.5% on 100 billionaires or a 5% tax on 10 billionaires, then there will be a benefit of Rs 1.4 lakh crore from which the education of underprivileged children can be managed.

- The government should impose a windfall tax so that it can help in removing the economic backwardness caused by the Corona pandemic. It is to be noted that windfall tax means the tax levied on unexpected or extraordinary profits that have been received at the time of economic crisis war or natural calamities.
- In addition, the government should increase the budgetary allocation for the health sector to 2.5% of GDP and for education to the benchmark of 6% of GDP as envisaged in the National Health Policy.

Other Suggestions:

- Government should focus on the proper implementation of Corporate Social Responsibility.
- Corporate companies that are getting benefits from the people of India should come forward morally and contribute to the development of the underprivileged sections of the country.

Conclusion:

Economic inequality not only hinders the achievement of constitutional goals, but it can become a major medium for anarchy and an increase in crime. In the event of anarchy and an increase in crime, not only will the socio-economic fabric be affected, but the country's economic production including corporate companies will also be affected in a big way. To diagnose the situation, it is necessary that the Government of India, living up to the objectives of its welfare state, should try as much as possible to bring the underprivileged sections into the mainstream of society.


ध्येय IAS
 most trusted since 2003


DHYEYA IAS
 most trusted since 2003

NEW BATCH - FACE TO FACE

सामान्य अध्ययन

UP-PCS

PRE-CUM-MAINS

22 FEB.

BPSC

MAINS SPECIAL | PRE-CUM-MAINS

20 FEB. | 15 MAR.

A 12, 13, ANSAL BUILDING, DR. MUKHERJEE NAGAR, DELHI 110009

9205274741 / 42, 9289580074 / 75

Strategies Being Made To Strengthen Indian Navy

Context:

- With a goal to reinforce the Indian Navy's commitment to be a fully AatmaNirbhar force by 2047, the 5th Scorpene class conventional submarine was commissioned into the Indian Navy as INS VAGIR at Naval Dockyard, Mumbai on 23 January 2023.
- 6 Scorpene class submarines are being built under Project-75 by the Mazgaon Dock Shipbuilders Ltd under technology transfer from France under a \$3.75 billion deal signed in October 2005. The first submarine, INS Kalvari, was commissioned in December 2017; the second, INS Khanderi, in September 2019; the third, INS Karanj in March 2021; and the fourth, INS Vela in November 2021.
- With this, the Navy now has 16 conventional and one nuclear submarine in. It includes seven Russian Kilo class submarines, four German HDW submarines, five French Scorpene class submarines, and the indigenous nuclear ballistic missile submarine INS Arihant.

India's maritime location and its significance:

- With a long coastline of nearly 7500 km with 1100 Islands and Exclusive Economic Zones (EEZ) of nearly 25 lakh square kilometers in India Ocean, India shares its maritime boundary with 7 countries (Pakistan, Maldives, Sri Lanka, Bangladesh, Myanmar, Thailand, and Indonesia).
- Major Sea Lanes of Communication connecting Strait of Malacca with Red Sea, Persian Gulf and Bab-El-Mandeb pass through Indian Ocean which makes it strategic focal point of global trade. Indian Ocean region transports 75% of the world's maritime trade.
- Furthermore, Indian Ocean is endowed with very important minerals called Polymetallic nodules. They are used in electronic devices, smart phones, batteries and solar panels. To explore these minerals India has launched "Deep Ocean Mission"
- This makes the Indian Ocean important from the point of view of energy security and economic prosperity and the Indian Navy has to play a central role by providing logistical support.

China's aggressive posture in the Indian Ocean:

- China has made aggressive moves to advance its strategic interests in the Indian Ocean Region (IOR), under its "String of Pearls," or a network of strategic naval/military bases constructed by

China to advance its economic, military, and strategic interests in the region. Gaining access to operational control of Sri Lanka's Hambantota Port, Pakistan's Gwadar Port for 99 years lease and construction of a military base in Djibouti is considered part of this strategy.

- In December 2022, the Chinese satellite tracking and Sea bed mapping ship Yuang Wang 5 entered the Indian Ocean. In 2018 also, Indian Navy spotted a Chinese Submarine in the Indian Ocean Region.

India's response to Counterbalance China and Navy's strategic role:

- Concerns about China's expanding incursions and increasing interference under its "String of Pearls" strategy in Indian Ocean Region, have led India to concentrate on strengthening its maritime and naval capacity to counter Chinese deployments.
- India obtained access to Indonesia's strategic deep sea Sabang Port and Oman's Duqm Port. India has also signed Logistics Agreement with France and USA, which grants India access to port facilities at the US base at Diego Garcia and French base at Reunion Island.
- The Indo-Pacific has emerged as a geostrategic focal point for China and India. To counter growing China's influence, USA along with France and Germany have expounded their own Indo-Pacific strategy of which India is an important component.
- India under Indo-Pacific Strategy also engages with USA, Japan and Australia through informal Quadrilateral Security Dialogue or "QUAD". The Maritime Strategy of QUAD, the Indo-Pacific Democratic Alliance, to contain the rise of China rests mainly on the strong and vibrant Indian Navy. The coming together of four democratic powers in the Indo-Pacific region under the QUAD grouping adds to the Indian Navy's profile and stature in the region. With China posing a major challenge to international order in the maritime domain, India's naval might is being seen as a principal counterbalance.

India's maritime strategy and Navy's growing relevance:

- Keeping the Indian Navy at the centre stage, India has propounded its maritime strategy in its 2015 document called "Ensuring Secure Seas: India Maritime Security Strategy". The

objective was to increase maritime cooperation and coordination with a focus on its own national interest.

- As a follow-up of the strategy, Indian Navy in recent years has expanded its presence and operational reach through 'mission-based deployments' by deploying ships and aircraft along critical sea lanes. The Gulf of Aden, the Arabian Sea, the Lakshadweep and the Maldives, the Seychelles and Mauritius, the Bay of Bengal, the Andaman and Nicobar Islands, and the Straits of Malacca have been identified as seven zones for year-round patrols by 15 warships and reconnaissance aircraft. India's operational reach has also expanded with ships being deployed to participate in naval exercises like MALABAR, MILAN, RIMPAC (Rim of Pacific), CORPAT, SIMBEX, AUS-INDEX etc.
- Intergovernmental organizations like "Indian Ocean Naval Symposium" and "Indian Ocean Rim Association" with the objective of maritime cooperation among navies of the littoral states in the Indian Ocean region have further increased the strategic relevance of the Indian Navy.
- Furthermore, strategic policies like the Mission SAGAR, Project MAUSAM, Project SAGARMALA, Act East and India as 'net security provider' – bring out the centrality of the oceans and Indian navy in a globalised world for India's economic development.

Steps being taken to strengthen Indian Navy:

- Navy's growing strategic relevance necessitated the urgency for its upgradation. Efforts are being made to make Indian navy world class.
- Under Project Sea Bird, India's largest naval infrastructure INS Kadamba aimed at providing fleet support and warship maintenance is under development since 2012 at the Karwar Naval Base in Karnataka. The Russian built aircraft carrier INS Vikramaditya is based at Karwar.
- Again in September 2022, the Indian Navy inducted the indigenously built aircraft carrier Vikrant. After the US, UK, France, Germany, China and Japan, India became the only seventh country that can build an aircraft carrier.
- Under Project 15A and 15B, four stealth guided missile destroyers- named as Vishakhapatnam, Mormugao, Imphal and Surat- are to be built at Mazgaon Dock Shipbuilders Ltd. INS Vishakhapatnam and INS Mormugao have already been commissioned recently.
- Six Scorpene class conventional submarines are being built under Project-75 by the Mazgaon Dock Shipbuilders Ltd. Along with this Indian navy is already equipped with the nuclear-

powered submarine Arihant and two more nuclear submarines are in the pipeline.

- Indian Navy commissioned the long-range maritime reconnaissance aircraft P-8I long-range maritime patrol aircraft, at INS Hansa in Goa in March 2022. Also called, "Submarine Hunters", it will boost the navy's surveillance capabilities in the Indian Ocean Region.
- In December 2022, the Indian Navy launched 'Arnala', the first of the 8 anti-submarine warfare shallow watercraft (ASW-SWC) that are currently being built by the Garden Reach Shipbuilders and Engineers Ltd (GRSE), Kolkata. These vessels are designed to conduct anti-submarine operations in coastal waters.
- With these developments, the Navy has substantially augmented its 'sea denial and sea control capabilities' on the high seas and is now counted among the five major naval powers in the world. It has acquired enough deterrent capability to challenge any naval power.

Way forward:

- On the eve of the Navy Day (December 4, 2022), Chief of Naval Staff Admiral Hari Kumar asserted that the Indian Navy will be fully self-reliant by 2047, when India will celebrate the centenary year of its Independence. Armed with these advanced Aircraft Carriers, submarines and warships, the Indian Navy has enhanced its presence across the region, enabling rapid responses to emerging security challenges. The strategic competition between big powers has already shifted to the maritime domain, for which the Indian Navy needs to be adequately prepared.
- The strategic importance of India in the Indian Ocean Region (IOR) due to its central position is also increasing for a balanced world order. For India's own national interests, it is essential to assume the role of a net security provider in the region. For which it must possess the strong and technologically modern Navy.
- Alfred Thayer Mahan aptly called the 21st century the "Century of the Seas". He was of the view that the secret to empire-building was the sea power or the naval strength of a nation. This has been proved repeatedly and is still relevant today, specifically for a country like India which possesses a very strong maritime asset having a coastal length of 7516.6 km with the world's second-largest peninsular area of 2.07 million sq. km.

India's Strides Towards Developing Indigenous Vaccines

Reference:

Recently the Union Minister of State for Science and Technology (Independent Charge) Dr. Jitendra Singh has said that the Department of Biotechnology (DBT) has distributed four vaccines through 'Mission Covid Suraksha', and has taken the initiative to scale up the manufacturing of Covaxin. This is a big achievement for India.

Introduction:

During the Corona pandemic, the whole world was apprehensive about the vaccine for this virus. In such a situation, Indian scientists have been successful in developing four indigenous vaccines for Covid-19 in two years. These vaccines are- World's first and India's indigenously developed DNA vaccine - Zykov-D, India's first protein subunit vaccine - Corbevax, the world's first and India's indigenously developed mRNA vaccine - Gemcovac-19 and World's first and India's indigenously developed intranasal (through the nose) COVID-19 vaccine - INCOVAK. This not only reflects the growing research in India but also shows the maturity of India's pharmaceutical industry.

Vaccine manufacturing scenario in India:

- Quick action was taken to neutralize the effects of Corona pandemic. The Department of Biotechnology (DBT) laid utmost emphasis on vaccine development through 'Mission Covid Suraksha'. Government and private institutions showed readiness for the vaccine, as a result of which India was able to manufacture 4 vaccines in 2 years.
- Because of the pandemic crisis, the Central Government accorded top priority to the development of the COVID-19 vaccine, and accordingly, the government of India announced "Mission COVID Suraksha" under the Atmanirbhar Bharat 3.0 package. It aims to enable the development of safe, effective, affordable, and indigenous COVID-19 vaccines expeditiously.
- Clinical trials of Zykov-D, Covax, Gemcovac-19, Corbevax, Covaxin Booster, RBCG (Serum Institute), and J&J's COVID vaccines have been facilitated at supported clinical trial sites under 'Mission Covid Suraksha'. Where an electronic database of about 1.5 lakh people who volunteered has also been prepared.
- Recently the intranasal Covid-19 vaccine - INCOVAK manufactured by Bharat Biotech has been launched. The dose of this intranasal vaccine is given through the nose in the form of drops. This vaccine provides additional immunity to the upper respiratory tract and tries to neutralize the virus before it reaches the body.
- India has not only given Covid vaccination to the people of its country, but also till July 2022,

India has given about 25 crores of vaccines to 101 countries and 2 UN entities. It is indeed a big achievement for India to become a major vaccine distributor.

Process of Vaccine manufacturing:

The development of any vaccine involves several steps starting from research and development to manufacturing, quality control, and distribution. Following are the steps of vaccine manufacturing-

- **Exploratory stage:** In this process, scientists identify natural and artificial antigens to diagnose the disease. After ensuring the identity of the antigen, the antigen is stimulated by the test to elicit an immune response. In this step, the growth, collection, and synthesis of the recombinant proteins are carried out.
- **Pre-Clinical:** In this stage, the antigen is tested on animals by cell culture. This step is done to ensure the efficacy of the vaccine. In this phase, vaccines are often used on rats, monkeys, rabbits, etc. It is done to verify the development of an immune system in the vaccine.
- **Clinical Trial:** This stage is the most important. In this, through the cell culture system, the immunity generated in animals or plants is tested on the human body. This stage is completed in three sub-stages.
 - » **Phase 1-** The vaccine is tested on a small group of people (around 20 to 80 people). In this, the effect of the vaccine on the human body is observed. During this period of supervision, special care is taken with the dose and timing of the vaccine.
 - » **Phase 2-** In this phase hundreds of people are tested. Here the positive and negative effects or side effects of the vaccine are analyzed by changing the dose, time, etc. of the vaccine. Here, an attempt is made to include people of all age groups. It takes an average of 8 to 12 months.
 - » **Phase 3-** In this stage, thousands of people are tested. And the effect of the vaccine is tested on a large population. In this, the long-term effects of the vaccine are investigated. When it is proved that all the objectives of the trial have been achieved, it is then taken forward for regulatory review.
- **Regulatory review and approval:** In this phase, the 'Drug Controller General of India tests the vaccine based on the standards set by the World Health Organization. After getting permission for this, the manufacturing of the vaccine starts.
- **Manufacturing and quality control:** In this stage, the manufacturing of the vaccine is started with better infrastructure. Regulatory tests are done from

time to time to ensure the quality of the vaccine.

Government efforts for COVID-19 vaccine development:

The Government of India has made several efforts in the development of the Covid-19 vaccine:

- A total of 10 vaccine candidates have been supported so far by the Department of Biotechnology (DBT), both in academia and industry.
- Currently, 5 vaccine candidates are in the human trial stage including the Russian vaccine Sputnik-V, while 3 others are in the advanced stage of pre-clinical, which will start human trial soon.
- 'Mission COVID Suraksha - The Indian COVID-19 Vaccine Development Mission' has been launched. It will consolidate all available and funded resources for accelerated product development with preclinical development

Challenges of Clinical Trials in India:

In the absence of a clear policy related to clinical trials in India, many challenges are seen, which are described as follows -

- **Death in clinical trials:** Between 2007 and 2019, about 4800 people died due to clinical trials across the country. This not only puts a question mark on diagnostic testing but also violates the right to life mentioned in Article 21.
- **Regulatory Failure:** In India, often volunteers participate in clinical trials in large numbers to reduce the income problem. In the absence of a better regulatory framework, the standards are not followed, disregarding the data related to the health of the volunteers. This not only negatively affects the health of the volunteers but also casts a doubt on the outcome of clinical trials.
- **Unethical clinical trials:** Unethical clinical trials are a big problem in India. Doctors, scientists, and test funding companies nexus among themselves in which they hide the truth from volunteers to test fake drugs and equipment, which can lead to negative health effects on people.
- **Economic Inequality:** People are often exploited by Clinical Research Organizations (CROs) who take advantage of the economic risks of volunteering. It is noteworthy that in the year 2009, 24000 girls were enrolled for the H.P.V. vaccine, but in the investigation, it was found that they provided false information.
- **The problem of financing:** There is a lot of expenditure in following all the stages of testing according to the rules, so private companies do not follow all the stages of testing to reduce this expenditure. Along with this, the Department of Biotechnology has also stressed the need for immediate public-private partnerships for financing the tests.

Benefits for India after becoming a vaccine hub:

- India's dependence on western countries will reduce due to the intensity of vaccine manufacturing in India.

- India has delivered vaccines to many countries through its Vaccine Friendship Campaign. This will help strengthen India's soft power diplomacy.
- The vaccine made in our country will reduce various types of rumors and uncertainties, which will reduce the chaos by reducing the trust crisis towards the vaccine.
- India has manufactured four vaccines related to Corona in the last 2 years which is showing India's strong pharmaceutical infrastructure.
- By dismantling the concept of vaccine nationalism given by western countries in India, it has taken a new stand which will also strengthen India's international position.
- It will not only improve the health of the country but also establish India as a pharmaceutical hub which will help in increasing investment, generation, and employment.
- India becoming a pharmaceutical hub will stop the brain drain of doctors, and nurses from India and will aid India's progress.



Other Facts

Mission Covid Suraksha:

- The full name of the Government of India's Covid-19 Vaccine Development Mission is 'Mission Covid Suraksha'.
- This mission is being implemented under the leadership of the Department of Biotechnology (DBT), Government of India.
- The mission will consolidate all available and funded resources for accelerated product development with preclinical development.
- Recently Rs 900 crore has been allocated for 12 months for Phase-I of this mission
- This mission is a targeted effort for the development of an indigenous, affordable, and accessible vaccine for COVID-19 protection in India and will complement the National Mission for Atmanirbhar Bharat.
- This will help in the development of 5-6 vaccine candidates and ensure licensing and market access.
- India is a powerful nation in vaccine manufacturing and through this National Covid Vaccine Mission, our vaccine manufacturers will develop affordable and accessible vaccines not only for India but for the world.

Conclusion:

The achievement of India in vaccine manufacturing is praiseworthy. However, it is necessary to mitigate the challenges in clinical trials. Vaccine manufacturing and its application is not only helpful in building a self-reliant India but it is also taking forward India's tradition of Vasudhaiva Kutumbakam. However, India will have to pay attention to the vaccination of other diseases as well, then a truly self-reliant India can be built.

Need For Reform In Management & Administration Of Cooperatives In India

The Union Cabinet in January 2023, has approved a historic decision to set up and promote a national level multi-state seed cooperative society under Multi State Cooperative Societies (MSCS) Act, 2002.

Role of these multi state cooperatives:

These cooperatives will act as an apex organization for-

- Production, procurement, processing, branding, labelling, packaging, storage, marketing and distribution of quality seeds.
- Strategic research & development.
- To develop a system for the preservation and promotion of indigenous natural seeds.
- This would be done through various cooperative societies across the country with support from relevant ministries especially the Ministry of Agriculture and Farmers Welfare, Indian Council for Agricultural Research (ICAR) and national Seed Corporation (NSC) through their schemes and agencies following the 'Whole of the Government Approach'.

The proposed society will help to:

- Increase the seed replacement rate (SRR), and varietal replacement rate (VRR).
- Ensuring the role of farmers in quality seed cultivation and seed variety trials, production and distribution of certified seeds with a single brand name, by utilizing the network of all levels of cooperatives.
- Increasing agricultural productivity due to availability of quality seeds.
- Strengthening food security.
- Increasing the income of the farmers.
- The members will benefit both by realization of better prices by production of quality seeds, higher production of crops by use of High Yielding Variety (HYV) seeds and also by dividend distributed out of the surplus generated by the society.
- Increase the agriculture production in the country thereby leading to more employment in the agriculture and cooperative sector.
- Reducing the dependence on imported seeds and provide boost to rural economy, promoting "Make in India" and leading to Atmanirbhar Bharat.
- The national level multi-state seed cooperative society under Multi State Cooperative Societies (MSCS) Act, 2002 is another step by government to reform management and administration of cooperatives in India and strengthen cooperatives movement in India.

Cooperative Movement in India:

- The International Cooperative Alliance (ICA) defines a Cooperative as "an autonomous association of persons united voluntarily to meet

their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise."

- Cooperatives are self-financing, self-reliant and autonomous. These are voluntary organisations of members who unite to achieve their common objectives based on values and not just profit. The core values driving the cooperative movement are self-help, self-responsibility, democracy, equality, equity and solidarity. The cooperatives are a vital plank of inclusive growth in rural areas, particularly food security, poverty alleviation, and employment creation. They present a democratic business model wherein people come together with complete equality and equity. It is said to be the people's capitalism to counter private capitalism that causes the concentration of wealth.
- The Cooperative Movement in India was born out of the distress and turmoil that prevailed in the last quarter of the 19th century.
- Even before formal cooperative structures came into being through the passing of a law, the practice of the concept of cooperation and cooperative activities were prevalent in several parts of India. Some of them were named as Devarai or Vanarai, Chit Funds, Kuries, Bhishies, Phads.
- British India enacted the first Cooperative Credit Societies Act, 1904 on recommendation of The Indian Famine Commission (1901). In 1919, cooperation became a State subject, and provinces were authorised to make their cooperative laws under the Montague-Chelmsford Reforms. In 1942, the British government enacted the Multi-Unit Cooperative Societies Act, intended to cover the societies whose operations extended to more than one state.
- In 1958, the National Development Council (NDC) recommended a national policy on cooperatives. The Government of India enacted the Multi-State Cooperative Societies Act in 1984 and the National Policy on Cooperatives was adopted in 2002. The 1984 Act was replaced by a new Multi-State Cooperative Societies Act 2002 for the speedier promotion and development of cooperatives.
- The Constitution (97th Amendment) Act, 2011 added a new Part IXB right after Part IXA (Municipals) regarding the cooperatives working in India and provided constitutional status to cooperatives. The word "cooperatives" was added in Article 19(1)(c) under Part III of the Constitution, giving it the status of fundamental right of citizens. A new Article 43B was added in the Directive Principles of State Policy (Part IV) regarding the "promotion of cooperative societies.
- Over the years, the cooperatives have occupied a

substantial space in the business world. There are about one million cooperatives in India. These are formed either under provisions of the Cooperative Societies Act, 1912, or the respective state laws; or the Central Multi-State Cooperative Societies Act.

- In agriculture and allied Sectors Indian Farmers Fertilisers Cooperative Limited (IFFCO), AMUL and Co-operative Rural Development Trust (CORDET), in banking Sector Bharat Cooperative Bank and Saraswat Cooperative Bank and Apna Bazar, one of the largest and oldest multi-state cooperatives, and Sahakari Bhandar, a cooperative chain of retail stores, are some of the success stories of cooperatives in India. According to the RBI, the contribution of cooperative financing institutions to rural and agriculture credit increased from 3.1 per cent in 1951 to an impressive 27.3 per cent in 2002.
- In 2021, a separate 'Ministry of Co-operation' has been created by the Central Government for realizing the vision of 'Sahkar se Samridhhi' (Prosperity through Cooperation) and to give a new push to the cooperative movement. The Government has also signalled its deep commitment to community-based developmental partnerships.
- Despite these efforts, the cooperatives movement hasn't reached its full potential due to numerous problems faced by it.

Issues Faced by the Cooperative Sector:

- **Top-down approach-** Cooperative movement in India lacks spontaneity in the sense that it has not emanated from the people themselves.
- **Excessive Cooperative Legislations-** Cooperatives in India function in different sectors. Being a State subject the State cooperative laws and their implementation vastly differ across states.
- Politicization and the excessive role of the government chiefly arising out of the loopholes and restrictive provisions in the Cooperative Acts.
- **Irresponsibility and Unaccountability-** Serious inadequacies in governance including that related to Boards roles and responsibilities. Lack of accountability of board members for many inconveniences.
- Inability to attract and retain competent professionals.
- Lack of Capital Formation-Lack of efforts for capital formation particularly that concern enhancing member equity and member stake.
- **Lack of Awareness-** People are not well informed about the rules and regulations of cooperative institutions.
- **Mismanagement and Manipulation-** A hugely large membership are mismanaged and in the elections to the governing bodies, money and muscle became powerful tool for election to the top posts of chairman and vice-chairman.

- **Restricted Coverage-** Most of these societies are confined to a few members and their operations are extended to only one or two villages.
- Lack of cost competitiveness arising out of issues such as overstaffing, and overall competitiveness due to the entry of MNCs in the Indian market.
- The poor health of cooperative banks is a vital link in the cooperative finance system. They are too small to operate properly and some of them are existing only on paper.
 - » The NPAs of the cooperative banks are higher than those of commercial banks i.e. in NPAs to asset ratios – PMC crisis
 - » Lesser than expected shareholder participation in working, infrastructural weaknesses, thereby hindering the overall working of the Cooperatives.
- Regional variations in cooperative movement – the limited success of cooperatives in some of the most fertile and populous regions points towards the link with demographic and cultural factors.

To secure the autonomy, independence and progress of the cooperatives, the following steps should be taken-

- Incorporating provisions in the law quantifying the minimum level of participation required by a member of the cooperative annually.
- Encouraging democratic participation by members, developing effective leadership which can even influence policy formulation by government favourable to cooperatives.
- Infusing professionalism as it is the key requirement for the conversion of ideas/policies into tangible outcomes.
- Strengthening arrangements for ensuring sound human resources management practices in cooperatives such as recruitment, training, social security etc.
- Remodelling both the Central and state laws to make cooperative enterprises more competitive and self-sustaining.
- Ensuring the recognition of cooperatives under various financial, commercial and tax laws and the need to harmonise with the Central and state cooperative laws.
- The principle of the cooperative movement is to unite everyone, even while remaining anonymous. The cooperative movement has the capacity to solve people's problems. However, there are irregularities in cooperatives and to check them there have to be rules and stricter implementation. While strengthening cooperative movement there is a need to keep in mind that the presence of a large network of social organizations, like cooperatives, would aid in the generation and utilization of social capital and 'greater the social capital, greater would be the possibility of development'.

Diminishing Militancy Due To Multi-Dimensional Development Of North-East India

In Northeast India, insurgency, separatism, subversive activities, and ethnic conflict have been present as major threats to the peace, security, and prosperity of the state. It has been the endeavor of the Central Government and the State Governments to create an insurgency-free Northeast India through effective strategies so that Northeast India can play its role more assertively in the development of India. Sharing one of its achievements in this direction, the Ministry of Home Affairs, Government of India has recently shared the figures related to the reduction in militancy in the Northeast. As per the Home Ministry data, there has been an 89 per cent reduction in militancy-related incidents in the Northeast. Further, there has been a 90 per cent reduction in attacks on security forces and 89 per cent reduction in civilian deaths. This reduction is the result of the policies of the Central Government and the development work done in this area. Around 8,000 youth belonging to extremist groups have surrendered and joined the mainstream.

Current Security Situation in the Northeast:

The security situation in the north-eastern states has improved significantly since 2014. The years 2019 and 2020 saw the lowest number of insurgency incidents and casualties among civilians and security forces when compared to the last two decades. Furthermore, in comparison to the year 2014, the incidents of militancy decreased by 80 per cent in the year 2020. Similarly, during this period, casualties among security forces decreased by 75 per cent and civilian casualties by 99 per cent. While in 2014 where there were 824 incidents of violence in the Northeast in which 212 innocent civilians were killed, in 2020 the number of such incidents came down to 162 where only three civilians were killed.

Major agreements in recent times to bring peace and prosperity to the Northeast:

- Long pending disputes between various states in the Northeast have been a major concern in the development of the region. Due to the active efforts of the Central Government, the disputes which have been going on for many decades have finally started getting resolved permanently. This has not only promoted integration and trust but has paved the way forward for lasting peace and progress. In this context, the historical Bodo Peace Accord can be mentioned as well.
- **Bodo Peace Accord:** During the 1960s, the Bodos and other tribes of Assam called for a separate state of Udayachal. In the late 1980s, there was another demand for a separate state for the Bodos - Bodoland and to divide Assam "50-50". As a consequence of these continuing demands, there have been widespread incidents of violence over the years. To resolve the five-decade-old Bodo issue in Assam, the Bodo Accord was signed on January 27, 2020, resulting in the surrender of 1615 cadres in Guwahati along with a huge amount of arms and ammunition. The Bodo peace

accord includes provisions relating to resolving issues related to the Bodo people living outside the Bodoland Territorial Area Districts (BTAD); To promote and protect the social, cultural, linguistic, and ethnic identity of the Bodos; providing legislative protection for the land rights of tribals. For the economic development of the Bodo area, the government has made a preliminary budget of Rs 1500 crore. A committee will supervise the development work in this area.

- **Bru-Reang Accord:** Due to ethnic violence in the western part of Mizoram in October 1997, a large number (over 37,000) of minority Bru (Reang) families migrated to North Tripura in 1997-1998. A historic agreement was signed on January 16, 2020, to resolve the 23-year-old Bru-Reang refugee crisis, by which over 37,000 internally displaced people are being resettled in Tripura. With this new agreement, a permanent solution has been given to this huge human problem which has been going on for almost 23 years. In an agreement between the Government of India, the Government of Tripura and Mizoram, and the Bru-Reang representatives, it has been decided that assistance of about Rs 600 crore will be given by the Center to facilitate the rehabilitation of the Bru people.
- **National Liberation Front of Tripura Agreement:** The National Liberation Front of Tripura (NLFT), formed in 1989, has been involved in violence, operating from its camps across the international border. After several years of negotiations with the Government of India and the Government of Assam, an agreement was signed with the National Liberation Front of Tripura in August 2019, resulting in the surrender of 88 cadres with 44 weapons.
- The cadre of NLFT resumed the insurgency from the year 1989. Presently, following state security measures and vigilance by central government agencies, rebel groups, especially members of the NLFT(BM), have become less motivated toward the insurgency and have shown signs of joining the mainstream.
- **Karbi Anglong Agreement:** The Karbis are a major ethnic group in Assam whose history has been marked by killings, ethnic violence, kidnapping, and taxation since the late 1980s.
- The Karbi Anglong Accord was signed on September 4, 2021, to resolve the long-standing dispute in the Karbi areas of Assam, with over 1000 armed cadres shunning violence and joining the mainstream of society. The names of these insurgent organizations who surrendered include- Karbi Longri North Cachar Hills Liberation Front, People's Democratic Council of Karbi Longri, United People's Liberation Army, Karbi People's Liberation Tigers, Karbi People's Liberation Tigers (R) and Karbi People's Liberation Tigers (M). Provision has also been made for the rehabilitation

of their cadres in the agreement. The Assam government has also agreed to take steps for the development of the Karbi people living outside the Karbi Anglong Autonomous Council area. For this, it will set up the Karbi Welfare Council. The Consolidated Fund of the State will be augmented to supplement the resources of the Karbi Anglong Autonomous Council. 1000 crore rupees will be spent in the next five years to speed up the development projects in the area. Further, it has been proposed to give more legislative, executive, administrative, and financial powers to the Karbi Anglong Autonomous Council.

- **Assam-Meghalaya Inter-State Boundary Agreement:** A historic agreement was signed on March 29, 2022, to settle the dispute on six areas out of twelve areas of the inter-state boundary dispute between the states of Assam and Meghalaya.

From disturbed area to aspirational area:

The security situation in the Northeast has improved significantly as a result of the Border Disputes Settlement Agreements and the Peace Accord. Fulfilling a long-standing and passionate demand of the North Eastern states, the Armed Forces Special Powers Act (AFSPA) has been diluted from a major part of the North East. 60% of Assam is now free from AFSPA, while 15 police stations in six districts of Manipur have been moved out of the disturbed area. Arunachal Pradesh is now left with AFSPA in only three districts and two police stations in one district. While the notification of disturbed areas has been removed from 15 police stations in seven districts of Nagaland. It was completely withdrawn from Tripura and Meghalaya.

Making Northeast the economic hub of India:

The Government is committed to the all-round development of the North Eastern Region under the Act East Policy and to make it an economic hub linking South East Asia. The total earmarked funds under 10% gross budgetary support from 54 Central Ministries for spending on development work in the North East have been increased by 110% from Rs 36,108 crore in 2014-15 to Rs 76,040 crore in 2022-23. A new scheme, Prime Minister's Development Initiative for the Northeast (PM-DEVICE) was announced in the Union Budget 2022-23 with an initial allocation of 1,500 crore rupees.

