



BIMSTEC

Bay of Bengal Initiative for Multi-Sectoral Technical & Economic Cooperation



Bangladesh



Sri Lanka



India



Nepal



Bhutan



Thailand



Myanmar



Educrat IAS Current Affairs Magazine

**Daily News Analysis (DNA) of the important articles of the Hindu
& Indian Express.**

March 2022

CONTENTS

1. Educrat IAS Mains DNA from The Hindu & The Indian Express.....	3
1.1 Reading New Climate Report	3
1.2 GDP 2nd Advance Estimates: What's Changed Since 1st, What it Means	3
1.3 How Dependent is India on Russia's Weapons?	4
1.4 Why Sea Route Turkey Controls is Key for Russia?	5
1.5 Why Ukraine Gave up its Nuclear Arsenal?	6
1.6 New Rules for Deputation of DIGs	7
1.7 What is 'General Consent' for the CBI.....	7
1.8 Our Data: Not for Sale.....	8
1.9 Russia-Ukraine War Impact, Beyond Oil	9
1.10 The Role of Belarus in the Russia-Ukraine War	10
1.11 Oil Price and Stagflation	10
1.12 What the Plight of Students in Ukraine Reveals about Medical Education in India	11
1.13 Looming Oil Crisis: What Now?	12
1.14 Water Management Needs a Hydro-Social Approach.....	12
1.15 Turkey's Stake in Ukraine War	13
1.16 Shutdown this Misguided Energy Policy	14
1.17 When a Missile Misfires	14
1.18 How War Can Hit Semiconductor Supply?.....	15
1.19 How South Asia Views War	16
1.20 Export Avenue for Farmers	17
1.21 Draft National Policy for Medical Devices, 2022.....	17
1.22 Why Special Situation Funds are Necessary	18
1.23 Wearing Hijab is not Essential Part of Religion: Karnataka HC.....	19
1.24 Indigenisation in Defence Technologies	20
1.25 Re-introducing African Cheetahs to India	20
1.26 Defining who is 'Assamese': Attempts, Challenges	21
1.27 Why 'De-Dollarisation' is Imminent	21
1.28 The Rank Pension Case	22
1.29 Russia's Offer of Cheaper Oil is Tempting, but India Must be Cautious.....	23
1.30 National Land Monetization Corporation:.....	23
1.31 Central University Entrance Test: Benefits and Concerns:.....	24
1.32 Needed, an Indian Legislative Service:	25
1.33 What is NASA's Artemis I Mission?	26
1.34 Green Bonds, Digital Currency Hold Promise	26
1.35 Why Mariupol is Important to Ukraine and Russia?	27

1.36 Time for India to Redefine its Relationship with Russia:	27
1.37 What Centre Wants to Change in Delhi's Civic Body?	28
1.38 A Good Foreign Policy Must also Make a Difference at Home	28
1.39 What is Behind the New Anti-India Campaign in Maldives?	29
1.40 The JCPOA Continues to be Elusive	30
1.41 A Subregional Grouping that Must Get Back on Course:	30
1.42 Defining Minority: What the Constitution Says; How SC has Ruled	31
1.43 Bio Samples for Crime Files	32
1.44 Startup India Initiative and its Success	33
1.45 Assam-Meghalaya Boundary Dispute Resolution	33
1.46 India Seeks Closer BIMSTEC Partnership:	34
2. Prelims Booster	35

1. Educrat IAS Mains DNA from The Hindu & The Indian Express

1.1 Reading New Climate Report

- Recently, the Intergovernmental Panel on Climate Change (IPCC), released the second part of its sixth assessment report.
- This second part of the report is about climate change impacts, risks and vulnerabilities, and adaptation options.

Major findings:

- Over 3.5 billion people, over 45% of the global population, were living in areas highly vulnerable to climate change.
- It has found that climate change is increasing vector-borne and water-borne diseases such as malaria or dengue, particularly in sub-tropical regions of Asia.
- It has also said deaths related to circulatory, respiratory, diabetic and infectious diseases, as well as infant mortality, are likely to increase with a rise in temperature.
- Global sea levels will likely rise 44-76 cm this century if governments meet their current emission-cutting pledges.

India specific:

- The report identifies India as one of the vulnerable hotspots, with several regions and important cities facing very high risk of climate disasters such as flooding, sea-level rise and heat-waves.
- Infrastructure, including transportation, water, and sanitation and energy systems has been compromised by extreme and slow-onset events, with resulting economic losses, disruptions of services and impacts to well-being.
- Urban India is at greater risk than other areas with a projected population of 877 million by 2050, nearly double of 480 million in 2020.
- At present, wet-bulb temperatures in India rarely exceed 31 degrees C, with most of the country experiencing maximum wet-bulb temperatures of 25-30 degrees C, according to IPCC.

Way ahead:

- The gap in adaptation was a result of lack of funds and political commitment, and also the absence of reliable information and a sense of urgency.
- There are “feasible and effective” adaptation options which could reduce the risks to people and nature.
- Strong actions to reduce greenhouse gas emissions in the near term, in the next 20 years, would substantially reduce the threats, and the projected damages, if not eliminate them all.
- These reports also form the basis for international climate change negotiations that decide on the responses at the global level.

The report:

- The first part of this report, on the physical science of climate change in 2021. It had warned that 1.5 degree Celsius warming was likely to be achieved before 2040 itself.
- For the first time, this report made an assessment of regional and sectoral impacts of climate change.
- It has included risks to, and vulnerabilities of, mega-cities around the world. For example, it has said Mumbai is at high risk of sea-level rise and flooding, while Ahmedabad faces serious danger of heat-waves. Such granular information was not available in previous assessment reports.
- Also, for the first time, the IPCC report has looked at the health impacts of climate change.

WHAT IS WET-BULB TEMPERATURE

➤ Wet-bulb temperature is the lowest temperature to which air can be cooled by the evaporation of water into the air

➤ It is measured by factoring in heat and humidity levels

➤ Theoretically, if wet-bulb temperature reaches 35 degrees Celsius – its highest point – it means humans can no longer lose internal body heat by sweating and cool themselves

➤ This could potentially lead to heatstrokes



Wet-bulb days in Delhi each year at present | **63 days**
RCP 8.5 or business as usual scenario (2050) | **99 days**
RCP 8.5 or business as usual scenario (2100) | **131 days**
RCP 2.6 (stringent scenario where global temperature rise will be below 2°C by 2100) | **81 days**

1.2 GDP 2nd Advance Estimates: What's Changed Since 1st, What it Means

Ministry of Statistics and Programme Implementation (MoSPI) released the Second Advance Estimates (SAEs) of GDP for the current financial year. These are an update over the First Advance Estimates (FAEs) released on January 7.

How many revisions of GDP estimates are done, and why?

- For each financial year, say 2021-22, the GDP estimates go through several rounds of revisions. Each year on January 7, MoSPI releases the FAEs.

- Then in February end, after incorporating the Q3 data, come the SAEs.
- By May-end come the Provisional Estimates after incorporating the Q4 (Jan to March) data.
- Then, in end-January 2023, MoSPI will release the First Revised Estimates for FY22. These will be followed by the Second Revised Estimates (by Jan-end 2024) and the Third Revised Estimates (by Jan-end 2025).
- Each revision benefits from more data, making the GDP estimates more accurate and robust.

Main engines of growth:

- Private Final Consumption Expenditure (PFCE) accounts for over 55% of GDP.
- The second biggest is the money spent by private firms (and, to a small degree, the government) towards increasing productive capacity. This is investment expenditure.
- Gross Fixed Capital Formation (GFCF) accounts for around 33% of GDP.
- Then comes the money spent by governments towards their consumption (as against their investments). This is the Government Final Consumption Expenditure (GFCE).

How are the two pictures different?

- Based on FAEs, the key observations about the nature of India's recovery were:
- Overall GDP was expected to go past the pre-Covid level.
- Recovery was driven by higher investments — as evidenced by the spike in GFCF.
- The main worry was poor levels of PFCE, which was well below the pre-Covid levels.
- The argument was: overall GDP is likely to be back at pre-Covid levels, but private income and expenditures are far below pre-Covid levels. This will imply weak consumer demand, and rob businesses of the incentive to continue investing.
- But now, even though overall GDP and per capita GDP (read income) have not changed much, PFCE and per capita PFCE (read expenditure) have jumped.
- Overall, all components are above the pre-Covid level and they are being led by private demand, which augurs well for the future.
- However, this is not the final picture.

FIRST ADVANCE ESTIMATES (JAN) VS SECOND (FEB) [₹ CR]			
	2019-20 (Pre-Covid)	2021-22 (FAE)	2021-22 (SAE)
Private Consumption Expenditure (PFCE)	82,59,704	80,80,527	83,55,833
Government Consumption Expenditure	14,84,272	17,07,307	16,11,821
Expenditure for Investment	46,11,021	48,51,682	47,32,872
GDP	1,45,15,958	1,47,53,535	1,47,71,681
Per Capita GDP	1,08,247	1,07,801	1,07,934
Per Capita PFCE	61,594	59,043	61,054
Source: MoSPI			

How did so much change in a month?

- Due to the inadequacy of data while making the FAEs.
- there are no independent estimates on the expenditure side, so what MoSPI does is that it takes the production side data and they classify goods and services as either 'consumption' goods or 'investment' goods.

If one looks at this GDP data with other estimates such as those of unemployment, one could argue that the upper arm of the 'K' has done better than what was previously imagined.

1.3 How Dependent is India on Russia's Weapons?

New Delhi has been trying to walk a fine line, negotiating its relationships with the United States and other Western nations on one side, and the historically deep and strategic ties with Russia on the other, even as its stand is becoming incrementally critical to Russia as its forces continue to fight in Ukrainian cities.

How strong are Indian and Russian defence ties?

- Immediately after independence, India was almost entirely dependent on the British and other Western nations for its arms imports.
- However, by the 1970s, India was importing several weapons systems from the Soviet Union (now Russia), making it the country's largest defence importer for decades.
- When it comes to arms transfer, India is the largest importer of Russia and the largest exporter of India.
- Russian-made weapons and platforms account for up to 85 per cent of the Indian armed forces.
- Russia is the world's second-largest arms exporter, only behind the United States.

What is the value of weapons India has bought from Russia?

- Between 2000 and 2020, Russia accounted for 66.5 per cent of India's arms imports. Of the \$53.85 billion spent by India during the period on arms imports, \$35.82 billion went to Russia. During the same period imports from the US were worth \$4.4 billion, and from Israel it was worth US\$ 4.1 billion.
- Between 2016 and 2020, Russia's share in Indian arms imports fell to around 50%, but it still remained the largest single importer.

Is India trying to expand its weapons base?

- There have been continuous efforts in recent years to expand the weapons platform bases not only to other countries but even within the United States.
- According to the Stockholm International Peace Research Institute's (SIPRI) India's arms imports declined by 33% between 2011 and 2016.
- In 2011–15, the United States was India's second-largest arms supplier, but in 2016–20, India's arms imports from the United States were 46% lower than the previous five-year period, making the United States India's fourth-largest supplier.
- In 2016–20, France and Israel were India's second and third largest arms suppliers, respectively.

Way forward:

- India's arms imports are expected to rise over the next five years due to outstanding deliveries of combat aircraft, air defence systems, ships, and submarines.
- As a result, it is essential for India to diversify its base in order to avoid being overly reliant on a single nation, which could constitute a leverage point for that country.

INDIA-RUSSIA DEALS IN THE PIPELINE

 <p>AKULA CLASS NUCLEAR-POWERED ATTACK SUBMARINE \$3 bn or ₹ 21,000 cr (to be delivered by 2026) STATUS: Signed</p>	 <p>KAMOV KA-226 LIGHT UTILITY HELICOPTERS JV between HAL and Russian helicopters for production (200 Kamov Ka-226) \$1 bn or ₹ 7,000 cr STATUS: MoU signed in June 2018</p>
 <p>AK-203 \$1.6 bn or ₹ 12,000 cr (700,000 rifles) Indo-Russian joint venture to make AK-203 rifles at an idle Ordnance Board Factory in Korwa STATUS: Signed. JV to be established soon</p>	
 <p>4 KRIVAK CLASS FRIGATES Two built in Russia, two to be built at the Goa shipyard \$2.5 bn or ₹ 17,000 cr STATUS: Signed</p>	 <p>18 ADDITIONAL SUKHOI SU-30MKI AIRCRAFT \$700 mn or ₹ 5,000 cr STATUS: Being negotiated</p>
 <p>21 MOTHBALLED MIG-29 AIRFRAMES \$800 mn or ₹ 5,600 cr STATUS: Being negotiated</p>	 <p>10 KAMOV KA-31 AEW&C HELICOPTERS \$500 mn or ₹ 3,600 cr STATUS: Approved. Contract yet to be signed</p>

What are the kinds of weapons Russia has given India?

- At the moment there are two major defence deals between India and Russia:
 Deal to buy five units of the state-of-the-art S-400 Triumf air-defence system
 India and Russia had just signed a deal to manufacture around 6 lakh AK 203 rifles at a factory in Amethi.
- The first submarine India ever got was also Soviet. The first Foxtrot Class submarine bought from the USSR entered Indian service in 1967 as INS Kalvari.
- India is also in talks with Russia to lease two nuclear-ballistic submarines, Chakra 3 and Chakra 4.
- The only aircraft carrier in service with India, INS Vikramaditya is a Soviet-made Kiev-class vessel that came into service for the Indian Navy in 2013.
- Russia has also been one of main exporters of fighter aircraft to India, including hundreds of Sukhoi and MiG jets.

1.4 Why Sea Route Turkey Controls is Key for Russia?

Turkey is set to activate the Montreux Convention in response to Russia's War over Ukraine. The declaration that situation in Ukraine had become a war, authorizes Turkey to activate the Montreux Convention and ban Russian war vessels from entering the Black Sea through the Bosphorus and Dardanelles straits.

Why is this route important to Russia?

- This route is directly linked with the Russia's naval power: Because Russia's only warm-water naval ports are on the Black Sea, in order to effectively project naval power, the Russians must not only exert control of the sea, but also have unrestricted access to the Dardanelles and Bosphorus Straits.
- It is the only passage through which the Black Sea ports can access the Mediterranean and beyond.
- Over three million barrels of oil, about three per cent of the daily global supply, mostly produced in Russia, Azerbaijan, and Kazakhstan, pass through this waterway every day.

- The route also ships large amounts of iron, steel, and agricultural products from the Black Sea coast to Europe and the rest of the world.

MONTREUX CONVENTION:

- It regulates maritime traffic through the Black Sea. The 1936 Convention Regarding the Regime of the Straits (commonly referred to as the Montreux Convention, after the city in Switzerland where it was negotiated)
- It guarantees "complete freedom" of passage for all civilian vessels during peacetime but battleships face certain restrictions and permits Turkey to restrict the passage of navies not belonging to Black Sea states.
- Any country with coastline on the Black Sea – Romania, Bulgaria, Georgia, Russia or Ukraine – must notify Turkey eight days in advance of its intention to send vessels of war through the straits.
- Other countries, the ones that don't border the Black Sea, must give Turkey 15 days' advance notice.

Role of Turkey:

- Turkish government finds itself in a difficult position, as both Ukraine and Russia are important partners in critical energy and military trade agreements.
- Turkey, a NATO member since 1952, wants to strengthen its ties with the West.
- Turkey and Russia find themselves on opposite sides of the debate on several major foreign policy issues like Nagorno-Karabakh conflict, the Syrian Civil War, the Libyan Civil War and the Kosovo conflict etc.
- Article 19 of the treaty contains an exception for the countries on the Black Sea that can effectively undermine Turkey's power in blocking the Russian warships entering or exiting the Black Sea.
- Vessels of war belonging to belligerent powers, whether they are Black Sea Powers or not, which have become separated from their bases, may return thereto.
- This exception provides Russia with an alternate way to exploit the Montreux Convention, which would be to reassign some of its vessels to the Black Sea.



1.5 Why Ukraine Gave up its Nuclear Arsenal?

Key Points:

- Ukraine has totally de-nuclearized between 1996 and 2001.
- Ukraine's decision to give up nuclear weapons came after consultations with the United States and Russia, as well as substantial security assurances from the three founding members of the Non-proliferation Treaty (NPT) — the United States, Russia, and the United Kingdom — as well as France and China. This was supported by NATO's assurances that it would not expand in order to allay Russian worries.
- Now that Russian soldiers have infiltrated Ukraine's borders, many Ukrainians are questioning if it was a mistake to de-nuclearize and whether having nuclear weapons would have been more effective in deterring Russia's aggression against their nation.
- At the time of its independence from the erstwhile Soviet Union in 1991, Ukraine had the third-largest stockpile of nuclear weapons in the world.

What is the 1991 Strategic Arms Reduction Treaty?

- Start was a bilateral treaty signed by former U.S. President George H.W. Bush and Soviet President Mikhail Gorbachev in 1991. It limited the number of ICBMs and nuclear warheads that the countries could possess.
- The treaty went through a period of turmoil when the Soviet Union ceased to exist, casting aspersions on its legitimacy.
- Ukraine, Kazakhstan, and Belarus signed a protocol in Lisbon in 1992 making them "successor states" of the Soviet Union
- The treaty obligated the successor states to join the Nuclear NPT at the earliest and the nuclear weapons were to remain under the control of a "single unified authority" until then.

- After extensive political manoeuvring, Ukraine ratified Start in February 1994 when it signed the Trilateral Statement along with the U.S. and Russia. Ukraine committed to full disarmament in exchange for economic compensation and security assurances.
- Ukraine transferred its last nuclear warhead to Russia in 1996 and dismantled its last strategic nuclear delivery vehicle in 2001.

What is the Budapest Memorandum?

- The Budapest Memorandum of Security Assurances is a political agreement between Ukraine, Russia, the U.K., and the U.S. It was signed in 1994.
- According to the memorandum, signatories Russia, the U.S., and the U.K. agreed to respect the “independence and sovereignty and existing borders of Ukraine” after the country agreed to give up its nuclear stockpile.

1.6 New Rules for Deputation of DIGs

After its proposal to amend the All India Service Rules that would allow it to call any IAS, IPS or IFoS officer on central deputation with or without the state’s consent, the Centre has issued another order on central deputation of Deputy Inspector General-level IPS officers.

What is the order?

- The Department of Personnel and Training (DoPT) has said that IPS officers coming to the Centre at DIG level would no longer be required to be empanelled at that level with the Union Government.
- According to existing rules, a DIG-ranked IPS officer with a minimum experience of 14 years could only be deputed to the Centre if the Police Establishment Board empanelled them as DIGs at the Centre.
- The board chooses the panel on the basis of officers’ career and vigilance records.
- Only Superintendent of Police-level officers do not require empanelment at the Centre.
- The new order makes the entire pool of DIG-level officers in a state eligible for central deputation.

Why has it been issued?

- The move is aimed at increasing the pool of DIG-level IPS officers for central deputation in the backdrop of massive vacancies in central police organisations (CPOs) and the Central Armed Police Forces (CAPFs).
- Out of 252 posts reserved for IPS officers at DIG level at the Centre, 118 (almost half) are vacant.
- The idea is to ease up the process of central deputation as verification of records takes a long time.
- Also, it increases the size of the pool of officers available to the Centre.

So why would states have a problem?

- The new order may be seen by many states as the Centre’s attempt at pushing the envelope further on increasing its powers over officers serving in the states.
- There is a serious paucity of officers in the states too.
- From 80-90 officers each, IPS batches were cut to 35-40 officers (in 1999-2002, the average was 36).
- The strength of IAS officers too had been impacted due to low intake during the 1990s.
- The anomaly in IPS recruitment adversely affected cadre management over the years.
- At some levels, there are fewer officers than sanctioned posts, while at others there is a glut. For example, UP has a shortage of DIGs and IGs, but too many officers at the level of ADGs.

1.7 What is ‘General Consent’ for the CBI

Meghalaya has withdrawn consent to the CBI to investigate cases in the state, becoming the ninth state in the country to have taken this step.

- The CBI is governed by The Delhi Special Police Establishment (DSPE) Act, 1946, and it must mandatorily obtain the consent of the state government concerned before beginning to investigate a crime in a state.
- The CBI’s position is in this respect different from that of the National Investigation Agency (NIA), which is governed by The NIA Act, 2008, and has jurisdiction across the country.
- The consent of the state government to CBI can be either case-specific or general.

General Consent:

- When a state gives a general consent (Section 6 of the Delhi Special Police Establishment Act) to the CBI for probing a case, the agency is not required to seek fresh permission every time it enters that state in connection with investigation or for every case.
- A general consent is given to facilitate that seamless investigation in a case of corruption or violence.

