

REC

Complete Fortnightly for UPSC and PCS Exam



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- Hizab Controversy: Violation of Fundamental Rights or Need of UCC
- Floods in India: Sustainable and Advanced Planning is Need of the Hour
- Depleting Forex Reserve and Slide in Rupee: Challenges Towards India **Becoming 3rd Largest Economy**
- India's Position Between NATO, Putin's Ambitions and Global Equations
- 5G: The Beginning of a New Era
- Global Hunger Index- Projected and Actual Conditions



Why Perfect-7 Current Affairs Magazine?

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



PERFECT

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Message



Vinay Kumar Singh Founder Dhyeya IAS

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

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

Best wishes.



Environment

Wildlife Diplomacy can Become an Effective Tool for Wildlife Conservation

The existence of fauna and flora around the world is under serious threat due to climate change and global warming. The extinction of the flora and fauna, and their endangered status continues to affect the Sustainable Development Goals and the nation's goals of biodiversity conservation. There are many nations where no single animal of some species is left due to the illegal smuggling of wildlife, degradation of natural habitats, and many other reasons. Some nations are now resorting to the policy of transnational translocation (that is, action to bring an extinct species of animal from another country to their country) for rehabilitation of such extinct species. For this, such countries have started emphasizing environmental interaction, dialogue, and agreement with other countries. In this regard, the Government of Sri Lanka has requested the Government of India to help relocate the Gaur, also known as Indian Bison, in Sri Lanka. The Indian bison became extinct on the Sri Lankan island in the 17th century. If approved, this project will be first such agreement between India and Sri Lanka that will promote the evolving global trend of wildlife or zoological diplomacy. Recently, some environmental experts have said that wildlife acts as zoological ambassadors between the two nations.

The Ministry of External Affairs of India has recently received a proposal from the Government of Sri Lanka, in which the country has expressed its desire to get 6 animals, including an Indian bison, a bull and 3 cows, from India under environmental cooperation. India's Foreign Ministry has said that it has sent Sri Lanka's proposal to Indian Ministry of Environment, Forest and Climate Change, for consideration. The Sri Lankan government, on the other hand, has clarified its plan in this matter, saying that if it receives this wildlife gift from India, then it will run a program of captive breeding of such extinct creatures for the next 5 years so that the goals of species recovery in Sri Lanka can be achieved.

(Captive Breeding)

Captive breeding, also known as captive propagation, is the process of maintaining plants or animals in a controlled environment. Such as wildlife reserves, zoos, botanical gardens and other conservation facilities.

Sri Lanka's well-known environmental conservationist Rohan Pethiyagoda, who has received the Linnean Medal for the year 2022, originally proposed to the Sri Lankan government that it should expand environmental cooperation with the neighbouring country India, which had always been assisting Sri Lanka. It is noteworthy that the Linnean Award is considered the Nobel Prize in the field of Zoology.

The director of the National Tiger Conservation Authority of India however says that before taking any decision, a feasibility study will be done so that it can be known whether the translocated animal will be able to adapt to Sri Lankan conditions and if it could survive there or not.

The policy of species translocation, reintroduction, gifting or loaning the animals from one country to another country for captive breeding, is in termed as the wildlife diplomacy. Along with the environmental cooperation, the wildlife diplomacy strengthens the bilateral relations between the two countries. Further, it increases the mutual trust between the two nations, encouraging the thought of achieving Sustainable Development Goals mutually.

When the American bison went extinct in America, Canada gave bison to America from its own land and helped America in relocating the Bison to American soil again. Recently Britain too reintroduced the European Bison to its land. These European bison are also called Vicente. It was almost after an estimated period of 10,000 years, that such translocation of a wildlife species occurred on the soil of the United Kingdom. The European bison is considered a close relative of the steppe bison, which was found on British soil a few centuries ago, but then became extinct and therefore Britain had to relocate bison from Europe.

Several nations of the world have rehabilitated extinct animals by the policy of reintroduction of wildlife through Wildlife Diplomacy. Israel, for instance, has relocated the Persian Fallow Deer for several decades. Arabian oryx and other species that were relocated from different places, were released into the Negev desert. Furthermore, after the end of the anti-apartheid regime, South Africa worked on a policy of exporting cheetahs to maintain good relations with many African countries,



which has been called Wildlife or Zoological Diplomacy. The recent gift of cheetahs from Namibia to India is further seen as the beginning of a new era for India-Africa relations.

Instances of wildlife diplomacy by Indian politicians:

As a forerunner of affection and goodwill, Jawaharlal Nehru gifted an elephant named 'Indira' to the children of war-torn Japan in 1949. During the 1950s, India sent elephants to zoos in China, the Soviet Union, the US, Germany, Turkey, Iran, Canada, and the Netherlands. Nehru described elephants as the symbol of India- 'wise and patient'.

Half a century later, the then Prime Minister Atal Bihari Vajpayee called for a more grandiose image of India in the elephant symbol. "The Indian economy is often identified with an elephant," he said at the 3rd India-EU Business Summit in Copenhagen in 2002. "I have no problem with this analogy. It may take time, but once they (elephants) actually start moving, it's very difficult to turn, slow down, stop or reverse the pace and when they walk, the forest shakes."

Need to be vigilant on the import of exotic species along with wildlife diplomacy:

The Central Government has issued an advisory regarding regulating the import of foreign exotic animals.

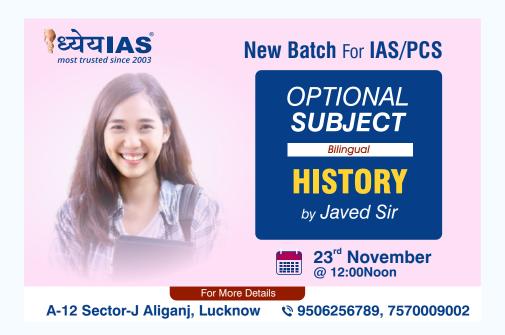
The COVID-19 pandemic has raised global concerns regarding the 'trafficking of wildlife and the spread of zoonotic diseases'. Therefore, the Indian government took this step. Exotic live species are organisms and plants that are carried, mostly by humans, from their place of origin to other places.

The exotic fauna that is in high demand in India, include: ball pythons, scarlet macaws, sea turtles, sugar gliders, African monkeys and brown African parrots, etc.

List of exotic species:

According to the advisory, 'exotic living species' are included as endangered species notified in Appendix I, II and III of the 'Convention on International Trade in Wild Fauna and Flora' (CITES), however, the species notified under 'Wildlife (Protection) Act '1972' have not been included.

The import of exotic animals into India is regulated under the Customs Act, but there has been a demand for stringent laws and guidelines regarding exotic animals in India for a long time by wildlife experts. Many Indian citizens keep exotic animals, notified under the Convention on International Trade in Wildlife and Flora (CITES), as pets. There is no integrated information system available on such species at the state or central level. Further, these species are often illegally smuggled into the country to avoid the lengthy process of documentation and scrutiny.







Hizab Controversy: Violation of Fundamental Rights or Need of UCC

Context:

In the context of the Hijab controversy in Karnataka, the issue of protection of fundamental rights and the need of Uniform Civil Code is increasing continuously.

Introduction:

The issue of religious freedom sparked a fresh debate after the Karnataka government decided to make the uniform prescribed by the school administration mandatory for pre-university schooling. Under Part 3 of the Constitution of India, all persons have the fundamental right to freedom of religion. This issue clearly shows the contradiction between the right to freedom of religion and the autonomy of school administration. The main reason behind these situations is that while the state here is secular, the society is religious; This situation highlights the need of a uniform civil code somewhere.

Hijab as a fundamental right:

The following arguments have been given in favor of considering the right to wear the hijab as a fundamental right -

- Article 15 prohibits discrimination on grounds of religion against any person in public places. Thus it can be argued that preventing someone from coming to school (a public place) because of the religious symbol (hijab) would violate the fundamental right (enshrined in Article 15) of hijab-wearing women by discriminating against them on a religious basis.
- Article 25 entitles all persons to "the freedom of conscience and equal right to profess, practice and propagate religion freely. Although this right is not absolute and this freedom can be restricted by the state based on public order, morality, morality, health. Wearing a hijab can be seen as following, practicing, and promoting religion.
- Article 29 gives the right to the protection of his/her culture, to any citizen of India.
- Preventing Muslim girls from wearing Hijab would also infringe upon women's right to education as mentioned in Article 21A. By banning such religious insignia (hijab), it is also possible that Muslim families may ban girls from taking education.

Thus this problem would be against the essence of "Education for All".

- Some argue that the hijab, like the turban of the Sikhs, is a religious symbol of Islam. Being barred from wearing the hijab violates the religious freedom of these women.
- ➤ In Amna Bint Basheer Vs CBSE The Kerala High Court held the hijab to be an essential religious practice that is protected under Article 25, which establishes the wearing of hijab as a fundamental right.

Problems caused by wearing hijab:

- There is indeed a right to religious freedom in India but this right is not absolute. Hijabs can be banned based on public order, morality, morality, and health.
- An institution like a school or a college has some degree of autonomy. They have the right to prescribe uniforms.
- Along with this, providing the right to wear the hijab would be a violation of the right to equality under Article 14. Giving the right to wear the hijab could affect the equality brought about by a uniform in schools.
- Some argue that the main object of Fundamental Rights is that they are the set of rights necessary for the development of the individual's personality. In modern times, it is considered that the compulsion of hijab for women, is not an essential element of Islam but has been imposed by the patriarchal mindset and the patriarchal mindset cannot be promoted in the name of religious freedom. Further, it is hindering the development of the personality of women.
- ➤ In Fatima Tasneem v State of Kerala, The Kerala High Court held that the collective rights of an institution should take precedence over individual rights. In light of this decision, if we look at the right to wear the hijab, priority should be given to the collectiveness of the school.

Has Uniform Civil Code become Necessary?

At present, matters like marriage, inheritance, adoption, succession, etc. are handled according to



the personal laws of various religious communities in India. In Hinduism, personal law applies to legal issues relating to inheritance, succession, marriage, adoption, co-parenting, the obligations of sons to pay their father's debts, the division of family property, guardianship, and charitable donations. In Islam, personal laws apply to inheritance, bequests, succession, marriage, waqf, dowry, guardianship, divorce, gifts, and matters involving the Quran.

- Indian society is religious and the state is secular; Therefore, there is a need to make religious freedom to every individual in the society. This situation can be achieved through the Uniform Civil Code (Article 44) mentioned in the Directive Principles of State Policy. The Uniform Civil Code (UCC) seeks to make a single law that is applicable to all religious communities in India in matters such as marriage, divorce, inheritance, and adoption.
- > The Delhi High Court held that various civil rules lead to conflict between communities.
- ➤ In the context of UCC, Dr Ambedkar had said that despite UCC being desirable, its legal formulation should be postponed until a more opportune time. It is, therefore, envisaged by Ambedkar to protect weaker sections including women and religious minorities, while also promoting nationalist fervor through unity.
- Recently, the implementation of the Uniform Civil Code in the assembly elections in Uttarakhand had become an election promise. The Chief Minister of Uttarakhand said that the UCC will promote equal rights for all in the state. It will enhance social harmony, promote gender justice, strengthen women's empowerment and help protect the state's exceptional cultural-spiritual identity and environment.
- ➤ The Supreme Court has several times asked the central government to not introduce the Uniform Civil Code Bill. For instance in the cases like Mohammad Ahmed Khan vs Shah Bano Begum. (1985), Jordan Diengdeh vs SS Chopra (1985), John Velmatom vs Union of India (2003), etc.
- Uniform Civil Code will eliminate the compulsory hijab at the school level and modify the orthodox rules within the religion.

India does not need Uniform Civil Code right now:-

➤ In 2018 the Law Commission clarified that UCC is "neither necessary nor desirable at this stage"

- for India. This will affect the diversity of India somewhere.
- ➤ Legal experts also raise doubts about whether the Uniform Civil Code will be successful in ensuring equality. Because that "code" does not mean the same law in every circumstance. It can mean either one enactment such as the Indian Penal Code, or the Hindu Code Bill which consists of three separate Acts.
- Along with this, the codes brought for the Hindu religion have not yet been successful in solving problems like inter-caste marriage, and gender discrimination.

Other Fact

- Articles 25 to 28 of Part 3 in the Constitution of India give the right to religious freedom.
- The UCC has its origins in colonial India when the British Government in 1835, in its report stressed the need for uniformity in the codification of Indian law relating to offenses, evidence, and covenants. It specifically recommended that the personal laws of Hindus and Muslims should change and should be excluded from such codification.
- ➤ The colonial government formed the BN Rau Committee in 1941 to codify Hindu law. The draft of the Rau committee report was submitted to a select committee headed by BR Ambedkar, it was discussed in 1951 after the adoption of the constitution.
- This was the basis of the Hindu Succession Act of 1956.
- ➤ Goa is the only state where Uniform Civil Code is applicable.

Conclusion:

The hijab is indeed a type of religious identity that needs to be protected. Similarly, the autonomy of schools is also necessary. If people of one religion were given the right to assume their religious identity, then people of other religions can also demand it, which can promote communalism. The matter is still under question in the court. Nevertheless, the government should gradually move towards an equal civil code by regulating the age of first marriage, and the rules of divorce; as the real law is that which is made by the sovereign and accepted by society.





Floods in India: Sustainable and Advanced Planning is Need of the Hour

Context:

Floods are the most common natural disasters occurring in India which cause great destruction every year. In India, where people rejoice with the arrival of monsoon and feel relief from the heat, in some parts, every year there is devastation. But this year in Assam, even before the onset of monsoon, incessant heavy rains submerged most parts, and with the onset of monsoon, many parts of India (Kerala, Bihar, Maharashtra, Karnataka, Odisha, Telangana, etc.) were submerged due to flood caused by heavy rains.

What is a flood?

A flood is a situation where a certain land area is temporarily submerged. Floods can either come suddenly or build up gradually. The river water when in its ebullience overflows to human settlements and other nearby areas, a flood-like situation develops. Further, when the lakes and inland water bodies have access of water than their water holding capacity, flooding occurs.

Flood-Affected Areas in India:

4 lakh hectares of the total geographical area in India is flood-prone. Due to heavy rains and floods this year, the situation in many states of India has been very worrying. Gujarat and Maharashtra were the most affected by this, while Assam, Telangana, Madhya Pradesh, Himachal, Uttarakhand and Jammu, and Kashmir were also in the grip of heavy rains, and many people lost their lives due to floods and incessant rains. Where 18 out of 33 districts of Assam were hit by floods, which resulted in the death of about 200 people and affected more than one million people and livestock, the situation in Maharashtra and Gujarat was even worse. Heavy rainfall in western India's Gujarat state has caused severe flooding in at least 7 districts, affecting more than one million people. Between 2016-2021, extreme events such as cyclones, flash floods, floods and landslides damaged crops in an area of 3.6 million hectares, causing a loss of \$3.75 billion to farmers in the country. In view of these risks, ADB last year provided a loan of \$251 million for Integrated Urban Flood Management for Chennai.

> The distribution of floodplains in India includes the Brahmaputra river region, the central and Deccan region, the Ganges river region, and the north-west riverine region. The Ganga-Brahmaputra-Meghna-Basin in India accounts for about 60 percent of the total river flow of the country.

Causes of floods in India:

Due to climate change, the threat of floods in monsoons is looming around the world. Environmentalists and climate change risk analysts analyze the causes behind floods every year. However, the main cause of floods in India is the uncertainty of the Indian monsoon and heavy water flow during the rainy season. Apart from this, there are other reasons as well that are responsible for floods, such as —

1. Natural factor

- Geographical location of India, asymmetric geomorphic variations.
- Overflow of rivers.
- Melting of glaciers, cloudbursts.
- > Storm waves or tsunamis.
- > Valleys with sloped edges.
- > Lack of drainage system.

2. Man-made factor

- Breakdown of dams, barrages and embankments.
- Release of water from the reservoir.
- > Deforestation and depletion of vegetation.
- > Continuous construction activities.
- > Urban floods, rapid industrialization, etc.

How do floods affect different states?

- > The outbreak of floods is more in the Brahmaputra valley and the lower reaches of the Ganges. About 50 million hectares of land get flooded every year. Whereas heavy rains during the returning monsoon in Tamil Nadu are responsible for floods. They have a huge adverse impact on human society.
- > Frequent flooding of agricultural land and in rural and urban settlements has a bad impact on human society and the ecosystem.
- Roads, bridges, rails, and infrastructure get disturbed. Millions of people become homeless and, there is a loss of livestock and wealth which affects the



- economic condition.
- ➤ Floods not only cause physical and economic damage but also cause social and psychological problems. eg. displacement problems, mental stress, etc.
- Floods cause various diseases in submerged areas. In many places, the breeding of mosquitoes and other insects in the accumulated water causes various diseases like malaria and dengue. Recently there has been an increase in cases of dysentery, pneumonic plague, and military fever.
- Loss of biological species.
- Along with this, some there have been some positive results of floods as well. For example, every year new layer of alluvial soil is spread in the flood-affected areas, which increases the fertility of the fields and increases the production in agriculture. Majuli Island, situated in the middle of the river course, is flooded every year, making its soil very fertile, which leads to good rice production in India. Floods also cause groundwater recharge.

Measures to prevent floods:



- Although rain events, melting glaciers, drains and storms are difficult to prevent, in most cases, fail-safe measures can be taken.
- To develop the operation process of reservoirs in such a way that the capacity to bear the flood can be achieved.
- By reducing the rate of soil erosion through planting more trees in the catchment area, bore wells should

- be constructed in different parts.
- Measures like reforestation, improvement of the drainage system, watershed management, and soil conservation.
- River Linking Project may offer a practical solution.
- Obstacles in the flow of rivers and streams should be removed, and river beds should be cleaned from time to time.

Programs launched by the Central and State Governments for flood management:

- ➤ National Disaster Management Act, 2005-Under this, the National Disaster Management Authority and the National Disaster Response Force were formed.
- > Flood Management and Boundary Area Program- with a focus on effective flood management, control of land erosion, and prevention of erosion of coastal areas.
- > National Water Policy, 2012: Under this, flood forecasting through structural and non-structural measures and modernization using a real-time data collection system.
- > Reducing the frequency of floods, carrying out relief work in flood-affected areas from time to time, etc.

Way Forward:

Although much work has been done by the government for flood management, and relief assistance at the time of disaster but this is not enough. Sustainable and advanced planning for flood management is the need of the hour and the government should pay more attention to this. Initiatives like strict adherence to building construction laws in flood-affected areas, construction of sluice gates of rivers, compilation of historical facts, etc. Further, attention should be given to infrastructural preparedness, health, rescue relief workers should be trained using systems like IFLOWS (Integrated Flood Warning System). It is not possible to control floods completely. Therefore, we should look for alternative measures like river-linked technology structures and other hydrometeorological solutions.





Depleting Forex Reserve and Slide in Rupee: Challenges Towards India Becoming 3rd Largest Economy

Context:

Recently, the Reserve Bank of India (RBI) reported that India's foreign exchange reserves have declined by USD 110 billion in the last 13 months. Along with this, the Indian currency rupee had reached its lowest level (1 US dollar = 83 rupees). Both these conditions pose a challenge for India to become the third-largest economy in the world.

Foreign Exchange Reserves:

Foreign Exchange Reserves refer to the assets held by RBI in foreign currency such as bonds, treasury bills, and other government securities, etc.

Most of the foreign exchange reserves are kept in US dollars.

The following are included in India's foreign exchange reserves:

- Forex Assets
- Gold reserves
- > Special Drawing Rights (SDR)
- Reserve Trench with the International Monetary Fund (IMF)

Current Scenario:

- ➤ India's foreign exchange reserve has declined by US\$ 114 billion since September 2021. As of October 14, 2022, India now has about USD 528 in forex reserves.
- ➤ It is to be noted that the Indian Rupee is a freely floating currency and its exchange rate is determined by the market. RBI does not have direct control over it.
- ➤ However, India has fared much better than emerging market economies and their Asian counterparts.