Act East Policy:

- The 'Act East Policy' announced in November 2014 is an upgraded version of the 'Look East Policy' which was promulgated in 1992. This envisages consolidating the Asia-Pacific region through continuous engagement at bilateral, regional, and multilateral levels thereby providing better connectivity to the states in the North East region with other countries in our neighborhood. The Act East Policy is playing a vital role in shaping and bringing about a significant change in the potential role of the Northeast region.
- In the past, government policies and their implementation proved insufficient to shape the vast inherent potential of the North East region. In the last eight years, the central government has been extremely sensitive to the needs of the region,

with better connectivity, better infrastructure, and people's welfare being part of its main development agenda. From being marginalized to the India story, the Northeast is fast becoming one of the growth engines of the country.

Focus on Higher Education and Health in Northeast India:

- The Central Government has established 191 new institutions to promote higher education in the Northeast. There has been a 40 percent increase in the establishment of central institutions of higher education. As a result, total student enrollment in higher education has increased by 29 percent.
- Further, 19 State Cancer Institutes and 20 Tertiary Care Cancer Centers have been sanctioned under the Strengthening of Tertiary Care Cancer Scheme from a health stand alone. With this, all the facilities that are required by cancer patients will be available in the Northeast itself.
- Moreover, the central government has approved 19 new projects worth Rs 77,930 crore for this sector. The government will construct 9,476 km of roads here in the next three years. Work is underway on the Rs 9,265 crore North East Gas Grid (NEGG) project in the country. Along with this, 18 National Waterways have been commenced in the North Eastern region.

Formation of Policy Forum for Inclusive Development of North East:

- The Policy Forum for North East was constituted in February 2018, to identify various constraints in the accelerated, inclusive yet sustainable economic growth in the North-Eastern region of our country, and suitable interventions to overcome these identified constraints can be recommended. This is the first regional forum constituted by NITI Aayog.
- The Forum is co-chaired by the Vice Chairman, NITI Aayog, and the Minister of State, Ministry of Development of North Eastern Region. The North Eastern Council (NEC) serves as the secretariat of the forum. This includes all the North Eastern States and the concerned Central Ministries/Representation of departments. Its members include eminent experts and representatives from prestigious institutes from the North East such as IIT Guwahati, IIM Shillong, NERIST, RIS, RFRI, etc.

Emphasis on Small Micro Medium Enterprises in the North East:

In recent times, the Regional Conference on Sustainable Development of Micro, Small, and Medium Enterprises in the North Eastern Region was organized in Agartala, Tripura. Furthermore, the Government has taken several initiatives to empower MSMEs in the North Eastern region. "Promotion of MSMEs in North East & Sikkim" is a dedicated scheme, which provides financial assistance for the infrastructure development of MSMEs for which Rs 140 crore has been released so far. Under the Prime Minister's Employment Generation Program (PMEGP), 1.14 lakh micro units have been supported, generating 7.6 lakh jobs.

Need Of EIA In Urban Development Projects

Sustainable development has become a major agenda and goal in the responsible countries of the world today. In India too, work is being done to make environmental impact assessment mandatory and to declare any area as ecologically sensitive area as a means of sustainable development to strike the right balance between environment and development. The role of the Supreme Court of India and the National Green Tribunal in this direction has been commendable in recent times. Both have given important decisions regarding Environment Impact Assessment and Eco Sensitive Zone in their respective decisions. Recently, the Supreme Court has said that necessary provision should be made by the legislature, executive and policy makers at the Center as well as at the State level to conduct environmental impact assessment studies before allowing any sort of urban development.

The Supreme Court explained the need for Environment Impact Assessment by giving the example of Bengaluru, which was once considered one of the best cities in India, but is now facing massive floods and waterlogging, due to such haphazard and thoughtless city planning and is grappling with the problems of potable water scarcity, terrible traffic jams, poor garbage disposal, and rapidly shrinking water bodies. The Supreme Court has observed that the environmental warnings being received by the city of Bengaluru require due attention from the legislature, executive, and policymakers. It is high time that EIA of such development is made before allowing urban development. Further, the Supreme Court has issued directions to preserve the heritage of 'Corbusier' Chandigarh and has urged the legislature and executive of the Center and the States to consider the harmful effects of 'haphazard' urban planning and take necessary measures to prevent the same. The environment should not be sacrificed at the altar of development and thus it becomes crucial that the provisions like Environment Impact Assessment should be used seriously.

In this context, the National Green Tribunal (NGT) recently canceled three environmental clearances granted to NKC projects in Budgam for the mining of minor minerals. Significantly, in this case, the environment clearance granted by the Jammu and Kashmir State Environment Impact Assessment Authority (SEIAA) on April 19, 2022, in favor of M/s NKC Projects Private Limited was challenged in the court. The importance of environmental impact assessment can also be understood from this decision of NGT. Since the NGT functions under the principles of natural justice, review of the environmental impact of development projects becomes one of its major

responsibilities and NGT has consistently performed this role. Sometime back, the National Green Tribunal had put a stay on an environmental clearance granted by the Uttarakhand State Environment Impact Assessment Authority. The case pertains to the Bageshwar district of Uttarakhand where environment clearance for soapstone mining has been granted by the Uttarakhand State Environment Impact Assessment Authority (SEIAA). The applicant in this case contended that the EIA notification dated September 14, 2006, was violated in this environment clearance. In its application to the NGT, it was stated by the petitioner that, "It ignores the damage caused to wildlife habitats and such activities are not viable in earthquake zones." As such, the NGT directed the project proponent to study and submit a report on the effects of mining on seismicity and its impact on forest and wildlife within two months, so that the SEIAA could consider the same and may pass an appropriate order considering all the relevant aspects before awarding the same.

Why Environmental Impact Assessment is important in India:

- The sensitive geographical location of various regions of India requires that development projects in such regions are not carried out indiscriminately for commercial gain. Every area has its carrying capacity, places like mountains, plateaus, river areas, wetland areas have only a limited capacity to tolerate development works. This should be kept in mind before any project is taken up. Amid reports of heavy damage due to landslides in Uttarakhand's Joshimath, government data has revealed that a total of 3782 incidents of landslides occurred in different parts of the country between 2015 and 2022, affecting life and infrastructure.
- According to the Geological Survey of India, about 0.42 million km² or 12.6 per cent of the land area, excluding snow-covered areas, is prone to landslides in India. Of this, 0.18 million sq km falls in the North East Himalayas, which includes Darjeeling and Sikkim, 0.14 million sq km lies in the northwest Himalayas (Uttarakhand, Himachal Pradesh, and Jammu and Kashmir), 0.09 million sq km in the Western Ghats and Konkan Hills (Tamil Nadu, Kerala, Karnataka, Goa, and Maharashtra) while the eastern Aruku region in Andhra Pradesh has 0.01 million sq km in the Ghats.
- The landslide-prone Himalayan region is one of the most earthquake-prone regions. In such a situation, the imperative of environmental impact assessment becomes necessary in these

areas. The National Disaster Management Authority (NDMA) also states that landslides and avalanches are one of the major hydro-geological hazards, which affect large parts of India apart from the Himalayas, North-Eastern hill ranges, Western Ghats, Nilgiris, Eastern Ghats, and Vindhyas and cover about 15% of the land area in that order.

- The Minister of Power and Renewable Energy, Government of India, has recently given information regarding the status of hydropower projects in the Himalayan region in the Lok Sabha, on the basis of which the serious need for environmental impact assessment can be understood. At present, there are 30 Large Hydro Electric Projects (HEPs) (above 25 MW installed capacity) with a total installed capacity of 11137.50 MW which is being developed in Himalayan regions in different states of the country. Out of these projects, 23 hydro projects with a total capacity of 10381.5 MW are under active construction and seven hydro projects with a total capacity of 756 MW are stalled.
- Along with this, the need for environmental impact measurement of developmental activities in the Trans-Himalayan region has also been emphasized in recent times. The Ministry of Environment, in the Revised Environment Impact Assessment Notification, 2006, has prescribed a detailed process for comprehensive assessment of the environmental and social impacts of the project. It includes four stages of the consideration process viz. investigation, scoping, public consultation, and evaluation by an Expert Appraisal Committee (EAC) for assessment of environmental and social impacts, taking into account, inter alia, the location of the project in the Trans-Himalayan region.

What is Environmental Impact Assessment?

- The United Nations Environment Program defines Environmental Impact Assessment as a tool for identifying the environmental, social and economic impacts of a development project or an activity, prior to making a decision on such activity or project.
- Environmental Impact Assessment (EIA) is a tool available to environmental policymakers to reconcile developmental activities with environmental concerns in order to achieve the goal of development. EIA was first introduced in India in 1978 in connection with river valley projects. It has been mandated under the Environment Protection Act, of 1986. The first Environment Impact Assessment notification was promulgated in the year 1994 by the then Ministry of Environment and Forests (now the Ministry of Environment, Forest and Climate

Change).

- Environmental Impact Assessment is based on the concept that development projects should not be undertaken without first assessing their potential impacts on sustainable development. This concept promotes green development. Environmental assessment (EA) is the evaluation of the environmental consequences (positive and negative) of a plan, policy, program, or actual project before a decision is made to proceed with the proposed action, in order to ensure if that the project can be carried out as proposed or not. The Environmental Impact Assessment is carried out by an Expert Appraisal Committee (EAC), comprising scientists and project management experts. The Expert Appraisal Committee prepares a framework for the EIA study and submits a preliminary report.

Importance of State Environment Impact Assessment Authority:

- State Environment Impact Assessment Authority (SEIAA) is a very important organization for a Ministry, for implementation of EIA notification at the State level. It has been given the powers to consider and make provisions for Environmental Clearance (EC) for all proposals under Category B. India's Environment Ministry has taken several initiatives to streamline the process of environmental clearance and reduce the inordinate time taken in granting clearances, for instance, complete online filing and processing of EC proposals, standardizing all expansion proposals ToR, handling of multiple EDS/ADS by taking up all queries in one go, holding EAC meetings, etc.
- As a next step, SEIAA's new ratings have been introduced to encourage efficiency, transparency, and accountability in the functioning of SEIAA. The ranking system is based on the provisions of EIA Notification 2006 and various guidelines issued by the Ministry from time to time. This is done to enhance its efficiency in decision-making, strictly as per the provisions of EIA Notification 2006, without diluting any regulatory safeguards. It is worth noting that the EIA notification already provides timelines for all EC procedures.
- According to the latest United Nations report, half of the world's population currently lives in cities and by 2050, half of India's population will be living in metro cities and cities. On one hand where Urbanization is increasing rapidly in India, globally too 70% of the total population will be living in cities by 2050. In such a situation, the burden on resources will increase too, and hence it becomes crucial to publicize the need for environmental impact assessment in urban development projects.

National Issue

1 Annual Death Penalty in India Report, 2022

Why in News:

Recently a report titled 'Annual Death Penalty in India Report, 2022' was released by Project 39 of the National Law University (NLU).

Key Points of the Report:

- As per the report, trial courts across the country have awarded death sentences to 165 prisoners in 2022, the highest in a single year in the last two decades.
- Also, 539 inmates were sentenced to death by the end of 2022, the highest since 2016. Further, there is a 40 percent increase in the number of inmates on death row since 2015.
- The report noted that out of 11 cases decided by the Supreme Court (involving 15 prisoners) the court acquitted five prisoners of all charges, commuted the death sentence of eight prisoners to life imprisonment and commuted two prisoners who were sentenced to death.
- The long queues of a large number of death row convicts indicate the continuation of a high number of death sentences by lower courts and a low rate of disposal by appellate courts.
- More than 50 per cent (51-28 per cent) of cases (in which the death penalty was awarded) were related to sexual offences.

Position of different courts:

- As per the report in 2022, the maximum number of death sentences was awarded to 38 people in a bomb blast case in Ahmedabad. This is the highest number of people sentenced to death in a single case since 2016.
- The Supreme Court and the High Courts decided 11 and 68 cases, respectively, relating to the death penalty.
- The report also noted that out of 68 cases decided by the High Courts (involving 101 prisoners), the death sentences of three prisoners were confirmed. The sentences of 48 people were commuted to life imprisonment and 43 were acquitted of all charges. The cases of the other six were referred to the Trial Court, NLU.
- The Bombay High Court has enhanced the life sentence of a prisoner to death in a dacoity and murder case.

Major concerns:

- The report cites the improper nature of the investigation and procedural failures by the police, prosecution and lower courts in the acquittals of the apex court.
- It further notes that although appellate courts continue to commute the majority of death

sentences, it is worrying that these commutations have resulted in a reduction in life sentences.

Way forward:

The Hon'ble Supreme Court in the case of Bachhan Singh Vs State of Punjab 1979 had said that capital punishment should be given only in the rarest of rare cases so that there is faith in the law. The un-scrutinized verdicts at times may create a trust deficit between the public and judiciary and thus proper steps must be taken in this regard.

2 OBC Sub-Categorization Panel Gets 14th Extension

Why in News:

Recently union cabinet gave a 14th extension to Justice Rohini's commission for the sub-categorization of OBCs. Notably, earlier this commission had to submit its report by January 31, 2023, which has now been extended till July 31.

About the Commission:

- This commission was constituted on October 2, 2017, under Article-340 of the Constitution to submit its report in 12 weeks by January 02, 2018.
- This commission was tasked with the sub-categorization of Other Backward Classes (OBCs) and the equitable distribution of benefits reserved for them.
- In 2015, the National Commission for Backward Classes (NCBC) recommended that OBCs should be classified into extremely backward classes, more backward classes and backward classes.
- NCBC is empowered to inquire into complaints and welfare measures in respect of socially and educationally backward classes.
- In this report, suggestions are also being taken from the State Governments; the covid-19 pandemic has delayed the collection of ground reports.

Present scenario of OBC Reservation in India:

- The Kalelkar Commission set up in the year 1953 was the first commission to identify backward classes other than Scheduled Castes (SC) and Scheduled Tribes (ST).
- The Mandal Commission (1980) report estimated the OBC population around 52% and classified 1,257 communities as backward. This commission recommended increasing the existing quota, which was only for SC/STs, from 22.5% to 49.5% to include OBCs.
- Articles 15(4), 16(4) and 340(1) of the Constitution mention the word 'backward classes'. Articles 15(4) and 16(4) empower the state to make special provisions for any socially and educationally

backward class of citizens.

- In 2008, the Supreme Court directed the central government to exclude the creamy layer (advanced class) among OBCs.
- The 102nd Constitutional Amendment Act of 2018 provided constitutional status to the National Commission for Backward Classes (NCBC), which was earlier a statutory body under the Ministry of Social Justice and Empowerment.

Need for sub-categorization:

- On one hand, there are powerful farming communities like Jats, Yadavs, and Kurmis who are enjoying various benefits and on the other hand, there is a large number of small farmers and allied communities like fish workers and herdsman who are the most deprived classes.
- Five years of data on the implementation of OBC quota in jobs and higher educational institutions shows that a very small section has cornered the lion's share.
- The National Commission for Backward Classes recommended the Standing Committee for Sub-categorization in 2011 because sub-categorization is a very simple way of removing inequality within OBCs.

Way forward:

The government should address this issue seriously as repeated extensions have eroded the faith of the people in the legal system; therefore it becomes necessary to give suggestions in a time-bound manner.

3 No Bar On Contesting Two Seats Simultaneously

Why in News:

Recently, the Supreme Court dismissed a PIL seeking to bar candidates from contesting elections from more than one constituency in Lok Sabha or Assembly elections simultaneously. The Honourable Court said that this work comes under Parliamentary sovereignty and political democracy.

Provision for contesting elections from two constituencies:

- Section-33(7) of the Representation of the People Act (RPA), 1951 allows a candidate to contest an election (parliamentary, state assembly or bye-election) from a maximum of two constituencies.
- This provision was amended in 1996. Earlier there was no restriction on the number of constituencies from where a candidate could contest.
- Section 70 of the RPA states that if a person is elected to more than one seat in either House of Parliament or in either House of the Legislature of a State, in such case, he shall, within the prescribed time, except one seat, resigns from all

others.

Government's view on the validity of Section-33(7):

- The government is of the view that the law cannot curtail the right of a candidate to contest elections and the political choice of candidates.
- The government said that the restriction for two constituencies was quite reasonable, so there was no need to change the law now.

View of Election Commission of India (ECI) on Section-33(7):

- The Election Commission told the Supreme Court in its affidavit that it had proposed amendments to Section 33(7) in 2004, 2010, 2016 and 2018.
- The Election Commission said that when a person contests from two constituencies and wins from both, he has to vacate one seat from the two constituencies which would require a by-election.
- The Election Commission also suggested that a candidate contesting two constituencies in an assembly election should deposit an amount of Rs 5 lakh and Rs 10 lakh in a Lok Sabha election so that this amount can be used to cover the expenses of the by-polls.

Way forward:

Today, when the concept of one person, one vote is in force in the country, it is the need of the hour that a person should contest elections from only one constituency. This will not only increase people's faith in democracy but also save time and reduce the misuse of resources.

4 Governor Sends Back Domicile Bill

Why in news:

Recently, Jharkhand Governor Ramesh Bais returned the Domicile Bill to the state government which defines a 'local' in the state on the basis of 1932 land records, hence needs a "serious review". Notably, the relations between the Governor and Chief Minister Hemant Soren have been tense for a long time.

What the Governor said about the bill:

- The governor returned the bill, arguing that only local persons, as identified under the bill, would be eligible for appointment to Class-III and IV posts in the state government. This is not in consonance with Article 16 of the Constitution, which guarantees equality in employment. The Governor also said that only the Parliament has the right to impose any kind of conditions in matters of employment, the State Legislature does not have the power to do so.
- The governor cited the case of AVS Narasimha Rao and others vs Andhra Pradesh to say that

the bill was against the orders of the apex court, which were about giving jobs to non-domicile persons. In this case, the Honourable Court said that all the relieved non-domicile employees would be employed in the Andhra region without any break in service and if necessary by creating supernumerary posts.

- It is also noted that various areas of Jharkhand come under the Fifth Schedule (provisions dealing with Scheduled Tribes) of the constitution. Citing the example of the case of Satyajit Kumar vs the State of Jharkhand, the Governor said that the provision of 100 per cent reservation appears to be inconsistent, adversely affecting fundamental rights. So when the State Legislature does not have the power to pass the bill in such cases, a serious question arises on the validity of this bill.

Way forward:

The Ninth Schedule of the Constitution contains a list of central and state laws that cannot be challenged in court. However, courts in the past have held that laws can be reviewed if they violate fundamental rights or the basic structure of the Constitution. That's why the state government should make laws keeping in mind the provisions contained under the constitution.

5 Ladakh demands 6th Schedule status under Article 244 of the Constitution

Why in News:

Recently, Sonam Wangchuk, Innovator and social activist from Ladakh sat on 5 day "Climate Fast" to draw attention to Ladakh's fragile ecology and to secure its protection under the Sixth Schedule under Article 244 of the constitution.

What is Sixth Schedule?

- Article 244 in Part X of the constitution deals with the Administration of Scheduled Areas and Tribal Areas. Under Article 244 (2), the provision of the Sixth Schedule applies to the administration of the Tribal Areas in the States of Assam, Meghalaya, Tripura, and Mizoram.
- Sixth Schedule provides autonomy to tribal communities through creation of Autonomous District and Regional Councils. They can make laws (which further require Governor's assent) on matters like Land, Forests, Shifting Cultivation, Village Administration, Inheritance of property, social customs etc.
- They can constitute village councils or courts for trial of cases between the tribes. They can establish and manage primary schools, dispensaries. Again, they can collect land revenue and impose certain taxes.

Why this demand?

- Ladakh has been administered by an Autonomous Hill Development Council since 1995. With the abrogation of Article 370, Ladakh was made a UT and the real power shifted from the Autonomous Hill Councils to the bureaucracy under the administrative control of the Lieutenant Governor and deprived people of Ladakh to make democratic choices and elect their own councillors.
- Again, the changed domicile policy in Jammu and Kashmir has raised fears in Ladakh about its own land, employment, demography, and cultural identity. With the opening of Ladakh for development for industrial and tourism purposes, the whole region would be inhabited by huge populations and industries. This could endanger their local cultures and social customs.

Way Forward:

The inclusion of Ladakh in the 6th schedule requires a constitutional amendment. As 6th schedule under Article 244 (2), includes only Assam, Meghalaya, Tripura, and Mizoram. For other tribal majority areas of the country, there is a provision of Scheduled Areas under the 5th schedule.

- In September 2019, The National Commission for Scheduled Tribes recommended that the UT of Ladakh be included in the 6th Schedule. More than 90% of Ladakh's population is tribal and communities such as Drokpa, Changpa, Balti, etc follow distinct cultural heritages which need to be preserved.

6 Operation Sadbhavana in Ladakh

Why in News:

Recently, Indian Army has launched Operation Sadbhavana with the aim of supporting Women, Children and Youth in remote areas of Ladakh.

What is Operation Sadbhavana?

Under 'Operation SADBHAVANA', Indian Army undertakes multiple welfare activities such as running of Army Goodwill Schools, Human Resource/ Skill Development, Infrastructure Development Projects, National Integration and Education Tours etc. for the Women, Children and weaker sections of the remote areas of Union Territory (UT) of J&K and Ladakh.

Objectives:

- The focus of Operation Sadbhavana is to improve the overall core social indices of Education & Healthcare, Women & Youth Empowerment with capacity building through implementation of community/infrastructure development projects. The underlying theme is to counter Pakistan sponsored anti India propaganda and facilitate all around development of the region based on a participative model involving the local

people, army, and civil administration.

Features:

- Community development projects include construction, upgradation and provisioning of equipment for community halls, water supply schemes, provision of generators, solar lighting, arboriculture, establishment of bore wells, constructions of village roads and toilets.
- Infrastructure projects include establishment of computer lab; construction of Stadium/Sports Complex; construction of community halls and auditorium and creation of Youth Empowerment Node etc. Sports is also being provided impetus by providing equipment, sports kits and organising various sports events.
- Women in remote areas are being empowered through various training programmes in Vocational Training Centres, Women Empowerment Centres, and Computer Centres. In addition, training classes for women are also being organised for various activities i.e. Pashmina Shawl Weaving, Wool Knitting, Extraction of Apricot Oil, Yak Cheese Making, etc.
- Further, 'Kargil Ignited Minds' an initiative exclusively for girl students of Kargil is launched for preparation for various competitive examinations for admissions into various professional colleges and institutions in India.
- Capacity Building Tours are conducted specifically for women and for students including girls students wherein they get an opportunity to call on and interact with the President of India in Delhi.

Way Forward:

'Operation SADBHAVANA' has been successful in achieving its objectives through national integration tours, women empowerment, employment generation, education, and development activities towards nation-building. 'Operation SADBHAVANA' projects are selected after considering local aspirations, in conjunction with local civil administration. This initiative is crucial from the point of view of national integration and assimilation of people of the region with the mainstream of India. This will also help in countering the radicalism and anti-national activities in the region.

7

Andhra's Guaranteed Pension Scheme model catches the attention of the Centre

Why in News:

The attention of the Union Finance Ministry has been caught because of the new model proposed by the Andhra Pradesh government where the country is debating Old Pension Scheme (OPS) Vs New Pension

Scheme (NPS).

About Old Pension Scheme (OPS)?

- Earlier OPS offered pensions to government employees which were fixed at 50% of the last drawn basic pay or their average wages over the previous ten months of employment, whichever is more favourable to them.
- Employees under OPS are exempted from making pension contributions.
- From April 1, 2004, the OPS was discontinued by the Central government.

Issues with the OPS:

- As life expectancy has increased, OPS has become unsustainable for governments.
- The monthly pay-outs of pensioners also increased, like the salaries of government employees, with hikes in dearness allowance or (DA) announced by the government for serving employees.
- The 'pay-as-you-go' scheme created inter-generational equity issues; the present generation had to bear the continuously rising burden of pensioners.
- Some states considered this a major fiscal concern.

What is New Pension Scheme (NPS)?

- In April 2004 the NPS was introduced by the Central government as a substitute for OPS.
- Under NPS, those who work for the government contribute 10% of their base pay, while their employers can contribute up to 14%.
- Employees from the public, private and unorganised sectors are open to pension programmes except those from the armed forces.
- During the course of their employment, this scheme encourages people to invest in a pension account.
- A certain percentage of the corpus can be taken out by the subscribers post-retirement.

What is the Difference between NPS and OPS?

- The pension amount is constant and guaranteed in OPS. On the other hand, NPS doesn't guarantee fix returns.
- No tax benefits were in OPS whereas in NPS an employee can claim tax deductions of 1.5 lakh under Section 80C of income tax and up to 50,000 on other investments under 80CCD (1b).
- No tax on pension in OPS whereas in NPS 40% is taxable while the remaining 60% of the NPS Corpus is tax-free.

Way Forward:

The pension system in India needs a relook and the current debate needs to be broadened to look at the requirements for the whole set of elderly. The pensions system should be sustainable from the perspective of both good politics as well as economics.



International Issue

1 'Strategic Partnership' between India and Egypt

Why in news:

The President of Egypt, Abdel Fattah El-Sisi, was on a State Visit to India from 24-27 January 2023. The President of Egypt was also the chief guest at the Republic Day 2023 of India. The Indian Prime Minister Narendra Modi and Egyptian President Abdel Fattah el-Sisi decided to elevate their ties to the level of strategic partnership, pledging to expand ties in the areas of defense and security, trade and counter-terror cooperation.

India-Egypt bilateral relations:

- India and Egypt have had a history of close ties since ancient times. India sees Egypt as a gateway to European and African countries. Ashoka's inscriptions mention India's relations with Egypt under Ptolemy II.
- The close friendship between President Nasser and PM Nehru led to the Friendship Treaty between the two countries in 1955.
- The year 2022 marks the 75th anniversary of diplomatic relations between India and Egypt.
- Also, Egypt has been invited as a guest country during India's chairmanship of G-20.
- Bilateral trade in 2021-22 is set to 7.26 billion, registering a growth of 75% over the previous year.
- About 50 Indian companies have invested in Egypt in various sectors with a combined investment of over US\$ 3.15 billion. Egyptian investment in India is around US\$ 37 million.
- India allowed 61,500 tonnes of wheat to be exported to Egypt despite a ban on exports.

Highlights of the Egyptian President's visit to India:

- The relations between the two countries were upgraded to a strategic partnership.
- Both sides decided to elevate the relationship to a strategic partnership covering political, security, defense, energy and economic sectors.
- Exchanged commemorative postage stamps to mark 75 years of the establishment of India-Egypt relations.
- MoUs were signed in the areas of cooperation in cyber security, IT, culture, youth affairs
- Taking the issue of terrorism seriously, both countries jointly stressed efforts to alert the international community. Terrorism is one of the most serious security threats to humanity and they stressed the need for concrete measures to eliminate cross-border terrorism.
- Both sides have decided to take bilateral trade to \$12 billion in the next five years.
- Further, both nations envisage creating

permanent channels to enhance digital connections between small and medium scale industries.

Way forward:

Egypt plays a prominent role in the politics of Africa and the Arab world. It is also seen as a major gateway to the markets of Africa and Europe. This agreement will not only provide cooperation in the fields of culture, IT, cyber security, youth affairs and broadcasting on both sides in future but will also help in dealing with terrorism and extremism.

2 Climate change fuelling conflict and migration in the Lake Chad Basin

Why in News:

Recently, Refugees International, a human rights group called for a high-level international action plan on the changing situation in the Lake Chad basin in Niamey, the capital of Niger. Drought, floods and the shrinking of Lake Chad due to climate change are fuelling conflict and migration in the region, which needs better attention.

Key points of the report:

- The report found that dwindling natural resources due to extreme weather are increasing stress in communities and forcing people to migrate from their birthplace.
- According to the report, till now about 3 million people have been displaced and 11 million people may fall in this category if humanitarian assistance is not received quickly.
- A 13-year insurgency by the Boko Haram extremist group and other militant groups has destabilized the Lake Chad basin and the Sahel region. This basin is located between Cameroon, Chad, Niger and Nigeria.
- According to the United Nations Population Agency, the Lake Chad Basin is more a humanitarian issue linked to peace and regional development than climate and ecological crisis.
- The UN weather agency also warned that the Chad Basin is particularly vulnerable to extreme events related to climate change, such as floods and droughts and extreme events could increase food insecurity in future.
- According to Chad Basin Commission data, the Lake Chad Basin in West and Central Africa covers 8% of the African continent, while being home to 42 million people whose livelihoods depend on pastoralism, fishing and farming.
- The United Nations Environment Agency noted that Lake Chad has shrunk by almost 90% in 60 years, with climate change as a significant contributor. Irrigation, construction of dams and population growth were also responsible for this.

Way Forward:

Day by day increasing climatic events are indicating to the world community that now the situation cannot be controlled only through meetings and conferences. Developed countries and rich people also have to take care of the interests of the people whose resources they have misused for their upliftment. Otherwise, it will be difficult for anyone to escape from the havoc of nature.

3 Unit-3 of Karachi Nuclear Power Plant (KANUPP-3)

Why in news:

Recently, Pakistan's PM Shehbaz Sharif inaugurated the third unit of the Karachi Nuclear Power Plant which will add 1,100 MW of electricity to the national grid.

What is KANUPP-3?

- KANUPP-3 is a part of the ambitious China-Pakistan Economic Corridor (CPEC) project, under the Belt and Road Initiative (BRI) of China. Nuclear cooperation between the two countries goes back to 1986 when they signed the 'Agreement for Cooperation in Peaceful Uses of Nuclear Energy'.
- As part of it, the first 325 MW capacity Pressurized Water Reactor (PWR) was installed at Chashma in Punjab in 1991. Later on, three more plants were installed at Chashma. A separate contract was signed in 2013 for the construction of nuclear power plants in Karachi, named K-2 and K-3 having a capacity of 1100 MW each.
- Construction of these two started in 2015 and 2016, respectively, and the K-2 nuclear plant began its operation in May 2021. These are based on Hualong One reactor, or HPR1000 which is a China-designed Generation III+ three-loop pressurized water reactor.
- The KANUPP-1 was commissioned in 1972 which was a single 137-MW Canada Deuterium Uranium, or CANDU, unit. It was decommissioned in 2002 after completing its 30 years of designed life.

Implications:

- With its operationalization, the share of nuclear energy in Pakistan's energy mix will exceed 10%. Currently, share of fossil fuels based power generation is highest in Pakistan, which supplies more than 60% of Pakistan's electricity needs. Amid concerns of growing energy crisis and power outages, enlarging nuclear power capacity could provide cheaper and cleaner source of energy.
- Moreover, it will reduce Pakistan's import bill which has reached \$27 Billion in the wake of current economic crisis. Even the foreign exchange reserves of the country dropped to their

lowest since 2014. Investing in renewable energy could help in saving valuable foreign exchange.

- On the international front, it strengthens the China-Pakistan relationship and builds trust between the countries. However, India should be cautious of this duo as the growing strength of CPEC could compromise India's national interests.

Way Forward:

Pakistan is planning to introduce more such reactors at Karachi and Chashma and exploit the full potential of hydel power generation. Steps like these not only ease the energy crisis in the country but also help in tackling climate change.

4 Sino Russia Alliance Implications

Why in news:

Recently, Chinese companies aided Moscow in equipping its jet fighters, submarines and soldiers. China is providing Russia with the necessary technology that caters to Moscow's military needs, despite several sanctions on Russia internationally.