Specific Consent:

- When a general consent is withdrawn, CBI needs to seek case-wise consent for investigation from the concerned state government.
- If specific consent is not granted, the CBI officials will not have the power of police personnel when they enter that state.
- This hurdle impedes seamless investigation by the CBI.

What does the withdrawal of general consent mean?

- It means the CBI will not be able to register any fresh case involving officials of the central government or a private person in the state without the consent of the state government.

Court rulings and current status:

- In Vinay Mishra vs the CBI, the Calcutta HC ruled in July this year that corruption cases must be treated equally across the country, and a central government employee could not be “distinguished” just because his office was located in a state that had withdrawn general consent. The HC also said that withdrawal of consent would apply in cases where exclusively employees of the state government were involved.
- The agency can use the Calcutta HC order to its advantage until it is — if it is — struck down by the SC.
- Even otherwise, the withdrawal of consent did not make the CBI defunct in a state — it retained the power to investigate cases that had been registered before consent was withdrawn.
- Also, a case registered anywhere else in the country, which involved individuals stationed in these states, allowed the CBI’s jurisdiction to extend to these states.
- There is ambiguity on whether the CBI can carry out a search in connection with an old case without the consent of the state government. But the agency has the option to get a warrant from a local court in the state and conduct the search.
- Finally, consent does not apply in cases where someone has been caught red-handed taking a bribe.

But what about fresh cases?

- Again, the CBI could use the Calcutta HC order to register a fresh case in any state.
- Alternatively, it could file a case in Delhi and continue to investigate people inside these states. The CBI could register cases in Delhi if some part of the offence is connected with Delhi, and still arrest and prosecute individuals in these states.

To what extent is the CBI ‘its master’s voice’?

- After the 2018 amendments to the Prevention of Corruption Act, 1988, the Centre has come to exercise power over the CBI not just administratively, but also legally.
- It is now mandatory for the CBI to seek the Centre’s permission before registering a case of corruption against any government servant.
- Earlier, the Centre had mandated that such permission was required only for officials of the level of joint secretary and higher which has now been extended.

1.8 Our Data: Not for Sale

The government published a draft data policy for public consultation, which says all data collected, generated, and stored by every government ministry and department will be open and shareable barring certain exceptions.

Draft India Data Accessibility & Use Policy 2022:

- It prescribes that a regulatory authority called the Indian Data Council (IDC) and an agency by the name India Data Office (IDO) will oversee framing metadata standards and enforcement, respectively.
- The nomination of departments and state governments in the IDC will be by rotation with tenure of two years for one department.
- Each central ministry/department will adopt and publish its domain-specific metadata and data standards.

THE FINE PRINT

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Stakeholders like start-ups, enterprises, individuals and researchers will be able to access enriched data | <ul style="list-style-type: none"> ▪ India Data Council will oversee metadata standards, comprise the India Data Office and data officers of five other government departments |
| <ul style="list-style-type: none"> ▪ Pricing of datasets will be done by the respective government departments in a transparent manner | |
| <ul style="list-style-type: none"> ▪ Draft policy says guidelines will be framed to decide how long datasets can be held by the government | <ul style="list-style-type: none"> ▪ Every Ministry/ Department shall have data management units headed by chief data officers |

Issues:

- The core objective of this policy seems to be purely revenue generation.
- It lacks clarity on a number of things such as how a high-value dataset will be defined.
- As per the Supreme Court's Puttaswamy judgment on the fundamental right to privacy, the first ingredient to satisfy constitutionality is the existence of a legal, more often a legislative, basis. Without a law, there is absence of defined limits to data sharing that are enforceable and contain remedies.
- Public data is now being viewed as a prized asset of the Union government that should be freely shared, enriched, valued and licensed to the private sector. Given that more data means more money, commercial interests will prompt the government to collect granular personal details through greater capture and increased retention periods. Over time, the original objectives for which databases are built will get diluted in favour of commercial interests.
- Within the present draft data accessibility policy, while the phrase "open data" has been used, its values and objectives are absent.

1.9 Russia-Ukraine War Impact, Beyond Oil

The current Russian invasion of Ukraine — unlike previous wars in Iraq and Libya or sanctions against Iran — is having an impact not just on energy prices. The effects of shipping disruptions through the Black and Azov Seas, plus Russian banks being cut off from the international payments system, are extending even to the global agri-commodities markets.

Russia and global commodity market:	Ukraine and global commodity market:
<ul style="list-style-type: none">• World's third biggest oil (after the US and Saudi Arabia)• Second biggest natural gas (after the US) producer,• Second largest exporter of wheat after EU.• Russia and its next-door ally Belarus are the world's No. 2 and No. 3 producers of muriate of potash (MOP) fertilizer.	<ul style="list-style-type: none">• At No. 4 position in wheat exports, after EU, Russia and Australia• Ukraine, moreover, is the world's third largest exporter of corn/maize• Ukraine and Russia are also the top two exporters of sunflower oil

How global commodity prices have moved?

- Russia's war on Ukraine hasn't stopped at driving up Brent crude to \$110-15/barrel and international coal prices to unprecedented \$440/tonne levels.
- The shutting down of ports in the Black Sea have also sent prices of wheat and corn.
- The Ukraine crisis has also led to prices of vegetable oils and oilseeds skyrocketing.

How it can benefit India?

- Skyrocketing global prices have made Indian wheat exports very competitive and India can partially fill the void left by Russia and Ukraine.
- High export demand for wheat could result in lower government procurement this time. A lot of wheat from western and central India may end up getting exported rather than in the Food Corporation of India's godowns.
- The benefits of rising vegetable oils should flow to mustard growers in Rajasthan and UP, who are set to market their crops in international market.
- Brent at \$110-115/barrel is also helping lift the prices of cotton (because of synthetic fibres becoming costlier) and agri-commodities that can be diverted for production of ethanol (sugar and corn) or bio-diesel (palm and soyabean oil).
- High prices (above MSP) can act as an inducement for farmers to expand acreages under cotton, soyabean, groundnut, sesamum and sunflower in the upcoming kharif planting season. That will serve the cause of crop diversification — especially weaning farmers away from paddy, if not sugarcane.

Challenges:

- The ongoing Black Sea tensions are impacting fertiliser prices. Out of the total import nearly a third came from Belarus and Russia. With supplies from there virtually choked, more quantities would have to be procured from other origins such as Canada, Jordan and Israel.

- International prices of other fertilisers (urea, di-ammonium phosphate and complexes) and their raw materials/intermediates (ammonia, phosphoric acid, sulphur and rock phosphate), too, have gone up.

1.10 The Role of Belarus in the Russia-Ukraine War

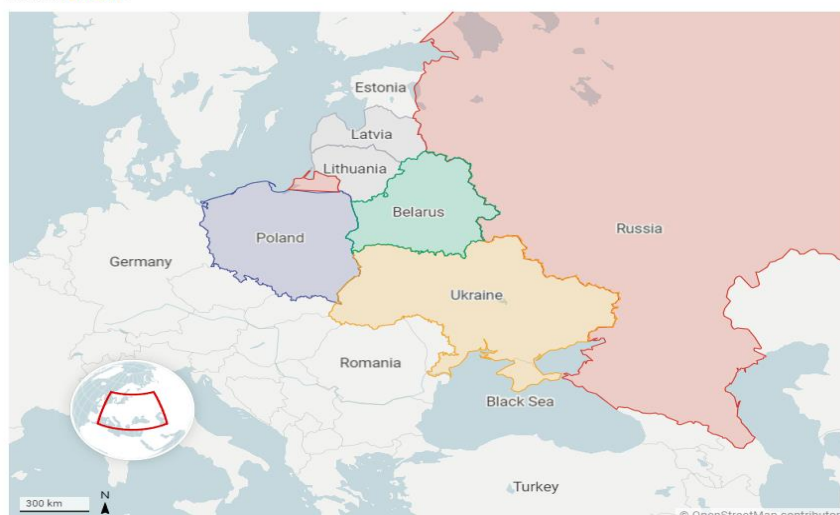
- Belarus, the largest landlocked European country bordering the two warring nations has found itself in a precarious position amid its political proximity with Russia.
- Belarus is a former Soviet republic of 9.4 million people that borders both Russia and Ukraine as well as Lithuania, Latvia and Poland. It is also Europe's last dictatorship.

Belarus proximity to Russia:

- The border between Belarus and Ukraine stretches about 674 miles – roughly half the length of Ukraine's border with Russia.
- Russia is Belarus' largest trading partner. It also enjoys subsidies on gas and oil from Russia.
- After 2020 election in Belarus, protests erupted as the results were considered fraudulent. Putin offered financial and military support to help Lukashenko silence the protests — without any international response or pushback. Putin also warned foreign powers not to interfere in Belarus' affairs.
- Since 2020, Belarus has faced a series of international economic sanctions that further alienated Lukashenko from the West.
- The lack of international reaction to Putin enabling Lukashenko's behaviour — alongside the economic pressure — pushed the Belarusian leader even closer to the Kremlin.

Where is Belarus?

Belarus is a former Soviet republic west of Russia, east of Poland, south of the Baltic nations of Latvia and Lithuania, and north of Ukraine.



Map: The Conversation, CC-BY-ND

Role of Belarus in current war:

- It allowed Russian troops to use its territory for invasion.
- Belarus scrapped its commitment to remaining nuclear free following a public referendum vote. This change in Belarus' constitution would allow Belarus to physically host Russian nuclear weapons.
- Lukashenko also offered to host Russian nuclear weapons if NATO moves nuclear weapons from Germany to Eastern Europe.
- By hosting Russian troops and weapons, Lukashenko has shown that he is closely aligned with Putin — despite the popular will of the Belarusian people to maintain distance.

1.11 Oil Price and Stagflation

- Stagflation is a stagnant growth and persistently high inflation.
- Typically, rising inflation happens when an economy is booming — people are earning lots of money, demanding lots of goods and services and as a result, prices keep going up.
- When the demand is down and the economy is in the doldrums, by the reverse logic, prices tend to stagnate (or even fall).
- But stagflation is a condition where an economy experiences the worst of both worlds — the growth rate is largely stagnant (along with rising unemployment) and inflation is not only high but persistently so.

How does one get into Stagflation?

- The best-known case of stagflation is what happened in the early and mid-1970s.
- The OPEC (Organisation of Petroleum Exporting Countries), which works like a cartel, decided to cut crude oil supply.
- This sent oil prices soaring across the world; they were up by almost 70%.
- This sudden oil price shock not only raised inflation everywhere, especially in the western economies but also constrained their ability to produce, thus hampering their economic growth.

- High inflation and stalled growth (and the resulting unemployment) created stagflation.

Is India facing stagflation?

- In the recent past, this question has gained prominence since late 2019, when retail inflation spiked due to unseasonal rains causing a spike in food inflation.
- India's GDP growth rate decelerated from over 8% in 2016-17 to just 3.7% in 2019-20.
- However, it was not stagflation as India's GDP was still growing, albeit at a progressively slower rate.

Expected impact on Indian Economy:

- Russia is the world's second-largest oil producer and, as such, if its oil is kept out of the market because of sanctions, it will not only lead to prices spiking, but also mean they will stay that way for long.
- India imports more than 84% of its total oil demand. Without these imports, India's economy would come to a sudden halt.

1.12 What the Plight of Students in Ukraine Reveals about Medical Education in India

The plight of 18,000 Indian medical students trapped in Ukraine's war zones has led to widespread concerns.

Why go abroad?

- The number of seats available for medical education in India is far less than the number of aspirants. Of the 1.6 million students who appeared in the National Eligibility cum Entrance Test (NEET) in 2021, only 88,120 made it into the 562 medical colleges in the country.
- The low MBBS course fees charged by the medical institutions between ₹30 lakh- Rs35 lakh compared to around ₹1 crore (including donation) charged in India.
- Ukrainian and Russian medical colleges are even recognised by the World Health Organisation (WHO).
- Additionally, unlike in India, there are no medical examinations that are conducted for the medical students to get admissions.
- On return, they need to pass a qualifying examination before they are permitted to intern in the institutions recognised by the Medical Council of India (MCI).

Issues:

- The passing rates for qualifying exams were disappointingly low due to:
 - Training standards varied widely across foreign institutions.
 - The language of instruction was not English.
 - The curriculum in foreign colleges differed in several respects from that taught in India. A student training in Russia or Ukraine is unlikely to learn much about kala-azar or malaria.
- Foreign medical graduates started taking coaching classes. That spawned another industry.
- Shortage is due to MCI boards imposing rigid conditions to restrict the number of medical colleges, as well as due to limited government investment in the health sector.
- Even if the private sector is provided land at a concessional rate for starting new medical colleges, they will face a faculty crunch and poach from government medical colleges.
- Handing over district hospitals to the private sector, as proposed by some, will exacerbate inequities in healthcare.

Alternatives:

- It is essential that we increase the number of medical colleges, especially in states that have a low number of such seats.
- State governments must be supported to invest in the upgradation of district hospitals.
- Specialist posts in many clinical disciplines that are needed for the MBBS programme already exist in the district hospitals. These specialists can be designated as faculty for a new medical college attached to the district hospital.
- Common classrooms can be created by virtually linking several of the medical colleges in a state, to share some of the faculty for classroom teaching.
- A centrally sponsored scheme aims to set up 157 new medical colleges attached to existing district/referral hospitals in areas that do not have any medical college. This will reduce urban-rural disparities in healthcare and also help to scale-up training.

What about the young students returning from Ukraine?

- It is unlikely that they will be able to resume their education there and present regulations do not permit them to continue their education in Indian medical colleges.

- Even if the NMC permits it as a special case, other students who qualified the NEET but did not make the cut for medical admission, and stayed back in India, might protest.
- The government could perhaps support these students by enrolling them in a BSc (Public Health) programme that can be run by schools of public health and medical colleges. They can graduate in three years to commence careers in public health, where their earlier medical education can add value.

1.13 Looming Oil Crisis: What Now?

U.S. President Joe Biden announced a ban on all crude oil and natural gas imports from Russia into the US, while the UK announced that it would phase out imports of Russian oil by the end of the year.

Why were oil prices rising even before the Ukraine crisis?

- Crude oil prices have fluctuated quite sharply over the last two years in the wake of the pandemic.
- From 60 dollar a barrel at the start of 2020, they fell to less than 20 dollar in April 2020 owing to supply chain constraints.
- Russia has been holding back from providing additional supplies of natural gas to Europe.
- Continued underinvestment in oil and gas exploration because of the public and regulatory aversion to fossil fuels adds to the issue.
- There is very limited spare capacity within the OPEC.

What about alternatives:

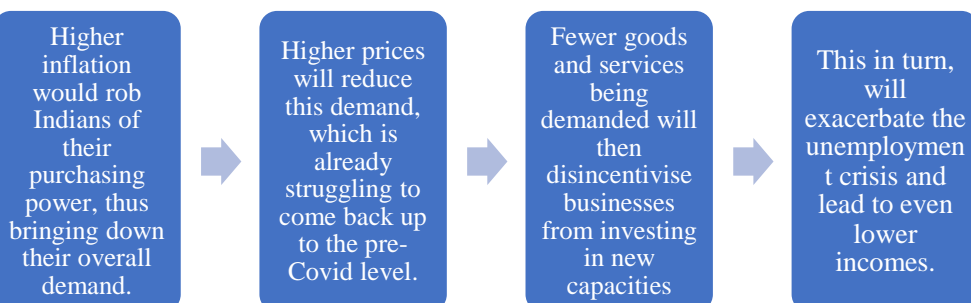
- Issue of quality: unlike Russian oil, Venezuela oil has more impurities and it requires a more complex type of refineries.

- Cost of production- The individual country's cost of production also plays a key role.

Most oil fields in the US

produce at 40 dollar a barrel, while those in Russia produce at around 20 dollar and those in Saudi Arabia at around 15 dollar a barrel.

- Russian supplies are not only the second-biggest, they are also the second-cheapest and of better quality than what a replacement like Venezuela may provide.



What are the challenges in meeting the gap created by Russia's ban:

- Strategic reserves are good enough only for emergencies.
- The top three countries in terms of such reserves are the US, China and Japan which have around 1500 million barrels. At an average daily global consumption of 95 million barrels a day, that's roughly 20-odd days of oil.
- It is an open question how far China will share globally.
- Venezuela has the world's largest oil reserves but the country's oil-producing apparatus is in disrepair due to the government's mismanagement and harsh US sanctions.
- Also, oil-producing companies in Venezuela are in debt and most don't even have good quality drilling equipment.
- Iran will not increase output unless it gets the nuclear deal with the US.

Way forward:

- Since individual production levels are quite low, several countries will have to come together and still they may not come anywhere close to matching the levels that Russia produces.
- Scaling the production will take time, money and effort.

1.14 Water Management Needs a Hydro-Social Approach

- It is globally estimated that the gap between demand for and supply of fresh water may reach up to 40% by 2030 if present practices continue.
- 2030 Water Resource Group in 2008 also recognises this problem and help achieve the SDG 6.

- The latest UN World Water Development Report, 2021, titled ‘Valuing Water’, has laid stress on the proper valuation of water by considering five interrelated perspectives
 - water sources;
 - water infrastructure;
 - water services;
 - water as an input to production;
 - socio-economic development, and sociocultural values of water.
- In this context, a hydro-social cycle approach provides an appropriate framework.

Need for hydro-social cycle approach:

- It repositions the natural hydrological cycle in a human-nature interactive structure and considers water and society as part of a historical and relational-dialectical process.
- World over intra- and inter-basin transfer (IBT) of water is used as a major hydrological intervention to rectify the imbalance in water availability due to naturally prevailing unequal distribution.
- EG: The National River Linking Project of India is one of those under construction.

Issues in IBT:

- The basic premise of IBT is to export water from the surplus basin to a deficit basin.
- However, there is contestation on the concept of the surplus and deficit basin itself as the exercise is substantially hydrological. EG: rainfall in many surplus basins has been reported as declining.
- There is also concern about the present capacity utilisation of water resources created in the country. The average water use efficiency of irrigation projects in India is only 38% against 50%-60% in the case of developed countries.
- Even at the crop level, we consume more water than the global average. The agriculture sector uses a little over 90% of total water use in India. And in industrial plants, consumption is 2 times to 3.5 times higher per unit of production of similar plants in other countries.
- There is also lack of proper disposal and reuse of grey water in our country. It is estimated that 55% to 75% of domestic water use turns into grey water depending on its nature of use, people’s habits, climatic conditions, etc. This untreated grey water and industrial effluents get into freshwater bodies and becoming a source of pollution.
- Apart from the inefficient use of water in all sectors, there is also a reduction in natural storage capacity and deterioration in catchment efficiency.

Way forward:

- A hybrid water management system is necessary, where (along with professionals and policy makers) the individual, a community and society have definite roles in the value chain.

1.15 Turkey’s Stake in Ukraine War

The foreign ministers of Ukraine and Russia are to meet for talks on the sidelines of the Antalya Diplomatic Forum. The talks will be held in “trilateral format”: that is, with Turkey present in the room as a mediator.

How is the relationship between Turkey and Russia?

- Turkey, as the gateway between Europe and Asia, is a country of many parts. It is a member of NATO, and was at one time thought to be a natural fit for membership in the EU.
- Russia is a friend of Turkey but also an age-old geopolitical rival, going back to the Russo-Ottoman wars.
- For Turkey, Moscow’s annexation of Crimea has been a nagging concern. Turkey’s President has said Turkey will never recognise this “illegal” action.
- Russia’s proximity to the PKK, the Turkish Kurdish rebel group, from the Soviet Union days is a major irritant for Turkey.
- In Syria, Russia and Turkey fought on opposite sides, Russia to preserve the Bashar al-Assad presidency, and Turkey on the side of groups fighting him.

Growing Partnership:

- Russia is now among Turkey’s main trade partners. Turkey’s economy depends heavily on imports from Russia mainly on refined petroleum.
- There is a gas pipeline now under the Black Sea from Russia to Turkey.
- In 2020, Turkey bought the S 400 Triumf surface-to-air missile defence system from Russia, and was sanctioned by the United States under its CAATSA law.

- Russia is building a nuclear power plant in Ayukku in southern Turkey.

Relationship between Turkey & Ukraine:

- Turkey a major exporter to Ukraine. The biggest export in 2019 was refined petroleum.
- Turkey also supplies Ukraine with a lethal missile carrier drone.
- An FTA was signed in 2022.

Turkey to mediate:

- In its efforts to mediate, Turkey is seeking to take on the role of the regional leader.
- It may also help Erdogan shed his image in the West as an authoritarian leader.
- It is also seeking to protect its considerable economic interests in the region, the stability of the Black Sea and the Turkish straits, its defence relations with both countries, and its oil and gas supplies from Russia.