The Key reasons for the fall in foreign exchange reserves and the rupee are:

- For Supporting Rupee: India's currency 'the rupee' is declining rapidly. To balance this decline, RBI is selling dollars from its foreign exchange reserves. Although it is necessary to check the free fall of the rupee and reduce volatility in the market, it is depleting foreign exchange reserves.
- Aggressive policy of the US Federal Reserve:
 The US Federal Reserve has tightened monetary policy and increased interest rates to prevent capital outflow. Consequently, many foreign portfolio

- investors(FPI) are investing in the US market instead of the Indian market. These FPIs were sellers of financial and IT services and buyers of telecom and capital goods and all these sectors earn foreign exchange.
- ➤ **Problems of the global economy:** The corona and corona-induced lockdown of 2019 affected the economy extensively. Thereafter the Russo-Ukraine war is causing inflation at the global level which is also affecting India negatively.
- > **Deglobalization:** Only after the American recession, the process of protectionism was implemented in many countries. This process is slowly turning into deglobalization. India was just reaching a position to take advantage of globalization and this protectionism that came on the global level affected the foreign exchange earning capacity of India.
- > **Devaluation:** A rise in the value of the US dollar against major currencies and a fall in gold prices also played a role in the reduction in forex reserves. The nearly 67% decline in reserves during this fiscal was on account of valuation changes resulting from an uptrend in the US dollar and higher US bond yields.
- ➤ Inflation rate: Due to rising inflation in India and being a net importer, India has to spend foreign exchange. Simultaneously, changes in market inflation cause changes in currency exchange rates. For example, a country with a lower inflation rate sees an increase in the value of its currency as compared to another country.
- ➤ Balance of Payments: India is a net importer. Along with this, there is the extensive import of crude oil and gold by India. It spends foreign exchange from India. Simultaneously, a deficit in the current account due to the over-spending of its foreign currency on imports of products causes depreciation from the sale of exports, and it encourages fluctuations in the exchange rate of a country's domestic currency.
- > Government Debt: The Government of India is currently debt-ridden. The interest on this loan is also payable in foreign currency. The unexpected expenditure due to Corona last year has led to a massive increase in the quantum of government debt and it has failed to meet the fiscal targets.

Due to the above reasons, while on one hand, the currency of the country is declining, on the other hand, the foreign exchange is decreasing rapidly. For the last



7 weeks, there has been a continuous decrease in the forex reserves. These problems are hindering the way of making the country a 5 trillion economy and becoming the third economy in the world.

Steps taken by the government to get rid of this problem:

- The Government of India is continuously trying to promote foreign direct investment. Due to these efforts, India's foreign direct investment has reached its best lining this year at around \$83 billion.
- > The Government of India is continuously entering into bilateral agreements. Last year, India carried forward the bilateral agreements with the UAE, and Australia and commenced a free trade treaty with the UK.
- ➤ India distances itself from more multilateral agreements involving countries that are in a positive balance of payments position in bilateral trade with India, for example, it distanced itself from the RCP.
- > The government of India is constantly trying to promote investment in India through initiatives like Startup India, Invest India, and Digital India. It is continuously leading the Indian youth towards the business which will aid in increasing the economy of the country.
- ➤ The government is continuously providing the 'Production Link Initiative' to increase the manufacturing of goods, which is being given to 14 sectors including semiconductors.
- Further, the government is continuously increasing its investment toward clean energy. This will reduce the dependence on crude oil, which will lead to less expenditure of foreign exchange.
- > To prevent investment in physical gold, instruments like Gold De Monetization Scheme, Sovereign Gold Bonds have been introduced by the government which is similar to physical gold. This will help in saving the foreign exchange to be spent on gold.
- ➤ India is in a negative position in the balance of trade in terms of goods, which is why a scheme is being run by the Government of India on Make in India which will boost manufacturing in India.
- Reserve Bank of India directed to settle foreign trade with Rupees. This step will help curb the expenditure of foreign exchange in India.

Which areas still need to be worked upon?

- ➤ India's FDI comes mainly from tax haven countries like Singapore. This is mainly done because of tax avoidance. India is constantly making compromises to avoid tax avoidance.
- There is still a delay in starting a business in India

- due to bureaucracy. For this, the Government of India is continuously making efforts and is setting up single window clearance in many areas.
- ➤ The functioning of the Special Economic Zone has also been affected due to the Corona-induced lockdown. The Special Economic Zone was conceptualized as a foreign exchange earning zone.
- ➤ India needs to enhance its port infrastructure and road infrastructure. The government is constantly striving towards this aspect through Bharatmala projects.
- Along with this, there are problems like Energy Poverty, Costly Debt, NPA problems, etc. on which the government needs to work upon.
- ➤ Nevertheless, efforts should be made for India to carry forward the long pending SAFTA (free trade agreement of SAARC).

Important words and facts

Balance of Payments: Balance of payments refers to

- the balance sheet of a country's trade with the rest of the world. India has historically been a negative balance of payments country.
- ➤ Balance of Trade: The balance of trade is the imports and exports of one country to another country. For example, India has a surplus trade balance with the US and a deficit in trade balance with China.
- ➤ Production Link Initiative: A scheme run by the government to increase the production of goods in the country, in which the government gives initiatives to companies in proportion to the production of goods.
- Make in India: This is an ambitious scheme being run by the government to increase manufacturing.
- Special Drawing Rights (SDRs): Special Drawing Rights were created by the International Monetary Fund (IMF) in 1969 as an international reserve asset for its member countries. SDR is neither a currency nor it can be claimed on the IMF. Rather, it is a potential claim by IMF members to freely usable currencies.

Conclusion:

India is one of the fastest-growing economies. According to analysts, India can overtake Germany to become the world's third-largest economy in the coming years. Although there are several challenges in front of this goal, the Government of India is making continuous efforts. India can rapidly become the third economy due to the recent growth of business in the country and the aspiration of the government.

International

India's Position Between NATO, Putin's Ambitions and Global Equations

The ongoing Russia-Ukraine conflict has put diplomatic equations around the world in an unstable position. It has become a matter of serious consideration in various nations as to whom to vote in favour of, or to abstain from the voting process at a meeting of the United Nations General Assembly, United Nations Security Council or other forums. But despite all this, what all nations including India are agreeing on is that the Ukraine issue should be resolved through dialogue and diplomatic routes, following democratic values, as this is the predetermined condition for global peace and security. The decisive approach of countries, like India, needed to come out clearly to remove the world from third-world speculation and hence, India in the last one and half two months has conveyed to the world community, its clear stand on the Ukraine issue.

Addressing the world leaders at the 77th UN General Assembly Assembly, the External Affairs Minister of India had said that "We are often asked whose side we are on and our answer is always straight and honest. India is in favour of peace. We stand and will stand firmly by that. We stand with the side that respects the United Nations Charter and its fundamental principles. We are with the side that talks about finding a solution through dialogue and diplomacy. We are on the side of those who are struggling to meet their needs."

Indian Foreign Minister Jaishankar, while referring to the impact of the Russian-Ukraine war on the global economy, said that the war will affect the availability of oil, food and fertilizer and their prices will increase. It is in the collective interest of all of us to find a solution to this conflict as soon as possible.

Recently, the emergency special session of the United Nations General Assembly was convened on the Ukraine conflict. A resolution was passed condemning the Russian acquisition of the territories of Ukraine. 143 members voted in favour of the motion, while 5 members voted against it. On the other hand, 35 countries including India abstained from voting. The UN Security Council recently convened a meeting to discuss the alleged referendums held in Ukraine's Russian-held areas of Donetsk, Luhansk, Kherson and Zaporizhzhia.

US Permanent Representative to the United Nations, Linda Thomas-Greenfield, told a Security

Council meeting that last week leaders of more than 100 countries gathered in New York to reaffirm their commitment to the UN Charter.



Ukraine suffering amidst the global politics:

Ukraine celebrated its Independence Day on 24 August. It was on this day that the nation seceded from the Soviet Union and came onto the global platform as an independent sovereign country. Almost three decades later, it has to fight once again with Russia for its right to independence and sovereignty, however, it is common in world politics, none can assess when disputes between two countries start and the nations start fighting for their national interests and by sticking to their respective issues, they start influencing the world.

The Russia-Ukraine conflict has given an entirely new dimension to the power politics of the world. The emergence of new centres of global power and regional power has begun. Multilateralism appears weak in global politics and the world, caught between a trade war, military war, perception war, and cyber war is facing new consequences. Based on the Russia-Ukraine war, many nations might open the disputed pages of the geographical past. On this basis, as per Analysts, China can be very aggressive about its territorial claims on Taiwan and Arunachal Pradesh. Similarly, based on the

Russia-Ukraine war, a large section of India believes that India should acquire PoK (Pakistan Occupied Kashmir).

The war between Russia and Ukraine have dragged on for an unexpectedly long time. Many international analysts are offering their perspectives and opinions on the reasons behind this. Out in this, one of the most crucial things that are surfacing is Ukraine's continued desire to become a member of NATO, efforts to become a member of the European Union, the intention to seek aid from America and European countries, and Russia's intention for military retaliation are some main reasons that have provided Russian President Putin with sufficient reasons to wage this war.

Russia might not have been so aggressive if Ukraine, assessing the seriousness of the situation, had given up its intention to join NATO in time, and did not demonstrate that it felt completely safe with the cooperation of the West, especially with the US. The US and other European countries, including NATO, could not live up to the assurances they had given to Ukraine. By the time Ukraine started receiving some support and aid from NATO and US, it was too late. America imposed many economic sanctions but it could do nothing for Ukraine beyond this. In the entire war, the biggest question was raised on America. Before the war, the US had repeatedly threatened Russia with dire consequences for an attack on Ukraine, but when the war broke out, President Joe Biden made it clear that US forces would not face off against Russian forces in Ukraine.

America actually believes that if Russia and its army clash against each other, then World War like situation might rise again. America believed that after its help, many nations could also join this war, the consequences of which would have to be suffered by the whole world. The US has declared Russia as an enemy country under the CATSAA Act. Whatever message America has been giving against China through the QUAD, is also directed indirectly towards Russia that it will stand against countries that threaten its maritime security.

There is also a diplomatic reason behind the US not sending troops to Ukraine. Ukraine is not a neighbouring country to America and neither does it have any military base in America. Further, sending army can also affect its oil trade with Russia in future. At the same time, America is currently battling an economic crisis due to the Corona epidemic. If it sends an army then Russia might retaliate too, which will make the situation worse. The question now arises as to where this war taking the world and will it stop with a ceasefire agreement. Actually

Russia knows that in view of the present world order war cannot be waged again and again, and so as the war has been fought it should reap out as much it can. Russia does not want to miss the opportunity of a permanent control over Ukraine's strategic economic nuclear areas, industrial and agricultural regions, the Black Sea regions. Moreover, it cannot get a better opportunity to show its mettle to America and its allies. Hence, Russia seems to stand with all kinds of aggression. Russia also has no particular fear for international rules, laws and mandates of the United Nations. It believes that Western nations, including America have used the United Nations Security Council several times for their political purposes. Therefore, Russia is often seen to ignore the advice of the UN. Along with this, it is also a big truth that whether it is America or European countries, they believe that by treating Russia exclusively with hostility, the world might face great economic and trade crisis, thus every country in this war wants to play its role cautiously.





Technology

5G: The Beginning of a New Era

Introduction:

The 5G launch was dubbed as "a revolution" by the Prime Minister. India, in the modern world, is no longer the nation that only consumes technology; rather it also helps to advance it. India was reliant on other nations at the time when 2G, 3G, and 4G services were introduced. However, the nation is leading internationally and entering a new historical period with 5G. Initially, 5G will be introduced in 13 Indian cities at first including Delhi, Bengaluru, Mumbai, Chennai, Ahmedabad, Chandigarh, Gandhinagar, Hyderabad, Kolkata, Lucknow, Pune, Jamnagar, and Gurugram especially in significant metro areas comprising Chennai, Mumbai, Delhi, and Kolkata. The 5G was recently launched in Diwali by Reliance Jio. The next-generation network will be available throughout the nation by December 2023. The benefits of 5G technology are immense, they include constant coverage, fast data rates, minimal latency, and excellent reliability.

What Is 5G?

➤ The 5G network, which will ultimately replace or at least supplement 4G LTE, is the next generation of mobile broadband.

Features Of 5G Technology:

5G will operate in the 30–300 GHz millimeter wave range, which will aid in the the rapid transmission of enormous volumes of data.

Further, it will operate in three bands: low, mid, and high frequencies.

- Low Band Spectrum: The highest possible speed for data exchange and Internet coverage is 100 Mbps (Megabits per second).
 - » It can therefore be used and installed by telecom operators for business mobile customers who might not have special needs for extremely fast Internet.
 - » The low band spectrum, however, might not be ideal for the industry's specialized demands.
- ➤ Mid Band Spectrum: It provides faster speed as compared to low band, but has restrictions on signal penetration and coverage area.
 - » Industries and specialized production units may utilize this band to create captive networks which

is tailored as per the requirements of that particular industry.

- ➤ **High Band Spectrum:** This band has the fastest speed among all the three, however its range and signal intensity is quite constrained.
 - » Although this will require significant infrastructure, it will significantly improve the application of 5G technology for the future, including Internet of Things (IoT) and smart technologies.
- ➤ New applications that make use of the 5G capabilities, like the Internet of Things (IoT), and artificial intelligence will be supported by reduced latency.
- ➤ Increased 5G network capacity can reduce the effects of demand spikes, such as those that occur during sporting events and breaking news events.

Applications:

- Faster data processing: The 20Gbps and higher speed range of 5G has a latency rate of 1 millisecond. As a result, large amounts of data from different sources can be analyzed quickly.
- ➤ High-speed mobile networks like 5G will reduce buffering and will speed up the downloading process in mobiles etc. Additionally, it will provide highquality video conferencing and calling.
- Internet of Things (IoT): 5G will accelerate IoT development.
- ➤ 5G provides extra benefits for artificial intelligence, robotics, and other programming languages. It could enable quicker data processing.
- ➤ Education: There was shift towards online learning during pandemic phase of COVID-19 and the internet speed became one of the major barrier for education here. A better learning environment and a quick connection are the potential benefits of 5G. It will also create new learning opportunities.
- ➤ **Health sector:** Telemedicine and biotechnology will benefit from 5G. It will facilitate the expansion of medical services accessibility to remote areas.
- > Employment Opportunities: 5G will create new job opportunities in several industries, including cyber, construction, and information technology. An estimated 5 crore young people in India might get work options consequently.
- ➤ Government Services: Citizens may have greater



last-mile access to government services with the help of 5G. It would facilitate the prompt resolution of public complaints and guarantee the openness and accountability of government operations.

➤ Global competitiveness: India can expand its Make in India initiative and compete with China in the deployment of 5G. India has to expedite its 5G research in order to keep up with the pace of global technology.

India's 5G Rollout Faces A Number Of Obstacles:

- ➤ Low Fiberization Footprint: India's current fiber connection, which only connects 30% of its telecom towers, has to be upgraded.
- ➤ Challenges of hardware manufacturing in India: One barrier to the development of 5G technology is the prohibition on some foreign telecom OEMs (original equipment manufacturers).
- ➤ **High spectrum prices:** When compared to the worldwide average, India's 5G spectrum prices are significantly high. The cash-strapped telecoms in India will suffer because of this.
- > Selecting the Best 5G Technology Standard: The conflict between the domestic 5Gi standard and the international 3GPP standard has to be resolved in order to speed up the adoption of 5G technology.
- India's top three 5G priorities are:
 - » Establishing early, effective, and widespread 5G networks to fully exploit the potential of this novel technology;
 - » Building India's industrial and R&D capabilities in the 5G design and IP dimensions is a technology;
 - » Manufacturing: 5G manufacturing facilities are being expanded for semiconductor production, assembly, and testing.
- **Education and Awareness Promotion Program:** The 5G Committee suggests three initiatives:
 - » organize national 5G events
 - » bring international 5G conferences to India
 - » construct an extensive skills development program.
- > Technology Demonstration and Major Trials: 5G trials will provide our Telecom Service Providers (TSP), academia, and industry with a significant learning opportunity.
 - » The Committee advises inviting the main Original Equipment Manufacturers from around the world to perform significant 5G experiments in India with local collaborators.

➤ Core Technology and Manufacturing: A significant and sustained effort is required to increase India's capabilities in core technology development (Design and IP) and manufacturing for 5G and, more generally, for all Information Technologies.

Measures Undertaken Till Now In This Direction:

- ➤ The government established a 5G High Level Forum in September 2017 to describe the vision for 5G in India and to suggest legislative changes and action plans to carry out this goal.
- ➤ Building an End-to-End 5G Test Bed is the name of a new initiative the government has announced.
- Additionally, DST and MEITY have provided funding for a number of smaller university R&D projects focused on 5G issues.
- ➤ In October 2019, the first 5G video call in the nation was shown at the India Mobile Congress (IMC) in Delhi thanks to a partnership between the American telecom equipment manufacturer Qualcomm and the Swedish telecom giant Ericsson.
- In relation to 5G services in India, the National Digital Communication Policy-2018 (NDCP-2018) also outlines the following goals: Using 5G technology to enable high-speed internet, the Internet of Things, and M2M (machine to machine), Increasing backhaul capacity to aid in the development of 5G and other next-generation networks, ensuring 6 GHz band spectrum is available for 5G, In order to deliver apps and services that are 5G enabled, the industry's policies for traffic prioritization are being examined. creating a framework that will allow M2M services to be deployed more quickly while still protecting device security and interception.

Conclusion:

By enabling a fast growth of the use of information technology throughout the manufacturing, educational, healthcare, agricultural, financial, and social sectors, 5G technology has the potential to usher in a significant societal shift in India. India must seize this opportunity by rapidly, effectively, and widely installing 5G networks, as well as by establishing itself as a prominent worldwide innovator and technology provider. To make 5G a genuinely inclusive technology, emphasis should be made on how it will affect the lives of rural and economically underserved communities.





GLOBAL HUNGER INDEX -

Projected and Actual Condition

Context:

The European agency made, the Global Hunger index has sensitised the image of India at the world forum. As jointly published by concern worldwide and Welthhungerlife, GHI Index-2022 has ranked India 107th out of 121 countries. India has been trailing down since 2014, consistently. Even its Asian neighbours like Sri Lanka, Bhutan and Bangladesh, Pakistan (99), and Nepal (81) are leading relatively.

In 2000, it recorded an 'alarming' score of 38.8, which was reduced to 28.2 by 2014. The country has started recording higher scores since then. However, with a 29.2 score in 2022, the nation falls in the 'serious' category of hunger.

What is the Index?

- > The GHI has been brought out almost every year since 2000, with this year's report being the 15th one.
- A low score gets a country a higher ranking and implies better performance. The objective behind the index is to map the hunger so that path of achieving SD Goal Zero Hunger by 2030 can be better projected. It is for this reason that GHI scores are not calculated for certain-high income countries.
- ➤ In the GHI 2022, the top of the list was dominated by European nations including Croatia, Estonia and Montenegro.
- Among Asian nations, China and Kuwait have ranked the highest.
- > The definition of Hunger is not limited to common parlance, and similarly, this index Hunger is not limited to low-calorie intake.
- ➤ It tracks the performance of different countries on 4 key parameters. Taken together, these parameters capture multiple dimensions, such as deficiency of the micronutrients of hunger etc.

Factors to be calculated:

- ➤ The GHI looks at four main indicators:
 - » Undernourishment (Inadequate food availability) -calculated by the share of the population that is undernourished.
 - » Child wasting (Acute under nutrition): calculated by the share of children under the age of five who

- are wasted (those who have low weight for their height)
- » Child stunting (Chronic under nutrition): Calculated by the share of children under the age of 5 who are stunted (those who have low height for their age.)"
- » Child mortality (Reflects both inadequate nutrition and unhealthy environment) - calculated by the mortality rate of children under the age of 5 (it is a reflection of the fatal mix of inadequate nutrition)

On these four indicators, each country's data are standardised on a 100-point Scale and final score is calculated after giving 33.3% weightage each to components 1 and 4 and giving 16.66% weightage to components 2 and 3.

There are 3 categories in the index:

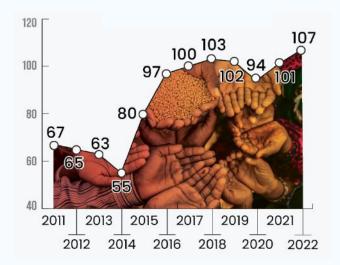
- 1. "Low" category of Hunger Less than or equal to 9-9 scoring.
- 2. "Serious category of hunger Score between 20 and 34.9
- 3. "Extremely Alarming" category Score above 5.

The reasons behind the alarming situation of malnourishment and hunger in India are ranging from wide fronts - so their precise identification is not possible. But the following can be seen as major plausible causes for stagnation progress:

- ➤ Calorific deficiency: Besides the surplus food grain accumulation at government food stock centres, there is a calorific deficiency in that PDS allocated food grain. Further, the allocation and distribution are also not proper.
- ➤ **Protein Hunger:** Pulses are a major contributor to addressing protein hunger. However, the distribution of pulses and their availability is insufficient.
- Micronutrient deficiency (Hidden Hunger): India faces a severe crisis in micronutrient deficiency. It is caused due to a poor diet, or disease and also



because of increased micronutrient needs not met during pregnancy and lactation.