The Sino-Russian Alliance: An Overview:

- Last year Russian president Vladimir Putin visited Beijing unveiling a new Sino-Russian alliance a partnership 'without limits' and 'no forbidden areas'. Although, both nations had been strategic partners for a long time before this alliance was announced-- their partnership dating back to the 1950s during the Soviet era--this partnership has been rekindled in recent years.
- This alliance between China and Russia has been driven by a shared interest in countering the influence of the United States and NATO in international affairs. Earlier, both nations sort to have friendly relations with the US. However, with Russia's growing grievances and china's ever increasing ambition to replace the US as Asia's dominant power brought these two forces together.
- In recent years, the Sino-Russian alliance has grown stronger, with both countries engaging in joint military exercises, economic cooperation, and coordination on international issues

After-effects of such alliance:

- Moscow's confidence in taking a chance at war with the West in Europe was increased by the Sino-Russian alliance. Through multifaceted military efforts, Russia sought to quickly topple the Kyiv administration and absorb Ukraine's sovereignty into Russia. If he had been successful, the European security order—which Putin had long criticized—would have suffered a deadly blow
- However, this didn't go as it was planned and

almost an year after the Ukraine invasion, Russia has lost 50% of the territories it had gained in the early phase of invasion. Apart from this, the nation is hard regime of western economic sanctions

- Further, the Ukraine invasion helped US expand the NATO presence and strengthening of US bilateral alliance with Australia and Japan.
- US has significantly raised its military and political support for Taipei and is making it harder for Xi to embark on an invasion of Taiwan.
- The so-called correlation of forces between the West and the Moscow-Beijing axis is significantly altered by the mobilization of Japan and Germany, the third and fourth largest economies in the world.

Implications for India:

- The Ukraine war has rather facilitated western unity with America as the leader and has allowed it to put simultaneous pressure on both China and Russia. As the Sino-Russian alliance grows stronger, India is faced with increasing strategic competition from both countries. The western alliance and its pressure on china might work in favour of India.
- China-- gaining more confidence in such alliance-- might increase its military pressure on the disputed border with India, and India's dependence on Russian military supply to tackle the PLA challenge puts the nation in a tough position.
- Further India's dependence on Russian army supplies has constrained its position over its engagement with Europe and the US becoming one of the major constraints in its freedom of action

5 Initiative on Critical and Emerging Technologies (iCET)

Why in News:

Indian National Security Advisor Ajit Doval and his US counterpart Jake Sullivan, in Washington, formally launched the initiative on Critical and Emerging Technologies (iCET) by convening its first inaugural meeting.

What is iCET?

- The idea of iCET was first pitched by the Indian PM and his American counterpart in May 2022, along the side-lines of the Tokyo Summit. It aims to elevate India-US strategic and technological partnerships by fostering cooperation in new domains.
- It has identified areas of cooperation promoting co-development and co-production shaped by shared democratic values and respect for universal human rights. These areas of cooperation are divided under 6 major heads

namely– scientific research and development, quantum and artificial intelligence, defence innovation, space, advanced telecommunications and semiconductors.

- This would be established through “innovation bridges” in key sectors through expos, hackathons and pitch sessions.
- The prime focus is to bolster innovative ecosystems in both India and the US. It envisages a partnership between the National Science Foundation and the Indian Science Agencies for heightening cooperation in artificial intelligence, quantum technologies, and advanced wireless technologies. The aim is to develop common standards and benchmarks for responsible AI and other technologies.
- On the defence front, the iCET announced a new bilateral defence industrial cooperation roadmap with an initial focus on exploration related to jet engines and according Validated End User (VEU) status to more companies.
- Apart from this, it advocated cooperation in the space sector by providing opportunities for joint commercial space exploration and advanced training of Indian astronauts at NASA Johnson Space Centre. Moreover, the US has applauded the establishment of the Indian National Semiconductor Commission in diversifying supply chains. It will complement the CHIPS programme initiated by the US.

Significance:

- Apart from co-development and co-production in critical and emerging technologies, it will address trade barriers, regulatory mechanisms, and export control through diplomatic channels. In view of rising Chinese ambitions, it will provide strategic, economical, and technological security to both countries.
- As far as benefits for India is concerned, it will add to her technological capabilities while ensuring economic growth. Moreover, it will reduce India's dependence on Russian military equipment while increasing its bargaining power. Also, cooperation in the space sector will complement India's plan for the commercialisation of the space sector.

Way Forward:

iCET has the potential to revolutionize the Indo-US technological partnership while benefitting the whole world community if implemented with speed and purpose.

6 QUAD Nations launch Quad Cyber Challenge

Why in News:

Recently, Quad nations (India, USA, Australia, Japan) launched 'Quad Cyber Challenge' to improve cyber

security and invited Internet users across the Indo-Pacific to become part of the 'Quad Cyber Challenge' and practice "safe and responsible" cyber habits. The action in India is being coordinated by the office of the National Cyber Security Coordinator with the National Security Council Secretariat.

- In January 2023, the Quad Cyber Security Group met in Delhi. The group discussed building cybersecurity capacity for Quad members and for partners in the Indo-Pacific region. The Indian side was led by Lt General Rajesh Pant, the country's National Cyber Security Coordinator.

What is Quad Cyber Challenge?

- Quad Cyber Challenge is a public campaign to encourage internet users across the Indo-Pacific and beyond, to adopt safe and responsible cyber habits.
- The focus of the initiative is to improve people's cyber security knowledge and behaviour as well as to promote a secure and resilient cyber environment to benefit economies and consumers around the world.

Relevance:

- Cybersecurity is one of the key areas identified by the Quad Leaders in advancing a free and open Indo-Pacific that is inclusive and resilient. Cyber threats from China and North Korea are potential challenges for the four countries and their partners.
- According to National Cyber Security Secretariat, Internet users worldwide are targets of cybercrime and other malicious cyber threats that can cost trillions of dollars each year and compromise sensitive and personal data.
- Many cyberattacks can be guarded against by simple preventive measures. Internet users and providers can follow these measures to significantly improve cybersecurity and cyber safety.
- These steps include routinely installing security updates, enabling enhanced identity checks through multi-factor authentication, utilising stronger and regularly changing passwords and knowing how to identify common online scams such as phishing.
- The QUAD Cyber Security Challenge provides resources such as basic cybersecurity information and training, for all users – from corporations to educational institutions, small businesses, and individuals from school students to the elderly.

Way Forward:

The Challenge reflects the continuing Quad efforts to strengthen individuals' and communities' cyber security awareness and to foster a more secure and resilient cyber ecosystem. Furthermore, such initiatives can prove to be a tool for capacity building in the field of Cyber Security, thereby countering cyber security threats from countries like China and North Korea.

7

Milk Capital of the World: India Leads Global Milk Production

Why in News:

India has claimed its position as the top milk producing country in the world, contributing a massive 24% of global milk production in the year 2021-22. According to the Food and Agriculture Corporate Statistical Database (FAOSTAT), India has recorded a 51% increase in milk production in the last eight years.

About India's dairy sector:

- The top milk-producing states in India are-
 - » Uttar Pradesh (14.9%, 31.4 MMT),
 - » Rajasthan (14.6%, 30.7 MMT)
 - » Gujarat (7.6%, 15.9 MMT)
 - » Andhra Pradesh (7.0%, 14.7 MMT)
- India witnesses a 6% growth rate in milk production every year.
- 3Majority of the labour force comprises female labours.

Significance of the Dairy Sector in India:

- **Employment-** it employs more than 8 crore families in the country.
- The dairy sector supports the country's economy and is one of the most significant industries in the Indian economy.
- Companies like Amul, Mother Dairy, and Kwality Limited have been instrumental in increasing production.
- Sales of VAPs (value-added products) also decreased during the pandemic in the prior year 2020-21.

Schemes related to the dairy industry:

- National Programme for Dairy Development (NPDD)- launched in 2014 by the Department of Animal Husbandry and Dairying to enhance the quality of milk and milk products and increase the share of organized procurement, processing, value addition and marketing.
- National Livestock Mission, Sub-Mission on Feed and Fodder Development- aimed at increasing the availability of feed and fodder for India's livestock.
- Rashtriya Gokul Mission- It promotes indigenous cattle rearing and conservation in a scientific manner.
- National Artificial Insemination Programme- It aims for improving the genetic merit of milch animals with high-quality seed.

Way Forward:

India's rise to the top as the world's leading milk producer is a testament to the hard work and dedication of its farmers and the support provided by the government through its various schemes. With a promising future ahead, India is well on its way to establishing itself as a dairy superpower.



Environmental Issue



1 Tips to Save Kerala's "Sinking" Island

Why in News:

Researchers have suggested curated solutions to save the Munroe Thuruthu. The island has been facing steady land subsidence, tidal flooding and lower agricultural productivity which have led to a mass exodus from the region.

Causes:

- Though the degradation started in 1980s but its severity was felt only in 2000s. Till now, around 39% area of the island has been lost with Peringalam and Cheriya Kadavu facing highest degradation of 12% and 47% respectively.
- The study conducted by the National Centre for Earth Science Studies (NCESS) has cited anthropogenic activities as the main culprit behind the land degradation. The study has used the available remote sensing data and land survey records to analyse the island's morphological changes. It has also conducted electrical resistivity meter surveys and bathymetry survey of the river Kallada to determine the sub-surface geology of the land area.
- The prime cause of land depletion in the area is unregulated sand mining resulting in formation of riverbed pools in the Kallada river. Moreover, the sediment supply by the river was blocked after the construction of Thenmala dam. The saline pools created due to unregulated sand mining have deteriorated the groundwater quality and soil fertility. The declining level of these two parameters has made agriculture impossible leading to mass exodus of islanders.

Solutions:

The study has prescribed following solutions to save the sinking island:

- First of all, there should be reverse landscaping which will integrate all aspects of earth and social sciences.
- Stringent measures should be adopted to control sand mining in the Kallada river and regulate land use on the island.
- All the current construction methods in the island should be replaced with well-studied engineering techniques.
- Furthermore, the study has proposed an artificial sedimentation process to eradicate the saline banks of riverbed pools. Sediments deposited in the Thenmala reservoir could be used for this purpose.
- Apart from this, the research has stressed on the need for sustainable management plans to conserve Ashtamudi lake, an important Ramsar

site.

Way forward:

India has pledged to restore 26 million hectares of degraded land by 2030 under UNCCD. A stringent regulatory mechanism, advanced technological solutions and suitable policy framework is required to achieve the same.

2 Kelp Forests losing Unique Traits due to Climate Change, says Study

Why in News:

A recent study, published in the Nature journal showed that underwater ecosystems called Kelp forests are declining because of climate change.

Findings of the study:

- Kelp populations at equatorward-range edges are particularly vulnerable to climate change as these locations are undergoing warming at or beyond thermal tolerance thresholds.
- Due to this, the unique adaptive or evolutionary genetic diversity that the rear-edge populations (populations in warm, low-latitudes) may contain is also under threat due to rapid warming.
- Ecklonia radiata, a dominant kelp species in the Southern Hemisphere, is vulnerable to climate change, especially in regions near the equator.
- New populations were found in shallower and cooler winter months with temperatures around 200°C.

About Kelp Forests:

- These are underwater ecosystems formed in shallow water by the dense growth of several different species of algae known as kelps.
- Kelps are large brown algae that live in cool and relatively shallow water which is close to the shore and attach to the seafloor.
- They eventually grow at the water's surface and rely on sunlight to generate food and energy.
- Kelp forests provide underwater habitats to hundreds of species of invertebrates, fishes, and other algae and have great ecological and economic value.

Distribution:

- Observed throughout the Arctic by the Inuit.
- The Canadian Arctic alone represents 10% of the World's coastlines,
- Between Ellesmere Island and Labrador, as well as along the coasts of Lancaster Sound, Ungava Bay Hudson Bay, Baffin Bay, and Resolute Bay and Eastern Canada, kelp forests have been scientifically documented.

Significance of Kelp:

- These are keystone species which indicate a substantial change in the structure of the environment.

- It serves as a crucial food source for a variety of marine creatures. Kelps produce up to 60% of the carbon found in coastal invertebrates.
- They serve as a habitat for birds and forage.
- They serve as natural backwaters and stop coastal erosion.
- It is a significant source of iodine and potash.

Way Forward:

The loss of kelp forests will lead to a decline in the unique biodiversity that they support. Identification of such areas is vital to ensure that this important genetic diversity is protected and to understand how extant and past climates shape species distribution and evolutionary diversity.

3 Shifting Banks of Ganga in West Bengal

Why in News:

Severe erosion along the banks of the river Ganga in Malda and Murshidabad districts of West Bengal has left thousands of people homeless. According to the experts, erosion in several blocks is a recent phenomenon which is washing away houses, temples, agricultural land, etc. Even India's largest botanical garden in Howrah is under threat.

Factors responsible:

- Experts have considered it as erosion induced by anthropogenic factors. The rivers of the Ganga-Brahmaputra-Meghna delta has a natural tendency to oscillate. Thus, river erosion and shifting courses are recurrent phenomena in this basin.
- However, the construction of the Farakka Barrage has obstructed the natural flow of the river. It has reduced its cross-sectional area and water-holding capacity. It was constructed to divert an ample amount of water from Ganga to the Bhagirathi-Hooghly river system through a feeder canal for the maintenance and preservation of Kolkata port.
- Consequently, it has led to sediment deposition in upstream Farakka in Malda, forming chars (river islands). In Malda, the river is eroding on the left bank whereas the relatively sediment-free water downstream Farakka is eroding on the right bank in Murshidabad.
- Moreover, the holding capacity of the barrage has considerably reduced in recent times resulting in the unregulated release of water during heavy rainfall in North Bengal. This has aggravated the erosion downstream. Also, sand mining, deforestation, port construction, aquaculture, climate change, etc. are worsening it.

Solution needed:

- The local administration has tried to prevent erosion by using bamboo structures and

sandbags but these steps will not suffice. Even, the Chief Minister of West Bengal in the recently convened meeting of the National Ganga Council flagged concerns about massive erosion in Manikchak block.

- To prevent river erosion, embankments should be built and mangroves should be planted along the banks of the river. There should be risk zone mapping of vulnerable districts and locals should be alerted from time to time. Top priority must be accorded to the rehabilitation process.
- Various state departments, Inland Waterways Authority of India and Kolkata Port Trust have reiterated the lack of funds for implementing long-term solutions. The centre should take note of the grim situation and prepare a delta management plan accordingly.

Way forward:

The river needs an area of 3-5km to play. There is need to understand river science as a whole and shift from civil engineering to social engineering solutions.

4 Disturbances in Earth's magnetic field and Avian Vagrancy

Why in News:

New research published in Nature Scientific Reports has revealed that there is a possible link between the disturbances in Earth's magnetic field and the migratory birds going astray. This phenomenon is known as avian vagrancy.

Relation between vagrancy and disturbances in the magnetic field:

- It is long established that bad weather can make migratory birds disoriented, leading them to unfamiliar territories they are not accustomed to. However, a recent study has shown that even disturbances in the earth's magnetic field can make birds lose their way during migration.
- For this, scientists have analysed records of 2.2 million birds from 152 species that were captured and then released between 1960 and 2019. Since the birds can sense magnetic fields using magneto receptors in their eyes; they are highly affected by distortions in the magnetic fields. The birds may navigate by geography in familiar areas, but in some cases, they are dependent on geomagnetism. Any change in the magnetic fields affects both young and old birds regardless of their migration experience.
- Earth's magnetic field or geomagnetic field is an imaginary line which runs from the North Pole to the South Pole and it is shaped by various internal and external factors, for instance; solar winds or sunspots. These disturbances render the birds with distorted maps which makes them lose their way. They often end up in an unacquainted territory which could either be detrimental or

supportive to their survival. In the new location, they may find it difficult to find suitable food and habitat, or this new location could be more conducive on account of traditional habitat destruction due to climate change.

- However, the study showed that there was fewer vagrancy linked to geomagnetic disturbances due to higher solar activity. This might be due to the radiofrequency generated by solar activity that would render magneto receptors in birds useless. Thus, it forces them to navigate through other available cues instead.

Way forward:

This study is a path-breaking revelation to analyse the threats faced by migratory birds and help in their conservation. Moreover, it could also aid scientists to understand the reasons for stranding in other migratory species such as whales.

5 Conservation Initiatives in the Budget

Why in News:

In Budget 2023-24, the Indian Government has proposed several schemes and initiatives as part of a larger “Green Push” aimed at ecological conservation. The following are the prominent ones with targeting an array of issues and ensuring measures to preserve India’s ecological health.

MISHTI (Mangrove Initiative for Shoreline Habitats and Tangible Incomes):

- This new program will be aimed to facilitate intensive afforestation of Coastal Mangrove Forests along the coastline and over the saltpan lands. The expenses of the program will be met through the convergence of MGNREGS, CAMPA funds and other sources.

Significance of initiative:

This program will have the following benefits:

- Promotion of conservation efforts for most biodiversity rich regions on earth and provide more ecological leverages.
- Provide Commercial opportunities to locals as Mangroves provide habitats for various marine species and fisheries.
- Protection of Coastline from inclement weather Vagaries.
- Mangrove Forests have acted as Ecological-Shock Observer and buffers for Cyclones. They have the ability to make coastal land more resilient, preventing land erosion and flooding. They also have four times more capability of Carbon sequestration than tropical rainforests.
- According to the India State of Forests Report 2021, India has 3% of total South Asia’s Mangrove Forest and is home to the largest Mangrove Forest in the World i.e. Sundarbans

Delta (West Bengal).

PM PRANAM (PM Program for Restoration, Awareness, Nourishment and Amelioration of Nourishment of Mother Earth):

- This program is aimed to incentivize states and union territories to promote alternative fertilizers and the balanced use of chemical fertilizers.
- This move will also bring down the government’s subsidy burden and restore the ideal N:P:K ratio in the country. The Government subsidies on fertilizers have gone up by almost 40% from 2021.
- The program includes the adoption of ‘Natural Farming’ and for this purpose 10,000 Bhartiya Prakaratik Bio-Input Resource Centers will be set up over 3 years. These Centers will act as a network for the distribution of micro-fertilizers and pesticide manufacturing.

Significance of this scheme:

- This move will empower the ongoing redressal mechanisms to check the negative impacts of chemical fertilizers. That includes water pollution of ground water and fresh river/pond water, eutrophication endangering aquatic life, presence for longer periods leading to acidification and degrading land productivity.
- Scientific studies have also found a link between the use of chemical fertilizers and cancer among farmers.

Amrit Dharohar:

- This scheme will aim to encourage the optimal use of wetlands by conserving them with an outlook that includes local communities as caretakers of these Ecosystems.
- Significance of this Scheme:
- This scheme will encourage the preservation of biodiversity-rich zones and carbon stocks. Wetland sites sustain aquatic life and other diverse flora and fauna communities. This move also seeks to increase eco-tourism opportunities and mitigate the climate change impacts on the economy of coastal regions.
- These above-mentioned moves will embrace India’s priority for transitioning into a Low-Carbon intensity economy and explore new green job opportunities by mitigating climate change effects through nature-based solutions.

Conclusion:

The Union Budget of India plays a crucial role in shaping the country’s economic and overall growth trajectory. In accordance with it, the above-mentioned schemes are promising the restoration of the ecological health of the country while ensuring the effective participation of local communities as a crucial stakeholders. These moves will support India in achieving its Net Zero Emission target by 2070.

6 Noble's Helen Butterfly

Why in News:

Recently, an extremely rare saw-toothed Noble's Helen butterfly was recorded for the first time in India, in Namdapha National Park, Arunachal Pradesh. This identification was conducted by a group of passionate butterfly enthusiasts.

Noble's Helen Butterfly:

- The scientific name of this extremely rare butterfly is *Papilio noblei*.
- It is a butterfly with a wingspan of 100-120 mm.
- It has an extra white spot in the dorsum of the forewing.
- It is most closely related to the "Papilio-antonio" found in the Philippines.
- It is also known to be very rare in occurrence in its previously known ranges.

Distribution:

- This butterfly species is facing disappearance from its previously known habitats, which encompass the regions of Myanmar, southern China, and Vietnam.
- This was also known to be found in the montane forest at moderate elevations in northern Thailand and has also been reported in the regions of Myanmar, Yunnan and Hubei regions of China, Laos, Cambodia and Vietnam.

Significance of a butterfly in the Ecosystem:

- The abundance of butterflies in any area represents the rich biodiversity. The butterfly also acts as an indicator species.
- Indicator Species provide information on the overall condition of the ecosystem and of other species in that ecosystem. They reflect the quality and changes in environmental conditions as well as aspects of community composition.
- They also act as a pollinator.

Namdapha National Park:

- Location- It lies on the international border between India and Myanmar(Burma) within Changlang District of Arunachal Pradesh.
- It lies close to the Tri-junction of Indo-China-Myanmar Border. The physiographic extension of Namdapha Protected Area lies between the Dapha Bum ridge of the Mishmi Hills, of North Eastern Himalayas and the Patkai Ranges.
- It is the largest protected region of the Eastern Himalayan Biodiversity Hotspot.
- The Namdapha National Park is famous for the critically endangered Namdapha flying Squirrel. It is the only national park in the world to have four Feline species of big cats namely the Tiger, Leopard, Snow Leopard and Clouded Leopard.
- This breakthrough in the Namdapha National Park has encouraged nature lovers and also emphasized the restoration steps taken by various agencies in

the Eastern Biodiversity Hotspot region.

7 About 20,000 tonnes of Red Sanders were smuggled from India between 2016 and 2020: Report

Why in News:

In a recently released report by TRAFFIC and WWF-I titled "RED SANDERS: Factsheet on India's Red Sanders in illegal wildlife trade", 28 incidents of confiscation & seizure of more than 19,049 tonnes of Red Sanders logs were reported. These had been exported from India between 2016 and 2020 after being illegally extracted from the wild. This report is based on the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) trade database.

Facts About Red Sanders:

- Red Sanders or *Pterocarpus Santalinus*, also called Red Sandalwood, is an endemic species found in the southern tropical dry deciduous forest of Eastern Ghats in India.
- It is listed as 'Endangered' by IUCN Red List and falls in Appendix II of CITES. In India, it is enlisted under Schedule IV of the Wildlife (Protection) Act, 1972.
- The heartwood of Red Sanders is in demand for making furniture, handicrafts and musical instruments in China and Japan. The red dye, obtained from the wood, is used as a colouring agent in the textiles, medicine and food industries.

Cause of Concern:

Red Sanders is one of India's most exploited tree species due to illegal logging and harvesting. Under the foreign trade policy of India, the import of Red Sanders is prohibited, while export is restricted. China remains the largest importer with more than 13,618 tonnes of the products, followed by Hong Kong at 5,215 tonnes and Singapore at 216 tonnes. With 53.3 percent of logs being shipped to China, it is the biggest importer of these illegally harvested logs of Red Sanders

Way forward:

Conservation efforts and awareness campaign along with strict enforcement of legal measures need to be stepped up to prevent further exploitation of the species. Andhra Pradesh government has given special status of protection to Red Sanders. Red Sanders offences were made cognisable and non-bailable, and the punishments related to it were enhanced. Further, Red Sanders forests should be declared as 'High Conservation Areas', to provide an adequate legal framework for protecting the species and its habitat. Enforcement agencies such as the Forest Departments, Customs, Railways, Directorate of Revenue Intelligence, and Coast Guards must coordinate efforts to curb the Red Sanders trafficking by sharing information on hotspots and transit routes and real-time intelligence related to the Red Sanders smuggling.



Science-Tech



1 NISAR SATELLITE- Joint Earth Observing Mission of NASA and ISRO

Why in News:

NISAR, the earth-observation satellite jointly developed by NASA and ISRO, is all set to be shipped to India in January 2023 for a possible launch in September 2023. The satellite will help study Earth's land and ice surfaces in greater detail and provide an in-depth analysis of the same.

About NISAR Satellite:

- ISRO and NASA joined hands in 2014 to build the 2,800 kg satellite for earth observation.
- It has Synthetic Aperture Radar (SAR) that will use to measure changes in the surface of the Earth.
- SAR is the technique for producing high-resolution images and because of the precision, the radar can penetrate clouds and darkness, which means that it can collect data day and night in any weather.
- NISAR will gather radar data with a drum-shaped reflector antenna almost 12 meters in diameter.
- It will use a signal-processing technique called Interferometric Synthetic Aperture Radar, or InSAR, to observe changes in Earth's land and ice surfaces down to fractions of an inch.

Role of NASA:

- National Aeronautics and Space Administration (NASA) will provide one of the radars for the satellite, a high-rate communication subsystem for science data, GPS receivers, a payload data subsystem, and an L-Band payload.
- NISAR will be equipped with the largest reflector antenna ever launched by NASA.

Role of ISRO:

- ISRO will provide the spacecraft bus, the second type of radar (called the S-band radar), the launch vehicle and associated launch services.

Function and utilities of the satellite:

- It will scan the globe every 12 days over the course of its three-year mission of imaging the Earth's land, ice sheets and sea ice to give an unprecedented view of the planet.
- It can detect movements of the planet's surface as small as 0.4 inches over areas about half the size of a tennis court.
- It will help researchers detect slow-moving variations of a land surface that precede earthquakes, landslides, and volcanic eruptions.
- Data about such movements could help communities prepare for natural hazards such as in the case of the Joshimath land subsidence.
- Measurements of melting sea ice and ice sheets

will improve understanding of the pace and impacts of climate change, including sea level rise.

- It can help to monitor groundwater supplies.

Way forward:

NISAR's data can help people worldwide to better manage natural resources and hazards. Its images will be detailed enough to show local changes and broad enough to measure regional trends. As the mission continues for years, it will also add to our understanding of our planet's hard outer layer, called its crust.

2 Generative Artificial Intelligence

Why in News:

The Government of India took cognizant of the emergence of Generative Artificial Intelligence technologies and their rapid proliferation in sectors like education, manufacturing, healthcare, finance, and others. The Government also considers Artificial Intelligence (AI) to be a kinetic enabler for the growth of our digital economy, investments, and jobs.

What is Generative Artificial Intelligence?

- Generative Artificial Intelligence refers to the capability of artificial intelligence-enabled machines to use existing text, audio files, or images to create new content. For example ChatGpt, Deep-Fakes etc.
- Generative AI works by training a model on a large dataset and then using that model to generate new, previously unseen content that is similar to the training data.

What can be the Applications of Generative AI?

Art, Music, Image and Video Generation-

- DeepDream Generator - An open-source platform that uses deep learning algorithms to create surrealistic, dream-like images.
- DALL E2 - This AI model from OpenAI generates new images from text descriptions.
- Amper Music - creates musical tracks from pre-recorded samples.
- AIVA- uses AI algorithms to compose original music in various genres and styles.

Language and Content-

- ChatGPT to generate news articles, poetry, and even code.
- Chat-bots and language translation models.
- Drug Discovery- Generative AI models can be used to discover new drug candidates and predict their potential efficacy.
- Further, it can be used in robotics and machine learning by generating content for AI to learn.

Significance for India-

- As per NASSCOM data, the overall AI employment

in India is estimated at about 416,000 professionals.

- The growth rate for the sector is estimated at about 20-25%. Further, AI is expected to contribute an additional USD 957 billion to India's economy, by 2035.

What are the Related Indian Initiatives?

- National Strategy for Artificial Intelligence- To develop an ecosystem for the research and adoption of Artificial Intelligence.
- National Mission on Interdisciplinary Cyber-Physical Systems.
- Artificial Intelligence Research, Analytics and Knowledge Assimilation Platform.

What are the Issues Associated with Generative AI?

- Job Displacement.
- Reducing Human Cognition- perform tasks. that would otherwise require human intelligence.
- **Bias and fairness-** AI models can perpetuate and amplify existing biases in society, leading to discrimination and unfair treatment of certain groups.
- **Ethical concerns-** It can be used for malicious purposes, such as propaganda or disinformation campaigns, and fake content, which can undermine public trust and have serious consequences.
- **Intellectual property-** Generative AI models can produce creative works that infringe on existing copyright or trademark laws, leading to legal disputes.
- The potential for Concentration of Power in a few big tech companies and countries.

Way forward:

Despite significant advances in recent years, generative AI still faces technical challenges, such as improving the quality of generated output and avoiding biases in the training data. Therefore, the need to continually assessing the potential consequences of generative AI models, both intended and unintended, and making adjustments as needed to minimise any negative impact are necessary based on principles of transparency, accountability and privacy.

3

Fearing H5 Pandemic Minks Culled in Spain

Why in News:

Bird flu, a virus not known to spread easily among mammals, led to the culling of 50,000 minks in Spain last October. The findings indicated at least one mutation in the virus' genome, which may make mammal-to-mammal infection easier.

About Bird Flu:

- Also known as Avian Influenza (AI), bird flu is a

highly contagious viral disease affecting several species of food-producing birds (Chickens, turkeys, fowl, etc.) as well as pet birds and wild birds.

- classification of Influenza Viruses-
 - » Low pathogenic AI (LPAI)
 - » Highly pathogenic AI (HPAI)- e.g. H5N1 strain
- Bird flu is caused by avian influenza type A viruses found naturally in wild birds worldwide.
- Type A viruses are classified based on two proteins on their surfaces- Hemagglutinin (HA) and Neuraminidase (NA).
 1. There are 18 known HA subtypes and 11 known NA subtypes
 2. Various combinations of these two proteins are possible, e.g. H5N1, H7N2, H9N6, H17N10, etc.

Transmission to Humans:

- The most common route is direct contact. It can also spread if they come in contact with contaminated surfaces or air near the infected poultry.
- The risk to the general public is very low. However, reports of human infection have been found.
- Infection is deadly as it has a high mortality rate of about 60%.
- Human-to-human transmission of H5N1 is very rare.

Impact:

- Bird flu outbreaks can lead to devastating consequences for any country, particularly the poultry industry.
- It affects farmers with a high level of mortality in their flocks, with rates often higher than 45%.

Bird Flu status in India:

- In 2019, India was declared free from Avian Influenza (H5N1), which was also notified to the World Organization for Animal Health (OIE).
- OIE is intergovernmental organisation, headquartered in Paris, France, responsible for health improvement in animals across the world.

Control Measures:

- Culling is undertaken to control the infection when detected in animals followed by the safe disposal of culled animals.
- WHO's global laboratory system, the Global Influenza Surveillance and Response System (GISRS), identifies and monitors strains of circulating influenza virus and advises governments.

Way Forward:

The infection among minks is a fresh concern worldwide. There is a need to enhance the monitoring of wild birds and mammals to act as an early warning

system for the arrival of potential strains of the virus.

4 Government of India Inaugurates National Summit on Quality of Biologicals

Why in News:

Recently Union Minister of Health and Family Welfare virtually inaugurated National Summit on Quality of Biologicals.

National Summit on Quality of Biologicals:

- National Institute of Biologicals (NIB) is playing a vital role in ensuring that only quality biological products reach the health system.
- The national summit will act as a platform to bring together stakeholders, regulatory authorities & academia for interaction on various aspects of quality assurance of biologicals.
- These interactions will spearhead capacity building, technology enhancement and development of newer biological for promoting and safeguarding public health, ensuring 'Healthy India'.

About National institute of Biologicals (NIB):

- It was setup in 1992 as an apex autonomous institute under the administrative control of the Ministry of Health & Family Welfare.
- NIB is responsible for performing the primary statutory function of Quality Control of Biologicals. E.g. Insulin, erythropoietin, blood products, diagnostic kits, etc.

What are Biologicals?

- Biologicals are diverse group of medicines which include vaccines, growth factors, immune modulators, monoclonal antibodies, as well as products derived from human blood and plasma.
- Biologicals are distinguished from other medicines as these are generally proteins which are purified from living culture systems. Whereas other medicines are considered 'small molecules' and are either synthetically made or purified from plants.
- Biological therapeutics include those medicines which are grown and then purified from large-scale cell cultures of bacteria or yeast, or plant or animal cells.