1.16 Shutdown this Misguided Energy Policy

- On March 3, a fire broke out near the Zaporizhzhia nuclear plant in Ukraine during the course of a military battle that could have triggered a major nuclear disaster.
- 2011, the Fukushima Daiichi nuclear plant suffered severe accidents after an earthquake and a tsunami hit it. As a result radioactive cores continued producing heat and eventually melted down.
- However, the Indian government in dec. 2021 said that it is planning to build “10 indigenous reactors” and had granted “in principle approval” for 28 additional reactors, including 24 to be imported from France, the U.S. and Russia.

Given the post-Fukushima global and national trends in the nuclear industry, such a policy seems misguided. How?

- Nuclear power is not an economical source of electricity: nuclear power plants are capital intensive and recent nuclear builds have suffered major cost overruns.
- Renewable-energy technologies have become cheaper: The cost of for solar power, and solar-wind hybrid project was ₹2.14 per unit and ₹2.34 per unit respectively whereas power from the EPRs at Jaitapur was at least ₹ 15 per unit excluding transmission costs.
- Global Nuclear Energy Share is declining: In contrast to India’s policy projection, the world’s nuclear power share in total electricity has declined from 17.5% in 1996 to just 10% in 2020.
- Unviable Imports: even after 13 years of the India-U.S. civil nuclear deal, not a single new nuclear plant has been established.
- Safety Concern: For example, the Fukushima Nuclear Disaster. In fact, many multinational nuclear suppliers demanded that they be indemnified of liability for the consequence of any accident in India. Therefore, India’s liability law was enacted to largely protects them. It means, manufacturers do not really believe in their own claims about how safe their reactors are.
- Protest Against Nuclear Plants: for example, “locals turned against” the Mithivirdi nuclear project after the Fukushima disaster in Gujarat.
- Climate change will increase the risk of nuclear reactor accidents. For example, A wildfire approached the Hanul nuclear power plant in South Korea.

Way forward:

In 2020, the International Energy Agency dubbed solar energy the “new king of electricity”. Therefore, nuclear power is not the right choice to “adapt” to climate change, and to mitigate India’s carbon emissions since it cannot be deployed at the necessary scale. The resources spent on nuclear plants will yield quicker results if they are redirected to renewables.

1.17 When a Missile Misfires

Pakistan has said that an unarmed Indian missile landed 124 km inside its territory on Wednesday which was acknowledged by India stating that a technical malfunction led to the accidental firing of a missile.

What is the procedure for information regarding such tests?

- Under the India- Pakistan's Pre-notification of flight testing of ballistic missiles agreement (2005), each country must provide the other an advance notification on flight test it intends to take for any land or sea launched, surface-to-surface ballistic missile.
- Before the test, the country must issue Notice to Air Missions (NOTAM) or Navigational Warning (NAVAREA) to alert aviation pilots and seafarers, respectively.
- The testing country must ensure that the launch site is not within 40 km, and the planned impact area is not within 75 km of either the International Boundary (IB) or the Line of Control (LoC).
- The planned trajectory should not cross the IB or the LoC and must maintain a horizontal distance of at least 40 km from the border.

Pre notification:

- The testing country must notify the other nation no less than 3 days in advance of the commencement.
- The pre-notification has to be conveyed through the respective Foreign Offices and the High Commissions.

What is the recent case of misfire?

- Neither country has spelt this out; Pakistan has only called it a "supersonic" missile.
- Some experts have speculated that it was a test of one of India's top missiles, BrahMos, jointly developed with Russia.
- A striking aspect of the episode is that the missile changed direction mid-air.
- Possible reasons for change in missile direction
 - It could be due to incorrect coordinates
 - If somebody was to jam the missile while in flight, by some cyber means
 - If the target data that has been fed into the missile gets corrupted

BrahMos Missile System



This missile can be launched from submarine, ships, aircraft or land.

It is notably one of the fastest supersonic cruise missiles in the world.

It is the world's fastest anti-ship cruise missile currently in operation.

A **NOTAM** is a notice containing information essential to personnel concerned with flight operations but not known far enough in advance to be publicized by other means.

Navigational Warning Service (WWNWS): Navigational warnings provide early information of important incidents which may constitute a danger to navigation. Many navigational warnings are of a temporary nature, but others remain in force for several weeks and may be succeeded by Notice to Mariners (NMs).

The BrahMos Missile of the Indian Armed forces is a medium range supersonic cruise missile developed by DRDO and Russia.

BrahMos was named after two major rivers of India and Russia: Brahmaputra and Moskva.

The technology used in this joint venture is based on the Russian P-800 Oniks cruise missile and similar sea-skimming cruise missiles from Russia.

The land-launched and ship-launched versions are already in service.

An air-launched variant of BrahMos appeared in 2012 and entered service in 2019.

A hypersonic version of the missile, BrahMos-II, is also presently under development with a speed of Mach 7-8 to boost aerial fast strike capability.

It was expected to be ready for testing by 2024.

1.18 How War Can Hit Semiconductor Supply?

The global semiconductor chip supply chain which was earlier hit by the COVID-19 pandemic may again face a crisis due to the Russia-Ukraine war. Both Russia and Ukraine contribute to the global semiconductor supply chain.

Impact on the Russian Semiconductor industry:

- The growing sanctions on Russia will cripple its domestic semiconductor chip industry.
- Due to export and import controls, it will be difficult for Russia to import high-end processors and chipsets, which are needed for advanced defense and space systems.
- India also exports some semiconductor chips to Russia and the western sanctions, especially by the U.S. might impact India's exports to Russia.

Alternatives:

- The United States and the United Kingdom are the major suppliers of Palladium.
- For the etching process, Neon can be replaced with Chlorine- and Fluorine-based gases.

Contribution of Ukraine:

Ukraine is one of the world's largest suppliers of Neon gas, which is used in the etching process. Thus, the usage of Neon gas is important for the fabrication of semiconductors.

Neon gas is a byproduct of steel production. It is produced by filtration of the gases released during the manufacturing of steel.

Neon is used for photolithography which is a method for fabricating integrated circuits.

Contribution of Russia:

Russia is the world's largest exporter of Palladium and the current sanctions and export controls on Russia will affect the global supply of Palladium.

Palladium is known for its conductivity and non-corrosive ability and is thus used for plating in the semiconductor industry.

It is used to coat electrodes that help control flow of electricity and in plating circuit boards.

Semiconductors

- Semiconductors are materials which have a conductivity between conductors (generally metals) and nonconductors or insulators (such as most ceramics)
They are driving the next phase of digital transformation under **Industry 4.0**.
- Semiconductors also known as integrated circuits or more commonly just chips, make electronic items smart. Made from a material, usually silicon, that "semi-conducts" electricity, the chip performs a variety of functions.
- **Memory chips**, which store data, are relatively simple and are traded like commodities. **Logic chips**, which run programs and act as the brains of a device, are more complex and expensive. These often carry names like Apple or Nvidia, but those companies are actually just the designers of the semiconductors, which are manufactured in factories called **foundries**.
- Semiconductor manufacturing is very complex and technology-intensive sector involving huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology, which require significant and sustained investments.
- A factory also uses enormous amounts of water and electricity and is vulnerable to even the tiniest disruptions, whether from dust particles or distant earthquakes.

1.19 How South Asia Views War

Some of India's neighbour voted against Russia at UNGA while some abstained.

Sri Lanka abstained from voting due to:

- Its import dependent economy has been crippled due to shortage of forex as tourism declines. Ukraine and Russia were a major market.
- Surge in oil prices due to sanctions on Russia has made India's \$500mn credit line look inadequate for fuel purchases.
- Russia is also a major buyer of tea and Sri Lanka needs to find a way around sanctions for economic growth.

Pakistan abstained too:

- Its ties with Russia were built over a decade as a response to its tension with USA during Afghan war.
- US-Pak relations have cooled down, especially after US withdrawal from Afghanistan.
- Pakistan hopes to build a new axis with China and Russia to take control of Eurasia.

Bangladesh has own reasons for abstaining:

- Issue with US' decision to sanction Rapid Action Battalion, an elite paramilitary deployed against jihadist groups for alleged human rights violation.
- Moscow helped Bangladesh with military during 1971 war while US sided with Pakistan.
- Russia is now construction Bangladesh's 1st nuclear plant at Rooppur.

Nepal voted against Russia:

- Sandwiched between China and India, Nepal voted against Russia as it condemns use of any force against territorial integrity.
- Close relations with US: \$500mn US grant for developmental projects.

Bhutan voted against Russia:

- As it used same geopolitics logic it faces like Nepal. Bhutan views Russian invasion as display of supremacy of a big power, much like China, which claims Bhutan's territories.

Afghanistan voted against Russia:

- Afghanistan continues to be represented at the UN by its ousted government.

1.20 Export Avenue for Farmers

With a bumper harvest on the way, and prices having firmed up because of the war in Ukraine, Indian farmers could have an opportunity for higher exports amid restrictions on Russian cargo movement.

Reasons for increasing exports:

- The surge in rice exports since 202-21 has been driven by a drought in Thailand.
- Diversion of free/subsidised grains meant for PDS substantially increased post pandemic.
- Russia and Ukraine account for 28% of wheat export. The war has led to port closures in Black sea and Russian cargo movement has been restricted through the Caspian sea.

Benefits:

- As supplies from these two key agri powerhouses have dried up, it has created opportunities for India to fill the gap, even if partially.
- Further, it has driven up global prices and can provide better monetary gains for farmers.
- Farmers in Rajasthan, MP, KNK, Bihar, Gujarat are likely to release MSP-plus prices on the back of rising export demand.
- With lower procurement and PM Garib Kalyan Yojana ending this month, there could be a reduction in the centre's food subsidy outgo as well.
- The improved price sentiment may induce farmers to plant more area under maize, cotton, soyabean, sunflower in the upcoming kharif season and can help in crop diversification.

Issues:

- There is a possibility of exporters competing among themselves to ship out maximum quantity of grains. eg: Indian wheat being heavily discounted.
- Logistics issue: Rush of cargoes is resulting in congestion at ports and vessel wait period is also increasing.
- Increase in fertiliser prices and their raw materials/intermediates can lead to increase in overall cost.

Way forward:

- Ensuring adequate availability of urea, DAP, MOP (muriate of potash) well before the start of kharif plantings is necessary.
- The government is in talks with other countries such as Canada, Israel etc to secure supply of various inputs.
-

1.21 Draft National Policy for Medical Devices, 2022

The government is proposing a new Draft National Policy for Medical Devices, 2022 to reduce India's dependence on import of high-end medical devices.

Objectives:

- Adopting public-private partnerships to reduce the cost of healthcare, drive efficiency, and aid quality improvements in medical devices manufactured in the country.
- It aims to become one of the top five global manufacturing hubs for medical devices by 2047.

Need:

- India's medical devices sector has so far been regulated as per provisions under the Drugs and Cosmetics Act of 1940, and a specific policy on medical devices has been a long standing demand from the industry.
- The policy also aims to increase India's per capita spend on medical devices. India has one of the lowest per capita spend on medical devices.
- With the new policy, the government aims to reduce India's import dependence from 80 per cent to nearly 30 per cent in the next 10 years.
- Indian players in the space have so far typically focussed on low-cost and low-tech products, like consumables and disposables, leading to a higher value share going to foreign companies.

Key proposals:

- Incentivising the export of medical devices and related technology projects through tax rebates and refunds
- Increasing government spending in "high-risk" projects in the medical devices sector
- Single-window clearance system for licencing medical devices
- Pricing environment with no price control on newly developed innovation in the sector
- Allot a dedicated fund for encouraging joint research involving existing industry players, reputed academic institutions and start-ups.
- NPPA (National Pharmaceutical Pricing Authority) shall be strengthened with adequate manpower of suitable expertise to provide effective price regulation balancing patient and industry needs.
- Pharmaceuticals Department will also work with industry to implement a Uniform Code for Medical Device Marketing Practices (UCMDMP)

Key issues:

- The key challenges in manufacturing medical devices in India include lack of adequate infrastructure and logistics, concentrated supply chains and high cost of finance.
- Medical devices sector in India is very small in size as compared to the rest of the manufacturing industry though India is the 4th largest market in Asia.

Way forward:

- The Production Linked Incentive (PLI) scheme for promoting domestic manufacturing of Medical Devices.
- Medical devices has been recognised as a sunrise sector under the 'Make in India' campaign in 2014.

1.22 Why Special Situation Funds are Necessary

India suffers from a chronic bad debt problem. To overcome this problem, banks and financial institutions were initially allowed to sell their stressed loans only to ARCs. Now they can sell to SSFs too.

- Higher bad debt requires higher provisioning, locking up more capital in the banking system. This reduces credit supply and hurts economic growth.
- To overcome this problem, banks and financial institutions were initially allowed to sell their stressed loans only to ARCs.
- Transfer of stressed loans would release capital locked-up in the banking system and help improve credit supply.

Understanding AIFs and SSF:

- SEBI has introduced SSFs as a distinct sub-category of Category I Alternative Investment Funds (AIFs).

Indian financial markets witnessed two crucial reforms earlier this year.

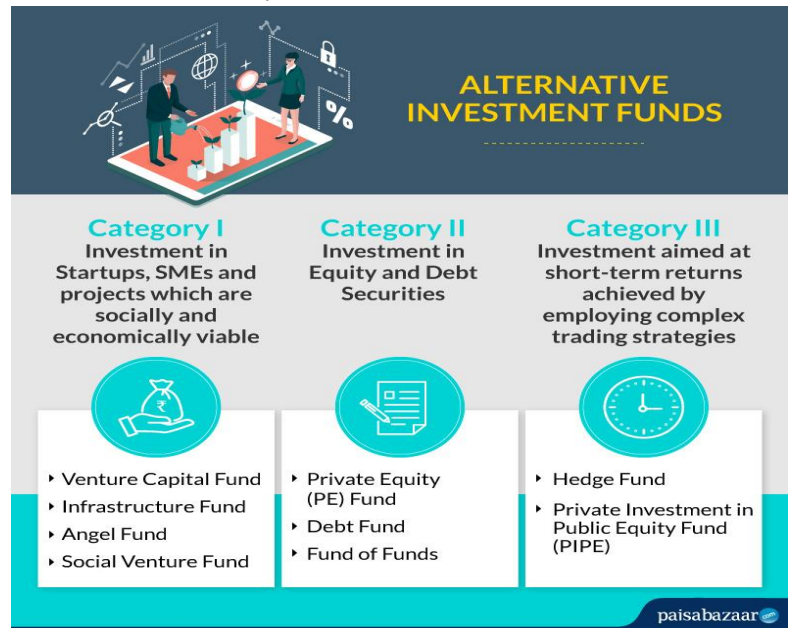
1] SSF: SEBI came out with a dedicated regulatory framework for special situation funds (SSFs).

2] Dual structure bad bank: The RBI approved the new dual-structure bad bank, NARCL-IDRCL.

- AIFs manage privately pooled funds raised from sophisticated investors with deep pockets.
- While AIFs have traditionally played a prominent role in equity markets, Regulations did not permit AIFs to participate in the secondary market for corporate loans extended by banks and NBFCs.
- The new regulations now create a special sub-category of AIFs, namely SSFs, which are allowed to participate in the secondary market for loans extended to companies that have defaulted on their debt obligations.

Why SSFs must be allowed full participation across the entire spectrum of secondary market for corporate debt:

- If lenders and bond investors could offload potentially stressed assets to SSFs before defaulting in the secondary market, they would benefit from a lesser haircut.
- Allowing SSFs to purchase investment-grade loans would also improve the liquidity in the secondary market for corporate loans.
- Secondary trading of loans is now institutionalised in international financial markets. The RBI task force on secondary markets for corporate loans, chaired by T N Manoharan, made this suggestion in 2019.
- SSFs cannot borrow funds or engage in any leverage except for temporary funding requirements. Consequently, risks associated with liquidity, credit or maturity transformation and asset-liability mismatches are unlikely to arise.
- Given their structure, SSFs are likely to acquire sufficient debt in a distressed company to acquire control or to influence its subsequent insolvency or restructuring process to maximise its value through business turnaround or sale.



1.23 Wearing Hijab is not Essential Part of Religion: Karnataka HC

Key takeaways:

- The HC held that wearing hijab is not an essential religious practice in Islam and is not, therefore, protected under by the right to freedom of religion guaranteed by Article 25 of the Constitution.
- The court said it was a reasonable restriction that was constitutionally permissible.
- The Bench also upheld the legality of the order prescribing guidelines for uniforms in schools and pre-university colleges.
- The court said that school uniform will cease to be a uniform if hijab is also allowed.

Various viewpoints:

- Some factions have said that the order is a blow to right to education for Muslim women.
- Other see it as an empowerment of women.
- Feminists says that it's not about an item of clothing, it's about the right of a woman to choose how she wants to dress.
- The Leftists perceived it as a blow against the universal right to education without discrimination, guaranteed by the law and the Constitution of India.

The doctrine of “essentiality”:

- It was invented by a seven-judge Bench of the Supreme Court in the ‘Shirur Mutt’ case in 1954. The court held that the term “religion” will cover all rituals and practices “integral” to a religion, and took upon itself the responsibility of determining the essential and non-essential practices of a religion.
- Essential religious practice test is a contentious doctrine evolved by the court to protect only such religious practices which were essential and integral to the religion.

1.24 Indigenisation in Defence Technologies

India’s successive abstentions during votes on Ukraine in the UN Security Council and elsewhere may be hard to justify on moral grounds, but they are certainly rooted in “realpolitik”.

Reasons for India’s stance:

- There is irrefutable logic in the argument that safeguarding the source of 60-70 per cent of its military hardware constitutes a prime national interest for India.
- Any interruption in the supply of Russian arms or spares could have a devastating impact on our defence posture vis-à-vis the China-Pak axis.
- Seen widely as pro-Russian, this posture is likely to affect India’s international standing and bears reflection.

Suggestion:

- India needs a “de-Russification of the armed forces” and the genuine “indigenisation of India’s defence technological and industrial base (DTIB)”
- Russia’s military-industrial complex, in oligarch hands, has been struggling against inefficiency, poor quality control and deficient customer support. It is time to initiate a process of progressive “de-Russification” of Indian armed forces.
- Atmanirbharta requires selective identification of vital military technologies in which we are deficient and demands the initiation of well-funded, time-bound, mission-mode projects to develop (or acquire) the “know-how” as well as “know-why” of these technologies.

1.25 Re-introducing African Cheetahs to India

The cheetah, which became extinct in India after Independence, is all set to return with the Union Government launching an action plan in Kuno National Park in Madhya Pradesh. According to the plan, about 50 of these big cats will be introduced in the next five years, from the Africa savannas, home to cheetahs, an endangered species.

The major reasons for the extinction of the Asiatic cheetah in India:

- Reduced fecundity and high infant mortality in the wild
- Inability to breed in captivity
- Sport hunting and
- Bounty killings
- It is recorded that the last cheetahs were shot in India in 1947, but there are credible reports of sightings of the cat till about 1967.

Historically, Asiatic cheetahs had a very wide distribution in India.

Most of the records are from a belt extending from Gujarat passing through Maharashtra, Madhya Pradesh, Uttar Pradesh, Chhattisgarh, Jharkhand and Odisha.

The cheetah’s habitat was also diverse, favouring the more open habitats: scrub forests, dry grasslands, savannahs and other arid and semi-arid open habitats.

Cheetah, the world’s fastest land animal was declared extinct in India in 1952.

The Asiatic cheetah is classified as a “critically endangered” species by the IUCN Red List, and is believed to survive only in Iran.

What is the officially stated goal?

- To establish viable cheetah meta-population in India that allows the cheetah to perform its functional role as a top predator
- To provide space for the expansion of the cheetah within its historical range thereby contributing to its global conservation efforts.

Issues in re-introduction:

- Experts find it difficult whether the African cheetahs would find the sanctuary a favorable climate as far as the abundance of prey is concerned.

- The habitat of cheetahs needed to support a genetically viable population.
- The issue calls for an open and informed debate.

1.26 Defining who is ‘Assamese’: Attempts, Challenges

Last week, the Assam government informed the Assembly that nearly 1.44 lakh illegal foreigners had been identified in the state this year based on the 1985 Assam Accord.

Who is a foreigner under the Assam Accord?

- The Assam Accord was signed in 1985 by the Centre and the Assam government with the All Assam Student Union (AASU) and the All Assam Gana Sangram Parishad.
- The Accord set March 24, 1971 as a cut-off. Anyone who had come to Assam before midnight on that date would be an Indian citizen, while those who had come after would be dealt with as foreigners.

What are the expressions for which the definitions have not been determined? Why are they important?

- The definitions of phrases mentioned in the Accord such as ‘Axomiya janagan’ (Assamese people), ‘khilonjia’ (indigenous) and ‘adi basinda’ (original inhabitants) were yet to be determined.
- However, it doesn’t provide clear cut definitions to identify who would be the “Assamese people”.