> Other factors:

- » Poor access to Safe drinking
- » Poor access to Sanitation
- » Low levels of nutrients availability
- Besides the global measurement of acute hunger and distress situations, the domestic and authenticate agencies like Niti Ayog's SDG report also flagged huge worries about hunger, poverty, and malnourishment in India.
- According to the Sustainable Development Goals Index 2019-20 released by NITI Ayog, the country's overall score is 60.
- That is alarming and provides alarming call to government agencies for better implementation of programs considering the severances of the condition.
- However, the Indian government has criticized the GHI - Index 2022, declaring it an erroneous measure of Hunger and telling that index suffers from serious methodological issues.
- > The government has quoted that "misinformation seems to be the hallmark of annually released Global Hunger Index. Three out of four indicators used for the calculation of the index are related to the health of children and cannot be representative of the entire population.
- The fourth and most important indicator estimate of the Proportion of the Undernourished (POU)

- population is based on an opinion poll conducted on a very small sample size of 3000.
- The index also disregards the efforts made by the government to ensure food security for the population, especially during the COVID pandemic.
- The data collected from a minuscule sample for a country of India's size through FIES (food insecurity Experience Scale) [FAO's survey model] has been used to compute POU value for India which is wrong and unethical; it also reeks of obvious bias.
- ➤ The Indian government is running the largest food security programme in the world. In precarious conditions, during the pandemic government has made an exemplary move by allocating a package of Garib Kalyan Yojana.

Besides, it has taken several steps

- » Eat Right Movement
- » Poshan Abhiyan
- » Pradhanmantri Matru Vandana Yojana
- » Food fortification
- » Ambitious National food security Act, 2013.
- » Mission Indradhanush
- » Integrated Child Development Services (ICDS) Scheme.

Conclusion:

These are the few steps to address the hunger-distress situation in a vast population country like India. Further, the problem to address hunger is not a fortnight subject, and to address the colonial-induced crisis, a large structured plan would be needed and that would be a long time for success. The government is doing its best from its limited resources pool. Indexes like GHI and others test results of measures to tackle the situation. Therefore an open approach should be considered to accept the findings along with authentication and methodology used by agencies to project the further course ambitiously.

NATIONAL





Parivar Pehchan Patra – Haryana

The government has started Several schemes for all sections of the people. Haryana Parivar Pehchan Patra (PPP) has been started by the Chief Minister of the Haryana Government, Mr Manohar Lal Khattar to ensure that the benefits of these schemes reach all the beneficiaries. Parivar Pehchan Patra (PPP) is similar to Aadhar Card for an individual where the Aadhar card represents an individual as a unit, PPP represents a family as a unit. PPP has made Haryana a role model for other states in the country.

What is Haryana Parivar Pehchan Card?

➤ Haryana is the 1st state to implement the PPP model in the country. Every family is given a PPP card by the government. This is a way of collecting the information of the families of the state in digital form with their consent. Under this, an eight-digit family ID is provided to each family. The information of 54 lakh families will be verified through PPP.

Requirement of enrolment for family identity card:

- ➤ **Permanent Family-** All those families who are permanently residing in Haryana. It is mandatory for them to get a PPP. They will be provided with an eight-digit family ID.
- ➤ Temporary Families- All those families who are living outside Haryana but want to apply for any service or scheme of the state, then it is mandatory for them to make PPP. They will be provided with a nine-digit family ID.

Why PPP is in the discussion?

➤ It will store the information of the families of the state digitally, but recently there are concerns about privacy in this scheme. In the absence of confidentiality laws in India, there is a possibility of misuse of data.

Features of PPP:

- It will store the information of the families of the state digitally.
- PPP has the facility of automatic updating of family information.
- The government has linked PPP with three social security schemes - Old Age Samman Allowance, Divyang Pension, Widow and Destitute Women Pension.

Need of PPP:

- Authentic, verified and reliable information of all the families of Haryana will be prepared
- Through this, the state government will monitor about 54 lakh families living in the state.
- ➤ It will link schemes related to government schemes like scholarships, subsidies, pensions etc. to enable the automatic selection of beneficiaries of various schemes with consistency and reliability. For government work, to open an account in a bank, in the admission process of schools and colleges and for making any government certificate, family Id will be necessary.

Benefits of PPP:

- ➤ The Family identity card will help in taking admission to schools, and colleges and will help get government and private jobs.
- Corruption will be reduced through Parivar Pehchan Patra (PPP).
- > The registration process will be accelerated through this portal. The data of all the beneficiaries will be uploaded on this portal, through which they will be provided with the benefits of all government schemes with transparency.
- ➤ Those families whose names are registered in the Socio-Economic Caste Census or SECC Data List can also fill out the enrolment form for Parivar Pehchan Patra.
- About 54 lakh families in the state will get benefit from this scheme.

Way Forward:

The PPP will create authentic, verified and reliable data for all families in Haryana. But along with this, the government has to take care of data protection. The government should strike a balance between the right to privacy of the people and the realization of the government plan. For effective implementation of this policy, the related authorities should update it from time to time and all stakeholders should interact with this. States like Telangana, Karnataka, Andhra Pradesh etc. are also exploring the possibility of implementing such PPP projects and in future, this scheme can prove to be a good role model for the country.



2

Wayanad to get First-ever Digital Tribal Hamlets

Why in News:

The state governments seek to develop the Scheduled Tribes by emphasizing the areas related to health, education and employment. Keeping this in mind Shri Radhakrishnan, Minister for Welfare of Backward and Scheduled Communities inaugurated the scheme on 16 October from Kalpetta in Wayanad district and announced that Wayanad district of Kerala would get the country's first digital tribal hamlets. An amount of Rs. 9 crores will be spent on this scheme. For this, e-education and e-health programs will be integrated with the tribal colonies in the hills of district Wayanad.

Digital Tribal Hamlets:

- ➤ In this, facilities related to education, health, and employment could be provided online to the tribal communities in a digital way.
- > This project is expected to improve the Health and education services in tribal hamlets with the help of various digital platforms and the Center for Development of Advanced Computing (CDAC).
- > This scheme is implemented by state's department of schedule tribes in collaboration with central ministry of electronics and information technology. CDAC is implementing the project under ministry of electronics and information technology

Need of Digital Tribal Hamlets:

- ➤ Through this, the state government wants to develop the scheduled tribes in areas related to health, education and employment.
- Due to lack of education, tribal communities face problems like tribal loan scam, land scam, frauds related to banks and social media etc.
- ➤ Problems of diseases like anemia, malnutrition in tribal communities due to unavailability of forest resources, meat, nutritious food etc. (As per the health department's August data, 47 out of 60 children in the Wayanad Kalpetta tribal community were malnourished.)
- Not providing any necessary health facilities to patients during treatment in NRC and lack of awareness related to health.
- To reduce the school dropout rate of students.

Features of Digital Tribal Hamlets:

- Smart classrooms will be started in tribal hamlets. These will be linked to the comprehensive e-resource portal of Lok Shiksha Kosh.
- Services of reputed institutions like the Regional Cancer Centre, Regional Institute of Ophthalmology and CSIR-NIIST will be available online for tribal villages of Wayanad.
- Provision of a telemedicine system for screening of non-communicable diseases and diabetic retinopathy, oral cancer, and cervical cancer with the help of synthetic intelligence.



Benefits of Digital Tribal Hamlets:

- > E-health facilities and a balanced diet will reduce diseases like malnutrition, anaemia etc.
- > Through e-education, tribal communities will be aware of their rights. Hence, they will be able to avoid fraud related to property, banks, social media etc.
- > Tribal communities will be able to use pure companies by connecting with reputed institutes in the field of health.
- Employment opportunities will be available with the development of employment-related sectors.

Way Forward:

Although this scheme has been announced by the government, there are many problems in front of the government, such as lack of electricity supply, lack of internet facility, lack of devices like tablets/laptops for students, lack of language medium problem, access of students from difficult areas to education centres etc. The solution to these problems is very important for the smooth implementation of this scheme by the government. Only then this scheme will be successful in its objectives and will become a role model for other tribal communities.



3

Legal proceedings in regional languages

Why in News:

Recently, while inaugurating a pan-India virtual conference of Law Ministers and Secretaries, Prime Minister Modi advocated for promoting the use of regional languages in the judicial system. The Prime Minister said that it should be ensured that the legal language does not create any obstacle for the citizens to understand the nuances of the law

Constitutional provisions related to the 'language of the court':

- Articles 343 to 351 in Part 17 of the Indian Constitution deal with the official language. Under this, provisions have been made regarding the language of the court under the heading, 'Language of the Judiciary and Legal Text'.
- Although the provision for making Hindi (in Devanagari script) the official language of the Union was made in Article 343, Article 348 (1) (a) provides that unless any provision is made by law, the proceedings of the Supreme Court and the High Court shall be in the English language. The Supreme Court hears only those petitions which are in English.
- ➤ The Official Languages Act, 1963 provides that the Governor may, with the prior permission of the President, permit the use of Hindi or any other regional language for proceedings in the High Court of the State concerned, subject to the condition that

- the English translation of the proceedings shall also be attached. Some states like Bihar, Uttar Pradesh, Madhya Pradesh and Rajasthan have authorized Hindi for proceedings before the High Court, while Tamil Nadu has authorized the Tamil language.
- ➤ In the year 2019, the court took the initiative to translate its decisions into English as well as regional languages.
- > Although the State Government has the power under Section 137 of the Code of Civil Procedure, 1908, that the State Government may choose the regional language in relation to the proceedings of the subordinate courts, the use of English by the Court will also continue. All subordinate courts normally use English as well as the regional language prescribed by the State Government.
- The basic principle of justice is that justice should not only be enough but justice should also be seen to be done. According to this demand for justice, the Supreme Court has started the system of live telecasts of the courtroom for important constitutional matters. The use of regional languages in the court for this campaign, along with making the system more effective, will work to connect the people with the justice system. For the strengthening of democracy, and for establishing the rule of justice, a deeper level of citizen engagement with the judiciary is necessary.

4 PM - DevINE Scheme

Why in News:

Recently, the Union Cabinet chaired by Prime Minister Narendra Modi has given its approval to a new scheme named Prime Minister's Development Initiative for North-East Region (PM- DevINE) from 2022-23 to 2025-26. It was announced in the Union Budget 2022 for the development of the Eastern Region.

PM-DevINE Scheme:

PM-DevINE was announced in the Union Budget 2022 to bridge the development gap in the Eastern region and provide ample opportunities for sustainable livelihood. PM-DevINE Yojana is a 100% centrally funded scheme with an outlay of Rs 6,600 crore for a period of 4 years from 2022-23 to 2025-26. The scheme will be implemented by the Ministry of Development of the North-Eastern Region through the North Eastern Council, Central Ministries/agencies.

Purpose:

- To fund the infrastructure included in PM Gati Shakti
- > Supporting social development projects.
- Enabling livelihood-related activities for youth and women.
- Bridging the growth gap in various sectors.



Why PM-DevINE Scheme is Needed:

- ➤ Northeast India has its strategic importance as it is the gateway to South-East Asia and it connects Myanmar with the Indian land.
- > The region has always been difficult to reach due to its geographical location and underdeveloped transport infrastructure.
- > The standards of North-eastern States in respect of basic minimum services (lack of basic infrastructures like physical waterways, roadways, railways etc. and social-health facilities, educational institutions etc.) have been significantly below the national average.
- > The Northeast has historically been underdeveloped due to the slow pace of industrial development.
- > The Inter-state and international conflict between the north-eastern states has always been present. (e.g., border disputes, ethnic differences, tribal cultural inequality etc.)

Salient Features of the PM-DevINE Scheme:

- ➤ PM-DevINE Scheme is related to infrastructural development.
- ➤ Under the PM-Devine scheme measures will be taken to ensure adequate operation and maintenance of the projects sanctioned so that they are sustainable.
- ➤ Engineering on Government projects will be implemented, as far as possible, on a construction basis, to limit construction risks of time and cost escalation.
- ➤ The PM-DevINE scheme will support infrastructure

- and social development projects that can be large in size and will also provide an end-to-end development solution instead of individual projects.
- Ensure that there is no duplication of project support under the PM DevINE Scheme with any other scheme of the Ministry of Development of the North-Eastern Region or any other Ministry/Department.

Major Infrastructure Projects in the Northeast:

- ➤ 4,000 km of roads, 2,011 km of 20 railway projects and 15 air connectivity projects are being developed.
- ➤ The National Waterways of Ganga, Brahmaputra and Barak rivers (NW-1 on Ganga, NW-2 on Brahmaputra and NW-16 on Barak) are in the development stage to provide better connectivity.
- ➤ The 5,000 km long Eastern Waterways Connectivity Transport Grid will connect the Northeast with the rest of India by navigable waterways.
- > The Intra-State Transmission and Distribution System by North-Eastern Region Electricity System Improvement Project (NERPSIP) is a major step towards economic development of the North Eastern Region.

Conclusion:

Investment in infrastructure will lead to employment generation and infrastructural development and will play a major role in thwarting the separatist movements in the North-East region.

Integrated National Database for Births and Deaths

Why in News:

Recently, the matters regarding database integration at the national level by cabinet note have resurfaced again. After the bill was moved by the Ministry of Home Affairs, the contemplation for integrating all registration of birth and death-related databases have emerged at the centre.

What is the present situation?

- ➤ At present, all registrations and data relating to death and birth are under the control of respective governments through local registrars.
- ➤ However, if this move comes into effect as legislation, then the Registrar General of India will be bestowed with the responsibility to maintain this database. The Registrar General would be working with the Chief

registrars of states to maintain it.

Central Government's Agenda and motives:

- ➤ Centre government intends to integrate all citizen databases at one single platform and further seeks to up the process of linking this data with the population register, electoral rolls, Aadhar Card, Ration Card, Passport and driving licences etc. This move aims to amend the Registration of Births and Deaths Act, of 1969.
- ➤ The Economic Survey of 2019 has also recommended the creation of a central database with a strong privacy framework that could benefit citizens, government and private sector firms as India starts digital transformation.

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- ➤ If this step is implemented, the centre could use this data to update National Population Register and Electoral Register, Aadhar Card and identity-related information etc.
- > This move will also address the challenges of forgery and duplication in aforesaid identity cards.
- It would also assist the Registrar General of India to better analyse demographic surveys of India.
- ➤ Alike the NRC-CAA move, this step might face stiff opposition. Therefore, all stakeholders related to this issue must be taken into confidence, before making it public, so that rumours and illegitimate propaganda can be prevented before they can emerge.
- India is a vast nation and maintaining a database that

is 'Unified' and 'Integrated' for its vast population is the need of the hour. This will not only assist other databases to be revised but will also aid in effectively analysing the performance of various policies related to (Birth and death) demography.

Registration of Births and Deaths Act (RBD) -1969:

- ➤ The registration of births, deaths and stillbirths is compulsory under the provisions of the RBD Act in all parts of the country.
- ➤ The normal period of 21 days (from the date of occurrence) has been prescribed for reporting the birth, death and stillbirth events.

(6)

National Commission for Backward Classes (NCBC)

Why in News:

DMK Rajya Sabha MP P Wilson has written to the Union Minister for Social Justice and Empowerment, Dr Virendra Kumar, urging him to appoint office-bearers in the National Commission for Backward Classes (NCBC) to ensure that the Commission functions properly.

Wilson said the NCBC is not working since March 1st, as the chairman, vice-chairman and members have not been appointed yet and the 9th Commission has not come into existence. He said that due to the inaction of the government, the functioning of the constitutional body has come to a standstill.

Issue with NCBC:

No special provision has been made regarding the appointments of National Commission for Backward Classes which is affecting its functioning. The recommendation of NCBC is not binding on the government. Besides this, the NCBC has no responsibility to define backwardness, so it cannot address the current challenge of well-off castes' demands to be included as BCs

NCBC:

➤ India's National Commission for Backward Classes is a constitutional body (123rd Constitutional Amendment Bill, 2017 and 102nd Amendment Act, 2018 in the constitution to make it a constitutional body under Article 338B of the Indian Constitution) under the Ministry of Social Justice and Empowerment. It was established on 14 August

1993. It was constituted pursuant to the provisions of the National Commission for Backward Classes Act, 1993.

Function of NCBC:

- > To investigate and monitor all the matters, regarding socially and educationally backward classes, that are concerned with the proper working of the safeguards provided under the Constitution or under any other law.
- > Evaluating the progress of development of socially backward classes as well as actively participating and advising in their socio-economic development.
- > It annually presents the reports based on the working of the safeguards to the President. If any of those reports relate to any matter which is concerned with the State Government, a copy of that report is forwarded to the State Government.
- ➤ NCBC is responsible for the protection, welfare, development and advancement of the socially and educationally backward classes.

Conclusion:

The government should first appoint on the vacancy posts of NCBC so that the commission can function properly. At the same time it is desirable for the NCBC to protect the constitutional right of OBCs keeping in view their duty.





Supreme Court Order against Hate Speech

Why in News:

The Supreme Court of India has directed the police for proactive action in dealing with the unending flow of hate speeches without waiting for a formal complaint. The Court has underscored the constitutional values of secularism and fraternity among all religions and social groups.

Definition of Hate Speech:

- > There is no specific legal definition of hate speech. Provisions in law criminalize speeches, writings, actions, signs, and representations that stir violence and spread disharmony between communities and groups.
- As per the Law Commission of India, Hate speech generally is an incitement to hatred primarily against a group of persons defined in terms of race, ethnicity, gender, sexual orientation, religious beliefs.

How is it Treated in Indian law?

- > Sections 153A and 505 of the Indian Penal Code are generally taken to be the main penal provisions that deal with inflammatory speeches and expressions that seek to punish 'hate speech'.
- ➤ Under Section 153A, 'promotion of enmity between different groups on grounds of religion, race, place of birth, residence, language, etc., and doing acts prejudicial to maintenance of harmony', is an offence punishable with three years' imprisonment.
- ➤ It attracts a five-year term if committed in a place of worship, or an assembly engaged in religious worship or religious ceremonies.
- > The statement, publication, report, or rumour that is penalised under Section 505(1) should be one that promotes mutiny by the armed forces, or causes such fear or alarm that people are induced to commit an offence against the state or public tranquility; or is intended to incite or incites any class or community to commit an offence against another class or community. This attracts a jail term of up to three years.
- ➤ Under 505(2), it is an offence to make statements creating or promoting enmity, hatred or ill-will between classes.

Supreme Court's decision on hate speech:

- > Shreya Singhal vs Union of India 2015: In this, the issue was raised in the court against the violation of the freedom of expression enjoyed by Article 19(1) (a) of the Constitution by Section 66A of the Information Technology Act, 2000, in which the court held that there should be a distinction between discussion, advocacy and incitement. And also recognize that the first two are the essence of Article 19(1).
- > Arup Bhuyan Vs State of Assam 2011: The Court said that mere act cannot be punished unless a person resorts to violence or incites another person to violence.
- ➤ Rangarajan Adi Vs P. Jagjivan Ram 1989: In this case, the court held that freedom of expression cannot be suppressed unless such a situation is dangerous to the community/public interest.



Need of the Hour:

- A clear distinction needs to be made between freedom of expression and speech that tends to incite hatred against a public group or section of society.
- At a time when communally motivated gatherings are increasing in their frequency and vociferous in their inflammatory speeches against minorities, one would expect the police to be more sensitive to the situation and prevent hate speeches.

Conclusion:

It is important that there should be a separate statute for this specifically that the IPC and the Information Technology Act should be amended against crimes promoted online and through social media.

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Indo-Egyptian Relations

Why in News:

Recently, the External Affairs Minister of India S. Jaishankar was on an official visit to Egypt, where he discussed various issues with his counterpart including the President of Egypt. EAM invited Egypt for the G-20 summit to be held in India in 2023. External Affairs Minister S. Jaishankar emphasized on the defence and security cooperation between India and Egypt as well as exploring opportunities in the field of renewable energy, trade, tourism and connectivity.

Ancient Historical Relations:

India and Egypt are counted amongst the ancient civilisations of the world and have stayed in contact with each throughout history. Asoka's inscriptions mentioned a connection with Egypt under Ptolemy II, while in modern times both Mahatma Gandhi and Saad Zaghloul shared common views on the independence of their countries. The 'India by the Nile' (IBN) annual cultural festival has emerged as the largest foreign festival in Egypt which included Manipuri folk dance, Yoga and Ayurveda, Bollywood music, street food festival, screening of films etc.

Political Relations:

After independence, India and Egypt have been cooperating with each other on bilateral, regional and global issues. There was a close friendship between Jamal Abdel Nasser and Jawaharlal. At the time of the Non-Aligned Movement, both the countries together led the Third World. After that there have been continuous high level visits from both the sides. India assured about providing possible assistance in the COP-27 to be chaired by Egypt.

Economic Relations:

The India-Egypt Bilateral Trade Agreement started since March, 1978 and at the Most Favoured Nation Clause. Total bilateral trade reached an all-time high of US\$ 7.2 billion in 2021-22. The top five Indian exports were mineral fuels, meat, vehicle parts, cotton yarn and organic chemicals while the top five Indian imports are crude oil, rock phosphates, inorganic chemicals, cotton and fruits. 50 Indian companies have invested about 3 billion US dollars in Egypt, which are present in the sectors of apparel, agriculture, chemicals, energy, automobiles, retail etc. These companies provide direct and indirect employment to approximately 35,000 Egyptians.

Way Forward:

The importance of Egypt increases for India due to its strategic location of the Mediterranean Sea and the Red Sea. India can boost Asia-Africa growth not only in renewable energy but also in agriculture by enhancing broader ties with Egypt. Egypt has shown interest in India's defence goods like Brahmos and Tejas, which can increase the trade potential manifold.