Benefits of Biologicals:

- Increases nutrient availability
- Improves root development
- Suppresses diseases and pests
- Maximizes genetic potential
- Promotes sustainability

Way Forward:

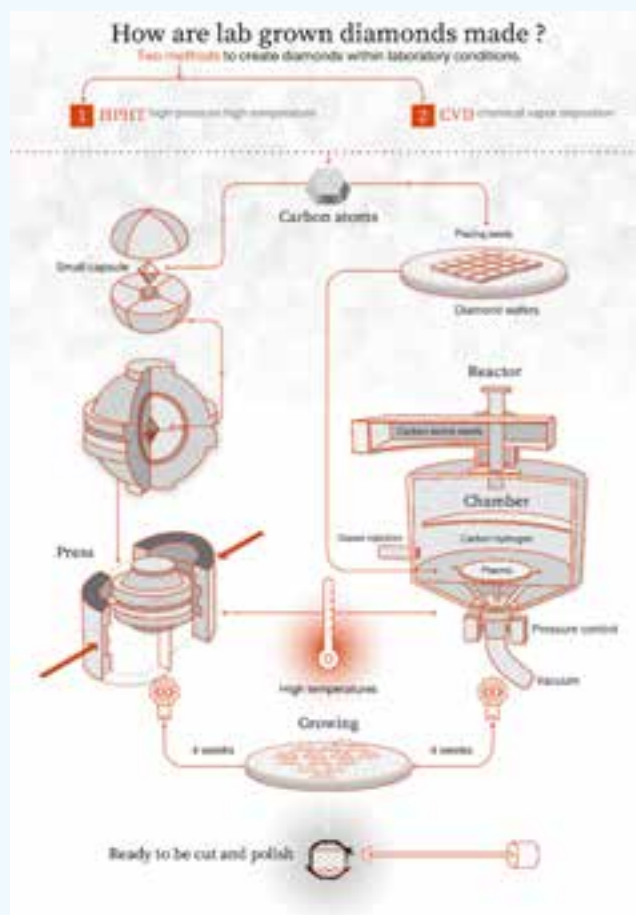
The summit will provide a base for gap analysis in the

currently prevalent quality assurance approaches in India. It will help upgrade the infrastructure and technologies of the country's biopharmaceuticals and in-vitro diagnostic industry and will enhance its capacity to develop world-class products and promote public health.

5 Lab-Grown Diamonds?

Why in News:

During the budget speech, Finance Minister announced the government's move to focus on lab-grown diamonds (LGD). Custom duty on the seeds used in lab-grown diamond manufacturing will be reduced. The grant will be given to IITs to facilitate the growth of LGDs in India.



What are Lab-grown diamonds (LDGs)?

- LDGs are the diamonds that are reduced using specific technology which mimics the geological processes that grow natural diamonds.
- World's first-ever LGD was created in 1954 by scientists in New York.

- LDGs are chemically, physically and optically diamond and thus difficult to identify as “lab-grown”.
- These are not same as “diamond stimulants” such as Moissanite, Cubic Zirconia (CZ), White Sapphire, YAG, etc., which simply attempt to “look” like a diamond. They lack the sparkle and durability of a diamond and are thus easily identifiable.

Production processes of LGDs:

There are multiple ways in which LGDs can be produced.

High pressure, high temperature (HPHT) method-

- This method requires extremely heavy presses that can produce up to 730,000 psi of pressure under extremely high temperatures (at least 1500 Celsius).
- Usually, the graphite is used as the “diamond seed” and when subjected to these extreme conditions, the relatively inexpensive form of carbon turns into one of the most expensive carbon forms.

Chemical Vapor Deposition (CVD) and explosive formation that creates what are known as “detonation nano-diamonds”.

Applications:

- Their properties are similar to natural diamonds, including their optical dispersion, which provide them the signature diamond sheen.
- Since they are created in controlled environments, many of their properties can be enhanced for various purposes.
- Industrial purposes: For example, LGDs are most often used for industrial purposes, in machines and tools.
- The hardness and extra strength make them ideal for use as cutters.
- Furthermore, pure synthetic diamonds have high thermal conductivity, but negligible electrical conductivity.
- Electronics: LGDs are invaluable for electronics where such diamonds can be used as a heat spreader for high-power laser diodes, laser arrays and high-power transistors.
- Jewellery: as the Earth’s reserves of natural diamonds are depleted, LGDs are slowly replacing the gemstone.

Way Forward:

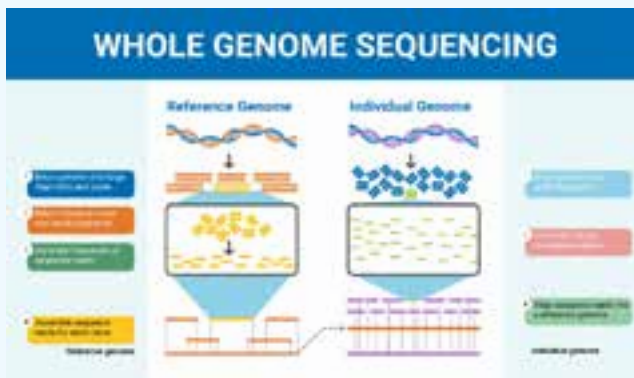
India is the world’s largest cutting and polishing centre for diamonds, accounting for over 90% of polished diamond manufacturing globally. With government’s focus on LGDs, the diamond industry in India would witness a growth.

6

Sequence Genome of Four Indian Cow Breeds

Why in News:

Researchers at the Indian Institute of Science Education and Research, Bhopal, successfully unravelled the genetic makeup of four native Indian cow breeds- Kasargod Dwarf, Kasargod Kapila, Vechur, and Ongole. This is the first time that the genome has been sequenced for these Indian cows.



What is Genome Sequencing?

- The genome is like a blueprint or a set of instructions for building and running an organism, like a plant or animal.
- It is made up of tiny units called genes, which contain the information needed for the organism to grow, develop, and function properly.
- Just like a blueprint for a building contains information about how to build it, the genome contains information that an organism needs to live and survive.
- Sequencing stands for the sequence of four nucleotide bases i.e., adenine (A), cytosine (C), guanine (G), and thymine (T).
- Human genomes are made of Deoxyribonucleic acid (DNA) whereas a virus genome can be made of either DNA or RNA (Ribonucleic acid).
- The human genome is made up of 23 chromosome pairs with a total of about 3 billion DNA base pairs.
- Genome sequencing is a technique that reads and interprets genetic information found within the DNA or RNA.

Native Indian cows:

- They have special abilities that help them survive in tough conditions in India, such as being able to eat poor-quality food and being resistant to certain diseases.
- The complete genome sequencing will help understand the reasons why Indian cows have certain traits like adapting to hot weather, their

size, and milk type.

- Vechur is the world's smallest cow breed.

Importance of Genome Sequencing:

- Genome sequencing presents a valuable shortcut to finding genes much more easily and quickly.
- A complete understanding of genome sequence will help understand how a genome as a whole directs the growth, development, and maintenance of an entire organism.
- Scientists can learn important information about the organism, like how it might be related to certain diseases or traits.
- Genome sequencing can help to preserve the genetic diversity of these native breeds, which is important for maintaining a healthy and resilient herd.

Way Forward:

The genome structure can be used to improve the breeding and management of these cows, leading to increased productivity and sustainability in the Indian cattle industry. It would also help in understanding the genetic differences between them and other breeds, which will be valuable for further genetic improvement.

7

Sickle Cell Anaemia

Why in News:

In Union Budget 2023-24, the government has announced a mission to eliminate Sickle cell Anaemia by 2047. It will focus on awareness creation, universal screening of seven crore people in the age group of 0-40 years in affected tribal areas and counselling through collaborative efforts of central ministries and state governments.

What is Sickle Cell Anaemia?

- Sickle cell disease (SCD) is an inherited group of blood disorders that is genetic in nature. It is usually transferred from the parents to the child during birth i.e. both parents can be carriers of SCDs.
- While healthy RBCs are round in shape, someone who has SCD, the RBC becomes sticky and hard and assumes a C-shape, similar to that of a farm tool 'sickle'.

What are the symptoms?

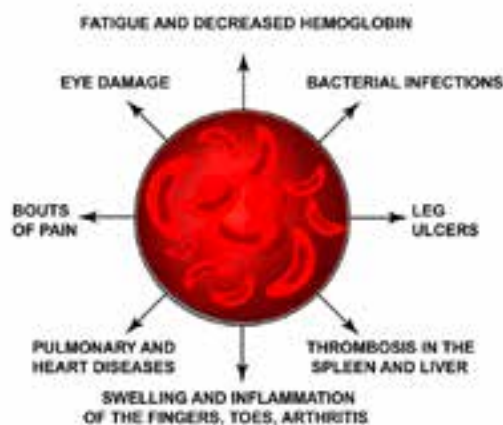
Some common symptoms include:

- Chronic Anaemia- The sickle cells die prematurely, resulting in a chronic lack of red blood cells, leading to fatigue, weakness, and paleness.
- Painful episodes (also known as sickle cell crisis)

- As sickle cell passes through small blood arteries, they become caught and obstruct the blood flow.

- This can result in discomfort like sudden and intense pain in the bones, chest, back, arms, and legs and other dangerous consequences (health issues) such as infection, acute chest syndrome, and stroke.
- Delayed growth and puberty.

SYMPTOMS OF SICKLE CELL ANEMIA



What are the treatments?

- Blood Transfusions- To relieve anaemia and reduce the risk of pain crises.
- Hydroxyurea- This is a medication that can help reduce the frequency of painful episodes and prevent long-term complications of the disease.
- Bone marrow or stem cell transplantation.

What is the procedure for diagnosing sickle cell disease (SCD)?

- A blood test.
- SCD can also be diagnosed before a baby is born by a sample of amniotic fluid or placental tissue.

Way Forward:

- Need to screen all population for sickle cell trait, especially high-risk communities.
- Preventing Individuals with sickle cell trait from marrying each other.
- Screening foetus for sickle cell disease and terminating the pregnancy if parents wish.
- The elimination of Sickle cell disease is a "bold step" and it goes hand in hand with the budget's focus on inclusive development.



Economic Issues



1

Consumer Price Index for Industrial Workers for December 2022

Why in News:

In December 2022, the All- India CPI-IW dropped by 0.2 points to 132.3 points. On 1-month percentage change, it decreased by 0.15 percent with respect to the previous month when compared to a decrease of 0.24% recorded between corresponding months a year.

December 2022 Index:

- The maximum downward pressure in the current index came from Food & Beverages group, contributing 0.52 percentage points to the total change.
- However, this decrease was checked by rice, wheat, atta, cow milk, etc. putting upward pressure on the index.
- Year-on-year inflation for the month stood at 5.50 % compared to 5.4% for the previous month and 5.56% during the corresponding month a year before.
- Similarly, food inflation stood at 4.10% against 4.30% of the previous month and 5.93% during the corresponding month a year ago.

Consumer Price Index for Industrial Workers (CPI-IW):

- It is compiled by the Labour Bureau, an attached office of the Ministry of Labour & Employment.
- It is released every month on the basis of retail prices collected from 317 markets spread over 88 centres in the country.
- CPI-IW is mainly used for determining dearness allowance (DA) paid to central/state government employees and workers in industrial sectors besides measuring inflation in retail prices.
- Base Year- 2016.

About Consumer Price Index (CPI):

- It measures price changes from the perspective of the retail buyer, published by the National Statistical Office (NSO).
- It calculates the difference in the prices of commodities and services purchased by Indian consumers for use, such as food, medical care, education, electronics, etc.
- CPIs are classified into four categories-
 1. CPI- Industrial Workers
 2. CPI- Agricultural Labourer
 3. CPI- Rural Labourer
 4. CPI (Urban/Rural/Combined)
- The first three are compiled by the Labour Bureau while the CPI (Urban/Rural/Combined) is compiled by NSO.

Way Forward:

The CPI-IW for December 2022 reflects the current

situation of inflation in the country. It guides the policymakers and RBI to act accordingly in order to contain the inflation levels in the country.

2

World Economic Outlook Report January-2023 Update

Why in News:

Recently, the International Monetary Fund(IMF) released the World Economic Outlook January Update 2023.

Indian Scenario:

- The released outlook forecasted that India will remain the fastest-growing economy in the world for both financial years 2023 and 2024.
- Indian economy will grow by 6.1% with the slightest dip in FY2023 but a rebound to 6.8% in 2024 due to strong domestic demand outweighing external headwinds.
- The inflation rate is expected to come down to 5% in FY23 from 6.8% in FY22. This will further decrease to 4% in FY24.

Global Scenario:

- IMF said that Global growth will accelerate slightly to 3.1% in 2024. The report also expects the world economy to grow at the rate of 2.9% by this year. This is better than the rate of 2.7% which was predicted in October 2022. This forecasted upgrade in global growth rate is a result of the lifting of the Zero-Covid restrictions Policy of China. It is also projected that India and China will supply over 50% of global growth in 2023.
- The report further expects Germany and Italy to avoid recessions this year, shifting from earlier predictions. Notably Europe's growth proved to be more resilient than expected, despite the ongoing Ukraine War.
- The IMF foresees inflation easing this year, as a result of aggressive interest rate hikes by the Federal Reserve and the major central banks. The global Consumption Inflation rate is expected to fall from 8.8% in 2022 to 6.6% in 2023 and further to 4.3% in 2024.
- The moderately better outlook is the result of increasing world economy resilience in the face of high inflation, elevated interest rates and Russia's ongoing war against Ukraine. This outlook provided relief, given the fears of a global recession in 2023.
- IMF chief economist Pierre-Olivier Gourinchas said, recession risks had been subsidized and central banks are making progress in controlling inflation, but more work is needed to curb prices

and prepare to expect the unexpected.

- World Economic Outlook is a survey by the IMF that is usually published twice a year in the months of April and October. It analyzes and predicts global economic developments during the near and medium term. In response to the growing demand for more frequent updates, the WEO update is published in January and July, between the two main WEO publications.
- Besides WEO, IMF also publishes Global Financially Stability Report and World Economic Report.

Conclusion:

The fresh outlook has forecasted relief from expected recession for upcoming fiscal years. However, to embrace the world economy against potential headwinds, advanced and emerging economies have to take steps collaboratively. This would include an array of initiatives, from the redressal of geopolitical tensions to boosting the productivity of economies via government interventions.

3 World Economic Situation and Prospects Report, 2023

Why in News:

Global Gross Domestic Product (GDP) is forecast to drop to 1.9% in 2023 from 3% in 2022, according to the UN's World Economic Situation and Prospects Report, 2023.

Highlights of the report:

- According to the report, the reasons are food and energy crises that hit the economy hard in 2022, against the backdrop of COVID-19 and the Ukraine War.
- The world's output growth can bounce back to 2.7% in 2024, subject to a change in the war situation and the disruption of supply chains
- Inflation- The world's average inflation rate was 9% in 2022, which led to budgetary constraints in several developed as well as developing countries.
- Poverty-According to World Bank, several global crises pushed an additional 75 to 95 million people into extreme poverty in 2022, compared to pre-pandemic projections
- Income inequalities –Globally, the average income for the bottom 40% declined slightly in 2021 from 2019, while it increased for the top 10% income group, signaling a widening income inequality.

South Asia:

- The economic outlook has significantly deteriorated due to high food and energy prices, monetary tightening and fiscal vulnerabilities.
- Average GDP growth is projected to moderate

from 5.6% in 2022 to 4.8% in 2023.

India-Specific highlights:

- Growth in India is expected to remain strong at 5.8%, albeit slightly lower than the estimated 6.4% in 2022, as higher interest rates and a global slowdown weigh on investment and exports.
- The report indicated that India's food and energy subsidies prevented a major downfall in the economy.
- Unemployment Rate – In 2022, it declined to the pre-pandemic level through stepped-up urban and rural employment. However, youth employment remained below pre-pandemic levels, particularly among women.

Recommendations:

- The report advised investing in digital infrastructure, climate change, and new technologies.
- Governments should focus on fiscal austerity, which is spending measures that contain spending cuts and tax increases.
- Strengthening of social protection system and provision of temporary subsidies.

About World Economic Situation and Prospects Report:

- Released by UNDESA (United Nations Department of Economics and social affairs).
- Headquarter – New York
- UNDESA assists countries around the world in agenda-setting and decision-making with the goal of meeting their economic, social and environmental challenges.

Way Forward:

The report recommended calibrating macroeconomic policies to strike a balance between stimulating output and taming expectations. Stronger international cooperation is urgently needed to expand access to financial assistance and scale up SDG financing.

4 Reverse-Flipping

Why in News:

The recent Economic Survey 2022-23 has suggested that Government of India needs to simplify the ESOP taxation (Employee Stock Ownership Plan) and make corporate laws easier to accelerate reverse-flipping among startups.

Flipping and Reverse Flipping:

- Flipping is the process of transferring entire ownership of an Indian company to an overseas entity.
- Reverse flipping, it is the process of shifting the domicile of those companies back to India who flipped or shifted earlier.

Why does this happen?

- Flipping happens at the early stage of the startups, driven by commercial, taxation and personal preferences of founders and investors. Major companies decide to flip because the major market of their product is offshore.



- Companies reverse flip because of easy access to capital from private equity and venture capital, changes in rules regarding round-tripping and the growing maturity of India's capital market.
- Many start-ups have shifted their business overseas, especially in destinations with favorable legal environments and taxation policies (known as flipping). This process involves the transferring the entire ownership of an Indian Company to an overseas entity including the transfer of all Intellectual Property and data owned by the Indian Company. This usually happens at the early stage the startup.
- Due to various factors, like various government initiatives for boosting startups and relaxing the tax related regulations. GoI is understanding the value of working with disruptive innovators across the value chain and using their innovations to improve public service delivery. The government of India is working on multipronged strategy for building an startup and innovation friendly ecosystem.
- The economic survey has highlighted several fronts where adequate govt interventions are needed like:
 - » Simplifying multiple tax layers.
 - » Resolving tax uncertainty due to tax litigation, especially of employee stock ownership plans.
 - » Exploring the incubation and funding landscape for start-ups in emerging fields like social innovation and impact investment.
 - » Facilitating mentorship programs through partnerships with established private

entities and simplifying the process for the grant of 'Inter Ministerial Board' certification for startups.

- » Other challenges like funding hurdles, revenue generation struggles, lack of easy access to supportive infrastructure and a complex regulatory tax environment also needed to be addressed.

Why Startups are so important for India?

- The Economic Survey noted that around 9 lakh direct jobs have been created by startups (self reported) recognized by the Department for Promotion of Industry and Internal Trade(DPIIT), with a 64% increase in 2022 over the last 3 years.
- Nearly 48% of Indian startups originate from tier 2 and 3 cities, demonstrating a strong presence at the grassroots level. The startup also ensures the better participation of every section of country and making growth story of India inclusive and sustainable.
- The Indian government must address these challenges in order to unleash the full potential of the country's youthful labor force and make India self-reliant and developed in its Amritkaal.

5

Paris Club likely to provide financial assurances to IMF on Sri Lanka debt

Why in News:

The Paris Club, an informal group of creditor nations, will provide financial assurances to the International Monetary Fund on Sri Lanka's debt.

About Paris Club:

- The club has 22 permanent members, mostly the western creditor countries.
- It started in a 1956 meeting in Paris between Argentina and its public creditors.
- Objective: to find sustainable debt-relief solutions for countries, unable to repay their bilateral loans.
- Each debtor nation is to be treated with consensus, solidarity, conditionality and comparability of treatment. Any agreement reached with the debtor country applies equally to all Club members.
- All 22 are members of the group, known as the Organisation for Economic Co-operation and Development (OECD).
- The members meet in Paris once a month except for February and August.

Significance of the Paris Club:

- China, Japan and India are the largest bilateral creditors in case of Sri Lanka. Sri Lanka needed assurances from China and India as well. Sri Lanka's debt to China is 52 per cent of its

bilateral debt, 19.5 per cent to Japan, and 12 per cent to India. Japan is a member of the Paris Club.

- India launched its own bilateral negotiations with Sri Lanka in January 2023.
- In the recent 20 years, China has overtaken Paris group nations as the largest bilateral lender in the world.



About Sri Lanka's financial crisis:

- Due to economic mismanagement, corruption and an agricultural crisis, Sri Lanka is facing an unprecedented crisis.
- The bad monetary policies have led to soaring inflation that has triggered unrest and protests in the country.
- The remaining foreign reserve of Sri Lanka is not enough to pay its debts.
- Sri Lanka heavily depends on its imports to meet its various needs such as transportation equipment, sugar, lentils, medicines and food, paper and other essential items.

Way Forward:

Paris Club's role in debt agreements has been significant. China's offer is still considered insufficient as the Paris Club's assurance to the IMF regarding Sri Lanka's debt is a step towards the disbursement of the \$2.9 billion bailout package.

6 NSE puts Adani Group Firms Under the 'Additional Surveillance Mechanism'

Why in News:

The National Stock Exchange (NSE) placed Adani Enterprises, Adani Ports and Ambuja Cements under the additional surveillance mechanism (ASM),

Reuters reported. It means that trading in their shares will require a 100% margin, which is aimed at curbing speculation and short selling.

What is an Additional Surveillance Mechanism (ASM)?

- The Securities and Exchange Board of India (SEBI) introduced ASM in 2018 with the intention to protect investors from market volatility and unusual changes in share price.
- The shortlisting of securities for placing in ASM is based on criteria that are jointly decided by the SEBI, covering the parameters of-
 1. High low variation,
 2. Client concentration,
 3. Close to lose price variation,
 4. Market capitalisation,
 5. Volume variation,
 6. Price-Earnings Ratio
 7. Delivery percentage, and
 8. Number of unique PANs
- Put simply, an ASM shortlisting signals to investors that the stocks have seen unusual activity.
- The shortlisting of securities under ASM is purely on account market surveillance and it should not be construed as an adverse action against the concerned company/entity.
- Stricter measures are imposed on those stocks to discourage speculators and intra-day traders from taking heavy positions in stocks.

About National Stock Exchange (NSE):

- NSE is an Indian stock exchange headquartered in Mumbai, Maharashtra.
- It is the largest financial market in India which was established in 1992 and began its operation in 1994 after being designated by SEBI (1993).
- NSE is world's eleventh-largest stock exchange by market capitalization.
- The S&P CNX Nifty, often known as the NSE NIFTY (National Stock Exchange City), is a market capitalization-weighted index of fifty large stocks.
- It has always been a fully electronic stock exchange, fostering paperless transactions.
- The products on exchange are organized into 3 asset classes for trading:
 1. Capital market for the listing and trading of equities.
 2. Fixed income securities.
 3. The derivatives market

Way Forward:

ASM lists the securities currently under observation, which alert the investors about unexpected price movement by stocks. Adani group under ASM list will be subjected to various trading restrictions.

7

Dip in Disposable Income**Why in News:**

According to a report by YouGov, 'More than a third of urban Indians have claimed that their disposable income has decreased in the last 12 months'. YouGov is an international data analytics firm, based in the UK that intends to find disposable income across 18 markets.

What is Disposable income?

- It is the amount of money that an individual or household has to spend or save after income taxes have been deducted.
- Disposable income = Personal income – Personal income taxes
- These numbers at a macro level show how consumers save, spend, and borrow.

What are the findings of the report?

- In India, more consumers report a decrease than an increase in their disposable income in the past 12 months.
- There is a less pessimistic view on future disposable income. Fewer expect a fall in disposable income in the next 12 months as compared to the past (31 per cent) and more expect an increase (26 per cent).
- The report highlights top three financial activities done in the past 12 months-
 - » Putting money in their savings (33 per cent),
 - » paying for health insurance (26 per cent) and

» investments in stocks and shares (21 per cent)

- On Savings - 36 per cent of urban Indians are intended to regularly put money into their savings in the next 12 months.
- Across the 18 markets, Britain had the largest decline in their disposable income with almost two-thirds (64 per cent) saying their disposable income has decreased over the past 12 months, followed by Italy and Poland (both 57 per cent).

What are the likely reasons for the decline in Disposable income in India?

- Effects of COVID-related economic crisis and the Ukraine-Russia war-related economic crisis.
- Job loss.
- Impeding economic recession, as the government revenue decreases and a deficit is created. To handle the situation Government increases taxes. Consequently, disposable income decreases.

Way Forward:

Disposable income is an important indicator as it helps in determining the demand in an economy and estimating the overall state of the country's economy. In general, having a higher disposable income is beneficial because it provides individuals with more financial freedom and flexibility. However, factors such as inflation, increase in the cost of living, and unexpected expenses can also impact the amount of disposable income available. Individuals need to monitor their disposable income and budget accordingly in order to make the most of their financial resources.




NEW BATCH - FACE TO FACE

MATHS & REASONING

Bilingual

by **MUKESH SINGH**

20 FEBRUARY
2:30 PM

📍 **SP MARG, CIVIL LINES, PRAYAGRAJ**

☎ **8853467068, 7459911157**

Miscellaneous Issues

1

Mandatory Minimum Sentencing

Why in News:

Recently, the Chief Justice of India D.Y. Chandrachud led the bench of the Supreme Court which decided to examine a petition challenging the constitutionality of Section 376 D of the Indian Penal Code. This section of IPC includes the provision of 'mandatory minimum sentencing' for gang rape of a minor under 12 years. Section 376DB of IPC: Where a woman under 12 Years of age is raped by one or more persons, each of those persons shall be punished with imprisonment for life.

What is Mandatory Minimum Sentencing?

- Mandatory Minimum Sentencing refers to "a sentence which must be imposed without leaving any discretion to the court. It means quantum of punishment which can't be reduced below the period fixed." This has been established by the Supreme Court in 2016 ruling, in Mohd. Hashim vs the State of UP and others.
- The concept of Mandatory Minimum Sentencing primarily comes from the Canadian and American legal systems. In India, it was first described by the Criminal Amendment Act of 1983.
- In India, such sentences are prescribed for all sexual offenses except the offense of sexual harassment, under the Prevention of Children from Sexual Offences (POCSO) Act 2012.
- Supreme Court of India held in its 2019 ruling (State of Madhya Pradesh vs Vikram Das) that, "When the legislature has prescribed the minimum sentence without discretion so judiciary can't reduce it... be it imprisonment or fine, it is mandatory."

Why Minimum Mandatory Sentencing is necessary?

- The arguments in favor of this concept state that it limits the scope of judicial discretion and arbitrariness, thereby enhancing the cause of justice and not letting the perpetrator of grave offences go unpunished.
- It also establishes provisions that act as a deterrent in society. It increases the moral belief in the criminal justice system of the country.
- On the contrary, many legal experts believe that it leads to overcrowding of prisons and also overweighs the mitigating circumstances of a convict (if they are a first-time offender or sole earner of the family). Such provisions can often have unintended consequences as judges might feel the prescribed punishment to be excessively stringent and in that case, acquit the accused altogether. Earlier as happened in 'Tukaram And

Ors vs State of Maharashtra' 1978, where the SC acquitted the two policemen in the gang rape of 16 years old girl.

- The Criminal Law (Amendment) Act of 2013, expanded the definition of rape and also updated the definition of "life imprisonment" to mean the entire remainder of the convict's life and introduced a minimum sentence of 20 years for gang rape.
- Besides the above several legal protection, NCRB 2016 statistics show that percentage of convictions in such grave cases is still low then the reporting percentage.
- The SC's judgement in review of Sec 376DB will definitely strengthen the Criminal Justice System in the country but other measures to address the issues like delayed trials, immoral investigation practices and sensitive handling of grave cases for maintaining the modesty and privacy of victims should also be considered by the judiciary.

2

Physical inactivity among Children and Adolescents

Why in News:

A recent study has highlighted that children and teenagers aren't doing enough physical activity. Physical inactivity which leads to chronic illness and disability is the fourth leading cause of deaths worldwide.

Findings:

- The study has cautioned that the world could see around half a billion new cases of chronic illnesses by 2030 due to physical inactivity. The World Health Organisation (WHO) recommends an average 60 minutes of moderate to vigorous intensity physical activity per day for children and teenagers in the age group of 5-17 years. It has also recommended that recreational screen time should not extend more than 2 hours/day.
- The research has collected data from four African countries—Botswana, Ethiopia, South Africa and Zimbabwe. It has found that children and adolescents from the four African countries were slightly more physically active from the rest of the world. More children and adolescents from the African countries were less sedentary; more physically fit and used active transport in comparison with the rest of the world.
- However, this could be due to a compelling necessity rather than a choice. For example, in the absence of affordable transport systems, children are forced to walk to school. It

highlights the challenges related to the lack of infrastructure, community safety and insufficient funding to promote healthy lifestyles in children and adolescents. Also, the data is not representative of all the children and adolescents in these countries.

Impact of COVID-19:

- Physical activity among children and adolescents was already below the recommended levels before the pandemic. In 2016, 81% of adolescents aged 11-17 years were considered physically inactive. The number was worse for girls. The pandemic has made the situation even worse. The closure of schools and public parks due to the lockdown has impeded the level of physical activity among children. The research has found that moderate to vigorous physical activity among children has decreased by 17 minutes/day during the pandemic.

Way forward:

Retarding level of physical activities among children is a global public health concern which is also included in WHO's Global Action Plan. A holistic curriculum should be devised to provide equitable opportunities for children to engage in physical activities. Moreover, green spaces, public parks, sporting facilities, etc. should be developed to ensure safe and free access.

3

Prisons without bars

Why in News:

With around 31 such prisons functioning, Rajasthan's "Open air camps" are serving as a bulwark of reformatory justice.

What are open prisons?

- The concept of open prisons is not a new one. It was first discussed in the United Nations Congress on the Prevention of Crime and the Treatment of Offenders in 1955. Thereafter, United Nations Standard Minimum Rules for the Treatment of Prisoners provided for constituting open prisons which will function on the basis of the self-discipline of inmates. Later, the All India Committee on Jail Reform recommended setting up open prisons in each state and UTs.
- Open prison is a penal establishment with minimum restraints which works on the principle of self-governance and self-discipline. The eligibility criteria are defined by the states. For example- In Rajasthan convicts who have served 1/3rd of their sentence, subject to good conduct and few exceptions like women, elderly, divyangs, etc., are eligible. The convicts are allowed to live with their families and earn their

livelihood. There are "Prisoners Panchayat", work and discipline committee, and prisoners cooperative societies for the internal management of such prisons.

Utility:

- According to Prison Statistics of India 2020, there are 76% of under-trials in Indian jails. Moreover, the country's jails are crowded to 118% of their capacity, with a count of 4.33 lakh prisoners against a capacity of less than 3.81 lakh. In such a scenario, open jails help in reducing the burden of overcrowded prisons.
- It is highly cost-effective with a minimum cost of Rs.500 per month per prisoner. This is 78 times cheaper than closed prisons. Also, these are easy to establish as they do not require a huge campus area. These can also be built as small clusters attached to boundary walls of closed prisons or "prisoners villages".
- Living with family aids the process of reformation, makes them more rule-abiding and addresses their psychological needs. Earning their livelihood instils confidence in them and provides them with financial security.
- □ This system is highly effective in special cases like pregnant women or women with young children, aged, divyangs, one time and petty offenders.

Way forward:

Open prisons are like "halfway homes" which aim to strike a balance between retributive and reformatory justice. The system should be extended all over the country and applied to under-trials as well to further prison reforms.

4

Microsoft Project 'Ellora'

Why in News:

Under this project, Microsoft researchers are working towards creating a digital ecosystem for Indian languages that do not have enough presence online. Microsoft Research has focused on three languages, Gondi, Mundari, and Idu Mishmi. Microsoft Research is helping preserve 'rare' Indian languages with its Project Ellora in India.