Issues with the cut-off date

- The cut-off for the rest of India is 1948, many noted that the Assam Accord would grant citizenship to a section of migrants who would be counted as foreigners elsewhere in the country.
- Clause 6 was, therefore, seen as a protective provision which would guarantee certain benefits to the Assamese people, while excluding some sections among those granted citizenship on the basis of the 1971 cut-off.

Why is the ‘Assamese’ definition difficult?

- Because Assam’s demography has been shaped by decades of migration.
- Many of the migrants had settled here during the colonial era.
- While they might not be native speakers of an indigenous language, such as Assamese or Bodo or Karbi, the question was whether the definition of “Assamese” could exclude someone, for example, whose family might have lived in Assam for 100 years.

1.27 Why ‘De-Dollarisation’ is Imminent

De-dollarisation refers to reducing the dollar’s dominance of global markets. It is a process of substituting US dollar as the currency used for:

- Trading oil and/ or other commodities
- Buying US dollars for the forex reserves
- Bilateral trade agreements
- Dollar-denominated assets
- The dominant role of the dollar in the global economy provides the US a disproportionate amount of influence over other economies.

How sanctions on Russia could lead to de-dollarisation?

- The imposition of sanctions and the exclusion from SWIFT by the US could trigger a faster de-dollarisation.
- Efforts are underway for the possible introduction of a new Russia-China payment system, bypassing SWIFT and combining the Russian SPFS (System for Transfer of Financial Messages) with the Chinese CIPS (Cross-Border Interbank Payment System).

Why the dominance of the dollar continues?

Currently, about 60 per cent of foreign exchange reserves of central banks and about 70 per cent of global trade is conducted using USD.

The US dollar sealed its position in the early 1970s with a deal with the oil-rich Kingdom of Saudi Arabia to conduct global energy trade in dollars.

The status of the dollar was enhanced by the collapse of the Bretton Woods system, which essentially eliminated other developed market currencies from competing with the USD.

Apart from the Euro and gold, most other foreign currencies have some inherent risks associated with them.

For instance, with the historically “neutral” Switzerland joining the EU in imposing sanctions on Russia, it eliminates the Swiss Franc from being an asset that can work as a hedge against economic sanctions.

- The “de-dollarisation” by several central banks is imminent, driven by the desire to insulate them from geopolitical risks, where the status of the US dollar as a reserve currency can be used as an offensive weapon.
- Russia had started its three-pronged efforts towards de-dollarisation in 2014 when sanctions were imposed on it for the annexation of Crimea.
 - Russia reduced its share of dollar-denominated assets to about 16% in 2021.
 - It also reduced its share of trade conducted in USD by prioritising national currencies in bilateral trade.
- China aims to use trading platforms and its digital currency to promote de-dollarisation. It has established RMB trading centres in Hong Kong, Singapore and Europe.
 - The International Monetary Fund (IMF) has already added Yuan to its SDR (Special Drawing Rights) basket in 2016.
 - However, the lack of full RMB convertibility will hinder China’s de-dollarisation ambition.
- India has also had to work out alternative arrangements, including a barter arrangement, with certain sanctioned countries in the past.
- More recently, India and Russia are said to be considering the use of the Chinese yuan as the reference currency to facilitate oil trade between the two countries.

1.28 The Rank Pension Case

The Supreme Court has ruled that there was “no constitutional infirmity” in the way the government had introduced ‘one rank, one pension’ (OROP) among ex-service personnel.

Need for the scheme:

- Early age of retirement: The other ranks, which are soldiers, usually retire at age 35.
- No benefits from pay commissions: Unlike government employees who retire close to 60, soldiers can thus miss out on the benefits from subsequent pay commissions.
- Salary based pension: And since pensions are based on the last drawn salary, pensions too are impacted adversely.
- Ranks based discrimination: The age when officers in the military retire depends upon their ranks. The lower the rank, the earlier they superannuate.

Earlier pension mechanism:


- Till 1973, there was a concept known as the Standard Rate of Pension, which was similar to OROP.
- Changes brought by 3rd and 4th pay commissions led to a situation where the benefits of the successive pay commissions were not passed to servicemen who had retired earlier.
- Pensions differed for those who had retired at the same rank, with the same years of service, but years apart.
- The Brig K P Singh Deo committee in 1983 recommended a system similar to Standard Rate of Pension, as did Parliament’s standing committees on defence.

Issues:

- During the OROP protests of 2013-15, it was argued repeatedly that meeting the demand would be financially unsustainable.
- Because soldiers retire early and remain eligible for pension for much longer than other employees, the Defence Ministry’s pension budget is very large, impacting capital expenditure.
- The Defence Ministry’s pension-to-budget ratio is the highest among all ministries, and pensions are more than one-fifth of the total defence budget.

Current challenges:

- The petitioners contended that the principle of OROP had been replaced by ‘one rank multiple pensions’ for persons with the same length of service.
- They submitted that the government had altered the initial definition of OROP and, instead of an automatic revision of the rates of pension, any future raising of pension rates would be passed on to past pensioners but the revision would now take place at periodic intervals.
- According to the petitioners, this was arbitrary and unconstitutional under Articles 14 and 21.

NEWSICLE			
THE ABC OF OROP ONE RANK, ONE PENSION SCHEME			
WHAT IS OROP ➤ Payment of uniform pension to military personnel retiring in same rank with same length of service, irrespective of date of retirement ➤ Any hike in pension rates to be automatically passed on to past pensioners			
THE NUMBERS INVOLVED	24.25 lakh Registered ex-servicemen	Over 13 lakh serving military personnel	Rs 8,300cr Estimated cost of OROP
PROBLEMS			
Financial: Grant of full OROP will further bloat the govt's pension bill	Administrative: Huge task to pass all the benefits, with no cut-off date, to all living ex-servicemen	Legal: Will lead to similar demands by other govt employees, especially paramilitary forces	WHY IT IS BEING DEMANDED ➤ Civilian employees retire at 60. Military personnel retire much earlier (based on rank) when family liability is maximum and 2nd career is difficult ➤ Sepoys retire at 35-38; NCOs & JCOs at 40-45 (Only 10% of sepoys become JCOs) ➤ Most officers retire in early-50s (just a few become Lt-Generals/Air Marshals/Vice-Admirals to serve till 60) ➤ Terms and conditions of military service much tougher than civilian government employees ➤ Soldiers undergo hardship postings, with risk to life and restriction of fundamental rights ➤ Successive pay commissions have widened gap between veterans who have retired earlier and those who retire later

- The court did not agree with the argument that the government's 2015 policy communication contradicted the original decision to implement OROP.
- It said that "while a decision to implement OROP was taken in principle, the modalities for implementation were yet to be chalked out."

1.29 Russia's Offer of Cheaper Oil is Tempting, but India Must be Cautious

With oil above \$100, the government now has to spend twice as much to import oil as it did earlier. Russia has offered to sell oil at lower prices to India.

Issues in buying oil from Russia:

- Impact on India's export due to threat of the secondary sanction by the US:
 - Whenever global crude oil prices have risen above \$100 in the past, India was able to cushion that shock primarily through growth in exports.
 - However, exports now have fallen dramatically to 18 per cent of GDP, which must be revived.
 - The US is India's biggest export market.
 - The US has already cautioned India about abetting Russia by buying Russian oil.
- With US sanctions against Russia, Russia will insist on payment in rubles.
 - If India is forced to accept trading in rubles with Russia, then it is very likely that China, which is India's second-largest trading partner, may also insist on payments in Chinese yuan.
 - This cascading "de-dollarisation" phenomenon will further irk and antagonise the US, since it weakens the dollar's status as the world's reserve currency.
 - This can catapult India into the centre of a geo-economic war that it can ill afford.

Opportunity for India

- The Russia-Ukraine conflict can be an opportunity for India to step up and capture global market share in goods and services.
- There is already talk of India capitalising on wheat exports, albeit a tiny share of India's overall exports, as a fallout of global sanctions against Russian wheat.

1.30 National Land Monetization Corporation:

The Union Cabinet has approved the creation of the National Land Monetisation Corporation (NLMC), the Special Purpose Vehicle (SPV) announced in the Union Budget 2021-22.

Monetization and its benefits:

- When the government monetises its assets, it essentially means that it is transferring the revenue rights of the asset (could be idle land, infrastructure, PSU) to a private player for a specified period of time.
- In such a transaction, the government gets in return an upfront payment from the private entity, regular share of the revenue generated from the asset, a promise of steady investment into the asset, and the title rights to the monetised asset.
- It helps create new sources of revenue for the government.
- It can unlock the potential of unused or underused assets by involving institutional investors or private players.
- It is also done to generate resources or capital for future asset creation, such as using the money generated from monetisation to create new infrastructure projects.

The NLMC will be a firm, fully owned by the government, to carry out the monetisation of government and public sector assets in the form of surplus, unused or underused land assets.

It will fall under the administrative jurisdiction of the Ministry of Finance and will be set up with an initial authorised share capital of ₹5,000 crore and a paid-up capital of ₹150 crore.

Apart from monetising underutilised or unused land parcels of Central Public Sector Enterprises (CPSEs), the

What will the NLMC do?

- The setting of the NLMC will speed up the closure process of the CPSEs and smoothen the strategic disinvestment process.
- It will also enable productive utilisation of these under-utilised assets by setting in motion private sector investments.

- It will boost new economic activities such as industrialisation, boosting the local economy by generating employment and generating financial resources.
- the NLMC will act as an advisory body and support other government entities and CPSEs in identifying their surplus non-core assets.
- According to the Economic Survey 2021-2022, as of now, CPSEs have put nearly 3,400 acres of land on the table for potential monetisation.
- They have referred this land to the Department of Investment and Public Asset Management (DIPAM).

Issues:

Volatile market conditions	Issue with transfer of rights	Unattractiveness of PPP
<ul style="list-style-type: none"> • In FY 2021-22, the government has hardly been able to raise expected amounts through various forms of disinvestment. • For example, the Life Insurance Corporation IPO, which was supposed to raise ₹60,000 crore is now shrouded in uncertainty owing to the Russia-Ukraine crisis making stock markets volatile. 	<ul style="list-style-type: none"> • The process of asset monetisation does not end when the government transfers revenue rights to private players. • Identifying profitable revenue streams for the monetised land assets, ensuring adequate investment by the private player and setting up a dispute-resolution mechanism are also important tasks. 	<ul style="list-style-type: none"> • Posing as another potential challenge would be the use of Public Private Partnerships (PPPs) as a monetisation model. • For instance, the results of the Centre's PPP initiative launched in 2020 for the Railways were not encouraging.

1.31 Central University Entrance Test: Benefits and Concerns:

University Grants Commission (UGC) has announced the introduction of the Central University Entrance Test (CUET), which is now mandatory for undergraduate admission at any of the 45 central universities in the country.

Background:

- Several governments, over the years, have made attempts to replace multiple entrance tests with a single common test. In 2010, the government had launched the Central Universities Common Entrance Test (CUCET) however it failed to gather steam since only 14 central universities had adopted it until last year.
- CUET is a revamped version of CUCET and it is now compulsory for all 45 central universities to adopt it.

The first part will test a candidate on a language of her choice. This will consist of reading comprehension, questions on vocabulary, synonyms and antonyms, besides other things. There will be a choice of 13 languages

The second part is focused on testing a candidate's domain-specific knowledge. This section offers a total of 27 domains, and a candidate can choose to have her knowledge tested in at least one and a maximum of six domains.

The third part of the entrance test will be a general test with questions on general knowledge, current affairs, general mental ability, numerical ability, quantitative reasoning, logical and analytical reasoning.

Features:

- The National Testing Agency (NTA), which conducts entrance tests such as JEE (Main) and UGC-NET, will also conduct CUET for all central universities.
- A student's Board marks will have no role in determining her admission to a college or a programme. Admission will be based only on her CUET score.
- Universities can use Board marks as the minimum eligibility criteria for admission though.
- It will be a 3.5 hours computer-based test that will be held in two shifts and can be taken in 13 languages.
- The test will have 3 parts:

Scope:

- At the moment, CUET has been made compulsory for central universities but the government is open to other institutions, including private universities, adopting this examination instead of conducting their own.
- Further, conducting admissions to postgraduate programmes through CUET is not compulsory for central universities.

Benefits:	Issues:
<ul style="list-style-type: none"> • The government did not favor using Board marks for admission because of the ‘diversity’ in evaluation methods adopted by different Boards. Some Boards like CBSE are more generous. • The current pattern has led to generation of unrealistic cutoffs. • It would give students another opportunity to show their potential even if they are unable to score well in board examinations. • During the pandemic, many schools awarded marks in an arbitrary manner or inflated the marks of their students. In such a situation, the 12th marks don’t show a true picture. • Easing of Burden: The students need to give just one entrance test rather than multiple entrances. 	<ul style="list-style-type: none"> • CUET will result in additional expenditure towards coaching. This would put financial strain on the marginalized section. • With CUET in place, students might pay less attention to 12th class syllabus and school learning. They would focus on CUET and may even start skipping their regular classes. • The new system will curtail the autonomy of institutions to respond to ground realities. Cut-offs are decided so as to have desired over-admission to ensure that seats do not go empty after closure of admission process. • CUET can be taken in 13 languages but experts have expressed concerns over the quality of content that would be provided in vernacular languages versus English.

Way forward:

- There should be a minimum weightage of 12th marks so that students don’t completely ignore their board examinations for CUET.
- Teachers of government schools should give additional classes to students for preparing for CUET. This would reduce the financial burden of marginalized sections.
- The government should give extra funds for spending on education so that more computer labs are built for conducting CUET.
- A provision of common counseling sessions for CUET students in the future to ease the admission process as is done in the JEE(Main) entrance test.

1.32 Needed, an Indian Legislative Service:

- P.P.K. Ramacharyulu was appointment as the Secretary-General of the Upper House by M. Venkaiah Naidu, Chairman of the Rajya Sabha, on September 1, 2021.
- Ramacharyulu was the first-ever Rajya Sabha secretariat staff who rose to become the Secretary-General of the Upper House.
- A precedent — appointing the Secretary-General from ‘outside’ or bureaucracy, often retired — very hard to unfollow was made possible by the Chairman

Secretary general:

- Article 98 provides the scope of separate secretariats for the two Houses of Parliament.
- The principle, hence, laid in the Article is that the secretariats should be independent of the executive government.
- The Secretary-General, with the rank equivalent to the Cabinet Secretary, is the third most key functionary of the Rajya Sabha after the Chairman and the Deputy Chairman.

Background:

- Since the first Parliament in 1952, Except for some of the lateral entry staff, who could become Secretaries-General, all the others were from the civil services or other services.
- Since 1993, all the Secretaries-General of the Rajya Sabha were from the civil service till the appointment of Ramacharyulu as the 12th Secretary-General.

Issues with Civil Servants being appointed as Secretary-General of Parliament:

- When civil servants are hired to the post of Secretary-General, this not only dishonours the purpose of ensuring the independence of the Secretariat but also leads to a conflict of interests.
- Appointment of civil servants as secretary general breaches the principle of separation of power.

- Compromises Reciprocal Supervisory Nature of Parliamentary Democracy: In a parliamentary polity, one of the roles of Parliament is to watch over the executive's administrative behaviour.

Way Forward- Constituting an Indian Legislative Service:

- There are thousands of legislative bodies in India, ranging from the panchayat, block panchayat, etc. Despite these mammoth law-making bodies, they lack their own common public recruiting and training agency at the national level.
- A common Indian Legislative service can build a combined and experienced legislative staff cadre, enabling them to serve from across local bodies to Union Parliament. Presently, the Parliament and State legislative secretariats recruit their pool of bureaucrats separately.
- The Rajya Sabha can, under Article 312, pass a resolution, in national interest, to create an all-India service common to both the Union and the States. This enables Parliament to create such a service by law.

1.33 What is NASA's Artemis I Mission?

National Aeronautics and Space Administration (NASA) rolled out its Artemis I moon mission to the launchpad for testing at the Kennedy Space Centre in Florida, United States.

ARTEMIS:

- NASA's Artemis mission is touted as the next generation of lunar exploration, and is named after the twin sister of Apollo from Greek mythology.
- Artemis I is the first of NASA's deep space exploration systems.
- It is an uncrewed space mission where the spacecraft will launch on SLS — the most powerful rocket in the world.
- The Orion spacecraft is going to remain in space without docking to a space station, longer than any ship for astronauts has ever done before.
- The SLS rocket has been designed for space missions beyond the low-earth orbit and can carry crew or cargo to the moon and beyond.
- With the Artemis Mission, NASA aims to land humans on the moon by 2024, and it also plans to land the first woman and first person of colour on the moon.
- NASA will establish an Artemis Base Camp on the surface and a gateway in the lunar orbit to aid exploration by robots and astronauts.

What is the mission trajectory?

- SLS and Orion under Artemis I will be launched from the Kennedy Space Centre in Florida, U.S. in the summer of 2022.
- On its way to the moon, Orion will be propelled by a service module provided by the European Space Agency (ESA).
- The spacecraft will communicate with the control centre back on Earth through the deep-space network.
- It will fly around 100 km above the surface of the moon and use its gravitational pull to propel Orion into an opposite deep orbit around 70,000 km from the moon, where it will stay for approximately six days.

1.34 Green Bonds, Digital Currency Hold Promise

- The SGB (sovereign green bond) raised will be part of the aggregate borrowing programme and has to be used for projects which are ESG (environment, social and governance) compliant.
- Hence, if the bond is being used to finance a power project or road, or in case it is used to finance revenue expenditure, it has to be ESG compliant.
- If they succeed at the central level, green bonds can be replicated by states.

Challenges for SGB

- Pricing challenge: As these bonds are different from G-secs (government securities), they may have to provide a better return as all ESG compliant companies have to make special investments that will push up costs.
- Further, given the low-interest rates prevailing today — real returns on deposits are negative — the SGBs can be issued as tax-free bonds, open to the public.

Central bank digital currency (CBDC) and challenges:

- Any issuance of CBDC on a voluntary basis raises a question on the security of the owner's information. CBDC has to be clear on the issue of confidentiality as it is bound to be a matter of concern.

- The future of the banking system: If people have to be incentivised to move voluntarily to the CBDC, the cash exchanged must earn interest or else all money will go to bank accounts where a minimal interest rate can be earned.
- Issue of security: Any financial system that runs on technology can be hacked.
- There is a real danger of cyber fraud increasing as the majority of the population is not tech-savvy.
- Similarly, there is always downtime for bank servers when banking transactions cannot be carried on. This cannot be allowed to be the case with CBDC as it has to be available on a 24 x 7 basis.

1.35 Why Mariupol is Important to Ukraine and Russia?

- Location: Mariupol is in South-eastern Ukraine and is located on the north coast of the Sea of Azov. It is also a large base for Ukrainian armed forces. It is a strategic target for the Russian forces. Notably, Mariupol is an important city for Ukraine and also for the pro-Russian separatists.
- Economic Importance: Mariupol is considered to be a metallurgical centre for iron and steel works. Metinvest, Ukraine's largest steel plant is also located in the city. Russia is targeting Mariupol for the economic strangulation of Ukraine.
- Largest trading port in the Azov Sea: Ukraine exports grain, iron and steel, and heavy machinery to European and Middle Eastern countries from Mariupol. Notably, Mariupol is on the land bridge that Russia is planning to build between the separatist republics and Crimea.
- If Mariupol was seized, Russia would also end up with full control of more than 80% of Ukraine's Black Sea coastline - cutting-off its maritime trade and further isolating it from the world.
- Mariupol is home to a Ukrainian militia unit called the Azov Brigade, named after the Sea of Azov which links Mariupol to the rest of the Black Sea. The Azov Brigade contains far-right extremists, historically including neo-Nazis.
- Although they form only the tiniest fraction of Ukraine's fighting forces, this has been a useful propaganda tool for Moscow, giving it a pretext for telling Russia's population that the young men it has sent to fight in Ukraine are there to rid their neighbour of neo-Nazis.

1.36 Time for India to Redefine its Relationship with Russia:

- Russia's war on Ukraine has decisively shaped international opinion. Indian foreign policy is also going to be affected in a profound manner.
- The Western world has imposed unprecedented sanctions against Russia and banned energy imports.
- New Delhi is concerned about the impact of these sanctions on global finance, energy supplies, and transportation, amid growing signs that they will constrain India's ability to import Russian oil.

India's challenges:

- Russia's increasing dependence on China: What must worry India is the fact that Russia will now become increasingly dependent on Chinese support to defend its policies.
- India's real strategic challenge is surfacing in the Indo-Pacific with the rise of China, as Beijing has consistently sought to expand its zone of military, economic and political influence through the Belt and Road Initiative.
- Though India would like the U.S. to continue to focus on China, it is not possible for Washington to ignore Russia's aggression along NATO's periphery.