IOR+ DEFEXPO 2022 Conclave

Indian Ocean Region Plus (IOR) Defence Ministers' Conference was hosted by Defence Minister Rajnath Singh on 19 October 2022, on the sidelines of DEFEXPO 2022 in Gandhinagar. Representatives from 40 countries participated in the conference.

Why in News:

Defence Minister Rajnath Singh addressing the Defence Ministers' Conference during the 12th edition of DEFEXPO, cited the adverse impact on energy and food security for the most vulnerable countries due to the recent Ukrainian conflict and the current and ongoing challenges for security and stability in the IOR. He called for collective efforts to address emerging threats (terrorism, narcotics, unregulated fishing in the Indian Ocean, etc.).

Further, he described the sustainable exploitation of marine resources as an important tool for the growth and development of nations across the IOR in the 21st century.

What is DEFEXPO?



It is a major biennial event by the Ministry of Defence, showcasing land, naval, air as well as homeland security systems.

Theme of the conclave:

'Challenges and Cooperation in the Indian Ocean'.

Objectives of the Conclave:

- ➤ To promote strategic and commercial partnerships within the IOR countries in line with the Security and Development for All (SAGAR) vision.
- ➤ Making DEFEXPO-22 a huge success with a focus on trade and exports.
- Promotion of indigenous defence platforms and products. One which promises to involve the public and inspire them to join aerospace and defence manufacturing sectors; for self-reliance.
- ➤ Urges the IOR countries to take advantage of the R&D ecosystem created by the Government in India

for mutual benefit to all.

Cooperation in capacity building of partner countries by providing ships, seaplanes, coastal radar and other surveillance systems, training and access to Indian shipyards.

Way Forward:

With the right policies and framework, India is poised to become a global R&D hub. India categorically rejects the pretense of moral superiority in international relations and believes in a global order based on mutual respect and benefit from every nation. This requires a collaborative effort so that the maritime expanse of the Indian Ocean is peaceful and is optimally harnessed to ensure regional and global food security. The suppression of piracy in the western Indian Ocean through concerted international efforts is the result of collective cooperation.

3

Globalization: In the current context

Why in News:

Recently, during his visit to Egypt, Indian External Affairs Minister Jaishankar talked about trade and wheat agreement. Further, while discussing globalization he said that globalization has huge opportunities but also has inherent risks which can be considered by like-minded countries and should be addressed by comfortable countries. These can be considered in conjunction with each other. The Egyptian President also urged India to increase the business of business.

The far-reaching changes that have taken place in the world economy since the 1970s reflect globalization. Globalization provides wide opportunities for worldwide development but it is not progressing equally. Some countries are integrating into the global economy more quickly than others. Countries that can integrate are seeing rapid growth and poverty reduction.

Globalization:

"Globalization" is a historical process, the result of human innovation and technological progress. It views the world as a village. It refers to the increasing integration of economies around the world, particularly through trade and financial flows. It also refers to the movement of people (labour) and knowledge (technology) across

international borders. Globalization also has wider cultural, political and environmental dimensions.

Risks with immense potential in globalization:

The emerging markets crisis of the 1990s made it clear that the opportunities of globalization do not come without risks. In this era of globalization, where the newly industrialized economies of Asia have performed well, the developing countries as a whole have increased world trade, while African countries have fared poorly on the others.

- ➤ Globalization can be a great driver of economic growth.
- New technologies, including information, communication and artificial intelligence, are related to rapid growth and development. Although these innovations can act as catalysts, the countries that do not have access to it are at risk of being left behind.
- Many trends associated with globalization, including economic activity, lifestyle changes and urbanization, impact our environment and may contribute to climate change.
- Trade, mechanization, outsourcing etc., where the manufacturing sector has developed and continues to progress, has caused loss of jobs. These trends in labor markets are associated with higher rates of income inequalities.



➤ Globalization can be a powerful force for poverty reduction. As a result of this many countries have seen improvements in their welfare and educational systems. Efforts can be made to remove the disparities between rich and poor nations by inculcating knowledge and self-confidence through education and skill training in the youth.

Way Forward:

Globalization can be leveraged to support inclusive economic growth and sustainable development, but it requires an analysis of the current system as well as emerging trends, so that policy solutions can be developed. Due to this, the decline in economic growth rate, loss of jobs, low income, poor education and health etc. can be improved.

4

India pushes for settlement of international trade in Rupee with Sudan

Why in News:

Taking its step towards the internationalization of domestic currency, India has approached Sudan for settlement of international trade in rupees. In this regard, RBI had also unveiled earlier a mechanism for settling international transactions in rupees to boost the growth of global trade.

Trade relations between India and Sudan:

Sudan is the 75th largest trading partner of India. The total trade between the two countries stood at \$1.21 billion during 2021-22. India exports food items, petroleum, manufactured goods, machinery and equipment, chemicals, medicines and textiles to Sudan and sesame, cotton, melon seeds and groundnuts etc. are imported from Sudan. India does not currently import oil from Sudan.

Why India wants to do trade with Sudan in Rupee?

- ➤ India has emphasized rupee trade with Sudan under the mechanism of the internationalization of the rupee.
- > Sudan's Ambassador El Taleb also said that Indian farmers are welcome to take up farming in Sudan, not only to feed Sudan but also for the export market. This shows positive thinking on behalf of Sudan.
- ➤ India imports 80 per cent of its crude oil and it can look towards Sudan in this direction. Over the years, Sudan has emerged as a major producer of gold. The agricultural technologies used by India are very friendly to African countries. India can easily sustain its market by investing in gold mining, and other sectors such as agriculture and infrastructure.

Benefits of India's international trade in Rupee with Sudan:

With this, the Indian rupee will be recognized as an international currency.

- India will be able to import crude oil from the African country and make payments in local currencies.
- This will not only boost exports with Sudan but will also lead to the development of global trade.
- ➤ This can save the foreign exchange reserves of the country which are currently under pressure.
- > This could help India circumvent some restrictions that prevent trade with certain countries in global currencies such as the US dollar.
- ➤ The growing interest in the INR will be supported by the global business community.
- > The risk of foreign exchange fluctuations will be less.
- > It will help in stopping the fall of the rupee.
- ➤ With the rupee becoming an international currency, the rupee will strengthen in the global market.

Challenges in business

- The rupee will have to be made fully convertible.
- Not all countries can agree to trade in Rupee as the credibility of the Rupee is less than that of the US Dollar.
- ➤ It is not expected to help stop the rupee's fall to any extent.
- China's position is stronger than India in the context of Africa. Therefore, India will also have to find ways to deal with the challenge of China.

Way Forward:

If the rupee is internationalised, India will become truly self-reliant. At the same time, India needs to become a producer as this will help significantly in making the rupee a currency of trade. At present Russia has exited the international payment system SWIFT, so India can make the rupee valuable and reduce its trade deficit by trading in rupees with Russia. There is a need to limit the depreciation of the rupee to keep foreign investors afloat in the Indian markets.

(5)

Australia-India-Indonesia Trilateral Meeting

Why in News:

Recently, the Australia-India-Indonesia Trilateral Foreign Ministers meeting took place during the 77th session of the United Nations General Assembly, in New York. This was the first individual meeting of this trilateral grouping. For a long time, this trilateral grouping was confined to the level of senior officials' meetings, but with this meeting, it has now been raised to the ministerial level.

Why the Australia - India - Indonesia trilateral meeting is in the discussion?

Australia and India had been pushing for a long time to raise this trilateral to the ministerial level, but there was no active participation from Indonesia because Indonesia did not want to be part of a group that would send the wrong message to China, as China is one of its primary partners. In addition, China is funding several infrastructure development projects (such as the China Jakarta–Bandung rail network). Another reason is, that Indonesia-Australia relations were strained in the past. However, now Indonesia is trying to diversify its economic and business sector. Along with this, there has also increased mistrust among Indonesians about China.

Key Points of the Trilateral Meeting:

The main agenda of this trilateral meeting was to focus on strengthening cooperation in the framework of the Indian Ocean Rim Association (IORA), Indo-Pacific, G20 and Blue Economy.

Benefits of a Trilateral Meeting:

The Australia-India-Indonesia trilateral can prove to be effective in the Indian Ocean region and the wider Indo-Pacific. It's actually like a positive development.

- > Due to the littoral of the Indian Ocean, the three countries can work in the Indian Ocean in areas such as maritime governance and maritime diplomacy.
- ➤ At present, the discussion on Blue Economy is gaining momentum. The Indian Ocean is facing many climate-induced challenges, such as the rapid depletion of marine resources, natural disasters etc. There is great potential for this Trilateral Forum to work in these areas.

- Maritime governance may be the starting point, but then there are other avenues such as maritime domain awareness; Coast Guard training, diplomacy exercises; and development of marine infrastructure etc. that can be specially taken up.
- ➤ Indonesia is currently chairing the G20 in Bali in November 2022 and thee upcoming G20 summit. Discussing various initiatives and projects of the trilateral meeting there will be helpful.



Way Forward:

Although the foreign ministers of Indonesia, India and Australia have met, both Australia and India will need to keep the momentum and push for more meetings in the future. India and Australia will need to map appropriate focus areas, particularly in the maritime, economic and trade, climate change and green energy sectors, which also take into account the interests of the Indonesian people to maintain the three-tier relationship. India needs to specifically involve IORA member countries in its Indo-Pacific Ocean Initiative (IPOI) and Coalition for Disaster Resilient Infrastructure (CDRI) and in this direction Indonesia and Australia which are already part of these two groups. This initiative can work with India.





18th Heads of Asian Coast Guards Agencies Meeting (HACGAM)

Why in News:

Raksha Mantri Rajnath Singh has reaffirmed India's resolve for an open, free and rule-based maritime borders in the Indo-Pacific region. He was delivering the inaugural address at 18th Heads of Asian Coast Guard Agencies Meeting (HACGAM) that held in New Delhi on October 15, 2022.

About Heads of Asian Coast Guards Agencies Meeting (HACGAM):

➤ With its establishment in 2004, it is working to facilitate the congregation of major Coast Guard Agencies of the Asian region. It is a group of 23 countries including India, China, Australia, Japan, South Korea, Pakistan etc. The Indian Coast Guard hosted 18th HACGAM in coordination with the HACGAM Secretariat. The 1st HACGAM was hosted by Japan Coast Guard in 2004 at Tokyo.

Its Significance:

> The Indo-Pacific region is one of the most populous and economically active regions in the world comprising the four continents Asia, Africa, Australia and the Americas. It represents 60% of the world's population and two-thirds of global economic output. The region is a centre of marine

resources such as hydrocarbons, methane hydrates, marine minerals and rare earth metals. It is also a major source of foreign direct investment as well as a wide range of exclusive economic zones (EEZ). In order to protect large coastal areas of India, this type of organization becomes necessary to avoid attacks like the 2008 Mumbai attack. Through this, China's dominance in the Indo-Pacific region (South China Sea and Sea of Japan) can also be reduced.

Way forward:

Through this, good governance, transparency, viability and stability can be increased by establishing connectivity in the region, which will protect sovereignty and strengthen regional integration. Illegal, unregulated and unreported (IUU) fishing and marine pollution, which have disrupted the aquatic life of the region, need to be addressed. Furthermore, the region can be protected from piracy, smuggling and terrorism so that all member countries can benefit from it.



National Security Strategy of USA

Why in News:

The administration of US President Joe Biden has released its report regarding the National Security Strategy. The report shows that china is bigger threat to America than Russia and can overturn the equations of the whole world.

In fact, President Biden's team has described China as America's only rival. However, report mention that America is not looking for further conflict with China. At the same time, Biden's team has described Russia as such a threat, due to which it has to be forced into a new defense strategy. The inflationary situation caused by Russia has been described as a threat to global security.

Key points of the strategy:

- China's behaviour at home and abroad has led to a conservative outlook in the economic, political, security and technological fields.
- Russian President Vladimir Putin's invasion of Ukraine prompted the US Congress to rewrite its essential document on foreign policy and national security issues on another dimension.
- ➤ By the 2030s the US will need to stop the two major nuclear powers (china and Russia) for the first time.
- > Nuclear deterrent response to the threats will maintain.
- American will modernize nuclear power and at the same time strengthening expanded deterrence commitments to allies.



India's Importance in the strategy:

National Security Strategy said that as India is the world's largest democracy and a Major Defense Partner, the United States and India will work together, bilaterally and multilaterally, to support our shared vision of a free and open Indo-Pacific. For 75 years, the United States has maintained a strong and consistent defense presence and will continue to meaningfully contribute to the region's stability and peace. The Quad and AUKUS will also be critical to addressing regional challenges, and we will further reinforce our collective strength by weaving our allies and partners closer together—including by encouraging tighter linkages between likeminded Indo-Pacific and European countries.

Other major regional partners in Asia:

National Security Strategy reaffirms iron-clad commitments with Indo-Pacific treaty allies— Australia, Japan, the Republic of Korea, the Philippines, and Thailand—and we will continue to modernize these alliances. We reaffirm our unwavering commitment to the defense of Japan under our mutual security treaty, which covers the Senkaku Islands.

Conclusion:

National Security Strategy will strengthen democracies across the world, and multilateral institutions, new and fair rules of the road for emerging technology, cybersecurity, and trade and economics. National security strategy also prioritizes the importance of a unique alliance of allies and partners.



ENVIRONMENTAL





Living Planet Report

Why in News:

Recently, the 'Living Planet Report-2022' was published by WWF, in which the wildlife population of mammals, birds, amphibians, reptiles and fish worldwide has decreased by 69 per cent in the last 50 years.

Key points of the Report:

- > The largest regional decline in the average population (94%) is reported in Latin America.
- Africa recorded a decline of 66 per cent in its wildlife population and 55 per cent in the Asia Pacific region from 1970-2018.
- > WWF has identified agriculture (agriculture most negatively affected land use), hunting, logging, pollution, invasive alien species and climate change as six major threats to biodiversity.
- > The report found that
 - » Agriculture is the main threat to amphibians (animals living on both land and water).
 - » Birds and mammals are most likely to be threatened by hunting and trapping.
 - » Geographically, Southeast Asia is the region where the species is most likely to face significant levels of threats.
 - » The polar regions and the east coast of Australia

- and South Africa are expected to reflect the high impacts of climate change, particularly on birds.
- » About 50% of tropical corals have already been lost and an estimated 1.5°C increase in temperature will result in the loss of 70-90% of tropical corals.
- » The population of freshwater species has declined by 83 per cent globally, proving that the planet is facing a "biodiversity and climate crisis".

About WWF:

- ➤ The Worldwide Fund for Nature (WWF) was established in 1961 in Gland (Switzerland). It is an organization working to spread environmental awareness in more than 100 countries.
- ➤ The purpose of WWF is to protect nature as well as to identify factors that damage the Earth's biodiversity.

Way forward:

To achieve Sustainable Development Goals, all responsible nations, and global institutions should adopt a collective inclusive approach and take initiatives to adopt revolutionary innovations and environmentally friendly techniques in production, consumption, governance and finance management.

2

Sloth Bear Day

Why in news:

The International Union for Conservation of Natural (IUCN) has declared October 12 as the 'World Sloth Bear Day'. The concept was proposed by Wildlife SOS India, an organisation working in the field of sloth bear conservation and protection, to draw attention to the conservation and protection of the unique bear species endemic to the Indian subcontinent.

About Sloth Bear:

- Sloth bear is one of the eight bear species. They have a distinct long, shaggy dark brown fur, V-shaped chest patch and claws for digging.
- ➤ 90 percent of the sloth bear population is found in India. A tiny scattering of this specie is also found in Nepal and Sri Lanka.
- > Sloth bears are fragile and considered the most

formidable wild animals.

Conservation status-

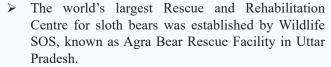
- > IUCN Status: Vulnerable
- ➤ Wildlife Protection Act 1972- Schedule I
- Convention on International Trade in Endangered Species (CITES) - Appendix I
- They primarily feed on termites and ants. They are also fond of honey, hence also called as "honey bear".
- They do not hibernate and are known as the least-researched bear species.
- Threats- Habitat loss, habitat fragmentation, poaching and increasing human-bear conflict.

Significance of the Sloth Bear Day:



- The day will provide an opportunity to highlight this specie.
- ➤ It will promote the conservation of sloth bears and their habitats.
- ➤ It will accelerate research and raise public awareness about this lesser known species.

Conservation Efforts



> Sloth Bear Day will bring the less-known sloth bears to global attention which will further promote their conservation and will ensure their habitat protection throughout their distribution range.

Conservation Enorts



Flex fuel strong hybrid electric vehicle (FFV-SHEV) in India

Why in News:

Recently, Union Minister of Road Transport and Highways, Nitin Gadkari unveiled India's first Ethanolready flex fuel hybrid car (FFV-SHEV) Corolla Altis Hybrid by Toyota.

What are Flex Fuel Vehicles (FFVs)?

- Flex fuel vehicles run on flexible fuels i.e. petrol, ethanol or a blend of petrol and ethanol.
- FFVs offer the flexibility to switch engine fuel from petrol to ethanol. They can also be operated on battery, thus contributing to carbon reduction.
- > The mild hybrid vehicles are incapable of running purely on one of these modes. They use the secondary mode as a supplement to the main mode of propulsion.

Difference between FFVs and FFV-SHEV:

- FFVs are vehicles that can run on flexible fuel which can include up to 100 per cent ethanol.
- > FFV-SHEV: They constitute FFVs which are integrated with strong hybrid electric technology. Strong Hybrid Vehicles, also called Full Hybrid Vehicles are vehicles which solely run on either electric or petrol modes.

Classification of FFV

> FFVs are classified as E95, E90 and E85 depending on the petrol-ethanol ratio.

What is Ethanol?

- ➤ Ethanol is considered a renewable fuel made from biomass. It is mainly a by-product of sugarcane but can also be obtained from grains.
- A good FFV can utilise up to 83 percent ethanolblended fuel, which is a global standard.

Significance of FFVs:

- Ethanol is way cheaper than petrol in India. It will help India in reducing its dependence on fuel imports.
- ➤ Environmental Impacts: FFVs use ethanolblended gasoline which produces fewer toxic fumes and burns cleaner than the gasoline. Ethanol doesn't contribute to the greenhouse gases significantly.
- ➤ **Higher Income to Farmers:** India is a land of surplus production of corn, sugarcane and wheat. Also, the mandatory blending of ethanol programme can help farmers in realising higher incomes by giving them an alternative.
- > Tax benefit: The tax credit provided on FFVs substantially reduces the taxpayer's tax obligation. It will give a boost to Atmanirbhar Bharat.

Challenges of Flex-Fuel Vehicles:

- Non-economical: It reduces fuel efficiency as compared to gasoline. Also, there are fewer flex fuel stations.
- ➤ **Impact on Engine:** Ethanol can cause corrosion and damage to the engine because it easily absorbs dirt particles.
- > Food Security: the diversion of food grains to ethanol production might lead to high prices of food products. Also, the food crops in India are prone to bad weather conditions affecting the supply for FFVs.

Conclusion

A comprehensive roadmap is necessary for a smooth and efficient FFV culture in India. This will empower India to be among the top global producers.

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Earth just had its 5th-warmest September on record

Why in News:

According to the United States National Oceanic and Atmospheric Administration (NOAA), September 2022 marked the fifth-warmest September in 143 years, tying with the same in 2021.

Climate by Numbers:

- ➤ The average temperature across the world was 0.88 degrees Celsius above the 20th-century average of 150C, making September 2021 the fifth-warmest since 1880.
- According to the report of NOAA, the Year to Date (January through September) average global temperature was the sixth warmest on record.

Notable Climate events

- Sea Ice coverage was below average: The ice extent (covering) in September 2022 was the 8th lowest September extent on record. The Arctic had its minimum ice cover in September while the Antarctic very likely reached its annual maximum extent.
- > Tropical Scenario: The frequency of storms and cyclones has increased to an above-average level in the eastern and western pacific basins throughout the month.
- Above-average precipitation was witnessed in parts of the Caribbean, the southeast United States, Central Europe, northern and southern Asia and parts of Australia.

Factors Responsible for Rising Temperature:

Natural Factors:

- Volcanic Activity- during Volcanic eruption, gas and ashes are released which influence the climate patterns.
- ➤ Plate Tectonics- The changes in the core of Earth's temperature lead to changes in the mantle plume and convection currents which force the Earth's plate to adjust. This can influence the global and local climate and atmosphere.
- > Continental drift- the continuous drifting of the landmass has a major role to play in Earth's climate.
- ➤ Ocean Currents- the temperature difference of water across the oceans, influence the climate of the region.

Anthropogenic Factors:

- ➤ Greenhouse Gas Effect- the greenhouse gases trap the infrared radiation emitted by the Earth's surface which results in rising atmospheric temperature. Common greenhouse gases are water Vapour, Carbon Dioxide, Chlorofluorocarbon, Methane, and Nitrous Oxide.
- ➤ **Atmospheric Aerosols** they scatter and absorb the infrared radiation causing the temperature to rise.
- ➤ Land use Pattern change- Deforestation, Increased Albedo, Desertification, etc. has caused the temperature rise of the Earth.