Project Ellora:

- In order to bring 'rare' Indian languages online, Microsoft launched Project ELLORA, or Enabling Low Resource Languages in 2015. Under this project, researchers are creating digital resources of languages. They aim to preserve a language for future generations so that users of these languages can participate and interact in the digital world.
- Microsoft is currently working with the Munda community of approximately one million people

spread across the eastern Indian states of Jharkhand, Orissa and West Bengal.

Processing of Ellora language dataset:

- The researchers are mapping resources, including printed literature, to create datasets to train their AI models.
- The team is also working with these communities on the project.
- By involving the community in the data collection process, the researchers hope to create a dataset that is both accurate and culturally relevant.

Main Objective of Project Ellora:

- Its objective is to preserve local languages and cultures for future generations while promoting education, and creating economic opportunities and technical skills.

Way forward:

Microsoft's Project Ellora is helping small languages like Gondi, Mundari, etc. become fluent in the digital world. However, the community is concerned about the longevity of their language as only major languages like Bengali, Hindi, and Oriya are taught to the children in schools. This project will not only expand the local languages but it will also help preserve the cultures for the future.

5 Amrit Udyan, the new name of the Mughal Gardens

Why in News:

Recently Rashtrapati Bhavan Garden which was earlier known as Mughal Garden has been renamed as Amrit Garden. This name of the garden has been changed under the Amrit Mahotsav of Independence. President Draupadi Murmu has given a generic name to the Rashtrapati Bhavan Garden of India as Amrit Udyan on the occasion of Amrit Mahotsav of Independence. Every year the Mughal Gardens are opened to the general public. This time it will remain open for two months from January 31 to March 26.

Important points related to the Mughal Gardens:

- Edwin Lutyens gave the design of the Mughal Gardens in 1917, but it was finalized during 1928–1929. Lutyens brought together two different horticultural traditions (the Mughal style and the English flower garden style) for the gardens.
- Its four walls have made good use of chhajja (dripstone), chhatra (domed niche), jali (perforated screen), and many other Indian architectural elements.
- The Mughal canals, terraces, and flowering shrubs are beautifully blended with European flower beds, lawns, and private hedges.
- The prestigious garden is spread over 15 acres. The main garden has two channels that meet at

right angles and the garden is divided into a grid of squares. The Charbagh, (four-cornered garden) was a distinctive style of Mughal landscaping. There are six lotus-shaped fountains up to a height of 12 feet at the intersection of these canals. The garden has around 2500 varieties of dahlias and 120 varieties of roses.

- In 1911, the British decided to shift the Indian capital from Calcutta to Delhi which involved building an entirely new city (New Delhi).
- About 4,000 acres of land was acquired for the construction of the Viceroy's House, with Sir Edwin Lutyens being commissioned to design the building on Raisina Hill. Lutyens' design combined elements of classical European architecture with Indian styles. Under this plan, the Mughal Gardens were built keeping in mind traditional British sensibilities.

6 Atal Innovation Mission inaugurates ACIC-CBIT Research and Entrepreneurship Foundation in Hyderabad

Why in News:

Recently, Dr Chintan Vaishnav, Mission Director, Atal Innovation Mission, NITI Aayog inaugurated the ACIC-CBIT centre in Hyderabad. Along with the inauguration of the centre, ACIC-CBIT hosted the first Startup 20X event in the form of talk from four startup founders working in different areas like infrastructure, mental health, millet manufacturing, and upskilling rural innovators.



About ACIC-CBIT:

Objective-

- ACIC-CBIT has been established with the aim to build a community innovation and entrepreneurship ecosystem to nurture

innovators and start-ups in unserved and underserved regions.

- ACIC believes and mandates the creation of a strong community innovation ecosystem to include expert mentors; access to infrastructural support such as maker space; funding facilitation; training and mentoring.

Sectoral Focus Areas-

- Health-tech
- AI/ML/IoT-Based Smart Engineering Products
- Renewable Energy & Environmental Sustainability

Targeted SDGs-

- Good Health & Well-being (SDG3)
- Industry Innovation & Infrastructure (SDG9)
- Sustainable Cities & Communities (SDG1)

About Atal Innovation Mission (AIM):

- AIM is the government's endeavour to promote a culture of innovation and entrepreneurship.
- It was initiated by the NITI Aayog in 2016.
- Objective- to serve as a platform for the promotion of world-class innovation hubs, grand challenges, start-up businesses, and other self-employment activities, particularly in technology-driven areas.
- Under AIM, Atal Tinkering Labs are established to promote a creative and innovative mind-set in schools.
- Atal Incubation Centres have been established at universities, by AIM to create an ever-evolving ecosystem of start-ups and entrepreneurs.

About NITI Aayog:

- The erstwhile Planning Commission was replaced by National Institution for Transforming India (NITI) Aayog in 2015.
- Promotes Cooperative Federalism: The governing council of Aayog has Lieutenant Governors of Union Territories and State Chief Ministers.
- Promotes Competitive Federalism: NITI Aayog has prepared online dashboards which rank states on different indicators of development such as the SDG India Index, Health Index, etc.

Way Forward:

Communities play a very important role in society and motivating innovators from the grassroots is an essential part of building an inclusive startup ecosystem across the country. Opening the new centre will attract youth to sharpen their entrepreneurship skills.

7

Keeladi Excavation

Why in News:

Recent excavations at Keeladi have shown that the Sangam age dates back to even before 800

BCE, which was earlier believed to date back to 300 BCE. Excavations at Keeladi prove that an urban civilization existed in Tamil Nadu during the Sangam age on the banks of the Vaigai River.

Keeladi Excavations: Sangam Age older than 800 BC

- The excavated antiquities provide important links to the cultural development of the Iron Age (12th century BC to 6th century BC) and beyond, from the 6th century BC to the 4th century BC.
- New reports restore it to the Sangam age between 800 BCE and 300 CE. This period is also classified into three periods. The Pre-Early Historic period between 800 BCE to 500 BCE, Early History from 500 BCE to the end of the 1st century BCE, and Post-Early History from the 1st century BCE to 300 CE.
- The mural paintings found at the sites of Kildi serve as the only residual link between the Indus Valley Civilization and South India. Some of the symbols found on the pottery of Keeladi bear a striking resemblance to those of the Indus Valley.

Important point:

- **Literate Society:** Tamil Brahmi script has been found on excavated pots that were inscribed when the pot was wet or after the pot had dried.
- **Merchant class:** According to the report, the area's fertile nature and animal husbandry played an important role in its development, leading to greater rice production and seaborne trade of the inhabitants.
- **Agricultural Society:** Skeletal fragments of cow/bull, buffalo, sheep, goat, nilgai, blackbuck, wild boar, peacock, etc. were found in the excavation.
- **High standard of living:** Tall walls, well-laid floors with roof tiles in broken condition, and iron nails on pillars and roofs prove the high standard of living during the Sangam age.
- **Found Items:** Brick structures, terracotta ring wells, sloped roofs with tiles, gold ornaments, copper needles, broken parts of copper objects, iron tools, terracotta chess pieces, ear ornaments, spindle whorls, figurines, Black and red ware, rouletted ware and a few pieces of glass, terracotta and beads made of semi-precious stones apart from arretine ware.
- **Graffiti marks:** found on pottery, in caves and rocks, or near excavation sites.

NEWS OF NATIONAL AND INTERNATIONAL IMPORTANCE

1. Indore becomes first civic body to launch green bond

Recently, the Indore Municipal Corporation, (topping the cleanliness survey for six consecutive years) became the first civic body in the country to launch a green bond, seeking to raise Rs 244 crore for a 60 MW solar plant at its water pumping station.

What is meant by Green Bond?

Green bonds work like regular bonds with one key difference: the money raised from investors is used exclusively to finance projects that have a positive environmental impact, such as renewable energy and green buildings. Green bond funds are used for climate friendly projects and financing.



2. Bar Headed Goose

Bar-Headed Goose, which was tagged in Mongolia in July 2014, is seen at Kunthankulam Bird Sanctuary in Tirunelveli district.

Main characteristics of the bird:

- It is one of the winter migratory bird species that regularly visit this sanctuary.
- It can be identified by its distinctive black stripes with white and brown plumage, head and orange-yellow beak and feet.
- The bar-headed goose can cover a distance of more than 1,600 km in a day.
- It is known to reach peak altitudes of 29,500 feet during its twice annual migration to the Himalayas.
- It breeds in colonies of thousands near mountain lakes in Central Asia and winters in South Asia, as far south as peninsular India.
- In the nest it lays three to eight eggs at a time.
- Conservation Status: IUCN Red List - Least Concern



3. New type of snow

Scientists have created a new type of ice that is similar to water in density and composition. This discovery will pave the way for studying the mysterious properties of water.

Key points of research:

- This ice has been called medium-density amorphous ice.
- Scientists stirred normal ice in a small container containing stainless steel balls at a temperature of (-) 200 °C to prepare this variant, the ice appeared as a white granular powder that stuck to the metal ball.
- Normally, when water freezes, it crystallizes and its molecules are arranged in the familiar hexagonal, solid structure we call ice.
- Ice is less dense in its liquid form, which is an unusual property for crystals. Depending on conditions such as pressure and freezing speed, water can freeze in any of two dozen other regular arrangements.
- Due to the absence of order in amorphous ice, it is considered different from normal ice.

4. Green Deal Industrial Plan

Recently the European Union announced the “Green Deal Industrial Plan”, to support and expand its green industry.

Key points of the Plan:

- The Green Deal Industrial Plan aims at providing large scale subsidies by cutting red tape.
- The move comes months after the Inflation Reduction Act (IRA) announcement of the United States.
- The IRA provides billions of dollars in tax cuts for clean energy and climate change programs along with incentives for US-based manufacturing.

About Green Deal Industrial Plan:

- The proposal includes creation of a simplified regulatory framework:
- The plan seeks to frame a Net-Zero Industry Act.
- It will simplify regulations and speed up issuance of permits for green projects.
- It also includes a “Critical Raw Materials Act”, which will provide access to materials such as rare earths critical to the development of net-zero technology.
- Providing faster access to funds: State aid rules will be relaxed to help the EU’s 27 governments invest in clean energy projects.
- Upskilling: The scheme aims to set up “Net-Zero Industry Academies” which also provide upskilling and re-skilling programs in strategic industries.
- Improving the EU trade network: It seeks to “develop the EU’s network of free trade agreements and other forms of cooperation with partners to support the green transition”.

5. India Energy Week 2023

Recently the Prime Minister launched E20 fuel and flagged off the Green Mobility Rally.

Main points:

- Prime Minister inaugurated the India Energy Week (IEW) 2023 in Bengaluru, Karnataka.
- IEW aims to showcase India’s growing power as an energy transformation superpower.
- As part of the event, he launched E20 fuel and flagged off the Green Mobility Rally, organized by Hindustan Petroleum Corporation Limited on behalf of oil and gas PSUs and PLL.

E20 Fuel:

- In line with the Ethanol Blending Roadmap, the Prime Minister launched E20 fuel at 84 retail outlets of Oil Marketing Companies in 11 States/UTs. E20 is a blend of 20% ethanol with gasoline.
- Government aims to achieve full 20% blending of ethanol by 2025.
- The ethanol blending program and biofuel program have not only enhanced India’s energy security but also resulted in reduction of 318 lakh metric tonnes of CO2 emissions.

6. Yaya Tso Lake

Recently, Yaya Tso Lake has been proposed as the first Biodiversity Heritage Site (BHS) of Ladakh.

Main characteristics:

- Yaya Tso is situated at an altitude of 4,820 metres.
- Yaya Tso is the nesting habitat for a large number of birds and animals, such as bar headed goose, black necked crane and ducks.
- It also has the distinction of being one of the highest breeding grounds of the black-necked crane in India.



7. Organization for Economic Co-operation and Development (OECD)

Recently, the Gujarat government signed an agreement with the Organization for Economic Co-operation and Development (OECD) to conduct the Program for International Student Assessment (PISA) test for government school students.

Main characteristics:

- PISA measures the ability of 15-year-olds students to use their knowledge and skills in reading, maths and science to meet real-life challenges.
- It also tests students in this age group on “critical thinking, problem solving and effective communication”.
- Gujarat is the first state in the country to sign such an agreement.

About OECD:

- OECD was established on December 14, 1960 by 18 European countries and the United States and Canada.
- Headquarters- Paris, France.
- It is a group of 38 member countries that discuss and develop economic and social policy.
- OECD members are generally democratic countries that support free market economies.
- Most OECD members are high-income economies with very high Human Development Index (HDI) and are considered developed countries.
- In 2017, OECD member countries collectively represented 62.2% of global nominal GDP (US\$49.6 trillion) and 42.8% of global real GDP (\$54.2 trillion).
- The OECD's stated goal is to shape policies that promote prosperity, equality, opportunity and well-being for all.
- The OECD is an official permanent observer of the United Nations and is referred to as a think-tank or monitoring group.
- India is one of the many non-member economies with which the OECD has a working relationship.

8. Red headed vulture

Recently, for the first time since 2017, birders spotted a red-headed vulture in Delhi's Bhatti mine area.

Main Features:

- Red-headed vulture was sighted at Chandu Budhera in Gurugram this week.
- The bird was sighted during the ongoing winter raptor survey conducted by the Bombay Natural History Society (BNHS) every year at the Asola Bhatti Wildlife Sanctuary (ABWS).
- Long-term vulture population surveys in 13 states in central, northern and eastern India show that the decline in the bird's population has stabilized since diclofenac was banned.
- Diclofenac, a drug toxic to these birds, was banned for veterinary use in 2006.

Red Headed Vulture:

- The red-headed vulture is also known as the Asian king vulture, the Indian black vulture or the Pondicherry vulture.
- It is a prehistoric vulture found mainly in the Indian subcontinent, with small isolated populations in parts of Southeast Asia.
- Its population is less than 10,000.
- conservation status
- IUCN Red List - Critically Endangered.
- THE WILDLIFE PROTECTION ACT, 1972- SCHEDULE 1.



9. Atmanirbhar Clean Plant Program

Recently, it has been announced to start a self-sufficient clean plant program.

Main characteristics:

- India is the top producer of many fruits like Banana, Mango, Pomegranate and Papaya, but their share in exports is negligible due to poor quality of produce. For example, India accounts for 27 per cent of global banana production, but accounts for only about 1 per cent of exports.
- Now to prepare high quality and disease free material for horticulture crops, the Finance Minister announced the Atmanirbhar Clean Plant Programme.
- The program will be organized by the National Horticulture Board which in turn will set up Clean Plant Centers across the country.
- These centres will ensure access to disease free horticulture planting material for global competitiveness of Indian horticulture sector.
- The objective of the Swachh Plant program will be to increase the yield of horticulture crops, dissemination and adoption of climate-resilient varieties; Protecting the ecosystem through proactive virus and disease control measures.

10. National Action for Mechanized Sanitation Ecosystem (NAMASTE)

The Ministry of Social Justice and Empowerment (MoSJE) has prepared a scheme “National Action for Mechanized Sanitation Ecosystems” (NAMASTE)

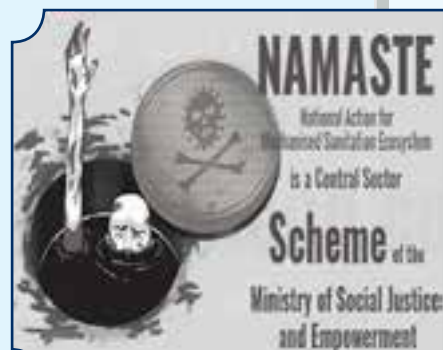
About NAMASTE:

The salient features of the scheme to be implemented in all ULBs are as follows:-

- Namaste scheme envisages identification of Sewer/Septic Tank Workers (SSWs) including vocational training to SSWs and distribution of PPE kits.
- Providing support for safety equipment to Sanitary Response Units (SRUs).
- Extending health insurance scheme benefits to identified SSWs and their families under Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).
- To promote mechanization and enterprise development by providing financial assistance and subsidy (capital) to Safai Karamcharis for purchase of sanitary equipment.
- It is a joint venture of Ministry of Drinking Water and Sanitation, Ministry of Social Justice and Empowerment and Ministry of Housing and Urban Affairs.

Importance of the scheme:

- The scheme is specifically meant to prevent deaths of sewer and septic tank workers (SSW). It will promote mechanization of cleaning operations with a view to reducing the risks in cleaning and ensuring the safety of the sanitation workers.



11. Operation “Narcos” and Operation AAHT

- The Railway Protection Force (RPF) launched a month-long nationwide campaign Operation “Narcos” and Operation Aahat in January 2023.
- Under Operation Aahat, special teams have been deployed on all long distance trains/routes with a focus on rescuing victims, especially women and children, from the clutches of traffickers.
- In addition, the force’s infrastructure and intelligence networks are being used to collect, collate and analyze leads on victims, source, route, destination, popular trains used by suspects, identity of carriers/agents, kingpins, etc. which is then shared with other law enforcement agencies.
- Operation “Narcos” - To draw attention towards the menace of narcotics and psychotropic substances, an all India campaign against drug trafficking through rail was launched under this code name.

Current Affairs at a Glance

1. Veteran journalist Dr. Anne Bhavani Koteswara Prasad has been selected for the prestigious PCI's Raja Ram Mohan Roy National Award 2020.
2. India Health Link has signed an MoU with the Uttar Pradesh government under their InvestUP program to set up a health ATM.
3. World Pulses Day is observed every year on February 10 to spread awareness about the nutritional and environmental benefits of pulses as part of sustainable food production.
4. Skye Air launched a drone-based traffic management system named 'Skye UTM' in India.
5. The National Council of Applied Economic Research's (NCAER) report on Making India a Global Power House on Farm Machinery Industry was released.
6. The Telangana government launched India's first mobility-focused cluster, Telangana Mobility Valley (TMV) during the first edition of Mobility Next Hyderabad Summit 2023, Telangana.
7. National Security Advisor Ajit Doval and his US counterpart Jake Sullivan launched the US-India initiative on Critical and Emerging Technology (iCET) and Innovation Bridge.
8. The Adani Group has acquired the strategic Israeli port of Haifa for USD 1.2 billion.
9. Former PM Dr Manmohan Singh (India) was conferred a Lifetime Achievement Honour by the India-UK Achievers Honours in London.
10. President of Equatorial Guinea, Teodoro Obiang Nguema Mbasogo has appointed Manuela Roka Botey as the first female prime minister of the country.
11. World Wetlands Day was observed on February 2 with theme: It's Time for Wetlands Restoration.
12. Yaya Tso lake has been proposed as Ladakh's first biodiversity heritage site (BHS) under the Biological Diversity Act.
13. Electronics and Radar Development Establishment (LRDE) has developed a major subsystem for a space radar, which holds significant potential for ISRO and the military.
14. The government has extended Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) scheme till March 2026. PM Kusum Yojana is launched with Objectives to installation of Solar Pumps and Grid connected solar and other Renewable Energy Power Plants (REPP).
15. The Delhi Commission for Protection of Child Rights (DCPCR) launched its WhatsApp chatbot named 'Bal Mitra'.
16. World Cancer Day is observed on February 4 to create awareness about cancer and to encourage its identification, prevention, and treatment.
17. The 6th Shanghai Cooperation Organisation (SCO) Supreme Audit Institutions (SAI) Leaders' Meeting was hosted by the Comptroller and Auditor General of India (CAG) in Lucknow on 6th February 2023.
18. Reliance Retail has become the first Indian retailer to introduce Central Bank Digital Currency, also known as the digital rupee.
19. India, France, and the UAE announced a formal trilateral cooperation initiative in the areas of defense, nuclear energy, and technology.
20. Pradhan Mantri PVTG Vikas Mission will be launched to improve the socio-economic conditions of Particularly Vulnerable Tribal Groups (PVTGs). In this, basic amenities like safe housing, clean drinking water and sanitation, education, health and nutrition, road and telecom connectivity and sustainable livelihood opportunities will be fully provided to PVTG families and habitations.

1. About Economic Survey

- Economic Survey, presented in the Parliament ahead of the Union Budget, is the Ministry of Finance's flagship document.
- The Economic Survey detailed information about the Indian economy over the past year.
- The Economic Survey also offers glimpses into the current state of the economy, and occasional insights into the economic outlook.
- Although the Constitution does not bind the government to present the Economic Survey, over the years, it has become common practice for every government to present the Economic Survey before the Union Budget.



Economic Survey

- This was the first time that the Economic Survey used data generated by GST Network and the Indian Railways to see the flow of goods and people across states within India.

2. Authors of Economic Survey

The Economic Survey is prepared under the guidance of the Chief Economic Advisor and is presented in both the houses of Parliament, a day before the announcement of the Union Budget.

3. Significance of Economic Survey

- The Economic Survey holds significance as it appraises common people about the state of economic affairs of the country and makes them aware of the key economic decisions of the government which impact their lives in a considerable way.
- The Economic Survey also recommends policy changes to the government, which are, however, not binding but only act as a guide in framing national policies.
- It contains forecasts about the economic growth of the country and the reasons outlining the projection.

4. A brief history of the Economy Survey

- The first Economic Survey was presented in the year 1950-51.
- Until 1964, it was presented along with the Union Budget, but later it was disjointed from the Union Budget to give a better understanding of the budget proposals.
- As the Economic Survey contains a detailed analysis of the economic development of the country and a lot of data related to various sectors of the economy, it works as a useful tool providing background knowledge.
- Former Chief Economic Advisor Arvind Subramanian in 2018 had for the first time released the document in pink colour.
- The idea was to support women who suffer violence and to push for more gender equality.
- Not just the colour of the document, he revamped the whole document by making it more interesting with quotes and additional information.

1. State of the Economy 2022-23: Recovery Complete

- Recovering from pandemic-induced contraction, Russian-Ukraine conflict and inflation, Indian economy is staging a broad based recovery across sectors, positioning to ascend to the pre-pandemic growth path in FY23.
- India's GDP growth is expected to remain robust in FY24. GDP forecast for FY24 to be in the range of 6-6.8 %.
- Private consumption in H1 is highest since FY15 and this has led to a boost to production activity resulting in enhanced capacity utilisation across sectors.



Economic Survey 2022-23 Part 1

- Similarly, the Indian economy is well placed to grow faster in the coming decade once the global shocks of the pandemic and the spike in commodity prices in 2022 fade away.
- With improved and healthier balance sheets of the banking, non-banking and corporate sectors, a fresh credit cycle has already begun, evident from the double-digit growth in bank credit over the past months.
- Indian economy has also started benefiting from the efficiency gains resulting from greater formalisation, higher financial inclusion, and economic opportunities created by digital technology-based economic reforms.
- Thus Chapter 2 of the Survey shows that India's growth outlook seems better than in the pre-pandemic years, and the Indian economy is prepared to grow at its potential in the medium term.

- The Capital Expenditure of Central Government and crowding in the private Capex led by strengthening of the balance sheets of the Corporates is one of the growth driver of the Indian economy in the current year.
- The credit growth to the MSME sector was over 30.6 per cent on average during Jan-Nov 2022.
- Retail inflation is back within RBI's target range in November 2022.
- Indian Rupee performed well compared to other Emerging Market Economies in Apr-Dec 2022.
- Direct Tax collections for the period April-November 2022 remain buoyant.
- Enhanced Employment generation seen in the declining urban unemployment rate and in the faster net registration in Employee Provident Fund.
- Economic growth to be boosted from the expansion of public digital platforms and measures to boost manufacturing output.

2. India's Medium Term Growth Outlook: with Optimism and Hope

- Indian economy underwent wide-ranging structural and governance reforms that strengthened the economy's fundamentals by enhancing its overall efficiency during 2014-2022.
- With an underlying emphasis on improving the ease of living and doing business, the reforms after 2014 were based on the broad principles of creating public goods, adopting trust-based governance, co-partnering with the private sector for development, and improving agricultural productivity.
- The period of 2014-2022 also witnessed balance sheet stress caused by the credit boom in the previous years and one-off global shocks, that adversely impacted the key macroeconomic variables such as credit growth, capital formation, and hence economic growth during this period.
- This situation is analogous to the period 1998-2002 when transformative reforms undertaken by the government had lagged growth returns due to temporary shocks in the economy. Once these shocks faded, the structural reforms paid growth dividends from 2003.

1. Fiscal Developments: Revenue Relish

- The Union Government finances have shown a resilient performance during the year FY23, facilitated by the recovery in economic activity, buoyancy in revenues from direct taxes and GST, and realistic assumptions in the Budget.
- The Gross Tax Revenue registered a YoY growth of 15.5 per cent from April to November 2022, driven by robust growth in the direct taxes and Goods and Services Tax (GST).
- Growth in direct taxes during the first eight months of the year was much higher than their corresponding longer-term averages.



Economic Survey 2022-23 Part 2

- The supply response of the industry to the demand stimulus has been robust.
- PMI manufacturing has remained in the expansion zone for 18 months since July 2021, and Index of Industrial Production (IIP) grows at a healthy pace.
- Electronics exports rise nearly threefold, from US \$4.4 billion in FY19 to US \$11.6 Billion in FY22.
- India has become the second-largest mobile phone manufacturer globally, with the production of handsets going up from 6 crore units in FY15 to 29 crore units in FY21.
- Foreign Direct Investment (FDI) flows into the Pharma Industry has risen four times, from US \$180 million in FY19 to US \$699 million in FY22.
- Over 39,000 compliances have been reduced and more than 3500 provisions decriminalized as of January 2023.

- GST has stabilised as a vital revenue source for central and state governments, with the gross GST collections increasing at 24.8 per cent on YoY basis from April to December 2022.
- Union Government's emphasis on capital expenditure (Capex) has continued despite higher revenue expenditure requirements during the year.
- The Centre's Capex has steadily increased from a long-term average of 1.7 per cent of GDP (FY09 to FY20) to 2.5 per cent of GDP in FY22 PA.
- The Centre has also incentivised the State Governments through interest-free loans and enhanced borrowing ceilings to prioritise their spending on Capex.

2. Monetary Management and Financial Intermediation: A Good Year

- The RBI initiated its monetary tightening cycle in April 2022 and has since raised the repo rate by 225 bps, leading to moderation of surplus liquidity conditions.
- Cleaner balance sheets led to enhanced lending by financial institutions.
- The growth in credit offtake is expected to sustain, and combined with a pick-up in private capex, will usher in a virtuous investment cycle.
- Non-food credit offtake by scheduled Commercial Banks (SCBs) has been growing in double digits since April 2022.
- Credit disbursed by Non-Banking Financial Companies (NBFCs) has also been on the rise.
- The Gross Non-Performing Assets (GNPA) ratio of SCBs has fallen to a seven-year low of 5.0.
- The Capital-to-Risk Weighted Assets Ratio (CRAR) remains healthy at 16.0.
- The recovery rate for the SCBs through Insolvency and Bankruptcy (IBC) was highest in FY22 compared to other channels.

3. Industry: Steady Recovery

- Overall Gross Value Added (GVA) by the Industrial Sector (for the first half of FY 22-23) rose 3.7 per cent, which is higher than the average growth of 2.8 per cent achieved in the first half of the last decade.

1. Prices and Inflation: Successful Tight - Rope Walking

- While the year 2022 witnessed a return of high inflation in the advanced world after three to four decades, India caps the rise in prices.
- While India's retail inflation rate peaked at 7.8 per cent in April 2022, above the RBI's upper tolerance limit of 6 per cent, the overshoot of inflation above the upper end of the target range in India was however one of the lowest in the world.
- The government adopted a multi-pronged approach to tame the increase in price levels:



Economic Survey 2022-23 Part 3

- As of December 2022, Forex Reserves stood at US\$ 563 bn covering 9.3 months of imports.
- As of end-November 2022, India is the sixth largest foreign exchange reserves holder in the world.
- The current stock of external debt is well shielded by the comfortable level of foreign exchange reserves.
- India has relatively low levels of total debt as a percentage of Gross National Income and short-term debt as a percentage of total debt.

- » Phase wise reduction in export duty of petrol and diesel
- » Import duty on major inputs were brought to zero while tax on export of iron ores and concentrates increased from 30 to 50 per cent
- » Waived customs duty on cotton imports w.e.f 14 April 2022, until 30 September 2022
- » Prohibition on the export of wheat products under HS Code 1101 and imposition of export duty on rice
- » Reduction in basic duty on crude and refined palm oil, crude soyabean oil and crude sunflower oil
- The RBI's anchoring of inflationary expectations through forward guidance and responsive monetary policy has helped guide the trajectory of inflation in the country.
- The one-year-ahead inflationary expectations by both businesses and households have moderated in the current financial year.
- Timely policy intervention by the government in housing sector, coupled with low home loan interest rates propped up demand and attracted buyers more readily in the affordable segment in FY23.
- An overall increase in composite Housing Price Indices (HPI) assessment and Housing Price Indices market prices indicates a revival in the housing finance sector. A stable to moderate increase in HPI also offers confidence to homeowners and home loan financiers in terms of the retained value of the asset.
- India's inflation management has been particularly noteworthy and can be contrasted with advanced economies that are still grappling with sticky inflation rates.

2. External Sector

- Merchandise exports were US\$ 332.8 billion for April-December 2022.
- India diversified its markets and increased its exports to Brazil, South Africa and Saudi Arabia.
- To increase its market size and ensure better penetration, in 2022, CEPA with UAE and ECTA with Australia come into force.
- India is the largest recipient of remittances in the world receiving US\$ 100 bn in 2022. Remittances are the second largest major source of external financing after service export

1. Social Infrastructure and Employment: Big Tent

- Social Sector witnessed significant increase in government spending.
- Central and State Government's budgeted expenditure on health sector touched 2.1% of GDP in FY23 (BE) and 2.2% in FY22 (RE) against 1.6% in FY21.
- Social sector expenditure increases to Rs. 21.3 lakh crore in FY23 (BE) from Rs. 9.1 lakh crore in FY16.
- Survey highlights the findings of the 2022 report of the UNDP on Multidimensional Poverty Index which says that 41.5 crore people exit poverty in India between 2005-06 and 2019-20.



Economic Survey 2022-23 Part 4

- US\$ 7.1 billion FDI equity inflows in services sector in FY22.
- Contact-intensive services are set to reclaim pre-pandemic level growth rates in FY23.
- Sustained growth in the real estate sector is taking housing sales to pre-pandemic levels, with a 50% rise between 2021 and 2022.
- Hotel occupancy rate has improved from 30-32% in April 2021 to 68-70% in November 2022.
- Tourism sector is showing signs of revival, with foreign tourist arrivals in India in FY23 growing month-on-month with resumption of scheduled international flights and easing of Covid-19 regulations.
- Digital platforms are transforming India's financial services.
- India's e-commerce market is projected to grow at 18 per cent annually through 2025.

- The Aspirational Districts Programme has emerged as a template for good governance, especially in remote and difficult areas.
- eShram portal developed for creating a National database of unorganised workers, which is verified with Aadhaar. As on 31 December 2022, a total of over 28.5 crore unorganised workers have been registered on eShram portal.
- JAM (Jan-Dhan, Aadhaar, and Mobile) trinity, combined with the power of DBT, has brought the marginalised sections of society into the formal financial system, revolutionising the path of transparent and accountable governance by empowering the people.
- Aadhaar played a vital role in developing the Co-WIN platform and in the transparent administration of over 2 billion vaccine doses.
- Labour markets have recovered beyond pre-Covid levels, in both urban and rural areas, with unemployment rates falling from 5.8 per cent in 2018-19 to 4.2 per cent in 2020-21.
- Due to several steps taken by the government on health, out-of-pocket expenditure as a percentage of total health expenditure declined from 64.2% in FY14 to 48.2% in FY19.
- Infant Mortality Rate (IMR), Under Five mortality rate (U5MR) and neonatal Mortality Rate (NMR) have shown a steady decline.
- More than 220 crore COVID vaccine doses administered as on 06 January, 2023.
- Nearly 22 crore beneficiaries have been verified under the Ayushman Bharat Scheme as on 04 January, 2023. Over 1.54 lakh Health and Wellness Centres have been operationalized across the country under Ayushman Bharat.