How India's ties with Russia changed over time:

- Following the disintegration of the USSR, India joined Russia and China against the unipolarity of the U.S.
- For some time, this common concern about unipolarity put the three countries on the same path towards mutual cooperation and understanding.
- However, it soon became clear that India and China did not see eye to eye.
- Moreover, India was determined to maintain its partnership with Russia, an important arms supplier.
- Its ties with the U.S. have also improved significantly since the end of the Cold War.
- But continuing dependence on Russian weaponry has become India's strategic headache.

Way forward for India:

- A NATO-Russia Council was formed specifically to alleviate Russia's concerns, and that Russia was recognised as one of the world's leading industrial powers through a formal admission into the elite G-7.
- Though Moscow has drifted much closer to Beijing, and is sharply critical of India's engagement with the U.S. and the Quad, India finds it difficult to extend support to Ukraine.
- It goes without saying that the U.S. is the country most likely to bolster India's future as a great power.

1.37 What Centre Wants to Change in Delhi's Civic Body?

The Bill seeks to amend The Delhi Municipal Corporation Act, 1957, to effectively undo the earlier 2011 amendment to the Act.

Key features of the Bill:

<u>2011 ACT</u>	<u>2022 BILL</u>
<ul style="list-style-type: none">• Under the 2011 Act, the erstwhile Municipal Corporation of Delhi (MCD) was trifurcated into separate North, South, and East Delhi Municipal Corporations.• The Act mandates that the Commissioner will exercise his powers regarding building regulations under the general superintendence and directions of Delhi government.• The Act provides that the number of seats in the three corporations taken together should not be more than 272.• The Act provides for a Director of Local Bodies to assist the Delhi government and discharge certain functions which include:<ul style="list-style-type: none">• Coordinating between Corporations,• Framing recruitment Rules for various posts, and• Coordinating the collecting and sharing of toll tax.	<ul style="list-style-type: none">• The Bill replaces the three municipal corporations under the Act with one Corporation named the Municipal Corporation of Delhi.• The Bill instead empowers the central government to decide these matters.• The Bill states that the total number of seats in the new Corporation should not be more than 250.• The Bill omits this provision for a Director of Local Bodies.• The Bill provides that the central government may appoint a Special Officer to exercise powers of the Corporation until the first meeting of the Corporation is held.• The Bill adds that obligatory functions of the new Corporation will include establishing an e-governance system.

Issues:

- New delimitation exercise: Reducing the number of seats means a new delimitation exercise will have to be conducted.
- Bureaucratization: Appointing a Special Officer means that until the elections are concluded, the Centre will likely appoint an officer to run the corporation.
- The other significant change is the replacement of the word "government" with "Central government" in all places. The bill hence seeks to curtail the powers of the elected govt of New Delhi by introducing central hegemony.

1.38 A Good Foreign Policy Must also Make a Difference at Home

- Edited version of lecture delivered by India's External Affairs Minister at St. Stephen's College, Delhi on March 24.
- Foreign policy being the link to the outside, it should enable us to draw what we seek.
- This could be in terms of technology or capital, best practices, or even work opportunities.

Recent instances in which India's foreign policy directly influence the common man:

- Through Operation Ganga, Indian students stuck in Ukraine were brought home.
- When the first wave of Covid hit India in 2020, we scrambled across the world to secure PPEs, masks and ventilators.
- The second wave in 2021 saw a similar spike in demand for oxygen and specialised medicines from abroad.
- Locating, negotiating and contracting supplies became the priority for Indian diplomacy.

Influence of foreign policy at the collective level:

- When it comes to security, external or internal, diplomacy could be a preventive, a mitigator or a problem-solver.

- It can help raise awareness of a shared threat, just as it can find partners against common dangers.
- In Asia, all modernising economies have single-mindedly focused their external interactions on obtaining capital, technology and best practices from abroad.
- Newer challenges like green growth and climate action have started to open up still more possibilities.

Building blocks of India's foreign policy:

- The six broad objectives that were spelt out to the policy-makers and implementers were clear.
- 1] Shaping global perception: We must bring about a change of thinking in the world about us.
- 2] Partnership on equal terms: The partnerships we should create should be on more equal terms, and with smaller countries, more generous.
- 3] Shaping the global agenda: The global agenda and the big issues of our times should be shaped by India as much as possible.
- 4] Leveraging foreign policy for domestic progress: Foreign relationships should be actively explored and leveraged for domestic development and progress.
- 5] People-centric foreign policy: The very conceptualisation of foreign policy should be more people-centric.
- 6] Our culture, traditions and thoughts should percolate our own articulation as well as influence international debates and initiatives.
- Yoga and Ayurveda were obvious examples in this regard.

1.39 What is Behind the New Anti-India Campaign in Maldives?

The recent 'India Out' campaign in the Maldives is against the opposition to the Uthuru Thila Falhu (UTF) harbour development deal with India in February 2021, which is being seen as a way of allowing Indian military presence on native soil.

Reason:

- Reports are being published in Maldives media alleging that the present incumbent government is allowing India to establish a military base in the island by signing secret agreements, in exchange for financial assistance or other material benefits.
- This allegation is made against the government because the leader of the current ruling party Mohamed Nasheed urged India to intervene militarily to restore peace and democracy in 2018.
- Former President Abdullah Yameen is perceived as a friend of China. During Yameen's term as President from 2013 to 2018, New Delhi-Male relations deteriorated drastically.
- On the other hand, the present Solih administration opt for an 'India first' foreign policy. The Solih government has rejected the 'India Out' campaign.
- Foreign ministry's urged the media not to affect bilateral relations and, as per article 29 of the Vienna Convention on Diplomatic Relations, it is the responsibility of the Maldives to treat the diplomats with due respect, and take all appropriate steps to prevent any attack on freedom, and dignity of foreign diplomats.

India aldives relation:

- **Historical relations:**
 - Both nations' were Britain colonies.
 - India was among the first to recognise Maldives after its independence in 1965 and to establish diplomatic relations with the country.
- **Political relations:**
 - India and Maldives have consistently supported each other in multilateral fora such as the UN, the Commonwealth, the NAM and the SAARC.
 - India is a preferred destination for Maldivian for education, medical treatment, recreation and business.
 - Diaspora: Indians are the second largest expatriate community in the Maldives.
 - India has also offered a \$1.4-billion development assistance package to Maldives, which is being utilised in several projects.
- **Strategic location:**
 - Maldives holds strategic importance for India under the Modi government's 'Neighbourhood First' policy due to its location in the Indian Ocean.
 - The Eight Degree Channel is one of the major maritime lanes of the world.

Issues:

- There have been growing concerns regarding China's role in the Maldivian economy through so-called "debt-trap diplomacy."
- Maldives incurred a debt of about \$1.4 billion owing to loans from China to finance several of its infrastructure projects.
- Maldives and China had also entered into a free trade agreement.
- Dhruv controversy: India gave two Dhruv Advanced Light Helicopters (ALF) to the Maldives in 2010 and 2015 both of which were to be used for ocean search-and-rescue operations, maritime weather surveillance and for airlifting patients between islands. However, it stirred the controversy that the helicopters marked the start of military presence in the country.
- Another issue is the lack of transparency when it comes to the signing of agreements between India and the Solih government. The Maldives government has refused to share details of agreements signed with India citing security reasons.
- The Uthuru Thilafalhu is a strategically located atoll near the capital Malé and was called the UTF Harbour project. However, after the Solih government took over, there was speculation that the UTF project would be turned into an Indian naval base.

Way forward:

- India needs to remain careful if it wants to avoid a Nepal-like situation, where New Delhi's perceived interference in Nepal's internal affairs had turned the Nepali people against India. Having a lighter diplomatic footprint is the only way forward in the Maldives.'

1.40 The JCPOA Continues to be Elusive

The Vienna talks aimed at reviving the Joint Comprehensive Plan of Action (JCPOA), also known as the Iran nuclear deal, have slowed down.

Reasons:

- Russia has sought written guarantees from the U.S. that the economic sanctions imposed on it for its attack on Ukraine would not affect its role under the JCPOA or will not in any way harm its future trade and defence ties with Iran.
 - Russia, an original signatory of the JCPOA, is a member of the joint commission that supervises Iran's compliance with the provisions of the deal.
 - Russia would help Iran to downgrade its Fordow enrichment plant into an isotope manufacturing centre to be utilised for medicinal purposes.
 - Western commentators claim the Russians are deliberately trying to delay the finalisation of the agreement to thwart the U.S. attempts to relax sanctions on Iranian oil exports which would help in turn tame the soaring crude oil prices.
- Iran has been insisting on the removal of all sanctions imposed on it during the previous Donald Trump administration, including the removal of the Islamic Revolutionary Guard Corps (IRGC) as a U.S.-designated Foreign Terrorist Organisation (FTO).

Impact:

- Notably, the JCPOA carries much less significance for Iran now than it did in 2015.
- Iran has been able to sell a substantial amount of its crude in the international market and has also been able to withstand the adverse economic impact of the U.S. sanctions on it.
- It has also achieved technological achievements in the nuclear enrichment cycle.
- The growing nuclear capability of Iran and the delay in concluding a new deal to curb its nuclear programme threatens to deepen the security crisis in West Asia

Conclusion:

Iran uses its nuclear activities as a bargaining counter to seek an agreement that will best serve its interests. So, the early conclusion of the deal is important to turn the clock back on Iran's nuclear activities.

1.41 A Subregional Grouping that Must Get Back on Course:

- Founded in 1997, the seven-member BIMSTEC includes the littoral states of India, Bangladesh, Sri Lanka, Myanmar (Thailand is a member too) and the land-locked states of Nepal and Bhutan.
- BIMSTEC has identified 14 pillars for special focus.

BIMSTEC summit: Priority areas

- Marine environmental protection: It must become a priority area for cooperation in the Bay of Bengal by strengthening enforcement and sharing information on best practices.
- Regional protocols: These need to be developed, along with establishing guidelines and standards on pollution control.
- Home-grown solutions: There is a need for home-grown solutions based on capabilities of local institutions. Also, there is a need to create regional frameworks for data collection.
- Participatory approaches must be evolved for near-real-time stock assessment and the creation of an regional open fisheries data alliance.
- The summit should come up with the measures to curtail unsustainable as well as IUU fishing. Steps could include:
 - setting up an international vessel tracking system and making it mandatory for vessels to be equipped with automatic identification system (AIS) trackers;
 - establishing a regional fishing vessel registry system and publishing vessel licence lists to help identify illegal vessels;
 - increasing monitoring, control and surveillance in IUU fishing hotspots;

The BIMSTEC summit must express full support for both BOBP and BOBLME.

The Bay of Bengal Programme (BOBP), an inter-governmental organisation based in Chennai, is doing good work to promote sustainable fishing.

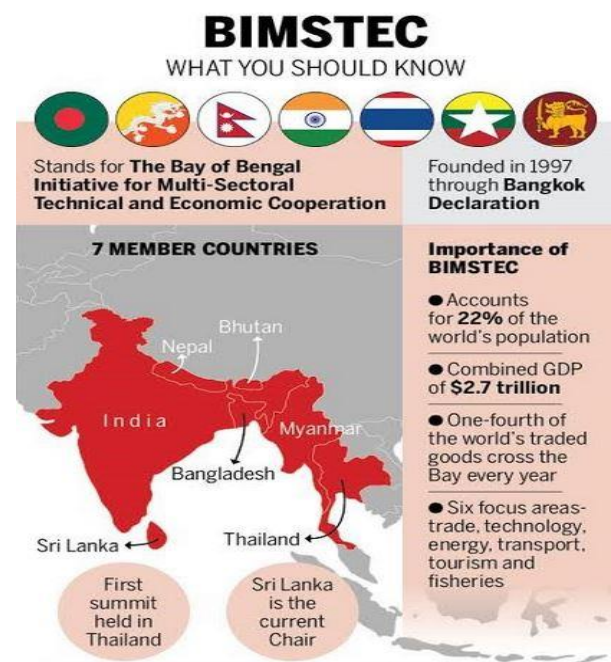
A Bay Of Bengal Large Marine Ecosystem (BOBLME) project is being launched by the FAO with funding from the Global Environmental Facility

Challenges:

- Emergence of a dead zone with zero oxygen where no fish survive;
- Leaching of plastic from rivers as well as the Indian Ocean;
- Destruction of natural protection against floods such as mangroves;
- Sea erosion;
- Growing population pressure and industrial growth in the coastal areas and consequently, huge quantities of untreated waste flow.
- Security threats such as terrorism, piracy and tensions between countries caused by the arrests of fishermen who cross maritime boundaries are additional problems.
- Increasing sea levels: It is predicted that the sea level will increase 0.5 metres in the next 50 years.
- Cyclonic storms: Moreover, there have been 13 cyclonic storms in the last five years.

Conclusion:

The challenges that confront the Bay of Bengal region brook no more delay. BIMSTEC must arise, awake and act before it is too late.



1.42 Defining Minority: What the Constitution Says; How SC has Ruled

In an affidavit filed in the top court, the Union Ministry of Minority Affairs said “state governments can also declare a religious or linguistic community as a ‘minority community’ within the state”.

Who are the Minorities?

- Muslims, Sikhs, Christians, Buddhists, Jain and Zoroastrians (Parsis) have been notified as minority communities under Section 2 (c) of the National Commission for Minorities Act, 1992.
- As per the Census 2011, the percentage of minorities in the country is about 19.3% of the total population of the country.
- The population of Muslims are 14.2%; Christians 2.3%; Sikhs 1.7%, Buddhists 0.7%, Jain 0.4% and Parsis 0.006%.

Defining Minorities

- The Constitution recognizes Religious minorities in India and Linguistic minorities in India through Article 29 and Article 30.
- But Minority is not defined in the Constitution.

- Currently, the Linguistic minorities in India are identified on a state-wise basis thus determined by the state government whereas Religious minorities in India are determined by the Central Government.
- The Parliament has the legislative powers and the Centre has the executive competence to notify a community as a minority under Section 2(c) of the National Commission for Minorities Act of 1992.

Various states on Minorities

- The Centre gave the example of how Maharashtra notified 'Jews' as a minority community within the State.
- Again, Karnataka notified Urdu, Telugu, Tamil, Malayalam, Marathi, Tulu, Lambadi, Hindi, Konkani and Gujarati as minority languages within the State.

1.43 Bio Samples for Crime Files

Criminal Procedure (Identification) Bill:

- It authorises law enforcement agencies to collect, store and analyse physical and biological samples of convicts and other persons for the purposes of identification and investigation in criminal matters.
- As per the Bill, any state government OR Union Territory administration may notify an appropriate agency to collect, preserve and share the measurements of a person of interest in their respective jurisdictions.


Why such a bill:	Issues
<ul style="list-style-type: none"> • The world has undergone technological and scientific changes, crime and its trend have increased. • Advanced countries across the globe are relying on new "measurement" techniques for reliable results. • The Bill will not only help our investigation agencies but also increase prosecution. • There is also a chance of an increase in conviction rates in courts through this. 	<ul style="list-style-type: none"> • Un-constitutionality: The proposed law will be debated against Article 20(3) of the Constitution, which is a fundamental right that guarantees the right against self-incrimination • Violation of Article 21: The Bill also seeks to apply these provisions to persons held under any preventive detention law. • Legislative competence of Centre: The Bill was beyond the legislative competence of Parliament as it violated fundamental rights of citizens, including the right to privacy. • Contentious provisions: The Bill proposes to collect samples even from protesters engaged in political protests. • Lack of clarity: Several provisions are not defined in the Bill itself. For instance, the statement of objects says it provides for collection of measurements for "convicts and other persons" but the expression "other persons" is not defined.

Key features:

- Define "measurements": To include finger impressions, palm-print and foot-print impressions, photographs, iris and retina scan, physical, biological samples and their analysis, etc.;
- Empower the National Crime Records Bureau (NCRB): To collect, store and preserve the record of measurements and for sharing, dissemination, destruction and disposal of records;
- Empower a Magistrate: To direct any person to give measurements; a Magistrate can also direct law enforcement officials to collect such information in the case of a specified category of convicted and non-convicted persons;
- Empower police or prison officers: To take measurements of any person who resists or refuses to give measurements

In the eye of storm | The Criminal Procedure (Identification) Bill, 2022 would allow the police and prison authorities to store and analyse physical and biological samples, including retina and iris scans of convicts

- The Bill seeks to repeal The Identification of Prisoners Act, 1920, whose scope was limited to recording finger impressions and foot-print impressions of limited category of convicts
- The new Bill expands the scope of "measurements" to include iris, signature, handwriting, biological samples
- The records can be stored for 75 years
- It also proposes to record the details of persons detained under any preventive detention law. Opposition says this can be misused against political adversaries
- If a person with no criminal background is released without trial or acquitted by the court, all records of measurements so taken shall be destroyed



- Resistance to or refusal to allow the taking of measurements under this Act shall be deemed to be an offence under section 186 of the Indian Penal Code (IPC).

1.44 Startup India Initiative and its Success

- The action plan for this initiative is focusing on three areas:
 - Simplification and Handholding.
 - Funding Support and Incentives.
 - Industry-Academia Partnership and Incubation.
- An additional area relating to this initiative is to discard restrictive States Government policies within this domain, such as License Raj, Land Permissions, Foreign Investment Proposals, and Environmental Clearances.
- It was organized by the Department for promotion of industry and internal trade (DPI&IT).

Success of the scheme:

- Minister for Commerce and Industry has informed the Lok Sabha that the entrepreneurial portal had more than 65,000 startups registered.
- Of which, 40 attained the ‘unicorn’ status in the last twelve months, bringing the total as of date to 90.
- India now ranks third among global startup eco-systems.
- The networking, training and mentoring facilities provided by Startup India alongside entrepreneurship outreach campaigns in tier-2 and tier-3 cities, helped address regional entrepreneurial disparities in India.

Issues:

- Entrepreneurship continues to be “highly concentrated” in three megacities, namely, Mumbai, Bengaluru and Delhi NCR.
- Such concentration can lead to increased economic inequality and hinder emergence of entrepreneurs from industries other than those belonging to the clusters.
- The Startup India Action Plan document has no mention of the words ‘caste’, ‘tribe’, ‘marginalised’, ‘indigenous’ or ‘social group’.
- Additionally, the policy’s reliance on technology does not take into consideration India’s digital divide, especially with respect to urban and rural areas.
- There is an under-representation of women and marginalized caste groups in the national startup ecosystem.

Way forward:

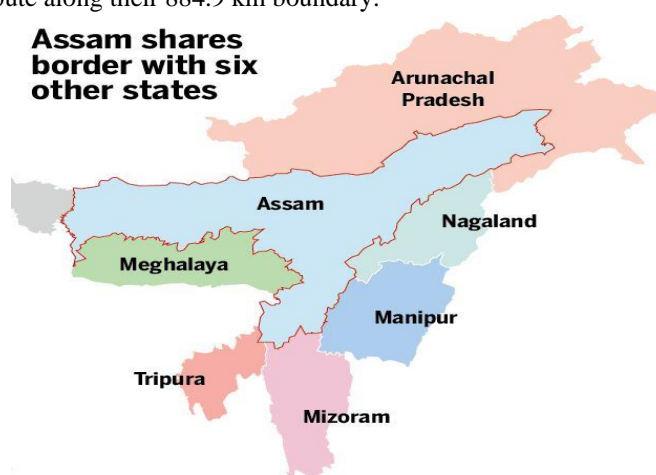
- There is a need for policies and progressive strategies from governments to encourage startups and provide access and assistance in key areas including tax clarity, incubation, affordability and licensing.

1.45 Assam-Meghalaya Boundary Dispute Resolution

- Assam and Meghalaya partially resolved a 50-year-old dispute along their 884.9 km boundary.
- According to the partial boundary deal, Assam will get 18.51 sq. km of the 36.79 sq. km disputed area while Meghalaya will get the remaining 18.28 sq. km.

Reason for dispute:

- Meghalaya, carved out of Assam as an autonomous State in 1970, became a full-fledged State in 1972.
- The creation of the new State was based on the Assam Reorganisation (Meghalaya) Act of 1969, which the Meghalaya government refused to accept as it followed the recommendations of a 1951 committee to define the boundary of Meghalaya.
- On that panel’s recommendations, areas of the present-day East Jaintia Hills, Ri-Bhoi and West Khasi Hills districts of Meghalaya were transferred to the Karbi Anglong, Kamrup (metro) and Kamrup districts of Assam.
- Meghalaya contested these transfers after statehood, claiming that they belonged to its tribal chieftains.
- Assam said the Meghalaya government could neither provide documents nor archival materials to prove its claim over these areas.