Possible Effects of Climate Change:

- ➤ **Rising Sea level-** The rising temperature has resulted in thermal expansion. Further, the melting glaciers have added to the cause.
- ➤ Ocean Acidification- the increase in greenhouse gases has increased the rate of CO2 absorption by the oceans which makes the ocean acidic.
- > Increasing frequency of Natural and manmade disasters- Rising temperature is leading to increased frequency of droughts, forest fires, cyclones, landslides, floods.
- > Emerging Health Issues- World is witnessing spread of contagious diseases, extreme heat waves, and more loss of lives due to disasters as a result of rising temperature.
- Economic Impacts- scholars estimate that climate change could cost about 5 to 20 percent of the annual global GDP, if the action is not taken.
- > Rise in the atmospheric temperature

Conclusion:

Climate Change is a global issue which requires global efforts and international cooperation to address and mitigate its adverse impact. A global comprehensive plan of action is necessary for inclusive and sustainable growth of the global community.

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Wildlife board approves new tiger reserve in Madhya Pradesh

Why in News:

- Madhya Pradesh Wildlife approved a new reserve names Durgawati Tiger reserve spread over 2339 km with 1414 sq km area as the core area and 925 sq km as a buffer area. Now, the proposal will be sent National Tiger Conservation Authority for final approval.
- ➤ As part of a wildlife management plan for Panna in wake of the Ken-Betwa river linking project, the NTCA had asked Uttar Pradesh and MP governments to notify new tiger reserves. The two state governments, with the Centre, are implementing a ₹44,605 crore river-linking project to end the water crisis in the Bundelkhand region.
- ➤ On September 27, the Uttar Pradesh cabinet approved the notification of the state's fourth tiger reserve in the Ranipur Wildlife Sanctuary (RWS) in the Chitrakoot district. RWS has no tigers of its own. But pugmarks of the animals are frequently seen there as tigers from nearby PTR frequently. The two protected areas are just 150 km from each other.

About the Durgawati Tiger reserve

- ➤ The 2,339 square kilometres new tiger reserve will spread across Narisinghpur, Damoh and Sagar districts. A green corridor linking Panna Tiger Reserve (PTR) with Durgavati Tiger Reserve, will be developed for the natural movement of the tiger to the new reserve.
- Nauradehi wildlife sanctuary, which has five tigers, is a corridor between Satpura and PTR, while Durgavati Wildlife Sanctuary is a green corridor for

Bandhavgarh Tiger Reserve. "The new reserve will also accommodate excess tigers from Bandhavgarh.

About PTR:

Panna is the twenty second Tiger Reserve of India and fifth in Madhya Pradesh. The Reserve is situated in the Vindhyan Ranges and spreads over Panna and Chattarpur districts in the north of the state. Panna National Park was created in 1981. It was declared a Project Tiger Reserve by Government of India in 1994. In 2020, UNESCO included PTR in a global network of biospheres because of its unique landscape and management.

About NTCA:

> The National Tiger Conservation Authority was established in December 2005, following a recommendation of the Tiger Task Force, constituted by the Prime Minister of India for reorganized management of Project Tiger and the many Tiger Reserves in India.

Conclusion

Experts say that the tiger is not the only species that will be affected. Panna is home to the largest number of vultures in central India and habitat loss will have a negative impact on them. Tigers may move to Rani Durgavati Sanctuary, however, what will happen to the habitat of vultures is not known, which is a matter of concern and it should also be resolved as soon as possible.



Lead Paint Alliance annual update

Why in News:

The Global Alliance to Eliminate Lead Paint (Lead Paint Alliance) has published its annual update on 'the Global Status of Legal Limits on Lead in Paint.'

About the lead paint

Lead paint or lead-based paint is paint that contains lead. Lead chromate and lead carbonate are the most common forms. Lead is added to paint to accelerate drying, increase durability, maintain a fresh appearance, and resist moisture that causes rust. It is one of the main health and environmental hazards associated with paint.

About the lead paint exposure limit

While no known level of lead exposure is considered safe, the concentration limit for total lead recommended by the Model Law and Guidance for Regulating Lead Paint is 90 parts per million (ppm), it is the lowest and most protective regulatory limit for lead paint that has been set in countries.

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Effect of lead pollution:

➤ Lead can cause permanent damage to the brain and nervous system, and can impair reproductive function, leaving young children and pregnant women especially vulnerable. The World Health Organization (WHO) estimates that nearly half of deaths due to chemical exposure in 2019 were due to lead exposure and resulting cardiovascular diseases.

About Lead Paint Alliance:

➤ UNEP and WHO serve as the joint Secretariat for the Lead Paint Alliance, which is chaired by the US. The Alliance was formally launched in 2011 to help achieve international goals to prevent children's exposure to lead from paints containing lead, and to minimize occupational exposure to lead paint. It aims to promote establishing lead paint laws in all countries through appropriate national regulatory frameworks to stop the manufacture, import, and sale of lead paint.

Conclusion:

Eliminating lead exposure, such as through establishing laws to stop the manufacture, sale, and import of lead paint, is the most effective way to protect people from lead's adverse effects. Most industrialized countries adopted laws or regulations to control the lead content of residential and decorative paints in the 1970s and 1980s. However, use of lead in paint continues in many parts of the world. To protect human health, laws, regulations, or enforceable standards are needed in every country of the world.



Blackbuck conservation breeding facility centre

Why in News:

The Punjab forest and wildlife department is coming up with a conservation breeding facility for endangered blackbucks in their natural environment at the Shri Guru Jambeshwar Wildlife Sanctuary in Fazilka district's Abohar subdivision. The first-of-its-kind project in the state was mooted after the sarpanch of Sukhchain village, Manoj Godara offered to donate 10 acres land from his family trust for free, for the conservation of the blackbuck, the state animal of Punjab.

Why was it needed?

> The number of blackbucks (called hiran in the local parlance) has decreased at an alarming level in the last few years. Due to constrained food availability and the increase in the population of stray cattle and dogs, blackbucks have migrated to the adjoining areas of Rajasthan. Blackbuck is a cultural identity of Abohar and are of cultural importance to the members of the Bishnoi community.

About the Blackbuck:

➤ The Blackbuck or the Indian Antelope is a species of antelope native to India and Nepal. They are widespread in Rajasthan, Gujarat, Madhya Pradesh, Tamil Nadu, Odisha, and other areas throughout peninsular India.

Protection Status:

- ➤ Wildlife Protection Act 1972: Schedule I
- ➤ IUCN Status: Least Concern
- ➤ CITES: Appendix III
- ➤ It has been declared as the State Animal of Punjab, Haryana, and Andhra Pradesh.

Cultural Importance:

➤ It is a symbol of purity for Hinduism as its skin and horns are regarded as a sacred object. For Buddhism, it is a symbol of good luck.

Conclusion:

Sanctuary is an area where animal habitats and their surroundings are protected from any sort of disturbance. The capturing, killing and poaching of animals is strictly prohibited in these regions. Community participation is an important part of wildlife sanctuary for conserving the dwindling population of the wild animals.

November 2022/Issue-01 SCIENCE-TECH





Cyber Security Exercise- PowerEx

Why in News:

Indian Computer Emergency Response Team (CERT-In) conducted a cyber security exercise 'PowerEX' for 193 power sector utilities in collaboration with Power-CSIRTs (Computer Security Incident Response Teams in Power Sector).

About PowerEX-2022:

- > Objective: "Recognise, Analyse & Respond to Cyber Incident in IT & OT Systems".
- > Theme: Defending Cyber induced disruption in IT & OT infrastructure

The exercise was hosted by CERT-In on its exercise simulation platform.

The exercise hosted around 350 plus officials from various power sector utilities. It helped them learn, practice and respond to cyber threats.

About CERT-In:

- > Indian Computer Emergency Response Team (CERT-In) is an organisation under the Ministry of Electronics and Information Technology with the prime objective of securing Indian cyberspace.
- > It was established in 2004 under the Information Technology Act, 2000.
- > CERT-In is the nodal agency to deal with cybersecurity-related threats like hacking and

phishing.

- The organisation is responsible for collecting, analysing and disseminating information related to cyber incidents in the country.
- The body is also responsible for forecasting and warning against cyber threats and taking emergency measures.

About Power-CSIRTs:

It is a team of experts involved in responding to computer security-related issues.

Government guidelines on Cyber Security in Power

- Central Government released the guidelines on cyber security in October 2021, applicable throughout the
- The guidelines seek to improve the preparedness of different power utilities and create a cyber-secure ecosystem in the power sector of the country.

Conclusion

Cyber security threats have gradually increased in the country over the last few years. Initiatives like PowerEX will generate awareness and help realise the goal of a cyber-secure India.

Smart Protein Summit

Context:

The annual flagship event, the Smart Protein Summit, was launched by the Good Food Institute India (GFI India).

Key points:

- The Smart Protein Summit was launched in collaboration with the Federation of Indian Chambers of Commerce & Industry (FICCI).
- > Further it had support from the Ministry of Food Processing Industries (MoFPI), The Agricultural and Processed Food Products Export Development Authority (APEDA), and India's Food Safety and Standards Authority of India (FSSAI) Eat Right India initiative.

About GFI:

- The Good Food Institute (GFI) is a non-profit organisation, working globally to promote the development of alternative proteins.
- It is the primary expert organisation and convening body in the "smart protein" sector.
- It has affiliate organisations in five important nations and regions: Israel, Asia-Pacific, Brazil, Europe, and India.
- In India, it works with government organisations, entrepreneurs, corporations, universities etc. to promote and bring sustainable protein for all.

Smart Protein:

Smart proteins are alternative proteins that can



- reliably and predictably replace the proteins derived out from animal, diaries etc.
- > They are extracted from the either plants, fermentation etc. providing replicated sensory experience to the consumers and several advantages over traditional animal protein sources.

Need for smart proteins:

- ➤ With growing world population, almost 820 million people are suffering with either food shortages or food crisis.
- As per current diet trends, the food requirement in the world will increase to 60% in 2050.
- Further, as per WHO's predictions that antimicrobial resistance may soon lead to the end of the antibiotic era and 75% of infections in the future are expected to be foodborne.
- > Further, animal farming at industrial level has various hazardous effects to the planet at several levels; the livestock sector is one of the leading source of green

- house gases.
- ➤ Hence, for a more sustainable, safe, and equitable food supply, smart protein created from plants, cells, and microorganisms will be a viable option.

Potential for future:

- Deloitte India report presented at the "Smart Protein Summit 2022", the country's smart protein market (domestic and exports) might reach a size of Rs 33,194 crore, or \$4.2 billion, by the year 2030,
- Although smart protein is a relatively new idea, it has enormous global potential. The sector has a huge potential to establish linkages with Indian farmers and ensure supply of proteins from local producers.

3

'PARAM KAMRUPA' Supercomputer facility at IIT Guwahati

Why in News:

The President of India Droupadi Murmu inaugurated 'PARAM KAMRUPA' Supercomputer facility and a high-power active and passive component laboratory of SAMEER at Indian Institute of Technology, Guwahati. The Param Kamrupa, one of its kind supercomputers in the North East region, is installed under the National Supercomputing Mission.

Super Computer Param Kamrupa will provide advance computing, healthcare techniques along with solutions for many issues privy to this region. Many components of this super computer have been developed indigenously.

About Param-Kamrupa:

- ➤ Param-Kamrupa is a state-of-the-art supercomputer set up under the National Supercomputing Mission (NSM). With this facility, IIT Guwahati will be able to carry out research on weather and climate, bioinformatics, computational chemistry, molecular dynamics, artificial intelligence (AI), machine learning, data science, etc.
- ➤ The SAMEER laboratory will be used design and development of high-power microwave passive

and active components. This facility will provide a platform for scientists to carry out research and development activities in different areas of highpower microwave engineering.

About supercomputer

A supercomputer is a computer with great speed and memory. This kind of computer can do jobs faster than any other computer of its generation. They are usually thousands of times faster than ordinary personal computers made at that time. Supercomputers can do arithmetic jobs very fast, so they are used for weather forecasting, code-breaking, genetic analysis and other jobs that need many calculations.

Application of supercomputer in India

- For genomics and drug discovery
- For a science based decision support framework etc. to address urban environmental issues (meteorology, hydrology, air quality).
- > For flood early warning and forecasting system for river basins of India
- ➤ HPC software suite for seismic imaging to aid in oil



and gas exploration etc

National Supercomputing Mission:

- ➤ India has showcased its talent on building supercomputers at low cost with its PARAM series. To further enhance its capacity and to meet requirements, Government of India launched National Supercomputing Mission (NSM) in 2015. Under NSM, the plan was to connect R&D institutions and academic institutions in the country using a supercomputing grid with more than 70 high performance computing facilities.
- Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY) jointly guides the mission. Centre for Development of Advanced Computing (C-DAC) is entrusted with overall design, development, deployment, and commissioning of

computers build under this mission. Atos a French based IT services firm won the contract to build parts for the supercomputers for C-DAC.

Conclusion:

India has made its mark in the technology landscape and has come a long way since the introduction of the first supercomputer. India will need capital investment as well as talent, to compete with major global players like China and the US. At present, the focus is on domestically designing and developing parts such as server board, interconnect and storage. India is moving towards manufacturing its fully indigenous supercomputer and given its current pace, India may be able to achieve it in future.



Why in News:

The Indian Space Research Organisation (ISRO) has successfully launched the LVM3 M2/OneWeb India-1 mission. The LVM3 rocket carried almost 6 tonnes of payload into lower-earth orbit, the most that any ISRO mission has delivered into space till date.

About the LVM3-M2 rocket mission:

➤ The LVM3-M2 mission is a dedicated commercial mission for a foreign customer OneWeb, through NewSpace India Limited (NSIL), a Central Public Sector Enterprise (CPSE). It is the first multi-satellite mission with 36 OneWeb Satellites to the LEO as the heaviest Payload mass of 5,796 kg of LVM3 till date.

About the LVM3-M2:

➤ Launch Vehicle Mark 3 (LVM3) is the heaviest rocket of ISRO. It is a three-stage launch vehicle consisting of two solid propellant S200 strap-ons on its sides and core stage comprising L110 liquid stage and C25 cryogenic stage. It is capable of launching 4,000-kilogram class of satellites into GTO (Geosynchronous Transfer Orbit) and 8,000 kgs of payloads into LEO.

Significance of this mission:

- ➤ The launch with ISRO and NSIL opens up the space sector in India with the possibility of billions of dollars flowing into the country.
- This partnership with NSIL and ISRO demonstrates OneWeb's commitment to provide connectivity across the length and breadth of India by 2023.
- ➤ It will bring secured solutions not only to enterprises but also to towns, villages, municipalities and schools, including the hardest-to-reach areas across the country.

About the launch vehicles:

Launch Vehicles are used to carry spacecraft to space. India has two operational launchers: Polar Satellite Launch Vehicle (PSLV) and Geosynchronous Satellite Launch Vehicle (GSLV). GSLV with indigenous Cryogenic Upper Stage has enabled the launching up to 2 tonne class of communication satellites. The next variant of GSLV is GSLV Mk III, with indigenous high thrust cryogenic engine and stage, having the capability of launching 4 tonne class of communication satellites.

Launchers under usage:

- ➤ Polar Satellite Launch Vehicle (PSLV)
- ➤ Geosynchronous Satellite Launch Vehicle (GSLV)



- Geosynchronous Satellite Launch Vehicle Mark III (LVM3)
- Sounding Rockets

Launchers under development:

- Reusable Launch Vehicle Technology Demonstrator (RLV-TD)
- ➤ Scramjet Engine TD

Launchers, Retired:

➤ SLV-3

> ASLV

Conclusion

Indian space sector has an opportunity to create a vibrant ecosystem for start-ups and private enterprises. Being one of the few spacefaring countries, India is increasingly encouraging private sector participation through various reforms that are expected to help India achieve a market share of more than 10% in the global space sector by 2030.

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Jaitapur Nuclear Power Plant

Why in News:

India and France have discussed ways to expedite the construction of six new European Pressurized Nuclear Power Reactors (EPRs) with a total capacity of 9900 MW at Jaitapur in Ratnagiri district of Maharashtra.

About the project:

- ➤ The project would make Jaitapur the world's largest nuclear power generation site (9900), surpassing Japan's current 7965 MW Kashiwazaki-Kariwa Nuclear Power Plant.
- ➤ The six nuclear power reactors, which will have a capacity of 1,650 MW each, will be set up with technical cooperation from France.
- > This project will embody the strong partnership between India and France, a commitment to low carbon future, and will directly benefit the state of Maharashtra with thousands of local jobs.

Nuclear power and its benefits:

Nuclear power is an efficient way to boil water to make steam, which is used to turn turbines, which generate electricity. Nuclear power is considered advantageous compared to other forms of renewable energy due to its small land footprint and the amount of waste it generates. Nuclear power uses 360 times less land than wind power and 75 times less land than solar photovoltaic plants. Nuclear fuel is energy-intensive because a 1-inch-long uranium pellet is equivalent to 120 gallons of oil and about 17,000 cubic feet of natural gas.

Three stage nuclear development programme:

- ➤ The Indian nuclear power programme, launched in 1954, envisaged a three-stage development of nuclear power generation from the country's uranium and thorium resources. The three stages are
 - 1. Pressurized Heavy Water Reactor (PHWR)
 - 2. Fast Breeder Reactor (FBR)
 - 3. Thorium based Reactor

Nuclear power in India

Among all the developing countries, India is the country which has generated electricity using indigenously developed, demonstrated and deployed nuclear reactors. India ranks third in terms of electricity generation worldwide by producing 1207 TWh of electricity. Nuclear power is the fifth largest source of electricity for India. India also ranks seventh in terms of number of nuclear reactors, with more than 23 nuclear reactors in 7 power plants across the country producing 6780 MW of nuclear power.

Operational Nuclear Power Plants:

Kaiga Karnatak
Kakrapar Gujarat
Kudankulam Tamil Nadu
Kalpakkam Tamil Nadu
Narora Uttar Pradesh
Rawatbhata Rajasthan
Tarapur Maharashtra

Conclusion:

India's nuclear power can provide a reliable solution to India's electricity demand, while wind and solar are



not available round the clock. This could further reduce India's contribution to global greenhouse gases (GHGs), which stood at 6.55%, with the energy sector contributing a little over two-thirds. India's current nuclear power capacity of 6,790 MW is expected to increase to 22,480 MW by 2031. This in turn is going to assist the country

in meeting the zero energy targets along with other clean energy sources.

6 IIT-Madras and NASA researchers studied microbes in the space station

Why in News:

The Indian Institute of Technology-Madras and NASA Jet Propulsion Laboratory (JPL) researchers have studied the interactions between microbes in the International Space Station (ISS.

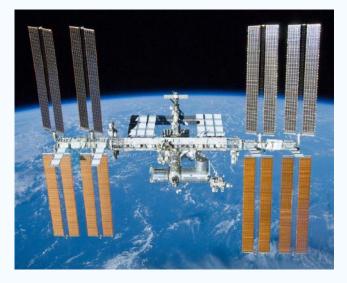
Finding of the report:

- A key finding is, that a microbe that resides on the ISS, was found to be beneficial to various other microorganisms but hampered the growth of a fungus.
- > The researchers analyzed the microbial sample data taken across three space flights at seven locations on the ISS. The study found that Klebsiella pneumoniae, a major microbe that resides on the ISS, is beneficial to various other microbes also present on the ISS, especially the bacteria from the Pantoea genus.
- ➤ However, it was found that its presence was hampering the growth of Aspergillus fungus. This computational observation was further tested through laboratory experiments, and it was found that the presence of K.pneumoniae was indeed detrimental to the growth of the Aspergillus fungus.
- This pathogen has been known to cause pneumonia and other nosocomial (hospital-acquired) infections. The researchers were broadly interested in understanding how this bacteria affects the growth of other microbes in the vicinity and the possible implications it could have.

Implication of the finding:

- The study would help devise strategies for the disinfection of space stations to minimise any potential impact of microbes on the health of astronauts.
- Crews, during spaceflight, may have altered immunity

and limited access to terrestrial medical facilities. Therefore, studying the microbes inhabiting the space station becomes important to understand the risks associated with short-term and long-term space travel on the health of astronauts.



Conclusion:

The microbial strains found in this study pose no threat to the space station astronauts, and this study provides evidence on why it's important to monitor the microbiome of the ISS. Keeping an eye on what microbes are on the ISS and learning how they adapt in microgravity continues to help us in protecting an astronaut's health.





One Health Joint Plan of Action

Context:

October 17, 2022 marked the launch of, 'One Health Joint Plan of Action' by four multilateral agencies to address the threats to living beings and Environment in a better way.