2. Services: Source of Strength

- The services sector is expected to grow at 9.1% in FY23, as against 8.4% (YoY) in FY22.
- Robust expansion in PMI services, indicative of service sector activity, observed since July 2022.
- India was among the top ten services exporting countries in 2021, with its share in world commercial services exports increasing from 3 per cent in 2015 to 4 per cent in 2021.
- Credit to services sector has grown by over 16% since July 2022.

1. Government's Vision for Infrastructure Development

Public Private Partnerships

- In-Principal Approval granted to 56 projects with Total Project Cost of Rs. 57,870.1 crore under the VGF Scheme, from 2014-15 to 2022-23.
- IIPDF Scheme with Rs.150 crore outlay from FY 23-25 was notified by the government on 03 November, 2022.

National Infrastructure Pipeline

- 89,151 projects costing Rs.141.4 lakh crore under different stages of implementation
- 1009 projects worth Rs.5.5 lakh crore completed
- NIP and Project Monitoring Group

(PMG) portal linkage to fast-track approvals/clearances for projects

National Monetisation Pipeline

- Rs. 9.0 lakh crore is the estimated cumulative investment potential.
- Rs. 0.9 lakh crore monetisation target achieved against expected Rs.0.8 lakh crore in FY22.
- FY23 target is envisaged to be Rs.1.6 lakh crore (27% of overall NMP Target)

GatiShakti

- PM GatiShakti National Master Plan creates comprehensive database for integrated planning and synchronised implementation across Ministries/ Departments.
- Aims to improve multimodal connectivity and logistics efficiency while addressing the critical gaps for the seamless movement of people and goods.



Economic Survey 2022-23 Part 5

subscribers are connected wirelessly.

- The overall tele-density in India stood at 84.8 per cent in March 22.
- 200 per cent increase in rural internet subscriptions between 2015 and 2021.

Digital Public Goods

- Achieved low-cost accessibility since the launch of Aadhaar in 2009
- Under the government schemes, MyScheme, TrEDS, GEM, e-NAM, UMANG has transformed market place and has enabled citizens to access services across sectors
- Under Account Aggregator, the consent-based data sharing framework is currently live across over 110 crore bank accounts.
- Open Credit Enablement Network aims towards democratising lending operations while allowing end-to-end digital loan applications

2. Making Indian Logistics Globally Competitive

- National Logistics Policy envisions to develop a technologically enabled, integrated, cost-efficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth.
- Rapid increase in National Highways (NHs) / Roads Construction with 10457 km NHs/ roads constructed in FY22 compared to 6061 km in FY16.
- Budget expenditure increased from Rs.1.4 lakh crore in FY20 to Rs.2.4 lakh crore in FY23 giving renewed push to Capital expenditure.
- 2359 Kisan rails transported approximately 7.91 lakh tonnes of perishables, as of October 2022.
- More than one crore air passengers availed the benefit of the UDAN scheme since its inception in 2016.
- Near doubling of capacity of major ports in 8 years.
- Inland Vessels Act 2021 replaced 100-year-old Act to ensure hassle free movement of Vessels promoting Inland Water Transport.

3. India's Digital Public Infrastructure

Unified Payment Interface (UPI)

- UPI-based transactions grew in value (121 per cent) and volume (115 per cent) terms, between 2019-22, paving the way for its international adoption.

Telephone and Radio-For Digital Empowerment

- Total telephone subscriber base in India stands at 117.8 crore (as of Sept,22), with 44.3 per cent of subscribers in rural India.
- More than 98 per cent of the total telephone

1. Climate Change and Environment: Preparing to Face the Future

- India declared the Net Zero Pledge to achieve net zero emissions goal by 2070.
- India achieved its target of 40 per cent installed electric capacity from non-fossil fuels ahead of 2030.
- The likely installed capacity from non-fossil fuels to be more than 500 GW by 2030 resulting in decline of average emission rate by around 29% by 2029-30, compared to 2014-15.
- India to reduce emissions intensity of its GDP by 45% by 2030 from 2005 levels.



Economic Survey 2022-23 Part 6

- About 11.3 crore farmers were covered under the Scheme in its April-July 2022-23 payment cycle.
- Rs 13,681 crores sanctioned for Post-Harvest Support and Community Farms under the Agriculture Infrastructure Fund.
- Online, Competitive, Transparent Bidding System with 1.74 crore farmers and 2.39 lakh traders put in place under the National Agriculture Market (e-NAM) Scheme.
- Organic Farming being promoted through Farmer Producer Organisations (FPO) under the Paramparagat Krishi Vikas Yojana (PKVY).
- India stands at the forefront to promote millets through the International Year of Millets initiative.

- About 50% cumulative electric power installed capacity to come from non-fossil fuel-based energy resources by 2030.
- A mass movement LIFE- Life style for Environment launched.
- Sovereign Green Bond Framework (SGrBs) issued in November 2022.
- RBI auctions two tranches of Rs.4,000 crore Sovereign Green Bonds (SGrB).
- National Green Hydrogen Mission to enable India to be energy independent by 2047.
- Green hydrogen production capacity of at least 5 MMT (Million Metric Tonne) per annum to be developed by 2030. Cumulative reduction in fossil fuel imports over Rs.1 lakh crore and creation of over 6 lakh jobs by 2030 under the National green Hydrogen Mission. Renewable energy capacity addition of about 125 GW and abatement of nearly 50 MMT of annual GHG emissions by 2030.
- The Survey highlights the progress on eight missions under the NAP on CC to address climate concerns and promote sustainable development.
- Solar power capacity installed, a key metric under the National Solar Mission stood at 61.6 GW as on October 2022.
- India becoming a favored destination for renewables; investments in 7 years stand at USD 78.1 billion.
- 62.8 lakh individual household toilets and 6.2 lakh community and public toilets constructed (August 2022) under the National Mission on Sustainable Habitat.

2. Agriculture and Food Management

- The performance of the agriculture and allied sector has been buoyant over the past several years.
- Private investment in agriculture increases to 9.3% in 2020-21.
- MSP for all mandated crops fixed at 1.5 times of all India weighted average cost of production since 2018.
- Institutional Credit to the Agricultural Sector continued to grow to 18.6 lakh crore in 2021-22
- Foodgrains production in India saw sustained increase and stood at 315.7 million tonnes in 2021-22.
- Free foodgrains to about 81.4 crore beneficiaries under the National Food Security Act for one year from January 1, 2023.

Prelims Special 2023: International Relation

India- Bangladesh relationship

Why in News: Bangladesh Prime Minister visited India in September, 2022.

Economic Relations:

- India is the Second largest trading partner of Bangladesh.
- India has provided duty free quota free access to Bangladesh on all tariff lines except tobacco and alcohol under the South Asian Free Trade Area (SAFTA) since 2011.
- Bilateral trade between the two countries to reach US\$ 18.2 billion in 2021-22 as compared to US\$ 10.8 billion in 2020-21.

River pact between two countries:

- India and Bangladesh share 54 common rivers. The Ganga Water Treaty was signed in 1996 for the sharing of the water of the river Ganges during the lean season.
- Recently, the Kushiara Agreement was signed, which will benefit the people of southern Assam and the Sylhet region of Bangladesh.

Connectivity between two countries:

- India and Bangladesh share a 4096.7 km long border, which touches the states of Assam, Tripura, Mizoram, Meghalaya and West Bengal.
- Transit and trade through inland waterways are governed by long-standing and time-tested protocols between Bangladesh and India.
- Agartala-Akhaura rail-link will be the first rail route between Northeast India and Bangladesh.

Power and Energy Sector Cooperation:

- The India-Bangladesh Friendship Pipeline Project, signed in 2018, will connect Siliguri in West Bengal in India and Parbatipur in Dinajpur district of Bangladesh.
- India and Bangladesh have also signed a Framework of Understanding (MOU) on cooperation in the hydrocarbon sector.

BIMSTEC

Why in News: India hosted the 2nd BIMSTEC Agriculture Ministers meeting under the chairmanship of Union Agriculture Minister Shri Narendra Singh Tomar 5th BIMSTEC Summit held in Colombo in March, 2022.

Key points of the meeting:

- The 2nd BIMSTEC Agriculture Ministerial Meeting adopted the Action Plan for Strengthening BIMSTEC Agricultural Cooperation (2023-2027).
- An MoU between the BIMSTEC Secretariat and the International Food Policy Research Institute (IFPRI) has been signed and approval has been given to bring Fisheries and Livestock sub-sectors under the Agricultural Working Group.
- BIMSTEC member countries appreciated India's efforts to strengthen cooperation in agricultural

research and development and for awarding six scholarships each for postgraduate and PhD programmes in agriculture.

About the BIMSTEC:

- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) was founded in 1997 and headquartered in Dhaka (Bangladesh). It comprising Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand brings together 1.73 billion people of the world population and a combined GDP of over US\$ 4.4 trillion. The purpose of BIMSTEC to accelerate the economic growth and social progress in the Bay of Bengal region through joint endeavours in a spirit of equality and partnership to promote active collaboration and mutual assistance on matters of common interest in the economic, social, technical and scientific fields.

Eastern Economic Forum

Why in News: Russia hosted the 7th Eastern Economic Forum (EEF) in Vladivostok. The Forum is a platform for entrepreneurs looking to expand their business in the Russian Far East (RFE) region.

About the Eastern economic forum:

- The Eastern Economic Forum was established in 2015 to encourage foreign investments in Russia's the Far East. As of 2022, almost 2,729 investment projects are being planned in the region.
- China, South Korea, Japan and India are the Key Players in the region, where China is the biggest investor.
- India is keen on cooperation in energy, pharmaceuticals, maritime connectivity, healthcare, tourism, the diamond industry in the region.
- In 2019, India offered a USD 1 billion line of credit to develop infrastructure in the region.

Act Far-East Policy of India:

- At the plenary session of the 5th Eastern Economic Forum (EEF) in Vladivostok in 2019, Indian Prime Minister Narendra Modi unveiled the 'Act Far East' policy for Russia and announced that India will extend the line of credit \$1 billion to the development of the Russian Far East.

India at UN

Why in News: External Affairs Minister S. Jaishankar participated in 77th Session of the United Nations General Assembly.

Priority issues for India:

- **South-South Cooperation:**
1. India has considerable experience in South-

South Cooperation, bilaterally as well as through collaboration with the UN.

2. India has set up a US\$ 150 million India-UN Development Partnership Fund, managed by UNOSSC. The Fund continues to support South-owned and South-led sustainable development projects with a focus on LDCs, LLDCs and SIDS. In four years, the Fund has accumulated a portfolio of 66 projects in 52 countries.
 3. The IBSA (India-Brazil-South Africa) Fund for the Alleviation of Poverty and Hunger also hosted at the UNOSSC is another unique mechanism for South-South Cooperation.
 4. India will also be an active participant in the 5th UN Conference on LDCs to be held in Doha, Qatar in March 2023.
- Maintain India's active engagement as a leading voice on issues relating to sustainable development, financing for development, terrorism, and climate change. Continue to advocate the need for resilient global supply chains to sustain vaccine production to ensure equitably and affordable access. Promote Indian positions and arguments in consultations and subsequent inter-governmental negotiations on Universal Health Coverage.
 - Attach greater prominence to issues relating to counter-terrorism; pushing for more transparency in the process of listing and delisting of entities and individuals in Security Council's Sanction Committees.
 - Engage substantively in matters relating to peacekeeping as a major Troop Contributing Country in finalizing of mandates for UN peacekeeping missions. Promote application of technology in peacekeeping Missions and seek accountability for crimes against Peacekeepers in line with Security Council Resolution 2589.
 - Take forward India's pragmatic and constructive approach on disarmament issues at the First Committee and UN Disarmament Commission and engage with all partners on issues related to outer space, cyberspace etc.
 - Continue to pursue the issue of reform of the Security Council for a meaningful outcome in the 77th UNGA.

SCO

Why in News: SCO summit concluded in the historic city of Samarkand, talked about the ideal world order. PM Modi participated in the summit.

About SCO:

- The Shanghai Cooperation Organisation was founded in 2001. It is a Eurasian political, economic and security organization. It is the

world's largest regional organization in terms of geographic scope and population, covering approximately 60% of the area of Eurasia, 40% of the world population, and more than 30% of global GDP. China, Kazakhstan, Kyrgyzstan, Russia, India, Pakistan, Uzbekistan and Tajikistan are the member of the organisation.

- The SCO has been an observer in the UN General Assembly since 2005.
- The intergovernmental organisation's purposes, principles, structures and forms of operation were listed in the SCO charter signed in Russia's Saint Petersburg in 2002. Its priority areas are regional security issues, fight against terrorism, ethnic separatism and religious extremism and regional development.

India's Stand:

- Now is not an era of war: India bluntly told Russia that this was not the time for war and that the war must stop.
- Diplomacy and democracy: It was the only country to demand a cessation of all hostilities and want diplomacy and democracy.
- Pakistan should give India transit trade access by land to Afghanistan and Central Asia.

Abraham Accord

Why in News: Abraham accord has completed two year which has led the peace in Middle East. Brokered by the USA, Abraham Accord is a normalization agreement between UAE and Israel to establish formal diplomatic relations, later joined by Bahrain, Sudan, and Morocco and in exchange Israel would suspend its plans to annex parts of the occupied West Bank, thereby becoming the first Gulf country to establish diplomatic and economic relations with Israel. UAE becomes the third Arab nation to recognize Israel after Egypt (in 1979) and Jordan (1994)

I2U2 Summit

Why in News: first I2U2 (India, Israel, United States and the United Arab Emirates) leaders' Summit was held virtually.

Key Highlights of the Summit:

- The United Arab Emirates (UAE) announced to invest USD 2 billion in India to develop Food Parks across India.
- India will provide appropriate land for the project and will facilitate farmers' integration into the Food Parks.
- The Grouping declared to support a hybrid renewable energy project in Gujarat, consisting of 300 megawatts (MW) of wind and solar capacity.

About I2U2:

- I2U2 stands for India, Israel, the UAE, and the US, and was also referred to as the West Asian

Quad.

- I2U2 was initially formed in October, 2021 following the Abraham Accords, to deal with issues concerning maritime security, infrastructure and transport. The Abraham Accord is the first Arab-Israeli peace deal in 26 years mediated by the USA.
- Its aim is to discuss common areas of mutual interest, to strengthen the economic partnership in trade and investment in our respective regions and beyond.
- Six areas of cooperation have been identified by the countries mutually, and the aim is to encourage joint investments in water, energy, transportation, space, health, and food security.

India, China held dialogue on airspace violations near LAC

Why in News: India and China discussed ways to better establish understanding to manage airspace and avoid airspace violations along the Line of Actual Control (LAC). This was discussed during the routine Confidence Building Measures (CBM) talks on the ground in eastern Ladakh

About Airspace:

- Airspace, in international law, is the space above a particular national territory, treated as belonging to the government controlling the territory. It does not include outer space, which, under the Outer Space Treaty (1967), is declared to be free and not subject to national appropriation. The treaty, however, did not define the altitude at which outer space begins and air space ends.

Chicago Convention:

- In 1944, Chicago Convention was held which led to the formation of International Civil Aviation Organisation (ICAO). This convention also led to the establishment of the core principles permitting international transport by air. India is one of the ICAO's founder members. ICAO headquarters is located in Montreal, Canada.

UN sanctions regime:

- India has said to the UN that the credibility of the United Nations' sanctions regime is at an all-time low. Double standards and continuing politicisation have rendered the credibility of the sanctions regime at an all-time low

UNSC 1267 Committee:

- It was established for the purpose of overseeing the implementation of sanctions measures imposed on Taliban-controlled Afghanistan, but eventually its scope has been enlarged to include individuals as well as organizations.

UN section regime:

- The Security Council can take action to maintain or restore international peace and security under Chapter VII of the United Nations Charter. Sanctions measures, under Article 41, encompass a broad range of enforcement options that do not involve the use of armed force. Although, under article 42 of UN charter, the armed forces can be used on the recommendation of UNSC.

Trans-Himalayan network

Why in News: China and Nepal recently gave their consent to construct Trans-Himalayan Multi-Dimensional Connectivity Network

About Trans-Himalayan network:

- The network is also called as Trans-Himalayan network. It is an economic corridor between Nepal and China, under the Belt and Road Initiative. The construction of this network was appreciated by Chinese President as switching Nepal from a landlocked to a land-linked country. The network comprises of multiple transportation infrastructure projects.

United Nations Military Observer Group in India and Pakistan (UNMOGIP)

Why in News: U.N. Secretary-General Antonio Guterres has appointed Rear Admiral Guillermo Pablo Rios of Argentina as the Head of Mission and Chief Military Observer for the United Nations Military Observer Group in India and Pakistan (UNMOGIP), the office of the U.N. Secretary-General has announced.

About the UNMOGIP:

- UNMOGIP emerged from U.N. Security Council Resolution 39 of January 1948 that set up the U.N. Commission for India and Pakistan (UNCIP).
- India officially maintains that the UNMOGIP's role was overtaken by the Simla Agreement of 1972 that established the Line of Control or the LoC which with minor deviations followed the earlier Cease Fire Line.
- Pakistan however did not accept the Indian argument and continued to seek cooperation from the UNMOGIP. As a result of these divergent policies, Pakistan continues to lodge complaints with the UNMOGIP against alleged Indian ceasefire violations. India has not officially gone to the UNMOGIP since 1972 with complaints against Pakistan.

International Transport Forum (ITF)

Why in News: The Cabinet gave its approval to sign an agreement between India and France to support the activities of the International Transport Forum (ITF) on the Indian transport sector. The contract was signed on July 6, 2022.

About International Transport Forum (ITF):

- The International Transport Forum at the OECD is an intergovernmental organisation with 64 member countries. It acts as a think tank for transport policy and organises the Annual Summit of transport ministers. ITF is the only global body that covers all transport modes. The ITF is administratively integrated with the OECD.

India and Egypt relation

Why in News: In a unique move Egypt Post released a commemorative postage stamp to celebrate 75 years of diplomatic relations between Egypt and India. Egyptian president came as a chief guest in 74th republic day commemoration.

About India and Egypt relation

- Diplomatic relations between India and Egypt began when Egypt recognized India's independence on 18 August 1947, three days after India's independence. The two countries became even closer in the 1950s, which resulted in a historic friendship treaty in 1955.
- Both countries have cooperated closely in multilateral fora and were the founding members of Non-Aligned Movement.
- The India-Egypt Bilateral Trade Agreement has been in operation since March 1978 and is based on the Most Favoured Nation clause and the bilateral trade has increased more than five times in last ten years.

Exercise Vajra Prahar

Why in News: 13th edition of Indo-US joint military exercise Vajra Prahar concludes at Bakloh, Himachal Pradesh.

About Exercise Vajra Prahar:

- 'Vajra Prahar' is an Indo-US Special Forces joint training exercise that began alternately in 2010 in India and the US. The aim of the exercise is to boost military ties between the two countries by enhancing reciprocity and mutual exchange of strategies between the Special Forces.

Exercise Yudh Abhyas:

- The 18th edition of the India-US joint military exercise 'Yudh Abhyas' was held in Uttarakhand, about 100 km from the Line of Actual Control.

About exercise Yudh Abhyas:

- The military exercise is conducted annually between India and the US with the aim of exchanging best practices, tactics, techniques and procedures between the armies of the two nations. The exercise is hosted alternately by the two countries since 2004.

Asian Palm Oil Alliance (APOA)

Why in News: Asian Palm Oil Alliance (APOA) was

launched during the Globoil Summit at Agra in September 2022.

About the Alliance:

- The Asian Palm Oil Alliance (APOA) is initiated by the Apex Solvent Extractors association of five South-Asian countries – India, Bangladesh, Nepal, Pakistan and Sri Lanka.
- The membership of APOA would be further expanded to include industries and companies involved with the production or refining of palm oil across the continent.
- The APOA Secretariat would be initially managed by the Solvent Extractors Association (SEA) of India.
- In its first general body meeting, Atul Chaturvedi, Director of Adani Wilmar Ltd and the President of SEA were elected as the first chairman of the APOA.
- The next meeting of APOA is expected to be held in Indonesia early next year (2023).
- The association is expected to safeguard the economic and business interests of the palm-oil-consuming countries and create a level playing field for all fats and oils used in food, feed and oleo-chemicals in Asia. It will also work to increase the consumption of sustainable palm oil in member countries.

Border clashes erupt between Armenia and Azerbaijan

Why in News: Fresh clashes broke out between Armenia and Azerbaijan, with each side reporting casualties and blaming the other for the violence.

Key points of the clash:

- The two countries have had a decades-long conflict involving the Nagorno-Karabakh region, which is inside Azerbaijan but populated mainly by ethnic Armenians.
- A six-week war in 2020 killed more than 6,600 people and saw Azerbaijan reclaim territory in and around the region.

About Armenia:

- Capital: Yerevan
- Currency: Armenian dram
- President: Vahagn Khachaturyan

About Azerbaijan:

- President: Ilham Aliyev
- Capital: Baku
- Currency: Azerbaijani manat

India-Japan 2+2 Ministerial Dialogue

Why in News: 2nd Indo-Japan ministerial dialogue will be held in Tokyo. Foreign and Defence ministers of India and its ally (2+2) meet regularly to understand each other's strategic concerns and build stronger ties.

About the dialogue:

- On November 30, 2019, India and Japan held their first 2+2 meeting in New Delhi between Japanese Foreign Minister Toshimitsu Motegi, Defense Minister Taro Kono and India's External Affairs Minister S Jaishankar and Defense Minister Rajnath Singh.
- The meeting was seen as a deepening of ties between India and Japan in the wake of tensions with China and China's assertiveness in expanding not only its influence but also control over regional issues.
- India has 2+2 dialogues with four key strategic partners: the US, Australia, Japan, and Russia.

India-Japan joint initiatives:

- Quad, Supply Chain Resilience Initiatives, Asia-Africa Growth Corridors, Mutual Logistics and supply agreement (MLSA), Dharma Guardian (Joint Military Exercise); JIMEX (Navy) and Malabar (India-US-Japan-Australia maritime exercise)

IPEF ministerial summit

Why in News: Indo-Pacific Economic framework (IPEF) ministerial summit concludes.

About the IPEF:

- It is the US-led economic grouping of 14 countries in the Indo-Pacific region, intended to counter Chinese aggressive and non-transparent trade and economic policies.
- Member: US, Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Vietnam.
- The IPEF framework has four pillars:
 1. Trade
 2. Supply Chains
 3. Clean Energy, Decarbonization, and Infrastructure;
 4. Tax and Anti-Corruption.

In four pillars, India only joins three pillars of IPEF except trade.

Indo-Pacific Trilateral Development Cooperation Fund

Why in News: India and France have agreed to work towards the establishment of Indo-Pacific trilateral development cooperation.

About the fund:

- Indo-Pacific trilateral development cooperation would facilitate development projects, especially in the framework of the International Solar Alliance.
- The Indo-Pacific trilateral would also provide a platform for Indian innovations and startups to demonstrate their relevance to the requirements

of other societies.

India and France cooperation:

- Exercise Shakti (Army), Exercise Varuna (Navy), and Exercise Garuda (Air Force) are joint exercises between India and France.
- India and France have signed an agreement for the cooperation on Gaganyaan Mission.
- Civil nuclear cooperation was signed between India and France in 2008; the 9,900 MW Jaitapur Nuclear Power Project (JNPP)

CICA summit

Why in News: Kazakhstan has invited Indian PM to the 6th CICA summit (Conference on Interaction and Confidence Building Measures in Asia). From India Meenakshi Lekhi was participated in the summit.

About CICA:

- It was founded in 1999 and is a multi-national forum of countries having a part of its territory in Asia.
- India is among its 27 members.
- It's aimed to enhancing cooperation through elaborating multilateral approaches toward promoting peace, security and stability in Asia.
- To build Confidence in area of Economic, environmental, new challenges and threats, military etc.

G4 countries highlight urgent need for reform in U.N. Security Council

Why in News: meeting between the foreign ministers of the Group of Four (G4) countries. They met on the sidelines of the 77th Session of the United Nations General Assembly to discuss issues related to reform of the United Nations Security Council (UNSC).

Key points of meeting:

- The joint statement released by the four ministers called for the expansion of Security Council in both permanent and non-permanent categories of membership.
- This will make the body more representative, legitimate and effective.
- The minister highlighted the lack of meaningful progress in the Intergovernmental Negotiations (IGN) on Security Council (SC) reform.

G4 Countries:

- It was formed in 2004 with India, Brazil, Germany and Japan as its members.
- The group is primarily focused on UNSC reforms, and permanent membership of the body for G4 members, among others.

Other groups that want reform in UNSC:

- The African Union
- The G4 nations
- The L.69 Group of Developing Countries
- The Arab League; and

- The Caribbean Community (CARICOM)

Quad group

Why in News: Foreign Ministers of the Quad group of countries met on the fringes of the United Nations General Assembly (UNGA) to sign a Humanitarian Assistance and Disaster Relief (HADR) partnership.

Quadrilateral Security Dialogue (QUAD):

- It is the informal strategic dialogue between India, the USA, Japan and Australia to ensure and support a free, open and prosperous Indo-Pacific region. The idea of Quad was first mooted by Japanese Prime Minister Shinzo Abe in 2007 but took shape only in 2017.

3C strategy of QUAD:

The strategy is based on three pillars.

- Covid19 vaccine partnership
- Climate working group
- Critical and Emerging Technology working group

UN Human Right Commission

Why in News: UN Secretary-General Antonio Guterres appointed Austria's Volker Turk as the next High Commissioner for Human Rights. He succeeded Michelle Bachelet of Chile, whose term ended on August 31.

About UN Human Right Commission:

- The United Nations Human Rights Council (UNHRC) is a United Nations body that promotes and protects human rights throughout the world.
- Established on 15 March 2006, the organization, headquartered in Geneva, Switzerland, consists of 47 members elected on a regional basis for 3-year terms. The members of the Council serve for a period of three years and shall not be eligible for immediate re-election after two consecutive terms.
- The main objective of the United Nations Human Rights Council is to investigate allegations of human rights abuse in member states of the United Nations and ensure that the following human rights issues are addressed and upheld to the maximum extent.

US-India Strategic Partnership Forum

Why in News: Indo-Pacific Economic Framework Ministerial (IPEF) meeting in Los Angeles.

About US-India Strategic Partnership Forum:

- The USISPF is a non-profit organization established in 2017.
- Its aim to Strengthening economic and commercial ties between the two countries through policy advocacy that will lead to driving economic growth, entrepreneurship, employment-creation, and innovation to create a more inclusive society.

- Enabling business and governments to collaborate and create meaningful opportunities that can positively change the lives of citizens.
- Economic Relations: In 2019, overall USA-India bilateral trade in goods and services reached USD 149

Clean Energy Ministerial (CEM13) and Mission Innovation (MI-7)

- **Why in News:** The US hosted the joint meeting of the Global Clean Energy Action Forum, the 13th Clean Energy Ministerial (CEM 13) and the 7th Mission Innovation Ministerial (MI-7) from 21 to 23 September 2022.

About Clean Energy Ministerial and Mission Innovation Ministerial

Clean Energy Ministerial:

- It was established in December 2009 at the UN's Framework Convention on Climate Change conference of parties in Copenhagen.
- CEM is a high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.
- The CEM is focused on three global climate and energy policy goals:
 1. Improve energy efficiency worldwide.
 2. Enhance clean energy supply.
 3. Expand clean energy access.
- 29 countries are part of CEM.
- India is also a member country.

Mission Innovation Ministerial:

- Mission Innovation (MI) is a global initiative catalysing a decade of action and investment in research, development and demonstration to make clean energy affordable, attractive and accessible for all. This will accelerate progress towards the Paris Agreement goals and pathways to net zero.

Indus Water Treaty (IWT)

Why in News: The World Bank has appointed a Neutral Expert (NE) and a Chairman of the Court of Arbitration (CoA) regarding the Kishenganga and Ratle hydroelectric power plants. Both dam build on western rivers allocated to Pakistan under Indus water treaty.

About the treaty:

- It was come in force in 1960 through mediation of World Bank.
- The IWT delimits the rights and obligations of India and Pakistan for the use of waters on the Indus Rivers.
- India, Pakistan and World Bank are the signatories of the treaty. Though Indus originates

- from Tibet, China has been kept out of the Treaty.
- World Bank is the third-party guarantor.
- **Eastern rivers:** Ravi, Beas and Satluj rivers 80% water was given to India for unrestricted use.
- **Western rivers:** 80% Water of Indus, Jhelum, and Chenab was allocated largely to Pakistan.
- In western rivers, India is permitted for certain agricultural uses, to build 'run of the river' hydropower projects with limited storage (up to 3.6 million acre feet or MAF of water) as per criteria specified in the treaty.
- Kishanganga Hydroelectricity Project (KHEP) located on Kishanganga or Neelum, a tributary of Jhelum, was inaugurated in 2018.
- Ratle Hydroelectric Plant (RHEP) is being constructed on the Chenab Rivers.

India-Africa Defence Dialogue (IADD)

Why in News: India-Africa Defence Dialogue (IADD) was held recently on the sidelines of DefExpo 2022 in Gandhinagar, Gujarat. Gandhinagar Declaration was adopted as an outcome document of IADD 2022.

About India-Africa Defence Dialogue (IADD):

- IADD was institutionalised in 2020 to be held biennially during successive DefExpos.
- It proposes to enhance cooperation in the field of training in all areas of mutual interest by empowerment and capability building of African defence forces, participation in exercises and humanitarian assistance during natural disasters etc.
- India offered fellowship for experts from African countries through Manohar Parrikar Institute for Defence Studies and Analysis.

UN Peacekeeping Mission

Why in News: India has presented reforms to address security and operational challenges faced by United Nations peacekeeping missions around the world.

About UN Peacekeeping mission:

- The first UN peacekeeping mission was established in 1948, when it deployed military observers to West Asia to monitor the Armistice Agreement between Israel and its Arab neighbours.
- It aims to build sustainable security and peace in countries affected by conflict.
- The decision to send a peacekeeping mission to a country is made by the UN Security Council (UNSC).
- UN member states contribute military and police personnel under UN command, for which they are paid from UN funds.

Mandates:

- Maintain peace and security:
- Protect civilians and promote human rights
- Support constitutional processes and the

organization of elections

- Assist in restoring the rule of law and extending legitimate state authority etc

India at UN peacekeeping mission:

- Currently, India is the 3rd highest amongst troop-contributing countries.
- India's contribution to UN Peacekeeping began with its participation in the UN operation in Korea in the 1950s.
- India also served as Chair of the three international commissions for supervision and control for Vietnam, Cambodia, and Laos established by the 1954 Geneva Accords on Indochina.
- In 2007, India became the first country to deploy an all-women contingent to the Mission.
- India was also the first country to contribute to the Trust Fund on sexual exploitation and abuse set up in 2016.
- Time and again India has also pitched for reforms for the mission to overcome to enhance its relevance in the current circumstances.

Action for peace (A4P):

- Action for peace (A4P) was declared in 2018 as a set of mutually-agreed principles and commitments to create peacekeeping operations fit for the future.
- It is centred on eight priority commitment areas.
- A4P+ is the implementing strategy (with 7 priorities) for A4P for 2021-23 16

Financial Action Task Force (FATF)

Why in News: Financial Action Task Force (FATF) announced the removal of Pakistan from its Grey List.