Assam shares border with six other states

- After claims and counter-claims, the dispute was narrowed down to 12 sectors on the basis of an official claim by Meghalaya in 2011.

How was it resolved:

- In January 2021, Home Minister urged all the north-eastern States to resolve their boundary disputes by August 15, 2022, when the country celebrates 75 years of Independence.
- In June 2021, the two States decided to resume talks at the CM level and adopt a “give-and-take” policy to settle the disputes once and for all.
- Of the 12 disputed sectors, six “less complicated” areas — Tarabari, Gizang, Hahim, Boklapara, Khanapara-Pilingkata and Ratacherra — were chosen for resolving in the first phase.
- Both States formed three regional committees, one each for a district affected by the disputed sectors.
- Followed five principles” for approaching the issue:
- These principles are historical facts of a disputed sector, ethnicity, and administrative convenience, willingness of people and contiguity of land preferably with natural boundaries such as rivers, streams and rocks.

Issues:

- Residents in the other six disputed sectors feel the “give-and-take” template could spell disaster for them.
- The fear is more among non-tribal people who could end up living in a “tribal Meghalaya with no rights”

1.46 India Seeks Closer BIMSTEC Partnership:

India has proposed an FTA for BIMSTEC.

- The BIMSTEC FTA has been signed by all member nations to stimulate trade and investment in the parties, and attract outsiders to trade with and invest in the BIMSTEC countries at a higher level.
- Subsequently, the “Trade Negotiating Committee” (TNC) was set up, with Thailand as the permanent chair, to negotiate in areas of trade in goods and services, investment, economic co-operation, trade facilitations and technical assistance for LDCs.
- Once negotiation on trade in goods is completed, the TNC would then proceed with negotiation on trade in services and investment.

Other initiatives:

- BIMSTEC Coastal Shipping Agreement draft:
 - It was discussed on 1 December 2017 in New Delhi, to facilitate coastal shipping within 20 nautical miles of the coastline in the region to boost trade between the member countries.
 - Compared to the deep sea shipping, coastal ship require smaller vessels with lesser draft and involve lower costs.
 - Once the agreement becomes operational after it is ratified, a lot of cargo movement between the member countries can be done through the cost effective, environment friendly and faster coastal shipping routes.
- BIMSTEC Master Plan for Transport Connectivity:
 - The BIMSTEC Master Plan for Transport Connectivity, finalized under India’s chairmanship of the expert group last year, envisages a seamless multimodal transport system across the region.
 - This will stimulate intra-regional trade and investment in the region.

2. Prelims Booster

1.3.2022

1. IPCC: Intergovernmental Panel on Climate Change (IPCC) was created to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options. The Assessment Reports – are provided by three working groups of scientists. Working **Group-I** - Deals with the scientific basis for climate change. Working **Group-II** - Looks at the likely impacts, vulnerabilities and adaptation issues. Working **Group-III** - Deals with actions that can be taken to combat climate change. Recent assessment of IPCC highlights that Ganga, Indus & Sabarmati River basins will face water scarcity by 2050.

2 GVA: Gross value added (GVA) is the measure of the total value of goods and services produced in an economy (area, region or country). The amount of value-added to a product is taken into account. GVA can be defined as output produced after deducting the intermediate value of consumption. This can also be mentioned as :

GVA= Gross Domestic Product + Subsidies on products – Taxes on products.

GVA at basic prices will include production taxes and exclude production subsidies. GVA at factor cost included no taxes and excluded no subsidies.

3. Wet Bulb Temperature: Wet bulb temperature is the lowest temperature to which air can be cooled by the evaporation of water into the air at a constant pressure.

4. ECGC: Export Credit Guarantee Corporation (is wholly owned by the Ministry of Commerce and Industry) was established to promote exports by providing credit insurance services to exporters against non-payment risks by the overseas buyers due to commercial and political reasons. It will enable it to expand its coverage to export-oriented industries, particularly labour-intensive sectors. ECGC has now put Russia in the Restricted Cover Category (RCC-I) from the earlier 'Open Cover' category.

5. NDB: The New Development Bank (NDB) is a development bank created by the multilateral grouping BRICS (Brazil, Russia, India, China, South Africa). The idea behind the NDB was mooted by India at the 4th BRICS Summit in New Delhi in 2012 and the formation treaty was signed in 2014 in the sixth BRICS Summit in Fortaleza, Brazil. Apart from BRICS nation Bangladesh, UAE, Uruguay and Egypt are members of NDB. Egypt is the most recent member.

6. UIDAI: The Unique Identification Authority of India or UIDAI is an agency under the central government of India mandated to collect demographic and biometric information of the country's residents, store the data in a central database, and issue to each resident of the country a 12-digit unique identity number called Aadhaar. The UIDAI on Monday informed the Supreme Court that it was willing to issue Aadhaar card to sex workers without insisting on proof of residence/identity, provided they got a certificate from a gazetted officer of the health departments of the States or from an official with the National AIDS Control Organisation (NACO).

2.3.2022

1. SilverLine Project: The proposed 529.45-km rail line in Kerala will link Thiruvananthapuram in the south to Kasaragod in the north, covering 11 districts through 11 stations. Trains will be capable to run at 200km/hr. The deadline for the project, being executed by the Kerala Rail Development Corporation Limited (KRDCL), is 2025. KRDCL, or K-Rail, is a joint venture between the Kerala government and the Union Ministry of Railways created to execute big railway projects.

2. IIP: The Index of Industrial Production (IIP) is an index that shows the growth rates in different industry groups of the economy in a fixed period of time. It is compiled and published monthly by the Central Statistical Organization (CSO), Ministry of Statistics and Programme Implementation. The eight core industries of India represent about 40% of the weight of items that are included in the IIP.

3. Bosphorus Strait: It is a natural strait connecting the Black Sea to the Sea of Marmara. It's length is 32 kilometers (20 miles) in the north to south direction. Bosphorus strait separates the European part from the Asian part of Istanbul. Recognising the Russian invasion of Ukraine as a "war", Turkey on Monday announced that it would implement the Montreux Convention Regarding the Regime of the Straits-a 1936 international treaty that regulates maritime traffic through the Black Sea. This would limit the movement of Russian warships between the Mediterranean Sea and the Black Sea.

4. Stockholm Peace Research Institute: Swedish think tank Stockholm International Peace Research Institute (SIPRI) has released its Year Book 2021. India possessed an estimated 156 nuclear warheads at the start of 2021, compared with 150 at the start of last year, while Pakistan had 165 warheads, up from 160 in 2020. Russia is the world's second largest arms exporter, with a 20% share in the global arms trade between 2016 and 2020, behind only the US (37%), as per the Stockholm International Peace Research Institute (SIPRI). Top arms supplier to India in 2016-20- Russia, France, Israel, USA.

5. CAATSA: The Countering America's Adversaries Through Sanctions Act (CAATSA) is a United States federal law that imposes sanctions against any adversaries faced by USA. Till now India has evaded a potential sanction from USA after importing the 1st set of S-400.

6.S-400: In October 2018, India signed a \$5 billion deal with Russia to buy five units of the S-400 air defence missile systems. India had moved ahead with the deal despite a warning from the then Trump administration that going ahead with the contract may invite U.S. sanctions. The first of the five units, delivered in December 2021, has been deployed at an Indian Air Force base in Punjab. The deal has been under the threat of sanctions from the US, which has not yet decided on it; the fresh round of sanctions on Russia could sound alarm bells for the deal.

3.3.2022

1. Sunrise Sector: Sunrise industry is a term used for a sector that is just in its infancy but shows promise of a rapid boom. Rapid emergence of this sector may threaten traditional industry sector because of its dim long-term prospects. In Indian scenario Artificial Intelligence, Semiconductor, drones, geospatial systems, genomics, pharmaceuticals, space techs, clean technologies can be termed as Sunrise industry. Acknowledging the immense potential of sunrise sectors the Union Budget 2022-23 presented has stated that supportive policies for this sector.

2. Operation Ganga: It is an evacuation mission to bring back all the Indian nationals who are currently stranded in Ukraine. There were around 20,000 Indians including students stuck in Ukraine. A dedicated Twitter handle '**OpGanga Helpline**' to assist Indian evacuation from Ukraine has also been announced. The Indian evacuation flights are operating from neighboring countries (of Ukraine) like Romania and Hungary.

3. C17: The Boeing C-17 Globemaster is a large military transport aircraft. It was developed for the United States Air Force (USAF). The C-17 commonly performs tactical and strategic airlift missions, transporting troops and cargo throughout the world. It can also perform medical evacuation and airdrop duties. C17 aircraft of Indian Air Force are also part of Operation Ganga.

4. GRAM Report: Global Research on Antimicrobial Resistance (GRAM) report, 1.27 million people died in 2019 as a direct result of AMR (AntiMicrobial Resistance). The death due to AMR is now a leading cause of death worldwide, higher than HIV/AIDS or malaria. Antimicrobial resistance is the resistance acquired by any microorganism (bacteria, viruses, fungi, parasite, etc.) against antimicrobial drugs (such as antibiotics, antifungals, antivirals, antimalarials, and anthelmintics) that are used to treat infections. As a result, standard treatments become ineffective, infections persist and may spread to others.

5. Intercontinental Ballistic Missile: Intercontinental Ballistic Missile (ICBM) is a land-based, nuclear-armed ballistic missile with a range of more than 5,600 km. ICBM-capable nations include the US, erstwhile Soviet Union, China, France, Israel, North Korea and the UK. Longer-ranged intercontinental ballistic missiles (ICBMs), are launched on a sub-orbital flight trajectory and spend most of their flight out of the atmosphere. India has **AGNI-V** (uses a 3-stage solid fuelled engine) in its arsenal which has a range of 5000km. **AGNI-VI** is under development stage and speculative range of the missile is 8000km.

6. Water Plus City: The Water Plus certificate is awarded to cities that have met all the **ODF++ (ODF-Open Defection Free)** standards. Also, the residual sewage from residential and commercial establishments is released into the environment only after treatment. Reuse of treated wastewater should also be ensured. In order to go to the micro level in the Swachh Bharat Abhiyan, the Ministry has included Water Plus with cleanliness. Its main objective is to clean the water bodies, rivers and ponds in the cities, so that only clean and rainwater flows in the rivers and streams and sewerage water can be reused. **Indore** has been declared as **the country's first 'water plus**.

4.3.2022

START Treaty: (Strategic Arms Reduction Treaty) was a bilateral treaty between the United States and the Soviet Union on the reduction and the limitation of strategic offensive arms. The treaty was signed on 31 July 1991 between the US President, George Bush and General Secretary of the Communist Party of the Soviet Union, Mikhail Gorbachev for the mutual elimination of the two countries' strategic nuclear weapons and entered into force on 5 December 1994.

2. Budapest Agreement: The Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purpose of Patent Procedure, signed on April 28, 1977, was amended on September 26, 1980. The Budapest Treaty eliminates the need to deposit microorganisms in each country where patent protection is sought.

Project P75: Project 75 is a programme by the Indian Navy that envisaged building six Scorpene-Class attack submarines. Project 75 intends to build six diesel-electric attack submarines of the Kalvari class that is based on the Scorpene-class, which are being

built at MDL (Mazagon Dock Limited). Under Project 75-India, the Navy will build six conventional diesel-electric submarines that would be bigger than the under-construction Scorpene-class submarines being built at the Mazagon Dockyards Limited in Mumbai.

UNHRC: The United Nations Human Rights Council (UNHRC) is a UN body that fosters and protects human rights all over the world, established in 15 March 2006, the Geneva, Switzerland headquartered organisation has 47 members elected for 3 years on a regional basis. 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.

1. Freedom of assembly
2. Freedom of expression and free speech
3. Freedom of religion
4. Protection of women's rights
5. Protecting rights of LGBT community and that of racial and ethnic minorities

International criminal court-The International Criminal Court (ICC) is an intergovernmental organisation and international tribunal headquartered in The Hague. It investigates and tries people charged with serious and grave crimes such as genocide, crimes against humanity, war crimes and the crime of aggression. It is the first permanent international criminal court in the world.

EU GDPR: European Union has passed a General Data Protection Regulation (GDPR) Law. The GDPR redefines the understanding of the individual's relationship with their personal data. It relates to an identifiable living individual and includes names, email IDs, ID card numbers, physical and IP addresses. This law grants the citizen substantial rights in his/her interaction with:

A) Data controllers - Those who determine why and how data is collected such as a government or private news website.

B) Data processors - Those who process the data on behalf of controllers, such as an Indian IT firm to which an E.U. firm has outsourced its data analytics.

5.2.2022

Brahmos: BrahMos is a joint venture between the Defence Research and Development Organisation of India (DRDO) and the NPOM of Russia. BrahMos is named on the rivers Brahmaputra and Moskva. It is a two-stage (solid propellant engine in the first stage and liquid ramjet in second) missile. It is a multiplatform missile i.e. it can be launched from land, air, and sea and multi capability missile with pinpoint accuracy that works in both day and night irrespective of the weather conditions. It operates on the "Fire and Forgets" principle i.e. it does not require further guidance after launch. Brahmos is one of the fastest cruise missile currently operationally deployed with speed of Mach 2.8, which is nearly 3 times more than the speed of sound.

Non-Proliferation Treaty: The NPT is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament. The treaty was signed in 1968 and entered into force in 1970. Presently, it has 190 member states. India is not a member. It requires countries to give up any present or future plans to build nuclear weapons in return for access to peaceful uses of nuclear energy. It represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States.

Periodic Labour Force Survey: Considering the importance of availability of labour force data at more frequent time intervals, National Statistical Office (NSO) launched Periodic Labour Force Survey (PLFS) in April 2017.

The objective of PLFS is primarily twofold: To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the 'Current Weekly Status' (CWS). To estimate employment and unemployment indicators in both usual Status and CWS in both rural and urban areas annually.

Ujjwala Scheme: The scheme provides a financial support of Rs 1600 for each LPG connection to the BPL households. Along with a deposit-free LPG connection, Ujjwala 2.0 will provide the first refill and a hotplate free of cost to the beneficiaries. Under Ujjwala 1.0, the target was to provide LPG connections to 50 million women from the below poverty line (BPL) households, by March 2020. However, in August 2018, women from seven other categories were brought under the purview of the scheme: SC/ST, those under the Pradhan Mantri Awas Yojana (PMAY), beneficiaries of the Antyodaya Anna Yojana (AAY), Forest Dwellers, most backward classes, tea gardens and Islands. Under Ujjwala 2.0, an additional 10 million LPG connections will be provided to the beneficiaries. Government has also fixed a target of providing piped gas to 21 lakh homes in 50 districts.

7.3.2022

Current Weekly Status: This approach records only those persons as unemployed who did not have gainful work even for an hour on any day of the week preceding the date of survey.

Tight Money Policy: A Tight Money Policy or contractionary monetary policy is focused on contracting (decreasing) the money supply in an economy. A contractionary monetary policy is implemented by increasing key interest rates thus reducing market liquidity (money supply). Low market liquidity usually negatively affect production and consumption. This may also have a negative effect on economic growth. When RBI adopt a contractionary monetary policy, the central bank increase Policy Rates (Interest Rates) like Repo, Reverse Repo, MSF, Bank Rate, Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) etc. RBI can also sell government securities from the market as part of Open Market Operations (OMO) – taking out liquidity from the market.

Urban Heat Island: An Urban Heat Island (UHI) is that part of an urban or a metropolitan area that is marked by remarkably high temperature as compared to its rural counterpart due to excessive human activity. The difference in temperature is noticed usually during the night and when winds are weak. The UHI is noticed when both the summer and winter seasons are at their peak. The term heat island is also used. Generally, such terms are used to denote any area that has high temperatures compared to the surrounding area, but it usually refers to those areas which have a high level of human activity.

Asian Infrastructure Investment Bank: It is a multilateral development bank with a mission to improve social and economic outcomes in Asia. It aims to connect people, services and markets that over time will impact the lives of billions and build a better future by investing in sustainable infrastructure and other productive sectors. It is headquartered in Beijing (China) and began its operations in January 2016. The AIIB has approved more loans for India than any other member of the bank. China is its biggest shareholder and India is the second-largest. It has more than 100 member countries including countries outside from Asia. Former RBI governor Urjit Patel has been appointed vice-president of the Beijing-based Asian Infrastructure Investment Bank (AIIB).

EWS: It is for economic reservation in jobs and admissions in education institutes for Economically Weaker Sections (EWS). The 10% EWS quota was introduced under the 103rd Constitution (Amendment) Act, 2019 by amending Articles 15 and 16. It was enacted to promote the welfare of the poor not covered by the 50% reservation policy for Scheduled Castes (SCs), Scheduled Tribes (STs) and Socially and Educationally Backward Classes (SEBC). It enables both Centre and the states to provide reservation to the EWS of society.

8.3.2022

Female labour force participation ratio: The participation of women in the workforce in India has dropped from 32% working or looking for work in 2005, to 21% in 2019. India's female labour force participation (FLFP) rate is the lowest among the BRICS countries and is also lower than some of its neighbours in South Asia such as Sri Lanka and Bangladesh

Red Cross: The International Committee of the Red Cross (ICRC) is a humanitarian institution based in Geneva, Switzerland. The mission of ICRC is to alleviate human suffering, uphold human dignity, protect life and health, especially during armed conflicts and other emergencies. ICRC is present in every country and is supported by millions of volunteers. The ICRC acts to help all victims of war and internal violence, attempting to ensure implementation of humanitarian rules restricting armed violence to promote compliance with International humanitarian law. ICRC strives for protecting and assisting the victims of armed conflict and internal violence so as to preserve their physical integrity and their dignity and to enable them to regain their autonomy as quickly as possible.

DIKSHA Platform: DIKSHA is a national platform for school education, is an initiative in the domain of digital learning by the National Council for Education Research and Training (NCERT) and the Ministry of Human Resource Development – MHRD. It was developed based on the core principles of open architecture, open access, open licensing diversity, choice and autonomy as outlined in the Strategy and Approach Paper for the National Teacher Platform. The motto of DIKSHA is 'our teachers are our heroes'. National Teachers Platform is built under DIKSHA to host Open Educational Resources (OER) and tools for teachers in schools, teacher educators in Teacher Education Institutes (TEIs) and student teachers in TEIs. The aim of this initiative is to help teachers and the students to continue their studies as usual and ensure holistic learning for both.

HANSA-NG: It is India's first indigenous aircraft trainer, designed and developed by CSIR-National Aerospace Laboratories. It has completed sea level trials, a necessary prelude to it being evaluated by Directorate General of Civil Aviation (DGCA). **Key features:** composite light weight airframe, a glass cockpit, a bubble canopy with a wide panoramic view, and electrically operated flap. It is an ideal aircraft for Commercial Pilot Licensing due to low cost and low fuel consumption.

Inflation Targeting: It is a central banking policy that revolves around adjusting monetary policy to achieve a specified annual rate of inflation. The principle of inflation targeting is based on the belief that long-term economic growth is best achieved by maintaining price stability, and price stability is achieved by controlling inflation. The Central Government has notified 4 per cent Consumer

Price Index (CPI) inflation as the target for the period from August 5, 2016, to March 31, 2021, with the upper tolerance limit of 6 per cent and the lower tolerance limit of 2 per cent. Urjit Patel Committee is related to Inflation targeting.

9.3.2022

Carrying Capacity: In ecological terms, the carrying capacity of an ecosystem is the size of the population that can be supported indefinitely upon the available resources and services of that ecosystem. Disease, competition, predator-prey interaction, resource use and the number of populations in an ecosystem all affect carrying capacity. Carrying capacity of an ecosystem as an anchor for planning sustainable development of a region Living within the limits of an ecosystem depends on three factors:

- the amount of resources available in the ecosystem,
- the size of the population, and
- the amount of resources each individual is consuming.

Junk Grade: Junk bonds represent bonds issued by companies that are financially struggling and have a high risk of defaulting or not paying their interest payments or repaying the principal to investors. Junk bonds are bonds that carry a higher risk of default than most bonds issued by corporations and governments. Junk bonds are also called high-yield bonds since the higher yield is needed to help offset any risk of default. Moody's and Fitch have downgraded Russia's sovereign rating to 'junk' grade following severe sanctions by western countries.

Donate a pension scheme: Launched under Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM) under Ministry of Labour for people to contribute to the pension fund of their support staff. Under this, citizens can donate the premium contribution of their immediate support staff such as domestic workers, drivers, helpers etc. PM-SMY is a 50:50 voluntary and contributory pension scheme in which the beneficiary makes a stipulated age-specific contribution and the Central Government matches it. **Eligibility:** Workers working in the unorganised sector (earning less than 15000/month) in the age group of 18-40 years can register themselves and deposit a minimum of Rs 660 to 2400 every year depending on their age. They should not be covered under New Pension Scheme (NPS), Employees' State Insurance Corporation (ESIC) scheme or Employees' Provident Fund Organisation (EPFO). Further, he/she should not be an income tax payer. Benefits: After attaining the age of 60 years they will receive the minimum assured pension of Rs 3,000 per month.