About One Health Joint Action Plan:

- The five-year One Health Joint Action Plan was unveiled by the "Quadripartite," comprising the World Health Organization (WHO), the UN Environment Programme (UNEP), the Food and Agriculture Organization (FAO), and the World Organization for Animal Health.
- > It focuses on supporting and expanding capacities in six areas:
 - » One Health capacities for health systems;
 - » emerging and re-emerging zoonotic epidemics;
 - » Endemic zoonotic;
 - » Neglected tropical and vector-borne diseases;
 - » Food safety risks:
 - » Antimicrobial resistance and the environment
- ➤ It is created through a participatory process and outlines a series of actions that are intended to improve collaboration, communication, capacity building, and coordination equally across all sectors that are responsible for addressing health issues at human-animal-plant-environment interface.
- ➤ The Action plan is in effect from 2022 to 2026 and it aims to lessen health issues on a national, regional, and international levels.

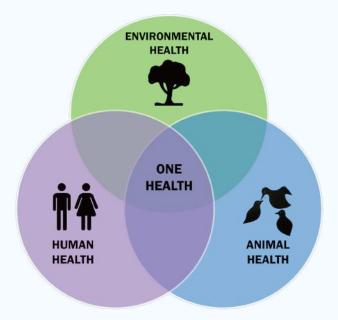
One health:

- ➤ One Health is an integrated, unifying approach with the goal of optimising the wellbeing of people, animals, and ecosystems in a sustainable manner.
- ➤ It acknowledges the interdependence and close connections between human health, and that of domestic and wild animals, plants, and the larger environment including ecosystems.

The Need for One health Approach:

- Studies indicate that more than two-thirds of existing and emerging infectious diseases are zoonotic, or can be transferred between animals and humans.
- ➤ 60% of all human infectious diseases are zoonotic in origin and approximately 75% jump species.

- Another category of diseases, "anthropozoonotic" infections, gets transferred from humans to animals.
- ➤ High-impact diseases affect crucial livestock-derived foods, which contribute 33 percent of protein and 17 percent of calorie intake of diets:
- Recent viral outbreaks such the Nipah virus, Ebola, Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), and Avian Influenza etc. have provided compelling reasons to look more into the connections between the environment, animals, and human health.



One Health Approach in India:

- ➤ India's 'One Health' vision derives its blueprint from the tripartite- alliance comprising FAO, UNEP, WHO and the World Organisation for Animal Health.
- ➤ It established a National Standing Committee on Zoonoses as far back as the 1980, keeping the long term objectives and since then it has taken various initiatives in this regard

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November 2022/Issue-01 ECONOMY





First National Coal Conclave

Context:

The first ever National Coal Conclave & Exhibition- 2022 was organised by Indian National Committee World Mining Congress in New Delhi on 16th & 17th October 2022, in New Delhi under the patronage of the Ministry of Coal.

Theme- "Indian Coal sector- sustainable mining towards Aatmanirbhar Bharat".

About the Exhibition:

The event provides a platform for policymakers, public and private sector mining companies along with researchers, academicians and other stakeholders to interact and prepare a roadmap for the Indian Coal Sector to align with the National Mission of 'Atmanirbhar Bharat'.

The Focus area of the conclave will be-

- 1. Fuel sufficiency in the power sector
- 2. Atmanirbharata in steel making for coal
- 3. Technology & Sustainability

India's Dependency on coal:

Economic Survey 2021-22 projects that the coal demand will range from 1.3 to 1.5 billion tonnes by 2030, an increase of 63 per cent from the current demand. Despite being the second largest coal producer in the world, India imported around 173.32 million tonnes of coal in 2021-22 (till January). Major exporters to India are Indonesia, Australia, South Africa USA the USA.

Coal Sector in India:

> Coal resources found in India are mainly from the Gondwana coal field (250 million years old) and tertiary coalfield (15-60 million years old). Major coal reserves are found in the states of Jharkhand, Odisha, Chhattisgarh, West Bengal and Madhya Pradesh. Coal accounts for 55 per cent of energy needs in India. Coal is the most important fossil fuel and the rising demand forecasts ensure that coal will continue to be the major source of India's energy scenario.

Challenges of the Coal Sector in India

Lack of Adequate Technology: One of the major

- concerns which inhibit coal production in India.
- Delayed Clearances: Several environmental and forest clearances are required from state and central governments which delays the coal mining projects.
- Low productivity: The coal production in the country is very low compared to countries like Australia and China.
- Monopolistic Sector: Coal mining is dominated by PSU which is gradually being opened to the private sector now. This monopoly has been a force behind the incapacity to meet domestic demands.
- Government's support to Renewable Energy: The unilateral focus of government on renewable energy has neglected the coal sector and its productivity has been impacted.
- **Environmental Pollution caused by the mining:** pollution generated by Coal sector is highly detrimental to environment and human health.

Steps taken by the Government:

- > Green signal to commercial coal mining: Government has opened up the coal mining for Indian as well as foreign units for commercial purpose.
- Transparent Auction Method: Government has opted for online platform for the purpose of auctioning of coal blocks. This move is expected to enhance efficiency of coal sector by eliminating the monopolistic tendency and increasing competition.
- Unlocking Transparency by Third Party Assessment of Mined Coal (UTTAM): It was launched by Ministry of Coal to ensure efficiency and transparency in coal quality monitoring process.
- Coal Allocation Monitoring System (CAMS): CAMS is used to monitor the allocation of coal blocks from top to bottom.
- New Coal Linkage Policy: to ensure adequate supply of coal to thermal power plants through reverse auction.
- Use of Technology: Introduction of Drone/ UAV for mine mapping and monitoring, automated mistbased water sprinkling system for dust suppression, etc.
- With such initiatives and cooperation from stakeholders, India is on the track of becoming Energy-independent nation by 2047.



(2)

India, a 'star' among emerging market economies: S&P

The S&P Global Ratings reported that India, with an estimated 7.3 per cent growth this fiscal year, may be the 'star' among the emerging market economies. In the report, S&P cited that global macro performance over the next few quarters points towards a slowdown with tightening financial conditions amid rate hikes by the central bank.

Insights into India's Economy:

- According to a provisional estimate released by the Ministry of Statistics and Programme Implementation, India's Gross Domestic Product (GDP) grew by 8.7 per cent for the fiscal year 2022.
- ➤ The GDP of India at the current price is USD 694.89 billion in the first quarter of FY22.
- Currently, India is the 6th largest economy after USA, China, Japan, Germany and the UK. By Purchasing Power Parity (PPP), India stood at 3rd position in the world.
- ➤ India stands at 4th in the world in terms of largest unicorn base valued at USD 73 billion.

Key Indicators:

Foreign Investments:

➤ India has been a favourite spot for global investors, leading to total foreign exchange (Forex) reserves of USD 678 million (January 2022). This is strengthened by investments from global giants like Facebook and Google.

Growth in different sectors:

- Agriculture has remained robust with a growth of 4.5 per cent in Q1 of 2022-23, which is highest than the previous quarters.
- > The manufacturing sector witnessed an average growth rate of 4.8 per cent.
- > Trade, hotels, transport etc. has remained below the

- pre-covid level. This was the most suffered sector during COVID.
- > Construction has shown positive growth, contributing to the overall growth of the economy.
- On the demand side, recovery in domestic demand has been reflected in the growth rates of Private Final Consumption Expenditure (PFCE)
- > External Trade: Growth in imports will continue to exceed growth in export, taking into account the rising petroleum prices and demand for importing intermediate goods to boost 'Make in India'.
- > Growth Rate Projections: being one of the fastest growing economies in the world, the overall future of the Indian economy looks strong and stable. The middle class of India is a major force behind domestic demand. Consumer spending is expected to double in the next decade.
- > Gross Goods and Service Tax Collection: it has remained high at Rs. 1.49 lakh crore in July 2022.

Steps that were taken by the Government to boost the economy:

- Production Linked Incentive Scheme (PLIS) for various sectors to boost their productivity.
- ➤ Make in India Scheme
- Proactive initiatives in Renewable Energy
- National Policy on Electronics (NPE) 2019
- Deep Ocean Mission
- > Telecom Sector Reforms & Banking Sector Reforms
- > Improving socio-economic indicators
- > Compilation of Labour Laws
- The international scenario is indicating a global recession. India's growth path is dependent on domestic investment. Sector-wise policy formulation would lead to enhancing efficiency and ease of doing business.

(3)

Coconut Community Farmers Conference

Why in News:

At the recently held Coconut Community Farmers Conference at Coimbatore (Tamilnadu), the Union Minister for Agriculture and Farmer Welfare ensured all possible assistance to the farmers in coastal states to promote coconut cultivation in the country.

Coconut- An Important Cash crop:

- ➤ Coconut, mainly grown by small and marginal farmers plays an important role in the agrarian economy of India.
- Coconut has a single trunk of 20-30 metres tall and can live up to 100 years.
- > The trees are found in the tropics and also beyond in

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- areas that have mild winters.
- Coconut plants are particularly concentrated in the coastal regions of India. Also, when agroclimatic conditions are met, these plants can be grown in the hinterlands.
- In India, coconut is mainly grown in the states of Kerala, Tamilnadu, Karnataka, Andhra Pradesh, West Bengal and Maharashtra.

Agro- Climatic Requirements of Coconut plant:

- ➤ Coconut plant is grown in the temperature range of 25-35 degrees Celsius and fairly well-distributed rainfall of 125 to 130 cm.
- ➤ It can be grown up to an altitude of 600 metres above sea level.
- ➤ It can tolerate a wide range of soil conditions including laterite, alluvial and coastal sandy soil.
- > The coconut plant is not shade-loving plant and requires plenty of sunlight.

Coconut Industry in India

- India is the third largest producer of coconut in the world after Indonesia and the Philippines.
- > Traditional activities of the coconut industry are mainly confined to copra making, oil extraction, coir manufacture, etc.
- > Coconut husk is a major source of fibre in the country.
- ➤ The coir and coir-based industry is one of the major segments using coconut by-products (particularly the husk).

➤ It has wide application in the manufacturing of soaps, hair oil, cosmetics and other industrial products.

Initiatives by the Government to support Coconut plantation:

- Initiatives by the Coconut Development Board (CDB)- CDB has formed a three-tier farmer group by integrating small and marginal farmers which have helped setting up the processing units in India. This is further creating employment opportunities and improving the financial condition of farmers.
- Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) provisions for direct cash transfers to farmers.
- Pradhan Mantri Fasal Bima Yojna
- ➤ Micro Irrigation Scheme: The financial provision under the scheme has been increased to Rs.10,000 crores from Rs.5000 crores.
- ➤ **Kisan Credit Card Scheme:** Earlier the crop loans were given to farmers only up to five to six lakh crore rupees, which has been increased to about Rs. 18 lakh crore and above.
- > **Agri Infra Fund:** for creating infrastructure like warehouses, and cold storage in every village.
- ➤ The projects and policies formulation for strengthening coconut industry must be inclusive and should be in collaboration of farmers' organization, states and central governments.



Small Saving yield is lower than stipulated by the formula-RBI

Context:

The Reserve Bank of India (RBI), in its monthly bulletin, noted that the current returns on India's small savings schemes have slipped below the formula prescribed for determining the rates. Returns on small saving schemes are linked to market yields on government securities (G-Secs).

More on the news:

➤ The gap between the current return and formulabased rates is the widest for three-year deposits. The returns on Kisan Vikas Patra, at 7 per cent, are 47 bps lower than the formula rates. Also, the paid rate on National Savings Certificates is 6.8% and the formula-based rate is 7.48% for the Oct-Dec quarter.

What are Small Savings Schemes?

- > Small Saving Schemes are a set of small savings managed by the central government to encourage citizens to save regularly irrespective of age.
- They form a major source of household savings in India having an assured source of income.
- These are particularly popular as they not only provide returns that are generally higher than bank fixed deposits but also come with a sovereign guarantee and tax benefits.
- ➤ The deposits under small savings schemes are pooled under National Small Savings Fund (NSSF), which is used by the central government to finance its fiscal deficit.

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Small Savings Schemes can be grouped under three heads:

- ➤ Post Office Deposits- includes savings deposits, recurring deposits and time deposits with 1,2,3 and 5-year maturities and monthly income accounts.
- > Savings Certificates- such as Kisan Vikas Patra (KVP), National Small Savings Certificate (NSC)
- ➤ Social Security Schemes- Sukanya Samriddhi Scheme, Public Provident Fund (PPF), Senior Citizens Savings Scheme.

What is yield on small savings schemes?

> Yield is the return an investor realizes on an

instrument.

- ➤ It is calculated by dividing the annual coupon rate by the current market price of the scheme.
- With the rise in yields in the market, the price of the scheme will decrease and vice versa.

Interest rate determination on small savings schemes:

➤ The interest rates are periodically reviewed by the Finance Ministry and are reset quarterly. Shyamala Gopinath Committee which was constituted in 2010 suggested a market-linked interest rate system for small savings schemes.

(5)

India's retail Inflation rises to a five-month high

Why in News:

India's retail inflation rose to 7.41% in September, the highest in five months, according to data released by the National Statistical Office (NSO). The number stayed well above the Reserve Bank of India's (RBI) upper tolerance band for a month. This is likely to pressure the RBI, which has raised its key repo rate by 190 basis points in four moves this year, to intensify its interest rate hikes. Food inflation, which accounts for almost half of the CPI basket, rose to 8.60% in September 2022, compared to 7.62% in August.

Inflation:

- Inflation is defined as rising in the general prices of most goods and services of common use such as food, clothing, housing, transport, consumer staples, etc.
- > In simple words, inflation is "too many rupees chasing too few goods".
- ➤ It measures the average price change in a basket of commodities and services over time. Inflation is measured in percentages. Two prospective of inflation:

1. Inflation: An economic scourge

- ➤ A report by Global Data, a globally renowned company, the Consumer Price Inflation rate of India increased to 6.7 per cent in July 2022, whereas the unemployment rate hit 8.2 per cent in August 2022.
- ➤ High inflation causes the reduction of currency's purchasing power as the commodities and services get dearer.

- Inflation affects the cost of living, which ultimately leads to a deceleration in the economic growth of a country.
- ➤ Inflation becomes dreadful for a country when it takes the form of 'stagflation'. Stagflation is an economic state of stagnation which witnesses a high unemployment rate along with a high rate of inflation.

2. Inflation: An Opportunity:

- ➤ Phillips Curve claims a stable and inverse relationship between inflation and unemployment. According to this theory, economic growth is accompanied by minor inflation, which is then followed by new opportunities and less unemployment.
- > Improved spending power: A consumer spends more during inflation by anticipating higher prices in the near future, which in turn gives a boost to the economy.
- ➤ **Higher Salary/ Wages:** Salaried employees demand higher paychecks to meet the overall rising cost of living. This increases the spending power and further boosts the economy.
- Assists in Debt Payments: When a borrower, who has borrowed before inflation pays the same amount with a higher paycheck, it doesn't feel like a burden to him/her.
- ➤ Lender witness hefty gains: Lenders also tend to benefit during inflation, as there are more demands for credit from people to meet the high prices of commodities. This will also ensure that lenders earn



high-interest rates.

➤ Boost to gig economy: During inflation, the employers tend to cut down the cost, hire part time employees and contractual labours which saves them from bearing expensive healthcare benefits and several other allowances.

Conclusion:

With the increasing awareness in the field of technology and the emergence of new, flexible ways have taught people to survive the chaos and make opportunity out of it. Inflation is boon when analysed and navigated through evolving market trends to ensure survival and growth even in adversity.



Budapest Conference

Why in News:

The world custom organization (WMO) and the Egmant group of Financial Intelligence Unit (FIU) hosted Budapest Conference in Budapest, Hungary. The conference organized several anti-money laundering sessions that touch upon the custom arena, including bulk cash smuggling, terrorism financing, e- currency, trade-based money laundering, and money laundering via environmental and human trafficking. The conference highlighted the growing threat posed to both regional and global security and the integrity of the global trade system and financial industry by transnational criminal organizations (TCO) and terrorist organizations.

Major highlights of the conference:

- > The conference underscored the importance of the joint efforts of law enforcement and FIU to identify the conversion of illicit proceeds into an international commercial shipment.
- > The participants noted that the prevalence of currency, gold, and precious metals smuggling has not diminished in the last decade due to the advent and proliferation of virtual assets in the global economy.
- The participants further acknowledged that the new payment method will continue to grow in international commerce. Hence, law enforcement agencies should prioritize money laundering in this sector.
- Conference participants also noted that the Custom-FIU cooperation handbook is a critical tool for custom authorities to target money laundering activities such as cash smuggling, gold smuggling etc.

What is money laundering?

Money laundering is the process of hiding the source of money obtained from illegal sources and converting it to a clean source, thereby avoiding

- prosecution, conviction, and confiscation of the criminal funds. It is an illegal exercise that converts black money into white money.
- Money laundering is a serious financial crime. Antimoney laundering measures have gained importance to prevent and curb such practices.

Overview of money laundering:

- > TCO continue to exploit the growth in global trade. The increase speed of transportation money laundering, and new and innovative technologies provide them with an expanding array of mechanism to continue and enhance their illicit activities.
- ➤ The UNODC estimates that between 2% and 5% of global GDP is laundering annually, which is equivalent between \$800 billion and \$2 trillion.
- Custom administrations across the globe are on the frontline regarding law enforcement efforts to identify, intercept, and dismantle criminal and terrorist activities that exploit international borders. The WCO is internationally recognized as the primary standards-setting authority for all custom matters. It is also a recognized centre of expertise in combating criminal activity in the customs area. Customs administration is critical for not only national security but also for regional and global security.

Conclusion:

Emerging levels of money laundering supported by emerging technologies need to be addressed with equally advanced anti-money laundering mechanisms such as big data and artificial intelligence. To effectively tackle the menace of money laundering, there is a need for both international and domestic stakeholders to come together by strengthening the data sharing mechanism.





SIDBI-D&B SPeX, India's 1st Sustainability Index

Why in News:

Small Industries Development Bank of India (SIDBI) and Dun & Bradstreet have launched SIDBI -D&B Sustainability Perception Index (SIDBI – D&B SPeX). The index will be presented as a quantitative measurement for policy makers and enablers to nudge businesses towards adopting an Environmental, Social and Governance (ESG) framework in their business strategy over the coming years.

Key feature of Index:

- It captures the sentiments of businesses on various business parameters, which will be analyzed broadly to provide valuable insights on the adoption of ESG framework.
- The index will later be expanded to include the sectoral and sub sectoral perceptions or aspirations as well as preparedness of businesses to improve their ESG.
- The survey will encompass views about the previous quarter as well as the outlook for the upcoming quarter. This enables assessment of changing sentiments over a 6-month period.
- ➤ The survey will cover sentiments and awareness of over 250 MSMEs each quarter from the D&B/SIDBI database of MSMEs.
- > It will help assess the role and consequences of regulations and government policies on environmental practices of MSMEs and how such practices are hindering the environmental sustainability of the sector.
- ➤ It will also cover the role and impact of social aspects like community, diversity, equal opportunity and competition.
- > It will also capture data on critical events that have impact on the MSME sector.
- ➤ It will analyze the implementation of sustainability practices across the value chain and assess the impact of internal drivers in various organizations.
- ➤ The index will improve the experience of investors, create benchmark for sustainable businesses and business practices providing value for all stakeholders.
- ➤ Its ultimate aim is to make the Indian economy and markets more attractive for sustainable capital and investment.

Government Initiative for MSMEs:

- As on July 8, 2022, the number of loans sanctioned under the Pradhan Mantri MUDRA Yojana (PMMY) scheme was 10.03 million and the amount disbursed was Rs. 73,199.89 crores (US\$ 9.15 billion).
- ➤ In the Union Budget of 2022-23, the MSMEs sector was allocated an Emergency Credit Line Guarantee Scheme (ECLGS) of Rs. 50,000 crores.
- On March 30, 2022, the Indian government allocated Rs. 6,062.45 crores for the scheme Raising and Accelerating MSME Performance (RAMP). The programme aims to improve market and credit access, strengthen institutions and governance at the centre and state levels, improve centre-state connections and partnerships, resolve late payment difficulties, and green MSMEs.
- ➤ In November 2021, the Ministry of Micro, Small, and Medium Enterprises launched SAMBHAV, a national-level awareness programme to push economic growth by promoting entrepreneurship and domestic manufacturing.
- ➤ In September 2021, Khadi and Village Industries Commission (KVIC) established the first 'Silk Yarn Production Centre' in Odisha to boost the local silk industry and generate employment.

About SIDBI:

Small Industries Development Bank of India (SIDBI) set up on 2nd April 1990 under an Act of Indian Parliament, acts as the Principal Financial Institution for Promotion, Financing and Development of the Micro, Small and Medium Enterprise (MSME) sector as well as for co-ordination of functions of institutions engaged in similar activities.

Conclusion:

The Government of India envisions doubling the Indian economy to US\$ 5 trillion in five years. MSMEs can play an important role to achieve this goal and can provide employment to the youth of the country as a major employment generator.

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MISCELLANEOUS





Power And Renewable Energy Conference

Why in News:

The conference of Power and Renewable Energy Ministers of States/ UTs was held from 14th -15th October 2022 in Udaipur, Rajasthan. The Inaugural session was chaired by Union Minister of Power and NRE R.K. Singh.