About Financial Action Task Force (FATF):

- FATF is the global money laundering (ML) and terrorist financing (TF) watchdog.
- The inter-governmental body sets international standards that aim to prevent these illegal activities.
- It was established in 1989, by a Group of Seven (G-7) Summit held in Paris.
- The summit set up the FATF to develop and promote policies, globally, to help eliminate threat posed by money laundering (ML).
- In 2001, the FATF took over responsibility for the development of standards in the fight against terrorist financing.
- FATF currently comprises 37 member jurisdictions and 2 regional organisations (Gulf Co-operation Council and European Commission).
- India became a member of the FATF in 2010.
- FATF's Black and Grey lists- These terms do not exist in official FATF terminology but are colloquial phrases used to describe two lists of countries maintained by the body.

International Criminal Police Organization (INTERPOL)

Why in News: INTERPOL has launched the first ever police metaverse specifically designed for law enforcement agencies worldwide during its 90th General Assembly in New Delhi.

About the Metaverse:

- Metaverse refers to real-time 3D virtual spaces, where users can meet, create, socialise, work, buy goods and services and attend events with other people who are not in same physical space.
- INTERPOL metaverse allows registered users to take virtual tour of its general secretariat headquarters in France's Lyon, interact with other officers via their avatars, and take training courses in forensic investigation and other policing skills.
- It can be accessed by all 195 member countries and offers benefits like remote work, networking, collecting and preserving evidence from crime scenes, and delivering training

About the INTERPOL:

- It is an inter-governmental organisation comprising 195 member countries, which helps police forces in all these countries to better coordinate their actions.
- It was formed in 1923.
- India has been a member since 1956.
- It enables member countries to share and access data on crimes and criminals and offers a range of technical and operational support.
- General secretariat coordinates organization's day-to-day activities.
- It is run by a secretary general with its headquarters in Lyon, France, with a global complex for innovation in Singapore, and several satellite offices in different regions.
- India's Central Bureau of Investigation (CBI), is the national coordinating agency with INTERPOL.

Counter-Terrorism Committee (CTC)

Why in News: Special Meeting of the Counter Terror Committee of the UN Security Council.

About Counter-Terrorism Committee of UNSC:

- It was established by Security Council resolution 1373 adopted unanimously in the wake of the 9/11 terror attacks in the US. It aims at enhancing the legal and institutional ability of countries to counter terrorist activities at home and around the world.

India Abstains On UNSC Resolution

Why in News: India abstained from a draft resolution at the United Nations Security Council (UNSC) condemning referenda organized by Russia across four regions of Ukraine- Kherson, Zaporizhzhia,

Luhansk, and Donetsk.

- UNSC resolutions: They are formal expressions of the opinion or will of United Nations organs.
- The draft resolution, circulated by the US and Albania, was supported by 10 of the 15 members of the Security Council, while Brazil, China and Gabon joined India in abstaining.
- The resolution called on all states, international organisations and agencies not to recognise the Russian annexation. It also called on Russia to immediately, completely and unconditionally withdraw all of its military forces from Ukrainian territory.

International Solar Alliance (ISA)

Why in News: 5th assembly of ISA has been inaugurated in India. India holds the office of the President of the ISA Assembly, with the Government of France as Co-President. The Assembly is the apex decision-making body of its members, where each Member Country is represented and membership is open to all members of the UN. It meets annually at the ministerial level at the ISA's headquarter.

About ISA:

- It is an intergovernmental organization, launched in 2015. ISA is the first such intergovernmental organization to be headquartered in India.
- Its mission is to unlock US\$ 1 trillion of investments in solar by 2030 and reduce the cost of the technology and its financing.

Important projects under ISA:

- One Sun One World One Grid (OSOWOG)
- ISA Solar Technology and Application Resource Centre (ISTAR C)
- Indian Technical and Economic Cooperation (ITEC) Scheme

19th India- ASEAN summit

Why in News: Recently, 19th India- ASEAN summit was held in Cambodia. 2022 is being celebrated as ASEAN-India Friendship Year as the summit also marked 30th anniversary of India-ASEAN dialogue.

Key highlights of the summit:

- Both sides elevated ties from strategic to Comprehensive Strategic Partnership (CSP) to focus on specific areas including Maritime security, projects in Indo-Pacific, Cybersecurity and inter-operability of digital financial systems etc
- India announced an additional outlay of \$5 million for ASEAN-India Science and Technology Fund. The Fund, established in 2008, facilitates support to R&D projects and associated project development activities.
- Expedite review of ASEAN-India Trade in Goods Agreement (AITGA) to make it more user friendly,

simple, and trade facilitative for businesses as well as support for sustainable and inclusive growth.

About ASEAN:

- Association of Southeast Asian Nations (ASEAN) was established in 1967 with signing of ASEAN Declaration (Bangkok Declaration) by Indonesia, Malaysia, Philippines, Singapore and Thailand.
- It aims to accelerate economic growth, social progress and cultural development through joint endeavours among Southeast Asian Nations.
- India began formal engagement with ASEAN in 1992 as a Sectoral Dialogue Partner and forged a strategic partnership in 2012.

Black Sea Grain deal

Why in News: Recently, Russia resumed participation in Black Sea Grain deal.

About the deal:

- The Black Sea Grain deal was brokered by the United Nations (UN) and Turkey in July, 2022 between Russia and Ukraine.
- The deal endeavours to tackle escalating food prices emanating from supply chain disruptions due to effective blockage of Black Sea.
- Deal was to provide for a safe maritime humanitarian corridor for Ukrainian exports (particularly for food grains) from three of its key ports, namely, Chornomorsk, Odesa and Pivdennyi.

India-UN Development Partnership Fund

Why in News: Recently India-UN Development Partnership Fund celebrated 5 Years of South-South Collaboration.

About UNDF:

- It is a dedicated facility established in 2017 within the United Nations Framework Convention on Climate Change (UNFCCC).
- The Government of India has committed \$150 million over 10 years to the India-UN Fund.
- It is managed by the United Nations Office for South-South Cooperation (UNOSSC) and implemented in collaboration with the United Nations system.
- The UNOSSC hosted by UNDP since 1974, was established by the UN General Assembly.

About South-South Cooperation:

- South-South cooperation refers to the technical cooperation among developing countries in the Global South.
- Operationally, it is a process whereby two or more developing countries pursue their individual and/or shared national capacity development objectives.
- It derives from the adoption of the Buenos Aires

Plan of Action for Promoting and Implementing Technical Cooperation among Developing Countries (BAPA) by 138 UN Member States in Argentina.

Multilateral Export Control Regime

Why in News: India assumes chairmanship of Wassenaar arrangement for one year from January 2023.

About Multilateral Export Control Regime:

- 42-member WA is a voluntary Multilateral Export Control Regime (MECR) to promote transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies by facilitating Information sharing among WA participating states.
- Standards setting on export controls of conventional arms and Dual-use goods and technologies. India joined WA in 2017.

China-Indian Ocean Region Forum

Why in News: China convened a first China-Indian Ocean Region Forum bringing together 19 countries from the region, and all of India's neighbors, except India.

About China-Indian Ocean Region Forum:

- It proposed to establish a marine disaster prevention and mitigation cooperation mechanism between China and countries in Indian Ocean region.
- It was organized by China International Development Cooperation Agency which is Beijing's new development aid agency.

G-20

Why in News: India assumed G 20 presidency in December, 2022. it unveiled the logo, theme and website of India's G20. In logo lotus and green earth has pictured.

- **Lotus:** India's national flower, Lotus having 7 petals, represent seven continents of the globe and also seven notes of music. •
- **G20:** It is the vibrant colours of India's National Flag Saffron, white and green.
- **Blue Earth:** Represent India's pro-planet approach to life, one in perfect harmony with nature.

About G-20:

- It is an intergovernmental forum made up of 19 countries as well as the European Union (EU) that aims to address significant global economic challenges such as international financial stability, climate change mitigation and sustainable development.
- The G20, which is made up of the majority of the world's top economies (both developed and developing), was created in 1999 and has met at

least once a year since 2008.

- This group has no permanent staff or secretariat, each year in December, a G20 country from a rotating region assumes the Presidency, which is in charge of organising the following summit.

India-Australia Economic Cooperation and Trade Agreement (ECTA)

Why in News: Australian Parliament ratified India-Australia Economic Cooperation and Trade Agreement (ECTA) in a landmark moment for India

About the ECTA:

- It is 1st such agreement for India with a developed country: India has free trade deals mostly with South Asian countries and hardly served India's trade interests. •
- The deal has the potential to raise bilateral trade between India and Australia to nearly \$50 bn in the next five years and create at least 10 lakh jobs especially in the start-up economy.

New Orientation for Reformed Multilateral system

Why in News: India has proposed reforms in United Nations via NORMS (New Orientation for Reformed Multilateral system) to determine a global order that best reflects contemporary realities.

About the NORMS:

- NORMS envisages reform in all three pillars of the current multilateral architecture (peace and security, development, and human rights), with the UN at its centre.
- It calls for a representative multilateral structure which is needed to address emerging challenges such as terrorism, radicalism, pandemics, threats from new and emerging technologies and so on.
- India proposed the idea while presiding on the UN Security Council open debate on Maintenance of International Peace and Security.

About UNSC:

- It is United Nations' principal crisis-management body, empowered to impose binding obligations on 193 UN member states to maintain international peace and security.
- Five permanent members (Collectively P5) with veto power: China, France, Russia, UK and USA.
- Ten non-permanent members elected by United Nations General Assembly by a two-thirds majority. They serve two-year, non-consecutive terms, are not afforded veto power.

China's concern regarding Yudh Abhyas

Why in News: The 18th edition of Yudh Abhyas, the annual India-U.S. military exercise concluded recently in Uttarakhand and exercise was opposed

by China.

Issue raised by China:

- Since the exercise was conducted at just 100kms away from the Line of Actual Control (LAC), the Chinese government raised its contention.
- China has claimed that India has violated the 1993 and 1996 agreements on LAC and also advised the US not to interfere in India China relations.
- In 1993 agreement, both sides agreed to strictly respect and observe the line of actual control between the two sides. To keep the military forces in the areas along the line of actual control to a minimum level. Not to undertake military exercises in mutually identified zones. Each side shall give the other prior notification of military exercises of specified levels near the line of actual control.
- In 1996 agreement, they agreed that neither side shall use its military capability against the other side. No armed forces deployed by either side in the border areas along the line of actual control.

United Nations Commission On Status Of Women (CSW)

Why in News: UN Economic and Social Council (ECOSOC) adopted a resolution to remove Iran from CSW.

About UN-CSW:

- It is the principal global intergovernmental body exclusively dedicated to promotion of gender equality and empowerment of women.
- It was established by ECOSOC in 1946.
- It plays a leading role in implementation of the Beijing Declaration and Platform for Action.
- Consists of one representative from each of 45 Member States elected by ECOSOC on the basis of equitable geographical distribution. India was elected to CSW for four years from 2021 to 2025.

India- US Defence Cooperation

Why in News: National Defense Authorization Act (NDDA) was passed by Senate and House of Representatives. Act was more focus on Indo pacific region.

- In 2016, US designated India as Major Defence Partner, (status unique to India).
- India was accorded 'Strategic Trade Authorization Tier 1 status' in 2018 for high-technology product sales particularly in civil space and defence sectors.

India-US Defence Agreements:

- India is signatory of all major defence agreement of US.
- General Security of Military Information Agreement (GSOMIA), 2002 on military

information exchange.

- Logistics Exchange Memorandum of Agreement (LEMOA), 2016 to use each other's military base.
- Communications Compatibility and Security Agreement (COMCASA) in 2018 for interoperability between two militaries and sale of high-end technology to India.
- Basic Exchange and Cooperation Agreement (BECA), 2020 to share high-end military technology, logistics and geospatial maps

SAARC CURRENCY SWAP FRAMEWORK

Why in News: RBI has signed a Currency Swap Agreement (CSA) with Maldives Monetary Authority under SAARC Currency Swap Framework.

About currency swap agreement:

- CSA between the two countries is an agreement or contract to exchange currencies with predetermined terms and conditions.
- SAARC Currency Swap Facility came into operation in 2012 with to provide a backstop line of funding for short term foreign exchange liquidity requirements or balance of payment crises till longer term arrangements are made.
- The draws can be made in US Dollar, Euro or Indian Rupee.

India Central Asia Security Meeting

Why in News: India hosted a conclave of top security officials from Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan with a focus on the evolving security situation in Afghanistan.

Key points of the meeting:

- Support for a peaceful, stable, and secure Afghanistan, emphasizing respect for its sovereignty, unity, and territorial integrity and urging non-interference in its internal affairs.
- The participants supported India's proposal to include the Chabahar port within the framework of the International North-South Transport Corridor.
- The communique also called for the early adoption of the UN Comprehensive Convention on International Terrorism (CCIT), which India had first proposed in 1996.
- International North-South Transport Corridor (INSTC) is a multi-mode network of ship, rail, and road routes for moving freight between India, Iran, Afghanistan, Armenia, Azerbaijan, Russia, Central Asia, and Europe. It was established in the year 2000
- The Ashgabat agreement is a multimodal transport agreement between India, Iran, Kazakhstan, Oman, Turkmenistan, and Uzbekistan for creating an international transport and transit corridor facilitating the transportation of goods between Central Asia and the Persian Gulf. The

agreement was signed by Iran, Oman, Qatar, Turkmenistan and Uzbekistan on 2011.

UNGA resolution on Israel

Why in News: The United Nations General Assembly (UNGA) ended 2022 by passing a resolution that asked the body's highest court, the International Court of Justice (ICJ), to render its opinion on the legal consequences of Israel's prolonged occupation of Palestinian land. Although India abstained from voting.

About Israel-Palestine Conflict:

- Israel-Palestine Conflict It dates back to early 20th century with Jews claiming Palestinian land as ancestral property while Arabs being the majority.
- Between 1920-40, Jews migration to Palestine grew because of persecution in Europe.
- In 1947, UN voted to split Palestine into a separate Jewish and Arab state.
- It was rejected by Arab states, it led to the declaration of state of Israel in 1948 and the first Arab-Israeli war.
- At ceasefire, Jordan occupied West Bank, Egypt occupied Gaza and Jerusalem was divided between Israel and Jordan.
- In 1967, six-day war started between Arabs and Israel. At its end, Israel gained territorial control of Sinai Peninsula and Gaza Strip from Egypt; West Bank and East Jerusalem from Jordan; and Golan Heights from Syria.
- Israel still occupies West Bank and East Jerusalem and built Jews settlements.

17th Pravasi Bharatiya Divas

Why in News: On January 9, 2023, Prime Minister Narendra Modi inaugurated the 17th Pravasi Bharatiya Divas Convention in Indore, Madhya Pradesh. The Prime Minister also inaugurated the first-ever digital PBD exhibition on the theme 'Azadi Ka Amrit Mahotsav - Contribution of Overseas Indians in The Indian Freedom Struggle.'

About the Pravasi Bharatiya Divas:

- The Pravasi Bharatiya Divas (PBD) conference is a flagship event of the Government of India, which provides an important platform to connect with overseas Indians and enable overseas Indians to interact with each other. PBD was began from 2003 and held biannually since 2015.
- The theme of the conference in this year is 'Diaspora: Trusted Partners for India's Progress in the Amrut Period'.
- The PBD Convention will have five thematic plenary sessions-

Global South Summit

Why in News: The Honorable PM of India recently

inaugurated a virtual event, Voice of the Global South Summit.

About the Summit:

- India hosted the summit in a bid to articulate the views of the developing countries regarding the effects of the pandemic and the war in Ukraine.
- The event has planned eight ministerial sessions including finance, energy, education, foreign affairs, and commerce.
- It was held under the theme - 'Unity of Voice, Unity of Purpose' - essentially envisages bringing together countries of the global south and sharing their perspectives and priorities on a common platform across a whole range of issues.

India –Sri Lanka relationship

Why in News: India becomes first country to extend assurance to Sri Lanka for its debt restructuring.

Significance of India's financing Assurance move:

- The International Monetary Fund's provisional USD 2.9 billion package to Sri Lanka will be cleared only after Sri Lanka's official creditors—China, Japan and India—have provided adequate financing assurances.
- The decision of financing assurance was also a reassertion of India's belief in the principle of neighborhood first, and not leaving a partner to fend for themselves.

United Nation and its special Agencies

- It was established in 1945 after the Second World War.
- Its charter was signed in San Francisco on June 26, 1945, and it came into force on October 24, 1945, after 51 countries signed the charter.
- Its mission is to maintain international peace and security, develop friendly relations among nations, and promote social progress, better living standards, and human rights.
- Headquarters - New York
- Official Language - Arabic, Chinese, English, French, Spanish, Russian
- Members - 193 (Latest member South Sudan)
- These include: the principal organs established by the Charter of the United Nations, the specialized agencies provided for in Article 57 of the Charter, and the funds and programs established by the General Assembly under its authority derived from Article 22 of the Charter.

United Nations General Assembly

- It is the main deliberating body and is composed of all member states, each of which has one vote.
- The UNGA's mandate is to discuss, debate and make recommendations on subjects relating to international peace and security, including

development, disarmament, human rights, international law and the peaceful arbitration of disputes between nations.

- It considers the reports of the other four organs of the United Nations, assesses the financial conditions of the member states and approves the budget of the United Nations, its most concrete role.
- The Assembly meets in regular session (from September to December), special session and emergency special session (within 24 hours) at the request of the UN Security Council or a majority of members or a member state.
- It appoints the Secretary-General of the United Nations based on the recommendations made by the Security Council.
- It elects the non-permanent members of the Security Council and the members of the Social and Economic Council.
- Along with the Security Council, it elects the judges of the International Court of Justice.
- The Speaker of the Legislative Assembly rotates with each annual session and is elected by the body itself.

UN Security Council

- It has primary responsibility for the maintenance of international peace and security.
- The Council has 15 members: 5 permanent - US, UK, Russia, France and China and 10 members elected by the General Assembly for 2-year terms.
- While other UN organs can only make recommendations to member states, the Security Council has the power to make decisions binding on member states. The presidency of the Security Council rotates alphabetically among the 15 members every month.
- The voting system in the United Nations Security Council is rigid. Article 27 of the United Nations Charter states that: Each member of the Security Council shall have one vote. Security Council decisions on procedural matters shall be made by an affirmative vote of 9 members. The decisions of the Security Council on all other matters shall be taken by an affirmative vote of 9 members including the concurrence votes of the permanent members.

United Nation Economic and Social Council

- It is the principal organ that guides sustainable development policies and coordinates the activities of the many United Nations entities and organizations working on development and social and economic issues.
- It is the principal body for the implementation of the internationally agreed development goals.

- It consists of 54 members, who are elected by the General Assembly for a three-year term.
- Seats in the council are allocated on the basis of geographic representation. Of those, 11 are allocated to Asian states.
- Nations need a 2/3 majority of the votes of the United Nations General Assembly to be elected as members of ECOSOC for a term of three years.
- Each member of the council has one vote and generally voting in the council is by simple majority.
- The President is elected for a term of one year

United Nations Secretariat

- Formed in 1945 and headquarter in New York City.
- The United Nations Secretariat is one of the six principal organs of the United Nations (UN). The Secretariat is the executive branch of the United Nations.
- The Secretariat has an important role in setting the agenda of the UN's deliberative and decision-making bodies (i.e., the General Assembly, the Economic and Social Council, and the Security Council) and in the implementation of the decisions of these bodies.
- The Secretary-General, who is appointed by the General Assembly, is the head of the Secretariat.

International Court of Justice

- The International Court of Justice is one of the six principal organs of the United Nations (UN). It settles disputes between states in accordance with international law and gives advisory opinions on international legal issues.
- The ICJ is the only international court that adjudicates general disputes between states, with its decisions and opinions serving as primary sources of international law (subject to Article 59 of the Constitution of the International Court of Justice).
- It was established in 1945 and headquarter located in Hague, Netherland.
- In the organization total 15 judges are sitting which term lasted for 9 year.

Food and Agriculture Organization of the United Nations (FAO)

- The Food and Agriculture Organization of the United Nations (FAO) is an international organization that leads international efforts to defeat hunger and improve nutrition and food security. It was established on 16 October 1945.
- FAO consists of 195 members (including 194 countries and the European Union). It's headquarter in Rome, Italy, and FAO has regional

and regional offices around the world, working in more than 130 countries.

- It helps governments and development agencies coordinate their activities for the improvement and development of agriculture, forestry, fisheries, and land and water resources. It also conducts research, provides technical support to projects, conducts educational and training programs, and collects agricultural production, production, and development data.
- FAO is governed by a biennial conference representing each member country and the European Union, which elects the 49-member Executive Council.

International Labor Organization (ILO)

- The International Labor Organization (ILO) is a United Nations agency whose mandate is to advance social and economic justice by setting international labor standards.
- Established in 1919 under the League of Nations, it is the first and oldest specialized agency of the United Nations.
- The ILO has 187 member states: 186 of the 193 member states of the United Nations and the Cook Islands.
- It is headquartered in Geneva, Switzerland.
- The ILO's standards aim to ensure accessible, productive and sustainable work around the world in conditions of freedom, equality, security and dignity. They are set out in 189 conventions and treaties, eight of which are classified as fundamental according to the 1998 Declaration on Fundamental Principles and Rights at Work.
- A unique feature of the ILO is its tripartite character. The membership of the ILO ensures the growth of tripartite system in the Member countries. At every level in the Organization, Governments are associated with the two other social partners, namely the workers and employers.
- ILO general assembly meet held every year.

International Civil Aviation Organization (ICAO)

- The International Civil Aviation Organization (ICAO) is a specialized agency of the United Nations that coordinates the principles and techniques of international air navigation, and the planning and development of international air transport to ensure the safe orderly development.
- It is established in 1947 and ICAO's headquarters are located in the Quartier International in Montreal, Quebec, Canada.
- The ICAO Council adopts standards and recommended practices for international

civil aviation relating to air navigation, its infrastructure, flight inspection, prevention of unlawful interference and facilitation of cross-border procedures.

International Maritime Organization (IMO)

- The International Maritime Organization (IMO) is a specialized agency of the United Nations responsible for regulating shipping.
- The IMO was established by agreement at the United Nations Conference held in Geneva in 1948 and the IMO came into existence ten years later, meeting for the first time in 1959.
- Headquartered in London, United Kingdom, IMO currently has 175 member states and three associate members.
- The primary objective of the IMO is to develop and maintain a comprehensive regulatory framework for shipping and today its scope includes maritime safety, environmental concerns, legal matters, technical cooperation, maritime safety and efficiency of shipping.
- The IMO is governed by an assembly of members that meets every two years.

UNICEF

- UNICEF officially the United Nations Children's Fund, is an agency of the United Nations that provides humanitarian and developmental assistance to children worldwide.
- UNICEF is created by resolution 57(I) of the United Nations General Assembly on 11 December 1946 to provide supplies and assistance to children after World War II.
- The agency is one of the most widespread and recognizable social welfare organizations in the world with a presence in 192 countries and territories.
- UNICEF activities include providing immunization and disease prevention, administering treatment for children and mothers with HIV, increasing childhood and maternal nutrition, improving sanitation, promoting education, and emergency response to disasters.

United Nations Development Program (UNDP)

- The United Nations Development Program (UNDP) is a United Nations agency tasked with helping countries end poverty and achieve sustainable economic growth and human development.
- UNDP emphasizes developing local capacity for long-term self-reliance and prosperity.
- The UN Development Program (UNDP) was founded in 1965 by the General Assembly of the UN. It is a subsidiary organ of the UN, with its headquarters in New York.

- It is the largest development assistance agency of the United Nations, with offices in 177 countries.
- UNDP is funded entirely by voluntary contributions from UN member states.

United Nations Educational, Scientific and Cultural Organization

- The United Nations Educational, Scientific and Cultural Organization is a specialized agency of the United Nations (UN) that aims to promote world peace and security through international co-operation in education, the arts, sciences and culture.
- It has 193 member states and 12 associate members, as well as non-governmental, intergovernmental and private sector partners.
- It's headquartered at the World Heritage Center in Paris, France.
- UNESCO was established in 1945 as the successor to the International Committee of the League of Nations on Intellectual Cooperation. UNESCO's founding mission is to advance peace, sustainable development and human rights by facilitating cooperation and dialogue among nations.
- UNESCO is governed by the General Conference, composed of member states and associate members, which meets biennially to determine the agency's programs and budget.
- It also elects the members of the Executive Board, which manages UNESCO's work, and appoints every four years a Director-General, who serves as UNESCO's chief administrator.

United Nations Industrial Development Organization (UNIDO)

- On 17 November, 1966, the United Nations General Assembly passes resolution establishing the United Nations Industrial Development Organization (UNIDO) as an autonomous body within the United Nations.
- Its mission is to promote and accelerate the industrialization of developing countries
- It is a specialized agency of the United Nations that assists countries in economic and industrial development.
- It is headquartered at the United Nations Office in Vienna, Austria, with a permanent presence in over 60 countries.
- As of April 2019, UNIDO consists of 170 member states, who together determine the organization's policies, programs and principles through a biennial General Conference.
- On 25 July 2016, the United Nations General Assembly adopted resolution declaring the period 2016–2025 as the Third Industrial Development

Decade for Africa.

United Nations Office for Disaster Risk Reduction (UNDRR)

- The United Nations Office for Disaster Risk Reduction (UNDRR) was created in December 1999 to ensure the implementation of the International Strategy for Disaster Reduction (General Assembly (GA) resolution
- UNDRR (formerly UNISDR) is part of the United Nations Secretariat and supports the implementation and review of the Sendai Framework for Disaster Risk Reduction.

United Nations Office on Drugs and Crime (UNODC)

- The United Nations Office on Drugs and Crime (UNODC) is a United Nations office that was established in 1997 as the Office for Drug Control and Crime Prevention by combining the United Nations International Drug Control Program (UNDCP) and the Crime Prevention and Criminal Justice Division in the United Nations Office at Vienna. It was renamed the United Nations Office on Drugs and Crime in 2002.
- The agency's focus is the trafficking in and abuse of illicit drugs, crime prevention and criminal justice, international terrorism, and political corruption.
- It is a member of the United Nations Development Group.

World Health Organization (WHO)

- The World Health Organization (WHO) is a specialized agency of the United Nations responsible for international public health.
- WHO was established on 7 April 1948 and headquartered in Geneva, Switzerland. Whose mandate includes: working around the world to promote health, keep the world safe and serve the vulnerable.
- It advocates that more than a billion people have: universal health care coverage, engagement with the monitoring of public health risks, coordination of responses to health emergencies, and the promotion of health and well-being. It provides technical assistance to countries, sets international health standards, and collects data on global health issues. One publication, the World Health Report, provides assessments of worldwide health topics.

World Intellectual Property Organization (WIPO)

- The World Intellectual Property Organization (WIPO) is one of the 15 specialized agencies of

the United Nations (UN).

- World Intellectual Property Organization created in 1967 and headquartered in Geneva, Switzerland.
- WIPO was created to promote and protect intellectual property across the world by cooperating with countries as well as international organizations.
- It began operations on 26 April 1970 when the convention entered into force.
- WIPO also works with governments, nongovernmental organizations (NGOs), and individuals to utilize IP for socioeconomic development.
- WIPO administers 26 international treaties that concern a wide variety of intellectual property issues, ranging from the protection of audiovisual works to establishing international patent classification.
- WIPO currently has 193 member states, including 190 UN member states and the Cook Islands, Holy See and Niue; Palestine has permanent observer status.

World Food Programme (WFP)

- The World Food Programme (WFP) is an international organization within the United Nations that provides food assistance worldwide.
- It is the world's largest humanitarian organization and the leading provider of school meals.
- It was founded in 1961; WFP is headquartered in Rome and has offices in 80 countries.

Other Organizations

Non-Aligned Movement:

- The Non-Aligned Movement (NAM) was founded in 1961 with the view to advancing interests of developing countries in the context of Cold War confrontation. In its first three decades, the Movement played a crucial role in decolonization, formation of new independent states, and democratization of international relations. India is founding member of NAM.

Group of Seven (G7):

- The G7 is an informal grouping of seven of the world's advanced economies, including Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States, as well as the European Union. The group was formed in 1975.

Group of 77 (G-77):

- The Group of 77 (G-77) was established on 15 June 1964 by seventy-seven developing countries signatories of the "Joint Declaration of the Seventy-Seven Developing Countries" issued at the end of the first session of the United Nations Conference on Trade and Development

(UNCTAD) in Geneva.

G20:

- The G20 was founded in 1999 in response to several world economic crises. The Group of Twenty (G20) comprises 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Türkiye, United Kingdom and United States) and the European Union. The G20 members represent around 85% of the global GDP, over 75% of the global trade, and about two-thirds of the world population. India is part of this organisation.

Alliance of Small Island States (AOSIS):

- Alliance of Small Island States is an intergovernmental organization of low-lying coastal and small island countries. AOSIS was established in 1990, ahead of the Second World Climate Conference. The main purpose of the alliance is to consolidate the voices of Small Island Developing States to address global warming.

AUKUS:

- Aukus, is a trilateral security pact between Australia, the United Kingdom, and the United States, announced on 15 September 2021 for the Indo-Pacific region. Under the pact, the US and the UK will assist Australia in acquiring nuclear-powered submarines.

North Atlantic Treaty Organization (NATO):

- The North Atlantic Treaty Organization is a military alliance established on 4 April 1949. Its headquarter is in Brussels. The organization has created a system of collective security, under which member states agree to cooperate in the event of external aggression.

International Renewable Energy Agency (IRENA):

- The International Renewable Energy Agency (IRENA) is a lead global intergovernmental agency for energy transformation that serves as the principal platform for international cooperation, supports countries in their energy transitions, and provides state of the art data and analyses on technology, innovation, policy, finance and investment.
- IRENA's membership comprises 167 countries and the EU. India is founding member of this organisation.

International Atomic Energy Agency:

- International Atomic Energy Agency was created on July 29, 1957. As of April 2021, 173 States are members of IAEA. It is the world's central intergovernmental forum for scientific and technical co-operation in the nuclear field. It

works for the safe, secure and peaceful uses of nuclear science and technology, contributing to international peace and security and the United Nations' Sustainable Development Goals.

Nuclear Energy Agency:

- The Nuclear Energy Agency (NEA) is an intergovernmental agency that is organized under the Organisation for Economic Co-operation and Development (OECD). It was created in 1972 as of now 34 members is part of agency.

Organisation for the Prohibition of Chemical Weapons (OPCW):

- The Organisation for the Prohibition of Chemical Weapons (OPCW) is the implementing body for the Chemical Weapons Convention, which entered into force on 29 April 1997. The OPCW, with its 193 Member States, oversees the global endeavour to permanently and verifiably eliminate chemical weapons. India is part of this organisation.

Wassenaar Arrangement:

- The Wassenaar Arrangement, formally established in July 1996, is a voluntary export control regime whose 42 members exchange information on transfers of conventional weapons and dual-use goods and technologies. Through such exchanges, Wassenaar aims to promote "greater responsibility" among its members in exports of weapons and dual-use goods. India is part of this organisation.

Nuclear Suppliers Group (NSG):

- The Nuclear Suppliers Group (NSG) is a multilateral export control regime and a group of nuclear supplier countries that seek to prevent nuclear proliferation by controlling the export of materials, equipment and technology that can be used to manufacture nuclear weapons. It was formed in 1974 and India is not part of this organisation.

Australia Group (AG):

- The Australia Group is a multilateral export control regime and an informal group of countries established in 1985 to help member countries to identify those exports which need to be controlled so as not to contribute to the spread of chemical and biological weapons. As of right now it has 43 member including India.

Missile Technology Control Regime (MTCR):

- The Missile Technology Control Regime is a multilateral export control regime. It is an informal political understanding among 35 member states that seek to limit the proliferation of missiles and missile technology. The regime was formed in 1987 by the G-7 industrialized countries. India is part of this organisation.