National Open Digital Ecosystem: National Open Digital Ecosystem (NODE) or GovTech 3.0 defined as "Open and secure delivery platforms, anchored by transparent governance mechanisms, which enable a technology collaboration among citizens, businesses and governments to transform societal outcomes. **GovTech 3.0** is focused on Open Digital Ecosystems (ODEs), the underlying philosophy suggests that the government should focus on creating the "digital commons". It envisages the government becoming a facilitator by creating digital infrastructure on which innovators can collaboratively build solutions for the public good. For Examples, deployment of contact tracing apps (AarogyaSetu) developed through public-private partnerships, to prevent the spread of the corona virus.

Central Administrative Tribunal: Article 323 - A: The Central Administrative Tribunal had been established under Article 323 - A of the Constitution for adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to public services and posts in connection with the affairs of the Union or other authorities under the control of the Government. Objective and Composition: The CAT is a specialist body consisting of Administrative Members and Judicial Members who by virtue of their specialized knowledge are better equipped to dispense speedy and effective justice. It was established in 1985. A Chairman who has been a sitting or retired Judge of a High Court heads the Central Administrative Tribunal.

10.3.2022

Five Eye: The Five Eyes (FVEY) is an alliance of intelligence agencies of Australia, Canada, New Zealand, the United Kingdom and the United States. It is the most well known of all espionage alliances in the world. The origins of the Five Eyes can be traced back to the end of World War II when the Allies set down post-war goals in the Atlantic Charter. Later when the Cold War began in earnest, a surveillance system code-named ECHELON was developed by the FVEY to intercept and monitor communications of the Soviet Union and the Warsaw Pact members.

Heatwaves: In India, Heat wave is considered if maximum temperature of a station reaches atleast 40 degree C or more for Plains and at least 30 degree C or more for Hilly regions. Heat Wave: Departure from normal is 4.5 degree C to 6.4 degree C. Severe Heat Wave: Departure from normal is >6.4 degree C.

Smart Event Tracking System: Smart Event Tracking System (SETS) is a Google Maps-based planning and analysis tool. It is in-house software of the Indian Railways. (SETS) is being used to tackle the problem of cattle getting run over by the trains. Kilometer stamps on electrical masts along the railway tracks are mapped and the exact location of 'cattle run over' is fed into the system. It

will become easy to identify the location of the accidents and observe the patterns of such accidents. This system can also be used to observe the patterns of incidents of chain-pulling, absence of gatemen at level crossings, etc.

Stagflation: Stagflation refers to an economy that is experiencing a simultaneous increase in inflation and stagnation of economic output. Stagflation is characterized by slow economic growth and relatively high unemployment—or economic stagnation—which is at the same time accompanied by rising prices (i.e. inflation). Measures: There is no definitive cure for stagflation. The consensus among economists is that productivity has to be increased to the point where it would lead to higher growth without additional inflation.

- Policy support for a sustained and inclusive recovery may be needed for longer.
- The focus is likely to be on the normalisation of prudential policies and the strengthening of insolvency frameworks and restructuring mechanisms, including for the overhang of public and private debt

National Calamity Contingent Duty: National Calamity Contingent Duty (NCCD) is levied to fund the National Disaster Response Fund and additional budgetary support is given as and when necessary. The NCCD is levied for goods specified in the Seventh Schedule (goods manufactured or produced).

BBIN: Bangladesh-Bhutan-India-Nepal (BBIN): Bangladesh, Bhutan, India and Nepal (BBIN) had signed a framework MVA in June 2015 to enable movement of passenger and cargo vehicles across borders among the four countries. Bhutan has not yet ratified the pact for its entry to come into force. However, Bhutan had given its consent for the BBIN MVA to enter into force amongst the other 3 countries i.e. Bangladesh, India and Nepal, who have already ratified it.

11.3.2022

Opec+: The Organization of the Petroleum Exporting Countries (OPEC) is a permanent, intergovernmental organization, created at the Baghdad Conference in 1960, by Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela and aims to manage the supply of oil in an effort to set the price of oil in the world market, in order to avoid fluctuations that might affect the economies of both producing and purchasing countries. OPEC membership is open to any country that is a substantial exporter of oil.

Mekedatu Project: Mekedatu is a multipurpose (drinking and power) project. It involves building a balancing reservoir, near Kanakapura in Ramanagara district in Karnataka. This project is proposed with an aim to conserve water, prevent energy shortage and provide drinking water facilities to Bangalore cities and surrounding areas in the Cauvery basin.

Grey water: It refers to wastewater from non-toilet systems, i.e. wastewater from kitchen sinks, dishwashers, baths, showers, etc. It is discharged into a pond-based wastewater treatment system through a network of storm water drains. It contains detergents that have nitrogen or phosphorus, which are plant nutrients.

API: Active Pharmaceutical Ingredients are known as bulk drugs. An active ingredient is the ingredient in a pharmaceutical drug or pesticide that is biologically active. It is that part of the medicine that produces the intended therapeutic effects. For example, in a painkiller, the active ingredient relieves pain. In the OTC drug Crocin, the API is paracetamol.

CPEC: China–Pakistan Economic Corridor is a collection of infrastructure projects, which are under construction throughout Pakistan. It is a 3,000-km long route of infrastructure projects, to connect China's northwest Xinjiang Uygur Autonomous Region to Gwadar Port in western province of Balochistan in Pakistan. India is protesting against CPEC, because it is being laid through Pakistan-occupied Kashmir (PoK).

12.3.2022

Inter-Basin water transfer: In this process where surplus water from a river basin is transferred to another river basin which is deficient in water. Interlinking of rivers is done to transfer water from one basin to another. In Indian context if the excess water can be diverted from the Plains to the Peninsula and central India, the problem of floods and droughts can be solved to a large extent. Hence, the interlinking of rivers will bring about an equitable distribution of river waters in India.

Ken-Betwa River Link: The Ken-Betwa Link Project (KBLP) is the River interlinking project that aims to transfer surplus water from the Ken river in MP to Betwa in UP to irrigate the drought-prone Bundelkhand region. The project involves building a 77-metre tall and a 2-km wide Dhaudhan dam and a 230-km canal. Ken-Betwa is one of the 30 river interlinking projects conceived across the country. Parts of Panna Tiger Reserve will get submerged due to creation of Dhaudhan Dam.

UN World Population Ageing Report: The report is released by United Nations, Department of Economic and Social Affairs. According to the report the number and proportion of people aged 60 years and older in the population is increasing. In 2019, the

number of people aged 60 years and older was 1 billion. This number will increase to 1.4 billion by 2030 and 2.1 billion by 2050. This increase is occurring at an unprecedented pace and will accelerate in coming decades, particularly in developing countries.

ASER Report: The Annual Status of Education Report survey, which is facilitated by Pratham Education Foundation, is the oldest survey of its kind in the country. According to the report:

- There was an unprecedented jump in government school students, and a 10-year low in private school enrolments.
- A clear shift from private to government schools — from 64.3% in 2018 to 65.8% in 2020, to 70.3% in 2021.
- A fall in private school enrolment from 28.8% in 2020 to 24.4% in 2021.

Pangong Tso: Pangong Tso, an endorheic lake, is 135 km long, of which more than two-thirds is under Chinese control and rest is under the control of India. Recently, it was found that China is building a new bridge on Pangong Tso which will provide an additional axis to deploy troops faster between the north and south banks of the lake, and closer to the LAC (Line of Actual Control). The building of the bridge will allow the Chinese Army to mobilise its troops faster in this area.

14.3.2022

Convention on Migratory Species: Bonn Convention is a name of the international treaty on the conservation of migratory species of wild animals, that was adopted in Bonn, Germany in 1979. It came into force in 1983. The convention is simply known as Bonn Convention or CMS (Convention on Conservation of Migratory Species) which is an important part of international environment conventions and protocols. India hosted the CMS COP 13 at Gandhinagar in Gujarat. Two appendices under the Bonn Convention:

- **Appendix I (Endangered Species)-** It comprises the list of those migratory species that are assessed as being in danger of extinction throughout their range or in some significant portion of their range. It also defines endangered species as those with a high risk of extinction in the wild in near future, as also defined by IUCN.
- **Appendix II** – It comprises those migratory species that need conservation through international agreements and will significantly benefit from such conservational efforts.

UNGA: The General Assembly is the main deliberative, policymaking and representative organ of the UN. All 193 Member States of the UN are represented in the General Assembly, making it the only UN body with universal representation. Each year, in September, the full UN membership meets in the General Assembly Hall in New York for the annual General Assembly session, and general debate, which many heads of state attend and address. Decisions on important questions, such as those on peace and security, admission of new members and budgetary matters, require a two-thirds majority of the General Assembly. Decisions on other questions are by simple majority and are non-binding in nature. The President of the General Assembly is elected each year by assembly to serve a one-year term of office.

International Labour Organization: It is the only tripartite U.N. agency. It brings together governments, employers and workers of 187 member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men. Established in 1919 by the Treaty of Versailles as an affiliated agency of the League of Nations. Became the first affiliated specialized agency of the United Nations in 1946. Headquarters: Geneva, Switzerland Founding Mission: social justice is essential to universal and lasting peace. Promotes internationally recognized human and labour rights. Received the Nobel Peace Prize in 1969.

Gig Worker: In general, gig workers are those engaged in hourly or part-time jobs in everything from catering events to software development. They have a non-standard work arrangement with their employers and share a non-traditional employer-employee relationship. The work is usually temporary and completed within a stipulated time.

Platform Worker: A platform worker implies a worker working for an organisation that provides specific services using an online platform directly to individuals or organisations. Examples of platform workers include Ola or Uber drivers, Swiggy or Zomato delivery agents, etc. The Social Security Code defines a platform worker as “a person engaged in or undertaking platform work”. The new Labour Codes, enacted by the Parliament in September 2020, acknowledge gig and platform workers as new occupational categories in India.

15.3.2022

Chilika Lake: The Odisha government has proposed to ban movement of mechanised fishing boats in the Mangalajodi area of the Chilika lake, an important haunt of migratory birds, to provide the winged guests an undisturbed ecosystem for six months every year. Mangalajodi is recognised as globally important for the conservation of birds. Migratory birds arrive there for roosting. Chilika is 64 kilometres long in the north-south direction and 13.5 km wide in the east-west direction. The sea connected with the lake near Satapada through a shallow and narrow channel. Chilika is Asia's largest and world's second largest lagoon. It is the largest

wintering ground for migratory birds on the Indian sub-continent and is home to a number of threatened species of plants and animals. In 1981, Chilika Lake was designated the first Indian wetland of international importance under the Ramsar Convention. Kalijai Temple – Located on an island in the Chilika Lake.

Corbevax: Corbevax is an indigenous vaccine made by Biological E. Ltd. Unlike other vaccines it is a “recombinant protein sub-unit”. The protein unit used here is SARS-CoV-2- that spike protein coronavirus surface that binds with cells and multiplies to cause Covid-19. When the spike protein binds with the cell the virus gets unrestricted entry to the body, but the vaccine contains only the protein unit without the virus and hence cannot cause any harm to the body. Soon the body reacts to the foreign spike protein and starts preparing an immune response. Hence when the real Covid-19 virus affects the body the immune response that can counter the effect of the spike protein comes to function making the person less vulnerable to the infection. This vaccine will be used to vaccinate 12-14 age group.

Q commerce: Q-commerce (‘quick commerce’) – sometimes used interchangeably with ‘on-demand delivery’ and ‘e-grocery’ – is e-commerce in a new, faster form. It combines the merits of traditional e-commerce with innovations in last-mile delivery. The premise is largely the same, with speed of delivery being the main differentiator. Delivery is not in days but minutes – 30 or less, to be competitive. This has in turn expanded the breadth of what individuals can order, with perishable goods – like groceries – being a large niche q-commerce companies speak to. It tends to focus on the micro – smaller quantities of fewer goods.

UPI123: Reserve Bank of India has launched a new Unified Payments Interface (UPI) payments solution for feature phone users dubbed ‘UPI123Pay’. UPI ‘123PAY’ is a three-step method to initiate and execute services for users which will work on simple phones. It will allow customers to use feature phones for almost all transactions except scan and pay. It doesn’t need an internet connection for transactions. Customers have to link their bank account with feature phones to use this facility.

National Land Monetisation Corporation: The Union Cabinet chaired by Prime Minister Narendra Modi approved setting up National Land Monetization Corporation (NLMC) to undertake monetization of surplus land and building assets of central public sector enterprises (CPSEs) and other government agencies. The NLMC will have an initial authorized share capital of Rs 5,000 crore and a paid-up share capital of Rs 150 crore. Members: NLMC will be a lean organization with minimal full-time staff, hired directly from the market on contract. The Board of Directors of NLMC will comprise senior Central Government officers and eminent experts to enable professional operations and management of the company. The Chairman, non-Government Directors of the NLMC will be appointed through a merit-based selection process.

16.2.2022

JCPOA: The JCPOA was the result of prolonged negotiations from 2013 and 2015 between Iran and P5+1 (China, France, Germany, Russia, the United Kingdom, the United States). The JCPOA obliged Iran to accept constraints on its uranium enrichment program verified by an intrusive inspection regime in return for a partial lifting of economic sanctions.

Gallium Nitride: Gallium Nitride Ecosystem Enabling Centre and Incubator (GEECI) has been set up in Bengaluru. The facility has been jointly set up by the Ministry of Electronics and Information Technology and IISc Bengaluru. It is aimed at establishing GaN based Development Line Foundry facility, especially for RF and power applications, including strategic applications. About Gallium Nitride: Gallium Nitride (GaN) is believed to be the second most important material after silicon for electronics chips. Properties of Gallium Nitride: High heat capacity, Sensitivity to ionizing radiation is low, faster-switching speed, higher thermal conductivity and lower on-resistance. Applications: GaN is a semiconductor commonly used in blue light-emitting diodes (LEDs). Gallium Nitride Technology is of strategic importance with its application in the field of 5G, space and defense. Gallium Nitride (GaN) plays a key role in enabling e-vehicles and wireless communication.

BRO: BRO was conceived and raised in 1960 by Pandit Jawaharlal Nehru for coordinating the speedy development of a network of roads in the North and the North Eastern border regions of the country. It works under the administrative control of the Ministry of Defence. It has diversified into a large spectrum of construction and development works comprising airfields, building projects, defence works and tunneling and has endeared itself to the people.

India Bangladesh Protocol Route: As per the Protocol on Inland Water Transit and Trade, inland vessels of one country can transit through the specified routes of the other country. Under the Protocol, 50:50 cargo sharing by Indian and Bangladeshi vessels is permitted both for transit and inter country trade. Pandu in Guwahati recently received the maiden voyage of food-grains from Patna to via Bangladesh, ushering new age for inland waterways in Assam as Brahmaputra (NW2) gets connected with Ganga (National Waterway-1) via Indo Bangladesh Protocol (IBP) route.

MMR: MMR is the annual number of maternal deaths per 100,000 live births. Maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy. It is a key performance indicator for efforts to improve the health and safety of mothers before, during, and after childbirth. The maternal mortality ratio (MMR) of India has declined by 10 points, says a special bulletin released by the Registrar-General of India. It has declined from 113 in 2016-18 to 103 in 2017-19, an 8.8% decline. With

this persistent decline, India is on the verge of achieving the National Health Policy (NHP) target of 100 per lakh live births by 2020 and certainly on the track to achieve the Sustainable Development Goal (SDG) target of 70 per lakh live births by 2030. . Encouraging achievement has been reported by Uttar Pradesh, which has shown the highest decline of 30 points, Rajasthan (23), Bihar (19), Punjab (15) and Odisha (14).

17.3.2022

MSP: The MSP is the rate at which the government purchases crops from farmers, and is based on a calculation of at least one-and-a-half times the cost of production incurred by the farmers. The Commission for Agricultural Costs & Prices (CACP) recommends MSPs for 22 mandated crops and fair and remunerative price (FRP) for sugarcane. CACP is an attached office of the Ministry of Agriculture and Farmers Welfare. The CACP considers various factors while recommending the MSP for a commodity, including cost of cultivation. It takes into account the supply and demand situation for the commodity, market price trends (domestic and global) and parity vis-à-vis other crops, and implications for consumers (inflation), environment (soil and water use) and terms of trade between agriculture and non-agriculture sectors.

Angadia: The Angadia system is a century-old parallel banking system in the country where traders send cash generally from one state to another through a person called Angadia that stands for courier. It is by and large used in the jewellery business with Mumbai – Surat being the most popular route as they are two ends of the diamond trade. The cash involved is huge and it is the responsibility of the Angadia to transfer cash from one state to another for which they charge a nominal fee. Generally, it is the Gujarati, Marwari and Malbari community that are involved in the business. The Angadia system works completely on trust as large sums, at times in crores, are involved. While the Angadia system per se is legal, there hangs a cloud over the activity as it is suspected that a lot of times it is used to transfer unaccounted money.

IMR: The Infant Mortality Rate or IMR is the number of deaths of children (under one year of age) per 1000 live births. On the other hand, the death rate of children under five year of age is called Child Mortality Rate. The major leading cause of IMR at global level is birth defect. The other significant causes of IMR are pneumonia, asphyxia, congenital malformations, prolonged labor, fetal umbilical prolapse, malaria, diarrhea, measles and malnutrition. The most common preventable cause of IMR is smoking during pregnancy. The different forms of IMR are perinatal mortality, neonatal mortality and post-natal mortality. The perinatal mortality is the death of the fetus or baby between 28 weeks of gestation and the first week of birth. Gestation is the period of carrying the baby in the uterus. Neonatal mortality is death of the baby occurring within 28 days of its birth. The post neonatal mortality is the death of the baby between 29 days and one year of birth. The IMR in India stands at 33 per 1000 live births. The IMR of India is poor as compared to China (8), Bangladesh (27), Sri Lanka (8) and Bhutan (26).

BIMSTEC: The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a regional multilateral organisation.. Its members lie in the littoral and adjacent areas of the Bay of Bengal constituting a contiguous regional unity. Out of the 7 members, Five are from South Asia – Bangladesh, Bhutan, India, Nepal & Sri Lanka. Two are from Southeast Asia – Myanmar, Thailand.

Liquefied Natural Gas: Liquefied natural gas (LNG) is natural gas that has been cooled to a liquid state (liquefied), at about -260° Fahrenheit, for shipping and storage. The volume of natural gas in its liquid state is about 600 times smaller than its volume in its gaseous state in a natural gas pipeline.

21.3.2022

POCSO: Protection Of Children from Sexual Offences Act was enacted to protect the children from offences of sexual assault, sexual harassment and pornography with due regard for safeguarding the interest and well-being of children and was amended in August 2019 to provide more stringent punishment, including the death penalty, for sexual crimes against children. POCSO act defines anyone below the age of 18 as child. This law defines a child as any person below the age of 18 years. It defines different forms of sexual offences including penetrative and non-penetrative assault, and even sexual harassment and pornography.

SCO: Shanghai Cooperation Organisation is a permanent intergovernmental international organisation. It's a Eurasian political, economic and military organisation aiming to maintain peace, security and stability in the region and a statutory document which outlines the organisation's goals and principles, as well as its structure and core activities. The official languages are Russian and Chinese. The SCO currently comprises eight Member States (China, India, Kazakhstan, Kyrgyzstan, Russia, Pakistan, Tajikistan and Uzbekistan).

One Rank, One Pension (OROP) Scheme: The Koshiyari Committee has defined OROP as a uniform pension be paid to the Armed Forces Personnel retiring in the same rank with the same length of service regardless of their date of retirement. Thus, any hike in the pension rates to be automatically passed on to past pensioners. Recently, SC ruled that there was "no constitutional infirmity" in the way government had introduced OROP among ex-service personnel.

Carbon border tariff: European Union has planned to impose a world-first carbon dioxide emissions tariff on imports of polluting goods. CO2 emissions costs will be introduced on imports of steel, cement, fertilisers, aluminium and electricity. The move is aimed at protecting European industry from being undercut by cheaper goods made in countries with weaker environmental rules. The costs would not kick in until 2026, but a three-year transition phase would begin in 2023. Concerns: It may become a protectionist device, unduly shielding local industries from foreign competition in so-called 'green protectionism'.