Key highlights of the conference:

- ➤ States were encouraged to accelerate solarisation under the PM KUSUM scheme. The States should further endeavour to deploy solar rooftop systems expeditiously to ensure meeting the overall target of 40 GW.
- ➤ It was emphasized that our demand is set to double by 2030, for which huge capacities will be required to be added, which in turn will require huge capital investments.
- Capital investments would also be required for modernizing the power systems and promoting new technologies like Green Hydrogen, Storage, Offshore wind etc. to help India achieve its energy transition trajectory.
- > To this end, it is absolutely imperative that the DISCOMS across the country follow prudent and sustainable financial practices to ensure that they are viable.
- Ministers highlighted the achievements made in the recent years in power sector in terms of surplus generation capacity, development of national grid, universal access to all households and improved supply to rural areas.
- ➤ The discussion held on ensuring 24 x 7 power supply through timely investment, viability of power distribution companies of the state, smart metering, rights of consumers and future power system.
- At a time of global energy crisis, the demand for electricity has been growing in India at about 11%. One of the major reasons behind it was shortage of coal supply and hike in prices internationally.

Renewable energy in India:

- Indian renewable energy sector is the fourth most attractive renewable energy market in the world.
- ➤ India was ranked fourth in wind power, 4th in solar power and 3rd in overall renewable power installed capacity, as of 2021.
- As of September 2022, India's total RE installed

- capacity (including hydro power) has reached over 157.35 GW.
- ➤ India has an estimated renewable energy potential of about 1100 GW. To reach its potential, India set a target of 500 GW by 2030.

Government Initiative to boost renewable energy:

The government has taken various initiatives to promote renewable energy in the country such as Green Energy Corridor projects, PM-KUSUM, National Clean Energy Fund, National Wind-Solar Hybrid Policy, 2018, Off-Grid and Decentralised Solar Photo Voltaic Applications Programme, Sustainable Rooftop Implementation for Solar Transfiguration of India (SRISTI) scheme, etc.

International Solar Alliance (ISA):

France to mobilize efforts against climate change through the deployment of solar energy solutions during the 21st Conference of Parties held in Paris in 2015. Its headquarter is located in Gurugram, India. Currently, 110 countries have signed ISA Framework Agreement.

One Sun One World One Grid:

➤ At the COP-26 climate summit in Glasgow, India launched 'One Sun One World One Grid'. It aims to provide energy to about 140 countries through a common grid that will transfer solar power.

Way forward:

The renewable energy sector can continue to grow significantly and play a key role in India's and the world's ambition in tackling climate change. There is a need to address the demand side flexibility, power plant flexibility, grid flexibility as well as policy, market and regulatory solutions for the short to long term.

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2 Manak Mahotsav

Context:

The Bureau of Indian Standards in Mumbai organised a 'standards conclave' on October 14, 2022, called "Manak Mahotsav" on occasion of World Standards Day.

About:

- ➤ Theme: 'Standards for Sustainable Development Goals A Shared Vision for a Better World'
- The word 'Manak' literally means, 'standard'. This conclave was organised to emphasise on the significance of standards in this era, and how work needs to be done in this regard.
- The conclave was addressed by, Minister of Consumer Affairs, who emphasized on the significance of quality standards for emergence of the, Brand India.

About World Standards Day:

- World Standards Day is observed on October 14 in honour of the joint efforts of thousands of professionals who work across the globe to develop the voluntary technical agreements that are published as International Standards.
- ➤ Its existence goes back to 1946, when 25 delegates from London came together to launch an international body to facilitate standardisation.
- This day however was first celebrated in 1970s.
- > Theme for 2022: 'Shared Vision for a better world'.

Standards across the globe:

- > Standardisation has been present since time memorial. In the pre historic times, the stone implements of similar shape and size have been found at the excavation sites.
- From Harappan seals and weights to modern day development of standardisation, the standards have evolved for the better functioning of the world.
- ➤ In layman terms, a standard is a document that provides requirements, rules and guidelines for a process, products or services usually a consequence of consensus and approval by a recognised body
- The main organisations involved with the development of global standards are International standards organisation (ISO), International Electrotechnical Commission (IEC) and International Telecommunication Union (ITU) etc.
- ➤ International Organization for Standardization is a worldwide federation of national standards bodies, comprising standards bodies from more than 160

countries, with one standards body representing each member country.

Bureau of Indian standards:

- ➤ The national standard body for India, that is responsible for framing standards is Bureau of Indian standards (BIS).
- BIS works under the aegis of Ministry of Consumer Affairs, Food & Public Distribution, Government of India
- ➤ The Bureau of Indian standards (BIS) Act 2016 establishes the Bureau of Indian Standards (BIS) as the National Standards Body of India.
- ➤ BIS has benefited the national economy through its core activities of standardisation and conformity assessment by providing safe, dependable, and quality goods.
- ➤ It has contributed greatly in reducing health risks to consumers; protecting the environment; promoting exports and imports as alternatives; controlling over proliferation of varieties; and more.

Why standards are crucial?

- > Standards promote compatibilities, better utilisation of resources, better communication and understanding, removal of trade barriers etc.
- ➤ Standardization can play an essential role for paving the way for India in order to achieve its target regarding Nationally determined contributions (NDCs).
- Further, India for making its global impact, must ensure the products, services to be standardized that can aid in its economical development, human development, cultural development etc.

Conclusion:

As per Indian Prime Minister, Standard is one of the main pillars for growth and development for India. From basic necessities like food and clothes, to major development infrastructures need standardisation for enhancement and better co-existence between the communities.

However, along with setting up a benchmark in quality-control, quality-assessment and quality assurance, these standards must be made sustainable, not just anthropogenically but environmentally.



3

World Health Summit

Context:

World health summit took place between October 16 to October 18 at Berlin, in collaboration with the world health organisation (WHO).

About:

- World health summit was an international, inclusive and inter-sectoral global health conference that brought the global health leaders and stakeholders from all sectors in all regions of the world
- ➤ The conference focused on "Making the Choice for Health" by reflecting on the most pressing topics and included more than 300 speakers and 6,000 participants, WHS 2022 aimed to set the course for a healthier future.

Central Topics of WHS 2022:

- 1. Investment for Health and Well-Being
- 2. Climate Change and Planetary Health
- 3. Architecture for Pandemic Preparedness
- 4. Digital Transformation for Health
- 5. Food Systems and Health
- 6. Health Systems Resilience and Equity
- 7. Global Health for Peace

World Health Organisation:

- ➤ World Health Organisation (WHO) is an UN specialised agency founded for health in 1948.
- ➤ It is inter- governmental organisation that cooperates with its member nations, typically through the Ministries of Health.
- > Its headquarters are based at Geneva, Switzerland.
- ➤ The WHO team works to increase everyone's ability to enjoy good health and well-being by collaborating with 194 Member States across 6 regions and on the ground in more than 150 locations.
- > India became party to WHO in 1948.

Health schemes in India:

1. National Health Mission

- NHM was launched by the government of India in 2013 amalgamating National Rural Health Mission (Launched in 2005) and the National Urban Health Mission (Launched in 2013).
- > It envisages achievement of universal access to

equitable, affordable & quality health care services that are within reach of people, accountable to them and responsive to their needs.

2. Ayushman Bharat

- Ayushman Bharat is a flagship effort, in order to replace the sectoral and segmented approach to service delivery with a comprehensive need-based health care service.
- The government started it in an effort to get the nation closer to having access to universal healthcare.
- Ayushman Bharat adopts a continuum of care approach, comprising of two inter-related components, which are
 - » Health and Wellness Centres (HWCs)
 - » Pradhan Mantri Jan Arogya Yojana (PM-JAY)

3. National Digital Health Mission

> It aims to offer the essential assistance for the integration of the nation's digital health infrastructure.

Challenges for Indian Health Sector:

- ➤ Despite efforts, there still lacks sufficient funding for the basic research and research related infrastructure.
- > Further, a lack of qualified medical personnel is another major issue that needs to be addressed, apart from inadequate quality control and insufficient health spending.
- ➤ There are still major portion of population that has inadequate access to basic healthcare services and facilities, it is an issue that requires an immediate attention.
- ➤ Health care workers often have to work in extreme conditions like over crowded places, often inadequate infrastructure, medicine and resources.



4 National Games 2022

Context:

The National Games 2022 was held across six cities of Gujrat namely Ahmedabad, Gandhinagar, Surat, Vadodara, Rajkot and Bhavnagar.

Key points:

- ➤ India's own version of the Olympics took place on September 27.
- ➤ However, the Table tennis competitions began on September 20 in order to avoid conflict with the international table tennis championships, which got underway on September 30 in China.
- Nearly 7,000 athletes from 28 Indian States, 8 Union Territories, and the Indian Armed Forces' sports team competed for medals across 36 different sports.
- ➤ The National Games 2022 concluded on October 12.
- The services won maximum number of gold medals accounting to 61, followed by Maharashtra (39), Haryana (38) and Karnataka (27).
- ➤ The event hosted almost 36 sports, which included traditional Olympic disciplines as well as indigenous sports like Mallakhamb, kho kho and Kabaddi.

Sports and Winners:

- The game showcased an exotic sport, called Mallakhamb. It is type of artistic gymnastics where players balance themselves upside down while twisting around an wooden pole with only the ball of their foot supporting their lean frames.
- ➤ The services won the Raja Bhalindra Singh Trophy with maximum number of medal, and Maharashtra was awarded with Best State Trophy.
- > Sajan Prakash took home eight medals, including five golds, two silvers, and one bronze. He also won the 'best male athlete' award while Hashika Ramachandra won the award for 'best female athlete with 6 golds and 1 bronze.
- Shauryajit Khaire (Mallakhamb), 10 years old emerged as the viral star after becoming the youngest athlete to win medal.

Sports in India:

- India being youngest country in the world, sports is another crucial aspect that needs transformation.
- The ministry of Youth Affairs and sports notified National Sports Development Code of India 2011.

- The Ministry of Civil Aviation in 2022 introduced National Air Sport Policy 2022 (NASP 2022) for aerobatics,
- Modelling, ballooning, drones, powered hang gliding, parachuting, and other activities.
- ➤ The current model for sports governance in India has many stakeholders, National Sports Federation (NSF), Sports Authority of India (SAI), Indian Olympic Association (IOA), State Olympic Association (SOA), Ministry of Youth Affairs and Sports (MYAS), etc.

Government initiatives:

1. Khelo India:

A scheme that is based on Gujrat's "Khel Mahakhumbh", that envisages to develop talent at grass root level by providing the young talent with national level platform.

2. Fit India Movement:

> The Indian Prime Minister, urged the people to adopt a fit lifestyle under Fit India Movement on occasion of National Sports Day.

3. Khelo India centres:

➤ In June 2020, the Sports Ministry announced plans to launch up to 1,000 new Khelo India Centres over the course of four years, with at least one centre in each district of the nation.

4. Target Olympic Podium Scheme(TOPS):

➤ The TOP programme was launched in 2014 by the Ministry of Youth and Sports (MYAS) and expanded in 2018 to help India's pursuit of medals at the 2020 Tokyo Olympic and Paralympic Games as well as future competitions.

Conclusion:

Sports is a power that definitely can aid India to consolidate its position as a major soft power. Despite, several efforts by government in the recent few years to promote sports and Indian athletes at global and national level, several lacunas needs to be addressed, like lack of infrastructure, lack of transparency, inadequate professionalization etc.



(5)

The first draft of the National Credit Framework (NCrF)

Why in News:

The draft for National Credit Framework or NCrF was recently released by the Union Ministry of Education. It is a framework under the National Education Policy of 2020 to integrate credit earned through schooling, higher education, vocational training, and skill education. It was prepared under the UGC (Establishment and Operation of Academic Bank of Credits in Higher Education) Regulations, notified in July 2021

Credits for school students:

- While the National Institute of Open Schooling (NIOS) follows a credit system, there is currently no established credit mechanism for regular schooling in the country.
- At the higher education level, there is a choice-based credit system, where the need to award a degree or diploma or certificate is determined in terms of the number of credits a student has to earn.
- > School students will be able to earn credits from classroom learning as well as extra-curricular activities, which will be deposited in the credit bank. This system is already implemented at higher educational level.

Integration of all frameworks:

NCrF will seamlessly integrate credit earned through school education, higher education and vocational and skill education by incorporating National Higher Education Qualification Framework (NHEQF), National Skill Qualification Framework (NSQF) and National School Education Qualification Framework

(NSEQF).

Aadhaar-enabled student registration:

- An Aadhaar-enabled student registration campaign is planned where student registration will take place.
- Academic Bank of Credit (ABC):
- ➤ After student registration, an Academic Bank of Credit (ABC) account will be opened, where credit can be credited. Degrees and credits will be credited to those accounts.

Need for NCrF:

- ➤ To ensure interconnection of school and higher education with vocational education and experiential learning
- > To prepare the educational system for the gradual implementation of the provisions of the National Education Policy such as a four-year undergraduate programme, which comes with facilities like multiple entry and exit, etc
- > To enable students who have dropped out of mainstream education to re-enter the education ecosystem

Conclusion:

NCrF is expected to assist the government to increase the enrolment of students, helping to fulfil the national vision of complementing the demographic dividend and transforming India into the Skill Capital of the World.

6 Glyphosate

Why in News:

Recently, Government has restricted the use of the Herbicide glyphosate due to fearing risk to human and animal health. From now, glyphosate will be applied only through pest control operators (PCOs). PCOs are licensed to use deadly chemicals for treating pests such as rodents.

Glyphosate:

➤ It is a non-selective herbicide (kills both ally types of plants). It is also used to regulate plant growth and ripen specific crops. It is banned in 28 countries,

including Australia, Canada, Brazil, Germany, Italy, Netherlands, and Sri Lanka, as it may be carcinogenic (as per a WHO study) and remains as a residue in the environment for up to 6 months.

Usage of glyphosate in India:

➤ It is widely used in plantation agriculture. It is also used to control weeds in afforestation activities and areas along irrigation channels, railway tracks etc. It may also be combined with BT cotton, leading to high usage in Deccan belts.



Concerns:

> The biggest concern now is that there's no pest control operator system available in the cultivation area and inevitably this order is going to create chaos on the ground. Second, the involvement of PCO would add additional cost to a large extent, so this is not at all a farmer-centric step.

Conclusion

Glyphosate in its pure form is low in toxicity.

However, the final commercially available product is highly toxic when combined with other ingredients. The product causes skin and eye irritation, nausea, burning of the throat, vomiting, and diarrhoea. Long-term exposure to Glyphosate can lead to chronic diseases like asthma, diabetes, cancers, infertility, and congenital disabilities. Now the need is that some alternative solution should be provided for the farmers instead.

7 Inter-Parliamentary Union

Why in News:

The 145th Legislative Assembly of the Inter-Parliamentary Union and all its related meetings were hosted by the Parliament of Rwanda in Kigali from 11 to 15 October. Meanwhile, in the election for the post of IPU Executive Committee member, Aparajita Sarangi won a landslide victory by 12 out of 18 votes.

The IPU is a global organization of national parliaments that empowers parliaments and parliamentarians to promote peace, democracy and sustainable development. It was founded in Paris in 1889 by the French politician Frederic Passy and the United Kingdom's William Randall Kramer. Its headquarter is located in Geneva. The IPU consists of 179 national parliaments and 13 regional parliamentary bodies. The IPU president is the political head of the organization. It serves as the body's representative at global events and festivals.

The overall theme of the Assembly is, 'Gender Equality and Gender Sensitive Parliament'. The upcoming elections offer both gender equality and youth empowerment, a chance to make greater progress. It works in close collaboration with the United Nations, regional parliamentary organizations, international intergovernmental organizations and NGOs to mediate conflicts.

Main purpose of IPU

- ➤ It aims to establish worldwide parliamentary dialogue and strengthen democracy while maintaining peace and cooperation.
- ➤ It promotes democratic governance, accountability and cooperation among its member countries.
- To achieve its objectives, it encourages coordination

and exchange of experiences between parliaments and parliamentarians of all countries and discusses questions of international interest and concerns. In addition to contributing to the protection and promotion of human rights, it also contributes to the strengthening and development of representative institutions.

Working area of IPU:

The IPU promotes parliamentary action to address international concerns by working on six main areas of action:

- > Representative democracy.
- > Peace and Security.
- > Promote Sustainable Development.
- > Human rights and humanitarian law.
- ➤ Women in politics.
- Education, Science, and Culture.

Way Forward:

The Inter-Parliamentary Association is a forum to discuss global political ideas. In 2022, there is a possibility of far-reaching changes in global politics. At the same time, it will continue to support the growing number of women MPs, women speakers, and young people in parliament. Through this, action can be taken in the future on human trafficking, human rights abuses, issues related to food security, issues related to the environment, etc.



NEWS OF NATIONAL AND INTERNATIONAL IMPORTANCE

1. Human Brain Cells transplanted into baby rats' brains grow and form connections

Scientists have recently successfully transplanted human brain cells into newborn mice, creating a new method for studying complex mental disorders. With this experiment, more will be known about human brain development and neurological disorders. This study could prove to be a new way to study complex psychiatric disorders such as schizophrenia and autism.



2. Sea-buckthorn

Recently in Ladakh, India Post has released a special cover on Sea Buckthorn as a Leh product under the theme 'One District - One Product' for promotion.

About Sea-Buckthorn:

Sea Buckthorn is known as the wonderful berry fruit of the Himalayas. Seabuckthorn is a beautiful, golden and orange wild berry. Its bushes have roots 200 feet below the ground to gather nutrition to survive in the harsh climate of the Himalayas. Sea-buckthorn contains more than 190 biologically active compounds. Extensive research findings from different parts of the world such as USA, Russia, Germany and India are being published regularly.



3. Kamikaze Drone

Recently, the Ukrainian capital Kyiv was attacked by Iranian-made kamikaze drones.

About Kamikaze Drone:

These are small unmanned aircraft loaded with explosives that can be fired directly at a tank or group of soldiers. These are destroyed when they hit the target and explode. The drone is named after World War II-era Japanese kamikaze pilots who would deliberately launch a suicide attack by crashing their explosive-laden plane into enemy positions.



4. World Green City Award

Recently the capital of Telangana, Hyderabad has won the overall 'World Green City Award 2022' and 'Living Green for Economic Recovery and Inclusive Growth' award at the International Association of Horticulture Producers (AIPH) World Green City Awards 2022 held in Jeju (South Korea).

Hyderabad has won this award beating cities like Paris, Mexico City, Montreal, Fortaleza and Bogota. It is a category in the award that focuses on creating systems and solutions that help all city residents overcome economic crisis and grow. ORR Hariyali called 'Green Necklace for Telangana State' was adjudged the best in this category.







5. Proposal to export Indian Bison or Gaur

The Indian government is considering a proposal from Colombo to export gaur, or Indian bison, to Sri Lanka.

Purpose:

➤ Efforts are being made to revive the population of gaur, which has been extinct in Sri Lanka since the end of the 17th century. This will be the first such agreement between India and Sri Lanka and will be part of the global trend of "wildlife or animal diplomacy".

About Indian Bison:

➤ The Indian gaur is one of the largest wild bovines. It is native to South Asia and Southeast Asia. It is found in Vietnam, Cambodia, Laos, Thailand, Peninsular Malaysia, Myanmar, Bangladesh, Bhutan, China and Nepal. There are about 13,000 to 30,000 gaurs in the world, of which about 85% of the population resides in India.



6. Wolf Warrior Diplomacy

Recently, the "Wolf Warrior" style of Chinese diplomacy has attracted every-one's attention.

- It is a word that gained popularity after Xi Jinping became president.
- The use of "wolf warrior diplomacy" is a tactic of the Chinese government to expand its ideology counter the West and defend itself.
- The sequel to a 2015 Chinese action film titled 'Wolf Warrior' served as the inspiration for the term.



7. Unified Pensioner Portal launched

The Central Government has launched a single window called Unified Pensioner Portal to meet the needs of pensioners.

- To provide a onestop solutions for all pensioneers related queries the Department has developed an integrated Pensioners Portal.
- It includes various stand-alone portals of DoPPW.
- > State Bank of India has become the first pension disbursing bank to integrate itself with the portal of Department of Pension and Pensioners Welfare (DoPPW).
- Pensioners can use this portal for all their pension related activities.
- Unified Pensioners' Portal to be linked with all pension disbursing banks.
- This portal also provides an opportunity to provide information related to pensioner's contribution in enhancing the effectiveness of various government policies.



8. Booker Prize 2022

Recently Sri Lankan author Shehan Karunatilaka won the Booker Prize for his second novel "The Seven Moons of Mali Almeida". The Booker Prize is a literary prize awarded annually to the best novel written in the English language and published in the UK or Ireland.





9. First Indigenously Built Aluminium Freight Train:

Indian Railways has recently unveiled an indigenously manufactured aluminum freight train rake from Bhubaneswar. It is lighter but has higher freight carrying capacity than its predecessors.

This will save eight to 10 tonnes of carbon.

It can carry an additional payload of 180 tonnes per trip over conventional rakes.