MCQs based on Preliminary Exam

1. Which of the following may be the *likely benefits of 'Interlinking of Rivers Programme' of Government of India?*
 1. Augmented water resources in water scarce areas.
 2. Improved food security of the nation.
 3. Flood control in flood prone areas.

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

(a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
2. Consider the following statements regarding *Maximum Admissible Export Quota (MAEQ) for sugarcane:*
 1. MAEQ is a marketing assistance policy for export of surplus sugar stock.
 2. MAEQ is linked with ethanol supply.

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

(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
3. Consider the following statements regarding *Prime Minister's Special Scholarship scheme (PMSSS):*
 1. PMSSS extends support to North Eastern states' students.
 2. PMSSS is being implemented by All India Council for Technical Education (AICTE).

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

(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
4. Consider the following statements about *World Bank Group:*
 1. International Bank for Reconstruction and Development (IBRD) provides loan to world's poorest countries.
 2. International Development Association (IDA) provides loan to middle-income and credit-worthy poor countries.
 3. India is member of all the organizations under World Bank Group.

Which of the statement/s given above is/are **incorrect**?

(a) 1 and 2 only (b) 3 only
(c) None of the above (d) All of the above
5. Consider the following statements about *Moringa Oleifera:*
 1. This tree is native to India.
 2. It has antifungal, antiviral, antidepressant, and anti-inflammatory properties.

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

(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
6. Which of the following regions given below have been *recognized as Globally Important Agri Heritage Systems in India by Food and Agricultural Organization?*
 1. Koraput
 2. Rushikulya
 3. Kuttanad

Select the correct answer using the code given below:

(a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
7. Consider the following statements about *Pneumococcal Conjugate Vaccine:*
 1. Serum Institute of India developed the first indigenous Pneumococcal Conjugate Vaccine.
 2. Pneumococcal Conjugate vaccines are effective against pneumococcal diseases caused by viruses.

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

(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
8. Consider the following statements about *Quantum Random Number Generator (QRNG):*
 1. QRNG was developed by the Council of Scientific and Industrial Research-Central Electronics Engineering Research Institute.
 2. QRNG helps in quantum communication, scientific and financial simulations.

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

(a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
9. Consider the following statements with regard to *Digital Ocean*, an initiative by the Government of India:
 1. It was developed by Indian National Centre for Ocean Information Services (INCOIS) under the Ministry of Earth Sciences.
 2. It facilitates 3D and 4D data visualization.

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

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

- 10.** Which of the nations mentioned below is/are part of the *Five Eyes Network*?
1. United Kingdom
 2. Canada
 3. Australia
 4. China
 5. New Zealand
- Select the correct answer using the code given below:
- (a) 1, 2, 3, 4 and 5 (b) 2 and 4
(c) 1, 2, 3 and 4 (d) 1, 2, 3 and 5
- 11.** Consider the following statements about *Green Propulsion Technology (GPT)*:
1. GPT involves Glycidyl Azide Polymer (GAP) as fuel and Ammonium Di-Nitramide (ADN) as oxidizer.
 2. Liquid oxygen and Liquid methane can be used in GPT as green propellant combinations.
- Which of the statement/s given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 12.** Consider the following statements about *National Common Mobility Cards (NCMC)*:
1. NCMC cards are an initiative of Ministry of Electronics and Information Technology.
 2. Committee chaired by Nandan Nilekani recommended the use of NCMC cards.
- Which of the statement/s given above is/are **incorrect**?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 13.** Which of the following is/are *application /s of radio telemetry in wildlife*?
1. Study the home range of animals
 2. Study the human - animal interactions
 3. Study the behavior of various species
- Select the correct answer using the code given below:
- (a) 1 only (b) 2 and 3 only
(c) 1 and 2 only (d) 1, 2 and 3
- 14.** Consider the following statements with regard to *Coal Import Monitoring System (CIMS) by the Indian Government*:
1. CIMS is the first such Import Monitoring System by the Indian Government for any commodity.
 2. Anthracite, Bituminous, Coking and Steam Coal imports will be subject to CIMS.
- Which of the statement/s given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 15.** Consider the following statements:
1. National Cadet Corps is the largest youth organization in the world.
 2. DGNCC Digital Forum has been launched to digitalize the National Cadet Corps in India.
- Which of the statement/s given above is/are correct?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 16.** Consider the following statements about *Leprosy*:
1. Leprosy is caused by a bacillus, *Mycobacterium leprae*.
 2. Mahatma Gandhi acted as a warrior against Leprosy.
 3. No cure for Leprosy has been discovered yet.
- Which of the statement/s given above are correct?
- (a) 1 and 2 only (b) 2 and 3 only
(c) 1 and 3 only (d) 1, 2 and 3
- 17.** Match List-I with List-II and select the correct answer using the codes given below the lists:
- | List-I (Timber) | List-II (Country) |
|------------------------|--------------------------|
| A. Cedar | 1. Myanmar |
| B. Douglas Fir | 2. Canada |
| C. Mahogany | 3. Mexico |
| D. Teak | 4. Honduras |
- Codes:**
- (a) A - 3; B-2; C- 1; D-4
(b) A - 3; B-2; C-4; D-1
(c) A-2; B- 3; C- 4; D-1
(d) A-2; B-3; C-1; D-4
- 18.** Consider the following statements:
- Full convertibility of the rupee may mean:*
1. Its free float with the other international currencies
 2. Its direct exchange with any other international currency at any prescribed place inside and outside the country
 3. It acts just like any other international currency.
- Which of these statements are correct?
- (a) 1 and 2 only (b) 1 and 3 only
(c) 2 and 3 only (d) 1, 2 and 3
- 19.** Consider the following statements:
1. Molasses is a by-product of sugar production process.

2. Bagasse obtained in the sugar mills is used as a fuel in the boilers to generate steam for the sugar factories.
3. Sugar can only be produced from sugarcane as the raw material.

Which of these statements are correct?

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

20. Consider the following statement :

1. Allergies occur due to hypersensitivity of certain individuals to foreign matters.
2. HIV is a weak virus and hard to get infected with.
3. Syphilis is a bacterial disease which is spread by sexual contact with the infected person.
4. Gonorrhoea is a disease which is caused by a bacteria named *Neisseria gonorrhoeae*.

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

- (a) 1, 2 and 3 (b) 1, 3 and 4
(c) 2, 3 and 4 (d) All of the above

21. Which of the following statements in context to *Cyclones* are correct?

1. Cyclone is violent wind rotating round a central area.
2. Tropical cyclones are formed only when the sea surface temperature is above 15° C.
3. Formation of dykes is a measure to prevent the devastation caused by cyclones.

Select the correct answer using the code given below :

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

22. Which of the following statements regarding '*Hotspot*' is/are correct?

1. Hotspot refers to those areas where COVID-19 infected people have been found in bigger numbers.
2. Areas exhibiting high species richness as well as high species endemism are termed as hotspots of biodiversity.

Select the correct answer using the code given below :

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

23. Consider the following statements about the *Gupta king Chandragupta II also known as Chandragupta Vikramaditya*:

1. Spread of his empire is indicated by an Iron Pillar inscription at Mehrgarh.
2. The Greek Buddhist Pilgrim Megasthenes

visited India during his reign.

3. Parashara Smriti is the law book of the Guptas.
4. He defeated the Shaka kings who were ruling in eastern India.

Which of the above statements is/are **incorrect**?

- (a) 1 only (b) 1, 2 and 3 only
(c) 1 and 2 only (d) All of the above

24. According to historical sources the number of successors of Mahapadma Nanda was eight. Which of the following are the sources where this fact is mentioned?

- (a) Upnishads & Brahmins
(b) Aranyakas & Jain texts
(c) Puranas & Buddhist texts
(d) Vedas & Upnishads

25. Consider the following statements related to *space objects*:

1. Oort clouds are the progenitors of long-lasting comets.
2. Dwarf planet pluto is found in the oort clouds.

Which of the statement(s) given above is / are correct?

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

26. With reference to *Indian Penal Code sections used during COVID-19*, find out the correct option:

1. Section 269 of IPC - Whosoever disobeys the quarantine rule shall be punished with imprisonment or fine or both.
2. Section 271 of IPC -Negligent act likely to spread infection of disease.
3. Section 188 of IPC- It is used for defaulters who disobey the orders of the public servants during the lockdown.

Select the correct answer using the code given below:

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

27. Consider following statements:

1. The Parliament has enacted the Panchayati Raj Extension to Scheduled Areas (PESA) Act for rural tribal areas and a similar legislation for urban tribal areas—the Municipalities Extension to Scheduled Areas (MESA) Act in 1996.
2. The Fifth Schedule of the Constitution mandates laws separate from the Panchayati Raj Act and the Nagarpalika Act to administer villages and towns in tribal-dominated areas.

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

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

28. Arrange the following historical events in Chronological order:

1. Formation of Muslim League
2. Kanpur conspiracy case
3. Surat split
4. Raleigh commission

Select the correct answer from the code given below:

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

29. Match the following -
Sangam Literature

- | | Author |
|-------------------|------------------------|
| A. Kural | 1. Ilango Adigal |
| B. Silappadikaram | 2. Thiruvalluvar |
| C. Manimekalai | 3. Chithalai Chathanar |
| D. Tolkappiyam | 4. Tholkappiyar |

Select the correct answer from the code given below:

- | | A | B | C | D |
|-----|----------|----------|----------|----------|
| (a) | 2 | 1 | 3 | 4 |
| (b) | 2 | 3 | 1 | 4 |
| (c) | 3 | 1 | 2 | 4 |
| (d) | 4 | 1 | 3 | 2 |

30. With respect to *South China Sea*, consider the following statements :

1. Philippines, Vietnam, China, Brunei, Taiwan, India and Malaysia hold different, sometimes overlapping, territorial claims over the sea, based on various accounts of history and Geography.
2. In 2016, China accepted UNCLOS Arbitral Tribunal ruling that China cannot claim historic rights to resources in the waters within a "nine-dash line" encompassing much of the South China Sea if these waters are within the exclusive economic zone, or EEZ, of other coastal states.
3. Two-third of global shipping, or a total of US\$6.74 trillion of international trade, passes through the South China Sea.

Which of the above statement/s is / are **incorrect** ?

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

31. Which of the following is / are correct when the *State Legislature is dissolved or suspended under President's Rule* :

1. The President can promulgate, when the Parliament is not in session, ordinances

for the governance of the state.

2. The President can authorise, when the Lok Sabha is not in session, expenditure from the state consolidated fund.

Select the correct answer from the code given below :

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

32. Which of the following statement/s is/are correct?

1. Styrene is used in production of a special textile fabric.
2. Styrene gas leaked from L.G. Polymers India Private Limited's Karnataka based plant.

Select the correct answer from the code given below:

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

33. Which of the following statement(s) is/are correct regarding *basic elements of Vijayanagara style of architecture*?

1. Temple pillars often have engravings of charging Horses or Hippogryphs.
2. Small shrines consist simply of a Garbhagriha (sanctum) and a porch.
3. Temples have tall Raya Gopuram built with Wood, Brick and Stucco in Chola style

Select the correct answer from the code given below:

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

34. Consider the following statements regarding *State Disaster Response Fund (SDRF)*:

1. SDRF was established on the recommendation of the 14th finance commission.
2. The central government contributes 50% to SDRF and the remaining 50% is provided from the state Govt.
3. A state Govt. may use the fund available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be 'Disasters' within the local context in the state.

Which of the statement(s) given above is / are **incorrect**?

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

35. Which of the following *bills lapse on the dissolution of the Lok Sabha*?

1. A bill passed by the Lok Sabha but pending in the Rajya Sabha.
2. A bill pending in the Rajya Sabha but not

passed by the Lok Sabha.

3. A bill passed by both Houses but pending assent of the President.

Select the correct answer from the codes given below:

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

- 36.** Consider the following statements about *Calling Attention Motion* :

1. It is introduced in the Parliament by a member to call the attention of a minister to a matter of urgent public importance, and to seek an authoritative statement from him on that matter.

2. It is not mentioned in the Rules of Procedure Which of the statement(s) given above is / are **incorrect**?

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

- 37.** The correct statements in context of *Ecological Equivalent* is/are-

1. They are related to animals having similar Ecological trends in different Geographical regions.
2. Kangaroos in Australia are the ecological equivalent of bison of North America.

Select the correct answer using the code given below :

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

- 38.** The *advantages of watershed* is/are-

1. Proper management of water and soil can be done at small scale
2. Agriculture work can be done according to the variety of crops and crop cycle.
3. Local resource based Employment system can be developed.

Select the correct answer using the code given below :

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

- 39.** Which of the following statements is / are correct?

1. James Outram considered revolt of 1857 as a 'Muslim conspiracy'.
2. J. R. Holmes considered Revolt of 1857 as a 'Sepoy Mutiny'.

Select the answer from the codes given below :

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

- 40.** Match the following -
Newspaper/

Person

Journals

- | | |
|--------------------|----------------------|
| A. Vijaya of Indra | 1. Ajit Singh |
| B. Quam | 2. Asif Hasan Haswi |
| C. Paridasak | 3. Qazi Abbas |
| D. Reshwa | 4. Bipin Chandra Pal |

Select the answer from the codes given below:

- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 1 | 2 | 3 | 4 |
| (b) | 2 | 3 | 4 | 1 |
| (c) | 4 | 2 | 3 | 1 |
| (d) | 3 | 4 | 1 | 2 |

- 41.** Match List-I with List-II and select the correct answer using the codes given below:

List-I (Constructions)

- A. Gateway of India, Mumbai
B. Victoria Memorial Hall, Kolkata
C. New Delhi
D. Champa (old city)

List-II (Architects)

1. R. F. Chisholm
2. Herbert Baker
3. Lutyens
4. Mahagovind

Code :

- | | A | B | C | D |
|-----|---|---|---|---|
| (a) | 1 | 2 | 3 | 4 |
| (b) | 2 | 1 | 3 | 4 |
| (c) | 3 | 4 | 1 | 2 |
| (d) | 4 | 1 | 2 | 3 |

- 42.** Consider the following statements regarding Hydrothermal Carbonisation-

1. This technology is aimed at conversion of Wet-Biomass into Hydro-4 under suitable temperature and pressure.
2. Hydro-4 can be utilized as a fuel because of rich in carbon and high thermal value.
3. It's by-products include ash which can be utilized as a plant nutrient enhancer because of its Phosphorus content.

Which of the above statement/s is/are **incorrect**?

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

- 43.** Consider the following statements regarding *Sodium Sulphur Battery*:

1. It is a high temperature battery which operates approx at 300 degree celsius Temperature.
2. This battery can be stored for more than 50 years.
3. It costs less because Sodium is much more common and widely available material than Lithium.
4. It becomes dormant in cold conditions.

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

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

44. Consider the following statements:

1. Chain-Melted state is newly discovered state of physical matter in which atoms are both solid and liquid at the same time.
2. Quantum leaf produce syngas without releasing Carbon Dioxide into the air.
3. Torrefaction Technology can convert rice stubble into Bio-Coal.

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

- (a) 1 and 3 (b) 2 and 3
(c) 1 and 2 (d) All of the above

45. Consider the following statements:

1. Annular solar eclipse occurs when the angular diameter of the Moon falls short of the Sun so that it cannot cover up the latter completely.
2. During one of the phases of the annular solar eclipse a phenomena called Bailey's Beads are visible.
3. Annular solar eclipse is suitable for the study of CORONA.

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

- (a) 1 and 2 (b) 2 and 3
(c) 1 and 3 (d) All of the above

46. 'The Review of Maritime Transport Report' is published by :

- (a) UNCTAD
(b) WEF
(c) WTO
(d) None of the above

47. Match list-I and list-II and select the correct answer using the code given below the list.

List-I
(Missile)

A. Nirbhaya

B. Dhanush
sea

C. Prithvi

D. Ashrta

Code :

	A	B	C	D
(a)	2	1	4	3
(b)	4	3	2	1
(c)	2	3	1	4
(d)	3	2	4	1

List-II

(Type)

1. Surface to
surface

2. Surface to

3. Sea to surface

4. Air to Air

48. Consider the following statements -

1. Bio-similar drugs are the cheaper form of Biotherapeutic drugs which is similar to generic medicines. Bio-similars are as effective as the original medicines.
2. Biotherapeutic drugs are made from organic and living substances such as cells, blood cells, tissues etc. instead of synthesized chemicals.

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

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

49. Consider the following statements regarding *Miyawaki's theory* related to natural forests:

1. According to this theory, there should not be a fixed distance between plants.
2. Before afforestation, land should be made fertile.
3. Banyan - like trees whose canopy is very big should be planted.

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

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

50. Which one is the example of *synclinorium*?

- (a) Aravalli Hills
(b) Kashmir valley and its hills
(c) Hills of Tibet Plateau
(d) Vindhyan hills

ANSWER

1.	(d)	14.	(b)	27.	(b)	40.	(b)
2.	(a)	15.	(c)	28.	(b)	41.	(a)
3.	(b)	16.	(a)	29.	(a)	42.	(d)
4.	(d)	17.	(c)	30.	(c)	43.	(d)
5.	(c)	18.	(d)	31.	(c)	44.	(d)
6.	(c)	19.	(a)	32.	(a)	45.	(d)
7.	(a)	20.	(d)	33.	(d)	46.	(a)
8.	(b)	21.	(c)	34.	(b)	47.	(c)
9.	(c)	22.	(c)	35.	(b)	48.	(c)
10.	(d)	23.	(d)	36.	(b)	49.	(a)
11.	(c)	24.	(c)	37.	(c)	50.	(b)
12.	(a)	25.	(a)	38.	(d)		
13.	(d)	26.	(c)	39.	(a)		

MCQs Based on Current Affairs

1. Consider the following statements regarding kelp forests.

1. Kelps forests are underwater ecosystems formed in shallow water.
2. Kelp act as a natural backwater and prevent coastal erosion.
3. These forests are generally formed in hot water in temperature above 300C.

Which of the above statements is/are correct?

- | | |
|------------|------------|
| A. 2 only | B. 1 and 2 |
| C. 2 and 3 | D. 1 and 3 |

Answer – B

2. Consider the following statements regarding Consumer Price Index (CPI).

1. The CPI-IW is compiled and released by the Labor Bureau, an attached office of the Ministry of Labor and Employment.
2. The base year of CPI-IW was changed from 2001 to 2012.

Which of the above statements is/are correct?

- | | |
|-----------------|----------------------|
| A. 1 only | B. 2 only |
| C. Both 1 and 2 | D. None of the above |

Answer- A

3. With reference to the United Nations World Economic Situation and Prospects Report, 2023, consider the following statements.

1. The report states that world output growth in 2023 is projected to decline below 2022 levels.
2. According to the report, the disproportionate loss in employment of women during the initial phase of the pandemic has not been completely reversed.
3. The United Nations has cut its GDP forecast for India in 2023 due to tighter monetary policy and weak global demand.

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

- | | |
|-----------------|--------------|
| A. 1 and 2 only | B. 2 only |
| C. 1 and 3 only | D. 1,2 and 3 |

Answer – D

4. Consider the following statements regarding Nisar satellite-

1. It is the largest Earth observation satellite with reflector antenna ever launched by NASA.
2. It is a joint project of NASA and European

Space Agency (ESA).

3. It has Synthetic Aperture Radar (SAR) which will help to measure the changes in the Earth's surface.

Select the correct option-

- A. Statements 1 and 2 are correct.
- B. Statements 1 and 3 are correct.
- C. Statements 2 and 3 are correct.
- D. All the statements are correct.

Answer- B

5. Consider the following statements regarding Avian Influenza.

1. H5N1 is a type of low pathogenic avian influenza (LPAI) virus responsible for causing bird flu.
2. It only infects wild birds and human transmission of the virus is not possible at all.
3. India has been declared free from Avian Influenza (H5N1).

Which of the above statements is/are correct?

- | | |
|------------|------------|
| A. 1 and 2 | B. 3 only |
| C. 2 and 3 | D. 1 and 3 |

Answer – B

6. Consider the following statements.

1. Biologicals are a diverse group of drugs that include vaccines, growth factors, immune modulators, as well as products derived from human blood.
2. The National Institute of Biological Sciences (NIB), under the Department of Science and Technology, is responsible for carrying out the primary statutory function of biological quality control.

Which of the above statements are correct?

- | | |
|-----------------|----------------------|
| A. 1 only | B. 2 only |
| C. Both 1 and 2 | D. none of the above |

Answer- A

7. Consider the following statements regarding Laboratory Grown Diamond (LGD).

1. LGDs are diamond chemically, physically and optically, similar to diamond-stimulated.
2. LGDs can be used as cutters due to their hardness and added strength.
3. India is the second largest diamond cutting

and polishing center in the world.

Which of the above are correct?

- A. 1 and 2 B. 2 only
C. 2 and 3 D. 1, 2 and 3

Answer – B

8. Consider the following statements regarding genome sequencing.

1. Genome is like a blueprint or a set of instructions to build and run an organism, such as a plant or an animal.
2. Genome sequencing can help preserve the genetic diversity of important indigenous breeds.
3. Vechur is the world's smallest cow breed which has recently undergone genome sequencing.

Which of the above statements is/are correct?

- A. 1 only B. 1 and 2
C. 1 and 3 D. All Of The Above

Answer – D

9. Consider the following statements regarding Paris Club.

1. It is a grouping of 22 nations that aims to find sustainable debt-relief solutions for countries
2. All 22 are members of the grouping known as the Organization for Economic Co-operation and Development (OECD).
3. India is a member of the Paris Club.

Which of the above statements are correct?

- A. 1 only B. 2 and 3
C. 1 and 3 D. 1 and 2

Answer – A

10. Consider the following statements.

1. Atal Innovation Mission (AIM) was launched in 2016 to promote a culture of innovation and entrepreneurship.
2. Atal Incubation Centers have been set up at school level to meet the objectives of AIM.
3. NITI Aayog encourages cooperative federalism, not competitive federalism.

Which of the above statements is/are correct?

- A. 1 and 2 B. 2 and 3
C. 2 only D. 1 only

Answer – A

11. Consider the following statements regarding Additional Monitoring Mechanism (ASM).

1. The Reserve Bank of India (RBI) launched ASM in 2018 with the intention of protecting

investors from market volatility and unusual changes in share price.

2. An ASM shortlisting signals to investors that unusual activity has been observed in the shares.

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

- A. 1 only
B. 2 only
C. Both 1 and 2
D. None of the above

Answer – B

12. Consider the following statements regarding sickle cell anemia-

1. It is genetic in nature.
2. At present it can be diagnosed only after the birth of the child.
3. There is no cure for this disease in the present state of technological development.

Select the correct option-

- A. Statements 1 and 2 are correct.
B. Statements 1 and 3 are correct.
C. Only statement 1 is correct.
D. All the statements are correct.

Answer – C

13. Consider the following statements regarding the Pension System in India.

1. Under the New Pension System (NPS), people who work for the government contribute 10% of their basic salary, while their employers can contribute up to 14%.
2. NPS is non-taxable unlike the old pension system (OPS).
3. Employees under OPS are exempted from making pension contribution.

Select the correct statement from the given options-

- A. 1 only
B. 2 and 3
C. 1 and 2
D. 1 and 3

Answer – D

14. consider the following statements

1. India ranks first in milk production in the world.
2. The per capita availability of dairy milk in India is more than the world average.

Which of the statements given above is/are

correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. neither 1 nor 2

Answer – C

15. Consider the following statements regarding disposable income-

- 1. It is the amount that an individual or family has to spend or save after deducting income tax.
- 2. Factors such as inflation, increase in the cost of living and unexpected expenses can affect the amount of disposable income.
- 3. According to a YouGov report, disposable income has declined in India over the past 12 months.

Select the correct option:

- A. Statements 1 and 2 are correct.
- B. Statements 1 and 3 are correct.
- C. Only statement 1 is correct.
- D. All the statements are correct.

Answer – D

16. Consider the following statements

- 1. Physical inactivity is the fourth leading cause of deaths in India.
- 2. The World Health Organisation (WHO) recommends an average 60 minutes of physical activity per day for children and teenagers in the age group of 5-17 years.

Which of the following is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer – A

17. Consider the following statements

- 1. Earth's magnetic field is affected by solar storms and sunspots.
- 2. Migratory birds can sense these magnetic fields using magneto receptors in their eyes.
- 3. Distortions in Earth's magnetic field affect only young birds as adult birds depend on their migrating experience.

Select the correct answer using the codes given below

- A. 1 only

- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

Answer- B

18. Consider the following statements on Farakka barrage

- 1. It was constructed to divert water from Ganga to the Bhagirathi-Hooghly river system.
- 2. It is one of the largest barrage of its kind in the country having a Feeder Canal whose bed width is wider than that of Suez Canal.

Which of the following is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer – C

19. Consider the following statements on Initiative on Critical and Emerging Technologies (iCET)

- 1. It is an agreement signed between India and Japan.
- 2. Apart from joint development and production in emerging technologies, it will address trade barriers, regulatory mechanisms and export controls.

Which of the following is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer – B

20. Consider the following statements on 'Open Air Camps'

- 1. These are open prisons which function on the principle of self-discipline and self-governance.
- 2. Madhya Pradesh has the highest number of open prisons in the country.

Which of the following is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer – B

Personality



Dr. Shanti Swarup Bhatnagar

Dr. Shanti Swarup Bhatnagar was a visionary scientist, who dreamed of making the country a leader in the field of science and started working on it. He is remembered as the father of Indian research laboratories. The credit for the establishment of the Council of Scientific and Industrial Research (CSIR), which has 38 scientific research laboratories across the country working in diverse fields of science, goes to Dr. Shanti Swarup Bhatnagar. He was a famous Indian scientist and academic administrator. He was born on February 21, 1894, in Shahpur (Presently Pakistan). In the year 1913, after passing the Intermediate examination from Panjab University in first class, he joined the Forman Christian College, Lahore. From here he passed B.Sc in the year 1916 and MSc in 1919. After completing his master's degree, he went to England on a research fellowship. From here he received his doctorate in science from University College London in 1921 under the supervision of Professor Frederic G. Donnan of Chemistry. During his stay in England, he received a scholarship of 250 Euro annually from the Department of Scientific and Industrial Research, London.

He returned to India in August 1921 and taught for three years as a Professor of Chemistry at the Banaras Hindu University (BHU). Thereafter, he worked as a professor of 'physical chemistry' at the Punjab University, Lahore, as well as the director of the university's chemical laboratories. This was the most important time of his scientific life in which he did fundamental scientific research. He made important contributions in the field of 'magneto-chemistry' in addition to work on emulsions, colloids and industrial chemistry. In the year 1928, he joined K.N. Mathur. Together they propounded the Bhatnagar-Mathur magnetic interference balance. It was one of the most sensitive instruments to determine the magnetic nature, which was later produced by the British company. When India got independence in the year 1947, the work of laying the foundation of science and technology in the country started. For this, Dr. Shanti Swarup Bhatnagar played an important role in making infrastructure and policies in the field of science and technology. He guided and encouraged many young and talented scientists. He also served as Secretary in the Ministry of Education and was also the Education Advisor to the Government of India. Under his leadership, oil refining centres were started, factories for the production of new metals like titanium and zirconium were built and a survey of mineral oil (petroleum) was also started. Shanti Swarup Bhatnagar did important work in the field of practical chemistry. He played an important role in the establishment of the National Research Development Corporation (NRDC). The role of NRDC has been to bridge the gap between research and development. He played an important role in the promotion of the 'Industrial Research Movement' in the country. A total of twelve national laboratories were established in India under his leadership. The CSIR he founded is today leading India on the global stage in various fields of science and technology. Today CSIR has an active network of 38 National Laboratories, 39 Remote Centers, 3 Innovative Complexes and 05 Units across India. CSIR is working in the fields of radio and space physics, ocean science, geophysics, chemistry, pharmaceuticals, genomics, biotechnology etc. In the year 1954, the Government of India honoured Dr. Shanti Swarup Bhatnagar with the Padma Bhushan award for his significant contribution in the field of science and engineering. Dr. Shanti Swarup Bhatnagar died of a heart attack on January 1, 1955. In 1957, CSIR announced Shanti Swarup Bhatnagar Award in his honour. This award is given to scientists who have made significant contributions in various fields of science.

जुड़िए सर्वश्रेष्ठ टीम के साथ

TARGET

68th BPSC
MAINS SPECIAL BATCH

Hindi & English Medium

Starts from

20 FEBRUARY
11:30 AM

3 CLASSES FREE

BPSC MAINS TEST SERIES
FREE FOR **200**
FIRST STUDENTS

A 12, 13, ANSAL BUILDING, DR. MUKHERJEE NAGAR, DELHI

Call: 9205274741 / 42, 9289580074 / 75



DHYEYA IAS[®]
most trusted since 2003

20 Years
of Trust

Success is Our Tradition

4500+ SELECTIONS IN IAS & PCS

₹ 55



dhyeyaias.com

Face to Face Centres

North Delhi : A 12, 13, Ansal Building, Dr. Mukherjee Nagar, Delhi - 110009, Ph: 9205274741/42/44 | **Laxmi Nagar** : 1/53, 2nd floor, Lalita Park, Near Gurudwara, Opposite Pillar no.23, Laxmi Nagar, Delhi - 110092, Ph: 9205212500/9205962002 | **Greater Noida** : 4th Floor Veera Tower, Alpha 1 Commercial Belt., Greater Noida, UP - 201310, Ph: 9205336037/38 | **Prayagraj** : II & III Floor, Shri Ram Tower, 17C, Sardar Patel Marg, Civil Lines, Prayagraj, UP - 211001, Ph: 0532-2260189/8853467068 | **Lucknow (Aliganj)** : A-12, Sector-J, Aliganj, Lucknow, UP- 226024, Ph: 0522-4025825/9506256789 | **Lucknow (Gomti Nagar)** : CP-1, Jeewan Plaza, Viram Khand-5, Near Husariya Chauraha, Gomti Nagar, Lucknow, UP - 226010, Ph: 7234000501/ 7234000502 | **Lucknow (Alambagh)** : 58/1, Sector-B Opposite Phoenix Mall Gate No. 3, L.D.A Colony, Alambagh Lucknow., Ph: 7518373333, 7518573333 | **Kanpur** : 113/154 Swaroop Nagar, Near HDFC Bank, Kanpur, UP - 208002, Ph: 7887003962/7897003962 | **Gorakhpur** : Narain Tower, 2nd floor, Gandhi Gali, Golghar, Gorakhpur, Uttar Pradesh 273001, Ph: 7080847474 | **Bhubaneswar** : OEU Tower, Third Floor, KIIT Road, Patia, Bhubaneswar, Odisha - 751024, Ph: 9818244644/7656949029

Dhyeya IAS Now on Telegram



We're Now on Telegram

Join Dhyeya IAS Telegram

Channel from the link given below

["https://t.me/dhyeya_ias_study_material"](https://t.me/dhyeya_ias_study_material)

You can also join Telegram Channel through
Search on Telegram

"Dhyeya IAS Study Material"

Join Dhyeya IAS Telegram Channel from link the given below

https://t.me/dhyeya_ias_study_material

नोट : पहले अपने फ़ोन में टेलीग्राम App Play Store से Install कर ले उसके बाद लिंक में क्लिक करें जिससे सीधे आप हमारे चैनल में पहुँच जायेंगे।

You can also join Telegram Channel through our website

www.dhyeyaias.com

www.dhyeyaias.com/hindi



Address: 635, Ground Floor, Main Road, Dr. Mukherjee Nagar, Delhi 110009
Phone No: 9205274741, 9205274742, 9205274744