Hypersonic Missile: 5 or more times the Mach or speed of sound. (Mach Number: It describes an aircraft's speed compared with the speed of sound in air, with Mach 1 equating to the speed of sound i.e. 343 metre per second). These are the ones that use rocket or jet propellant through their flight and are regarded as being just faster versions of existing cruise missiles.

22.3.2022

NPA: Non-Performing Assets is a loan or advance wherein interest or installments of principal remain overdue for a period of 90 days. **Classification** of Non Performing Assets: **1. Sub-standard:** When the NPAs have aged less than 12 months. **2. Doubtful:** When the NPAs have aged more than 12 months. **3. Loss assets:** When the bank or its auditors have identified the loss, but it has not been written off.

RCEP: Regional Comprehensive Economic Partnership is a trade deal between the 10-member Association of Southeast Asian Nations (ASEAN) and China, Japan, South Korea, Australia and New Zealand. RCEP covers about 30% of global gross domestic product (GDP), worth \$26.2 trillion (€23.17 trillion), and nearly a third of the world's population, some 2.2 billion people. Under RCEP, around 90% of trade tariffs within the bloc will eventually be eliminated. RCEP will also set common rules around trade, intellectual property, e-commerce and competition.

Warsaw Pact: The Warsaw Pact (1955) was signed between Russia and her satellite states shortly after West Germany was admitted to NATO. The Pact was a mutual defense agreement, which the Western countries perceived as a reaction against West Germany's membership of NATO.

Padma Awards: The award seeks to recognize achievements in all fields of activities or disciplines where an element of public service is involved. The Padma Awards are conferred on the recommendations made by the Padma Awards Committee, which is constituted by the Prime Minister every year. The nomination process is open to the public. Even self-nomination can be made. The Padma Vibhushan had three classes namely Pahela Varg, Dusra Varg, and Tisra Varg. These were later renamed Padma Vibhushan, Padma Bhushan, and Padma Shri through a Presidential Notification issued on January 8, 1955.

Forest elephants: Forest elephants are listed by the International Union for Conservation of Nature as "Critically Endangered" — a category for species that have declined over 80 per cent within three generations. It has listed savanna elephants as "Endangered" — indicating a decline of over 50 per cent within three generations. Forest elephants are native to humid forests in West Africa and the Congo Basin. It is the smallest of the three living elephant species, reaching a shoulder height of 2.4 m (7 ft 10 in).

23.3.2022

3 seas initiative: The Three Seas Initiative (3SI) is a regular cooperation format that brings together 12 European Union member states between the Adriatic Sea, the Baltic Sea and the Black Sea: Austria, Bulgaria, Estonia, Croatia, Lithuania, Latvia, Poland, Romania, Slovakia, Slovenia, the Czech Republic and Hungary. The partners of the 3SI are the United States, Germany and the European Commission. The initiative is designed to promote cooperation in order to contribute to economic growth and energy security, as well as to boost cohesion and unity in Europe.

GCC: GCC was established by an agreement concluded in 1981 among Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE in view of their special relations, geographic proximity, similar political systems based on Islamic beliefs, joint destiny and common objectives. The structure of the GCC consists of the Supreme Council (the highest authority), the Ministerial Council and the Secretariat General. The Secretariat is located in Riyadh, Saudi Arabia. It is a political, economic, social, and regional organisation according to its charter. Many CEOs from GCC nations have recently participated in the 1st ever overseas investment summit in Srinagar.

TRIPS: The TRIPS agreement was negotiated in 1995 at the WTO, it requires all its signatory countries to enact domestic law. It guarantees minimum standards of IP protection. Such legal consistency enables innovators to monetise their intellectual property in multiple countries. In 2001, the WTO signed the Doha Declaration, which clarified that in a public health emergency, governments could compel companies to license their patents to manufacturers, even if they did not think the offered price was acceptable. This provision, commonly referred to as "compulsory licensing", was already built into the TRIPS Agreement and the Doha declaration only clarified its usage.

DO: Dissolved Oxygen is a measure of the amount of free oxygen available in river systems. Presence of organic and inorganic wastes in water decreases the dissolved oxygen content of the water. A number of factors like surface turbulence, photosynthetic activity, O₂ consumption by organisms and decomposition of organic matter are the factors which determine the amount of DO present in water. The quality of water increases with an increase in DO levels.

Common university Entrance Test: University Grants Commission (UGC) has announced the introduction of the Central University Entrance Test (CUET) which is now mandatory for undergraduate admission at any of the 45 central universities in the country. The CUET will include 3 tests (language, domain/discipline specific and general awareness) and will be conducted by National Testing Agency.

24.3.2022

Finlandization: It refers to the policy of strict neutrality between Moscow (Russia) and the West that Finland followed during the decades of the Cold War. The principle of neutrality was rooted in the Agreement of Friendship, Cooperation, and Mutual Assistance (or YYA Treaty, from the Finnish “Ystavyys-, yhteistyö - ja avunantosopimus”) that Finland signed with the USSR in April 1948. The 1948 treaty lay at the heart of Finland’s foreign policy doctrine especially when Juho Kusti Paasikivi (1946-56) and Urho Kekkonen (1956-82) were President, and is known in international relations studies as the “Paasikivi-Kekkonen line”.

Biomass Cofiring: It refers to the concurrent blending and combustion of biomass materials with other fuels such as natural gas and coal within a boiler, which reduce the use of fossil fuels for energy generation and emissions without significantly increasing costs and infrastructure investments. In May 2021, to address the issue of air pollution due to farm stubble burning and to reduce carbon footprints of thermal power generation, Ministry of Power decided to set up a National Mission on use of Biomass in coal based thermal power plants.

Navroz: Navroz is the new year celebrations for Parsis (Zoroastrians) and Muslims (both Shia and Sunni). It is celebrated on 21st March every year. In 1079 AD, a Persian (Iranian) king named Jalaluddin Malekshah introduced this festival to generate revenue and collect taxes from people. It was observed on March 21 to mark the beginning of spring and the day of equinox. It is inscribed in the list of UNESCO Intangible Cultural Heritage of Humanity of India. In India it is known as Jamshed Navroz.

Kinzhal: Russia has claimed to have used Kinzhal missiles for the first time in Ukraine. Kinzhal, which means dagger, is an air-launched hypersonic missile (Hypersonic describes any speed faster than five times that of sound) with a reported range of 1,500-2,000km. It can carry nuclear payload of 480 kg. Hypersonic weapons are normally defined as fast, low-flying, and highly maneuverable weapons designed to be too quick and agile for traditional missile defence systems to detect in time.

AquaMAP: It is a new water management and policy centre that was inaugurated recently at IIT Madras. IIT Madras is collaborating with IIT Dharwad around the broad theme of 'Data Science for Water Security and Agriculture Sustenance. AquaMAP aims at providing solutions for complex and challenging water problems by designing smart and optimal water management practices and implementing them in the field (in villages and towns). Other Key activities of AquaMAP include:

- Identify grand challenges in water/wastewater management.
- Set up of a state-of-the-art Hydro-Informatics Laboratory.

25.3.2022

FPO: FPOs are voluntary organizations controlled by their farmer-members who actively participate in setting their policies and making decisions. They are open to all persons able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political or religious discrimination. FPOs operatives provide education and training for their farmer-members, elected representatives, managers, and employees so that they can contribute effectively to the development of their FPOs.

BA.2: BA.2 variant of Covid differs from BA.1 in its genetic sequence, including some amino acid differences in the spike protein and other proteins. Studies have shown that BA.2 has a growth advantage over BA.1. The BA.2 variant does not appear to cause more severe disease than the original Omicron, BA.1, nor does it seem more likely to evade immune protection -- but it is more transmissible.

GDP Deflator: The GDP Deflator measures the average change of prices of all goods and services in the economy. The GDP Deflator is also known as the Price Deflator and Implicit Price Deflator. It is an indication of overall inflation across all goods and services in the economy compared to the base year. If the GDP Deflator is 1 then it indicates that there is zero average inflation and deflation. If it is greater than one then it means there is inflation.

IPO: Initial Public Offering is the selling of securities to the public in the primary market. Primary market deals with new securities being issued for the first time. It is also known as the new issues market. It is different from secondary market where existing securities are bought and sold. It is also known as the stock market or stock exchange.

Offer For Sale: Under this method, securities are not issued directly to the public but are offered for sale through intermediaries like issuing houses or stock brokers. In this case, a company sells securities en bloc at an agreed price to brokers who, in turn, resell them to the investing public.

26.3.2022

Wings India-2022: The Ministry of Civil Aviation, Airports Authority of India (AAI) and Federation of Indian Chambers of Commerce and Industry (FICCI) is jointly organising Wings India 2022 from 24th – 27th March 2022, Begumpet Airport, Hyderabad, India. It is Asia's largest event on Civil Aviation (Commercial, General and Business Aviation). It is in synergy with India's commitment to transform the country into World's top aviation hub. It seeks to provide a congenial forum catering to the rapidly changing dynamics of the sector, focusing on new business acquisition, investments, policy formation and regional connectivity. It will provide a much-desired fillip to the aviation and restructured focused forums shall be instrumental in attaining the objective of connecting the Buyers, Sellers, Investors, and other stakeholders at a common vantage forum 'Wings India 2022'.

NIPUN-BHARAT: The Ministry of Education has launched NIPUN (National Initiative for Proficiency in Reading with Understanding and Numeracy) Bharat Scheme. It aims to cover the learning needs of children in the age group of 3 to 9 years. Objective: To create an enabling environment to ensure universal acquisition of foundational literacy and numeracy, so that every child achieves the desired learning competencies in reading, writing and numeracy by the end of Grade 3, by 2026-27.

Disinvestment: Disinvestment means sale or liquidation of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets. The government undertakes disinvestment to reduce the fiscal burden on the exchequer, or to raise money for meeting specific needs, such as to bridge the revenue shortfall from other regular sources.

Strategic Disinvestment: Strategic disinvestment is the transfer of the ownership and control of a public sector entity to some other entity (mostly to a private sector entity). Unlike the simple disinvestment, strategic sale implies a kind of privatization. The disinvestment commission defines strategic sale as the sale of a substantial portion of the Government shareholding of a central public sector enterprises (CPSE) of upto 50%, or such higher percentage as the competent authority may determine, along with transfer of management control. The Department of Investment and Public Asset Management (DIPAM) under the Ministry of Finance is the nodal department for the strategic stake sale in the Public Sector Undertakings (PSUs).

UNHCR: UNHCR, the UN Refugee Agency, is an international organisation working to saving lives, safeguarding the rights and providing a better future for refugees, forcibly displaced communities and stateless people. The organisation's target audience includes refugees, people who are forcibly displaced from their homes, asylum seekers, internally displaced persons and stateless people. The UNHCR was established in 1950 in the wake of the mass displacements caused due to the Second World War in Europe. The UNHCR is headed by the High Commissioner for Refugees. Its parent organisation is the United Nations General Assembly (UNGA). India is not a signatory to the 1951 Refugee Convention.

28.03.2022

Reserve Bank Innovation Hub (RBIH): The Reserve Bank of India (RBI) governor inaugurated the Reserve Bank Innovation Hub (RBIH) in Bengaluru. It has been set up as a Section 8 company under the Companies Act, 2013 with an initial capital contribution of Rs. 100 crore. It is a wholly owned subsidiary of the RBI. RBIH aims to create an ecosystem that focuses on promoting access to financial services and products for the low-income population in the country.

H2Ooooh: It was launched by UNESCO in July 2021, jointly with the National Mission for Clean Ganga (NMCG) and others. H2Ooooh! is a unique program crafted for Indian school students from Standard 1-8. Objectives: It aims to increase awareness about the limited availability of water, its sustainable use, its conservation, its exploitation and much more. It seeks to enable the students to share their own experiences and proposals for the protection of the environment. Divided in three phases, the project aims to spur creativity and raise awareness on water conservation and its sustainable use for students between the age of 6-14 years, by providing training and encouraging them to submit paintings and story ideas for the animated short films.

Dare2eraD TB: Union Minister of Science & Technology announced the launch of Data-Driven Research to Eradicate TB- "Dare2eraD TB" by the Department of Biotechnology, M/o Science & Technology, on the occasion of World TB Day (March 24). Dare2eraD TB will be the umbrella TB program of DBT comprising of following key initiatives:

- InTGS – Indian Tuberculosis Genomic Surveillance Consortium.

- InTBK Hub- Indian TB Knowledge Hub- Webinar Series.
- Host Directed therapies against TB and developing an evidence-based regimen for treating extra-pulmonary Tuberculosis.

Free Trade Agreement (FTA): It is a pact between two or more nations to reduce barriers to imports and exports among them. Under a free trade policy, goods and services can be bought and sold across international borders with little or no government tariffs, quotas, subsidies, or prohibitions to inhibit their exchange. The concept of free trade is the opposite of trade protectionism or economic isolationism.

Himadri station: Himadri is India's first research station located at the International Arctic Research base in Norway. India is the 11th country after Britain, Germany, France, Italy, China, Japan, South Korea, The Netherlands, Sweden and Norway to set up a permanent research station in Ny-Ålesund (Town in Oscar II Land on the island of Spitsbergen in Svalbard, Norway). It is located at a distance of 1,200 kilometres from the North Pole. The National Centre for Polar and Ocean Research (NCPOR) (previously known as National Centre for Antarctic and Ocean Research – NCAOR) is a nodal agency that makes sure the availability of the requisite facilities at the Himadri.

29.3.2022

NABARD: NABARD is a development bank focussing primarily on the rural sector of the country. It is the apex banking institution to provide finance for Agriculture and rural development. Its headquarter is located in Mumbai, the country's financial capital. It is responsible for the development of the small industries, cottage industries, and any other such village or rural projects. It is a statutory body established in 1982 under Parliamentary act-National Bank for Agriculture and Rural Development Act, 1981. It provides refinance support for building rural infrastructure. It prepares district level credit plans to guiding and motivating the banking industry in achieving these targets. It supervises Cooperative Banks and Regional Rural Banks (RRBs) and helping them develop sound banking practices and integrate them to the CBS (Core Banking Solution) platform.

Ak-203: AK series (known in Russia as 'Avtomat Kalashnikova') of rifles are a series of automatic rifles of Russia (erstwhile Soviet Union) based on the design of Mikhail Kalashnikov. The armed forces have received the first batch of 70,000 rifles from Russia as part of a larger contract to manufacture the AK 203 assault rifles in India. The initial batch has been delivered at a fast pace as requested by India. The rifles are being manufactured with a complete technology transfer clause that will also enable their exports to friendly foreign nations in the near future. The manufacturing will be done by the Indo Russian Rifles Private Limited Joint Venture between Advanced Weapons and Equipment India Ltd (erstwhile OFB) and Russian Rosoboronexport.

B9 countries: The "Bucharest Nine" is a group of nine NATO countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War. The B9 was founded on November 4, 2015, and takes its name from Bucharest, the capital of Romania. Romania, Poland, Hungary, Bulgaria, the Czech Republic, Slovakia, and the three Baltic republics of Estonia, Latvia, and Lithuania. All members of the B9 are part of the European Union (EU) and North Atlantic Treaty Organisation (NATO). All nine countries were once closely associated with the now dissolved Soviet Union, but later chose the path of democracy. The B9 offers a platform for deepening the dialogue and consultation among the participant allied states, in order to articulate their specific contribution to the ongoing processes across the North-Atlantic Alliance. The envoys to India of nine Eastern European countries called Bucharest Nine jointly wrote to acquaint the Indian public with the basic facts on the ground" about the "premeditated, unprovoked and unjustified Russian aggression in Ukraine".

G-20: It is an informal group of 19 countries and the European Union (EU), with representatives of the International Monetary Fund and the World Bank. It does not have a permanent secretariat or Headquarters. The membership comprises a mix of the world's largest advanced and emerging economies, representing about two-thirds of the world's population, 80% of global Gross Domestic Product (GDP), 80% of global investment and over 75% of global trade.. Each G20 country is represented by its Sherpa, who plans, guides, implements, etc. on behalf of the leader of their respective country. India will steer the international body as its President from 1st December 2022 to 30th November 2023, which will lead to the G20 summit to be hosted here. Members: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the EU

BOD: Water pollution by organic wastes is measured in terms of Biochemical Oxygen Demand (BOD). BOD is the amount of dissolved oxygen needed by bacteria in decomposing the organic wastes present in water. It is expressed in milligrams of oxygen per litre of water. The higher value of BOD indicates low DO content of water. Since BOD is limited to biodegradable materials, it is not a reliable method of measuring water pollution.

30.3.2022

Shrinkflation: Shrinkflation is basically a form of hidden inflation that involves reducing the size of a product while maintaining its sticker price. Rather than increase the price of a product, the company simply offers a smaller package for the same sticker price.

Raising the price per given amount is a strategy employed by companies, mainly in the food and beverage industries, to stealthily boost profit margins.

Endosymbiosis: Endosymbiosis is an intense form of symbiosis when one of the organisms is captured and internalized by the other. The endosymbiotic hypothesis for the origin of mitochondria (and chloroplasts) suggests that mitochondria are descended from specialized bacteria (probably purple nonsulfur bacteria). Mitochondria are dubbed the power houses of the cell, because they help in generating energy in the form of Adenosine Triphosphate (ATP) within the cell, powering it.

Bamiyan Buddhas: It is situated in the Hindu Kush in the central highlands of Afghanistan. Bamiyan Buddhas date back to the 5th century AD and were once the tallest standing Buddhas in the world. They were locally known as Salsal and Shamama. They were great examples of a confluence of Gupta, Sassanian and Hellenistic artistic styles. In 2001, Taliban began blowing up the two statues. Following this, UNESCO included the remains in its list of World Heritage Sites in 2003. Now Taliban are preserving Bamiyan buddhas, with eye to China investment.

UNESCO City of Literature: Kozhikode was proposed by the Kerala Institute of Local Administration (KILA) to be branded as a 'City of Literature' with the help of UNESCO. UNESCO's City of Literature programme is part of the wider Creative Cities Network. The Network was launched in 2004, and now has member cities in seven creative fields. The other creative fields are: Crafts and Folk Art, Design, Film, Gastronomy, Media Arts, and Music. A city designated as 'Creative City of Literature' must have a sufficient number of institutions taking care of its literary life.

Biodiversity: In simple terms, biodiversity is the number and variety of living organisms present in a specific geographical region. It includes various plants, animals and microorganisms, the genes they have and the ecosystems formed by them. It relates to the diversity among living organisms on the earth, including the diversity within and between the species and that within and between the ecosystems they form.

31.3.2022

Affinity test: The Supreme Court wants to fix foolproof parameters to determine if a person belongs to a Scheduled Tribe and is entitled to the benefits due to the community as it is no longer sure about an "affinity test". Affinity Test is used to shift through anthropological and ethnological traits to link a person to a tribe. There is the likelihood that contact with other cultures, migration and modernization would have erased the traditional characteristics of a tribe. The claim by an applicant that he is a part of a Scheduled Tribe and is entitled to the benefit extended to that tribe, cannot per se be disregarded on the ground that his present traits do not match his tribes. These include peculiar anthropological and ethnological traits, deity, rituals, mode of marriage, death ceremonies, method of burial of dead bodies etc.

Stablecoins: A stablecoin is a type of cryptocurrency that is typically pegged to an existing government-backed currency. Stablecoins hold a bundle of assets in reserve, usually short-term securities such as cash, government debt or commercial paper. Stablecoins are useful because they allow people to transact more seamlessly in cryptocurrencies that function as investments, such as Bitcoin. They form a bridge between old-world money and new-world crypto aslo they promise to function like perfectly safe holdings.

The Frontier 2022 report: The UNEP Annual Frontier Report 2022 was released recently. It was titled 'Noise, Blazes and Mismatches'. **Highlights of the report:** Dhaka has been ranked as the noisiest city in the world which is followed by Moradabad, Uttar Pradesh. Five Indian cities have been ranked in this list of being among the noisiest cities of the world which are Asansol, Jaipur, Kolkata, New Delhi, and Moradabad. Irbid, Jordan has been ranked as the world's quietest city.

Catch the rain campaign: President of India launched the Jal Shakti Abhiyan: Catch the Rain campaign 2022 in New Delhi. Objective: To nudge the states and stake-holders to create appropriate Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata before monsoon. Drives to make water harvesting pits, rooftop RWHS etc; Removal of encroachments and de-silting of tanks to increase their storage capacity; > Removal of obstructions in the channels which bring water to them from the catchment areas etc.

V-shaped recovery: In a V-shaped recovery, an economy that has suffered a sharp economic decline experiences a fast and strong rebound. Such recoveries are generally spurred by a significant shift in economic activity caused by rapid readjustment of consumer demand and business investment spending. Because of the economy's rapid adjustment and quick recovery in the major metrics of macroeconomic performance, a V-shaped recovery can be thought of as a best-case scenario for an economy in recession.