In order to make these wagons without welding on the composition, fully locked bolted construction was used. The new rakes have 80 percent resale value and a life of 10 years. It is a boost for the domestic aluminum industry. The iron and steel industry consumes a lot of nickel and cadmium which are imported. Hence, proliferation of aluminum wagons will reduce imports and at the same time it augurs well for the domestic aluminum industry.



10. SPRUT-SDM-1 LIGHT Amphibious Tank

Russia will launch its Sprut-SDM-1 Light Amphibious Tank for the upcoming tender of the Indian Army.

Sprut can cross water obstacles and can fire his gun while disembarking from the ship. It can work in any situation.

The tank is equipped with a guided missile system designed to hit ERA-equipped armoured targets at ranges up to 5 km.

Due to the high level of maneuverability of the Indian Army with the presence of light tanks, combat capability in high altitude areas can be significantly improved. This will help India in securing its high-altitude borders with China.



11. National Conference on Tourist Police

The Union Ministry of Tourism, in coordination with the Bureau of Police Research and Development, Ministry of Home Affairs, organized a National Conference of Director Generals/Inspectors General of Police Departments of all States and Union Territories regarding the implementation of Uniform Tourist Police Scheme at all India level.

About Tourist Police Scheme:

The objective of the scheme is to provide a safe ecosystem to the foreign and domestic tourists in and around the tourist places. Enabling and facilitating them to work closely with the State/Union Territory Police Department. To sensitize them about the specific requirements of foreign and domestic tourists for effective implementation of Uniform Tourist Police Scheme at all India level.

It will transform India's perception of safety and security at the global level and help make India an essential travel destination across the globe.



12. Sir Syed Excellence Award

Recently, American historian Barbara D. Metcalf received the Sir Syed Excellence International Award for 2022. This annual award is given by Aligarh Muslim University (AMU) on 17 October, the birth anniversary of Sir Syed Ahmed Khan. Metcalf's writings have made significant contributions to understanding the history of the Muslim populations of India and Pakistan, particularly during the colonial period.



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13. Launch of School of Excellence Project

Recently the ambitious 'Mission School of Excellence' project has been launched by the Prime Minister in Gandhinagar, Gujarat.

- With an outlay of Rs 10,000 crore, the mission, partially funded by the World Bank, aims to strengthen the education infrastructure through the establishment of new classrooms in the state.
- Under this project 1.5 lakh smart classroom, 20,000 computer labs and 5,000 Atal tinkering labs, besides 50,000 classrooms will be set up in government schools.



14. Nihonshu

Recently Embassy of Japan, New Delhi has made an application seeking Geographical Indication (GI) tag for alcoholic beverage, Nihonshu/Japanese Sake.

This is the first time for a product from Japan that an application for a tag has been made in the Geographical Indications Registry in Chennai. In Japan, Nihonshu is considered a special and valuable drink made from rice. People traditionally drink Nihonshu on special occasions such as festivals, weddings or funerals. Thus, it is an integral part of the lifestyle and culture in Japan.

Sake Market (almost all are Nihonshu) is the second largest liquor (such as beer) market in Japan. Three main raw materials are needed to make nihonshu – rice, koji-kin (a type of fungal spore) and water.



15. Hyderabadi Haleem Awarded 'Most Popular GI' in Food Category

Recently, Hyderabadi Haleem, a popular dish that is mostly consumed during Ramzan, has received the award for 'Most Popular GI' in the food category. The award was presented by the Ministry of Commerce and Industry.

Awards in various categories:

- Odisha's Kandhamal turmeric, which is famous for its healing properties, has received the award in the agriculture category.
- > Thanjavur Art Plate from Tamil Nadu bagged the award in the Handicrafts category
- Mysore sandalwood soap from Karnataka has received the award in the Manufactured category.
- Lime sandstone of Uttar Pradesh has got the award in the natural category.

Hyderabadi Haleem:

This non-vegetarian dish is mostly eaten during Ramadan. Hyderabadi Haleem was first given GI status in 2010 and was the first non-vegetarian dish in India to receive this tag. Haleem Makers Association, which got the GI tag in 2010, has recently renewed it for another 10 years in May, 2022.



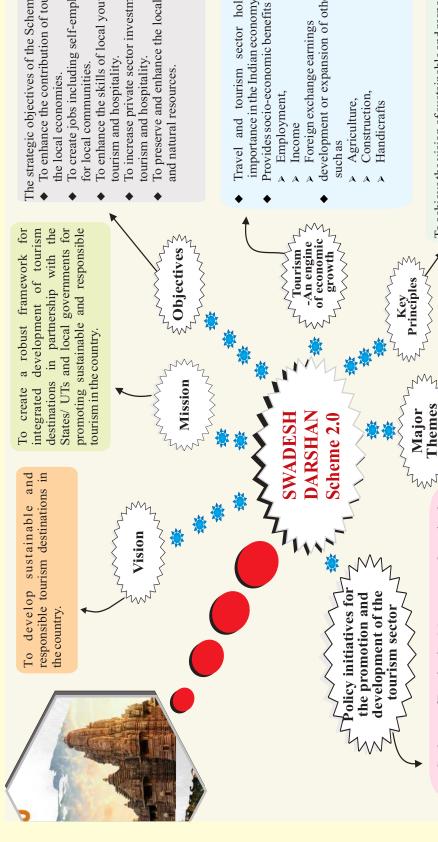
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Current Affairs at a Glance

- 1. Union Railway Minister Ashwani Vaishnav inaugurated India's first aluminum freight rake from Bhubaneswar which has the following advantages: lighter than iron, more cargo capacity and less fuel consumption.
- 2. Hyderabad was awarded the World Green City Award. Hyderabad is the only city in the country to receive this award.
- 3. The Central Government has set up 22 Language Centers based on NEP 2020 to prepare adequate study material in Indian languages.
- 4. The Central Government appointed Bharati Das, Controller General of Accounts in the Ministry of Finance.
- 5. The Board of Control for Cricket in India elected Roger Binny as the new president in place of Sourav Ganguly.
- 6. Qatar (Doha) will host the 18th Asia Cup of football 2023.
- 7. According to the Global Multidimensional Poverty Index 2022, poverty in India has improved from 2015-16 to 2019-20.
- 8. Jyoti Yaraji became the first Indian female athlete to complete the 100m hurdles in less than 13 seconds.
- 9. The 12th edition of Defense Expo was held in Gujarat which was based on the theme 'Path to Pride'.
- 10. Union Minister Dr. Jitendra Singh launched Single Integrated Pension Portal which will be known as Bhavishya Portal
- 11. Union Minister Hardeep Singh Puri launched Asia's largest Compressed Biogas Plant in Sangrur, Punjab.
- 12. Ulf Kristersson was elected the new Prime Minister of Sweden.
- 13. RK Singh (India) and Co-Chairman Crisola (France) were elected as the President of International Solar Alliance. Its headquarter is located in Gurugram (India).
- 14. Prime Minister Narendra Modi along with UN Secretary-General Antonio Guterres launched Mission Life from Gujarat, which will promote environmental protection. (Li- Lifestyle, F for the, E environment)
- 15. Armane Giridhar was appointed as the new Defense Secretary in October 2022. He will take over as the Secretary of Defense Department after the retirement of Ajay Kumar on October 31.
- 16. The people of Ukraine were awarded the Freedom of Thought at the Sakharov Price, the top honor of the European Parliament, which is given by the European Union.
- 17. Rishi Sunak of Indian origin was appointed as the new Prime Minister of Britain. He replaced Liz Truss.
- 18. Shankar Subramaniam became the principal scientist of India's Aditya L1 mission. It will do research on the inner part of the Sun, the corona.
- 19. India's first vertical lift railway Sea Bridge Pamban Bridge is being constructed in Tamil Nadu, which connects the mainland India with Rameswaram Island, at an estimated cost of Rs.250 crores.
- 20. Dr. K.P. Ashwani was appointed as a special envoy of the United Nations Human Rights Council to reform apartheid. His tenure will be for 3 years.
- 21. COP-27 Climate Change will be held in Egypt from 6 to 18 November with the theme 'Critical Impact of Climate Change on the Continent'.
- 22. Thuri and Kadmat beaches of Lakshadweep get the coveted BlueFlag certification. This is a certification given by the Foundation of Environment Education, which has so far been given to 12 sites in India.
- 23. Sangeeta Verma has been appointed as the Acting Chairperson of the Competition Commission of India.
- 24. Satyajit Ray's 'Pather Panchali', released in 1955, was declared the best Indian film of all time by the International Federation of Film Critics.
- 25. Dr. Shifali Juneja has been appointed as the Chairperson of the Air Transport Committee of the International Civil Aviation Organization. India will chair this committee after 28 years.
- 26. Prime Minister Narendra Modi laid the foundation for the C-295 transport aircraft manufacturing project in Vadodara on 30 October.





Culture and Heritage Adventure Tourism

Setting up of Destination Management Organization

National Integrated Database of Hospitality

Industry (NIDHI)

Eco-Tourism

Revamping of Star classification and certification

schemes for sustainable tourism, ecotourism.

System for Assessment, Awareness and Training for

Hospitality Industry (SAATHI)

- Wellness Tourism
 - MICE Tourism
 - Beach Tourism Rural Tourism
- Ocean Cruises Inland

Strategies for development of MICE, Medical and Wellness, Ecotourism, adventure tourism and other

Incredible India Website and Mobile Application

Tourism statistics

niche areas.

Minimum standards for Homestay / B&B

adventure tourism etc.

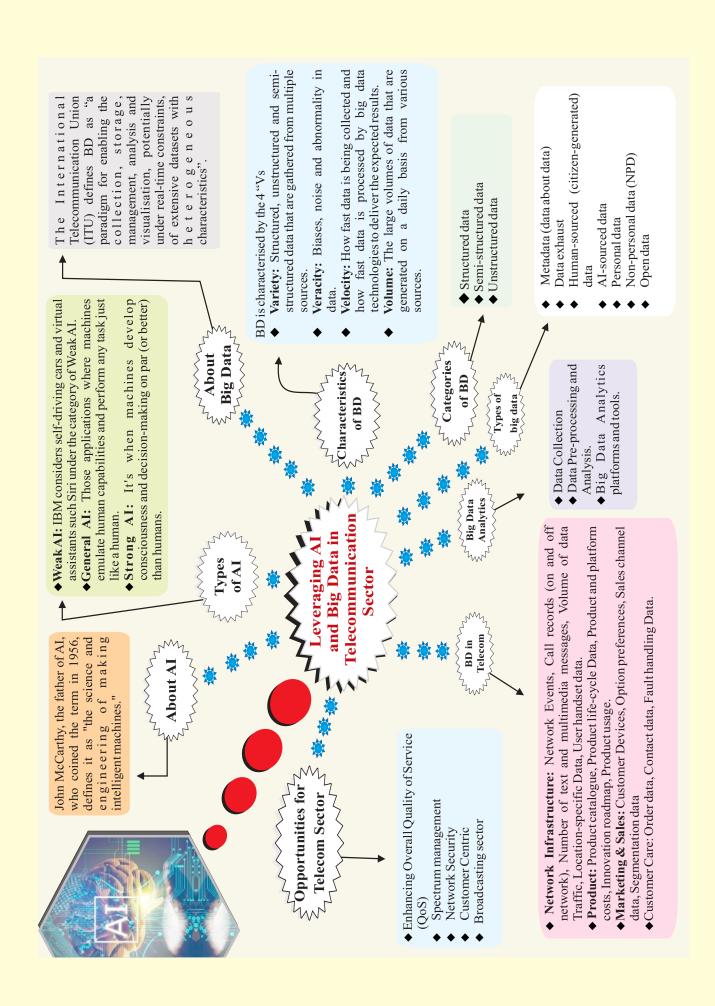
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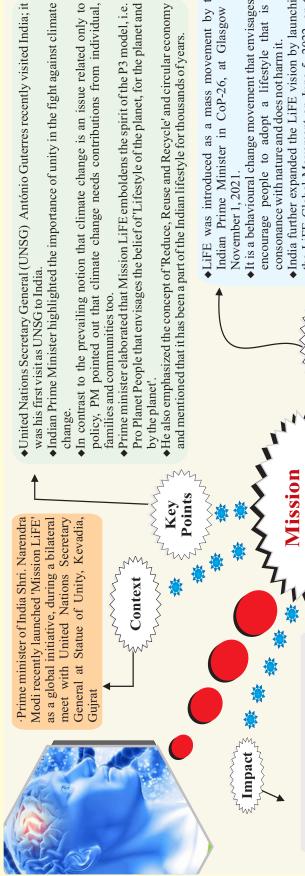
The strategic objectives of the Scheme are:

- To enhance the contribution of tourism to
 - To create jobs including self-employment To enhance the skills of local youth in for local communities.
- To increase private sector investment in tourism and hospitality.
- To preserve and enhance the local cultural and natural resources.
- Travel and tourism sector holds strategic importance in the Indian economy.
- Foreign exchange earnings
- development or expansion of other industries

To achieve the vision of sustainable and responsible tourism following principles have been identified:

- Develop benchmarks and standards for major tourism themes.
 - Sustainable and responsible tourism.
- Destination and tourist-centric approach.
- Integrated development of tourism destination. Focus on Domestic Tourism.
 - Policy and Institutional Reforms.
- Operation and maintenance on sustainable basis. Synergy with other central and state schemes.





- little actions like switching off the car engines, scooter engines, etc. at traffic lights can save up to 22.5 billion kWh of •Adopting a pro planet life, can make huge impact while tackling the climate change, energy per year.
- Similarly, turning off the taps when not in active use can save water up to 9 trillion litres, while composting food waste could save 15 billion tonnes of food going to landfills.

Other Behavioural

change programmes Other

by India

Mission Life

◆Indian Prime Minister highlighted the importance of unity in the fight against climate ♦In contrast to the prevailing notion that climate change is an issue related only to policy, PM pointed out that climate change needs contributions from individual, Pro Planet People that envisages the belief of Lifestyle of the planet, for the planet and •Prime minister elaborated that Mission LiFE emboldens the spirit of the P3 model, i.e. ◆He also emphasized the concept of 'Reduce, Reuse and Recycle' and circular economy and mentioned that it has been a part of the Indian lifestyle for thousands of years. families and communities too. by the planet'

- ▶LiFE was introduced as a mass movement by the Indian Prime Minister in CoP-26, at Glasgow on November 1, 2021.
 - It is a behavioural change movement that envisages to encourage people to adopt a lifestyle that is in consonance with nature and does not harm it.
 - ◆India further expanded the LiFE vision by launching the LiFE Global Movement on June 5, 2022, on the occasion of World Environment Day.
- scientific ways through which the full potential of ◆The nation invited academics, researchers, and startups from around the world to consider concrete, collective action can be harnessed to address the environmental crisis.

Swachh Sagar Surakshit Sagar: A campaign that sought to remove

Swachh Bharat Abhiyan: This mission led to construction and promoting use of around 100 million toilets in rural India within 7 years.

around 15,000 tonnes of waste from 75 beaches in 75 days.

- ◆Ujjwala scheme: Ujjwala scheme increased LPG connection from 62% in 2015 to ~99.8% in 2021 in the Households

will put India's beliefs and goals into action and show its commitment to actually Mission LiFE through a mission-mode, scientific, and quantifiable programme, addressing climate change.

- It is designed to mobilise at least 1 billion Indians and other global citizens to take individual and collective action for protecting and preserving the environment in the period 2022-27
 - ◆At least 80% of all villages and urban local bodies in India are aimed to become ◆The global launch of Mission LiFE was coordinated by NITI Aayog, MoEFCC, environment-friendly by 2028.
- Mission LiFE will be curated and incubated by NITI Aayog for the first year before being implemented by MoEFCC. The mission is a five year programme and the Government of Gujrat, India.

In DBU, the products and services will be offered to A digital banking unit is a specialized fixed point of products and services as well as business or hub which has a certain minimum infrastructure for providing digital banking existing financial services products in self-service mode at **Provided** Service by DBU any point in time. The state of the s What is a banking digital unit? aunched digital banking unit across 75 In the budget 2022-23, it was announced Recently, the Prime minister of India These digital banking units can further enhance financial inclusion in the to set up 75 digital banking units in 75 hums 22 Why in News districts of the country. districts of the nation. country.

checks, print passbook, transfer of funds, investment in ◆Services being offered through DBU include banking facilities like the opening of savings accounts, balance > Digital Assistance Mode > Self Service Mode customers in 2 modes:

fixed deposits, loan applications, stop-payment instructions for cheques issued, application for credit/debit view statement of account, pay taxes, pay bills, make nominations, etc.

end-to-end digital processing of small-ticket ◆The DBUs will also facilitate onboarding to Government credit link schemes through the Jan Samarth portal and MSME/retail loans.

> need next-generation solutions. Only All parts of the economy, including commerce, financing, and logistics, 27% of our population is digitally literate, with a lack of good connectivity infrastructure. Thus it is the need of the hour for government to focus on digital The digital economy is growing rapidly literacy related to finance.

Banking Unit

> Digital Banking Benefits of the Unit

◆Bank staff will be available to help and guide users for ◆People not having connectivity or computing devices can do banking transactions from DBU in a paperless mode. banking transactions in assisted mode Services shall be provided digitally.

They will provide banking services including cash deposit

& withdrawal 24 x 7.

OBUS will be different irom a traditional following aspects branch in the

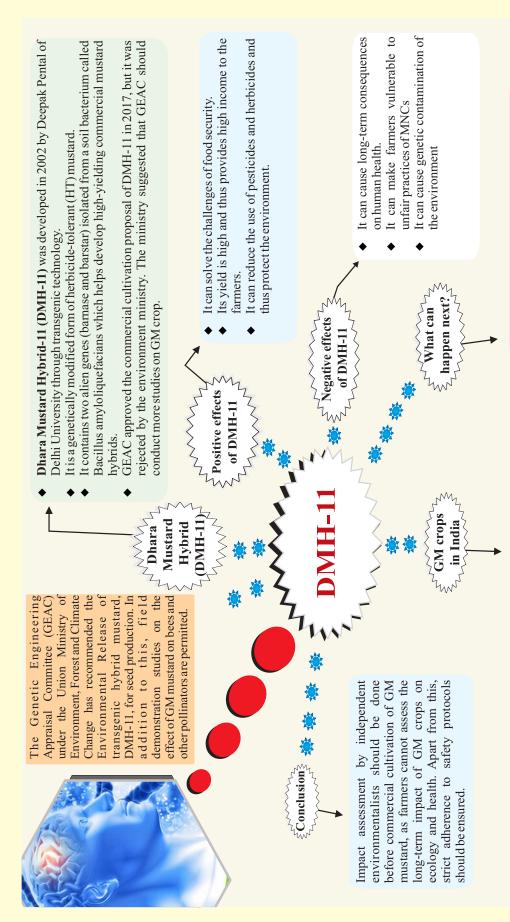
Banking Unit

enhanced digital experience of banking products and services throughout the DBUs will enable customers to have cost-effective, convenient access and

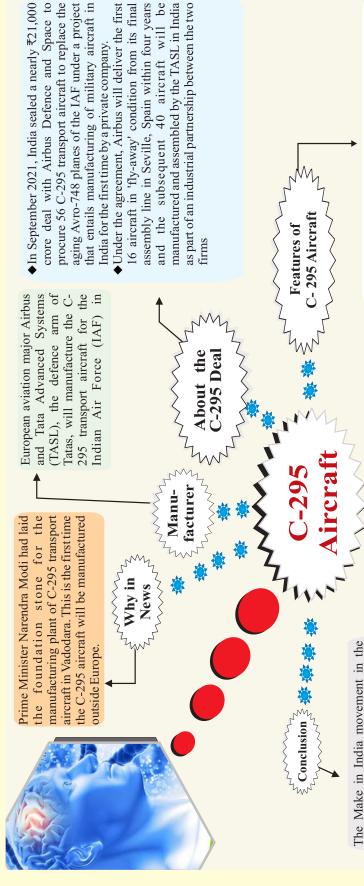
- ◆They will spread Digital Financial Literacy and special emphasis will be given to customer education on cyber security awareness and safeguards.
- ◆It can offer real-time assistance and redress customer grievances arising from business and services provided by the DBUs directly or through Business Facilitators/ Correspondents.

Commercial banks (other than regional rural banks, payment banks and local area banks) with digital banking experience are permitted to open DBUs in tier 1 to tier 6 centres, unless otherwise specifically restricted.

- DBUs of the banks will be treated as banking outlets.
- DBU must be headed by a senior and experienced executive of the ban who can be designated as the DBU's Chief Operating Officer (COO).



- ◆Cotton: In 2002, GEAC approved Bt cotton for commercial cultivation in 6 states namely Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Tamil Nadu. Bt cotton is the first and only transgenic crop approved by GEAC.
 - ◆Brinjal: Mahyco jointly developed Bt brinjal with Dharwad University of Agricultural Sciences and Tamil Nadu Agricultural University.
 - ▶GEAC recommended a commercial release of Bt brinjal in 2007, but this initiative was put on hold in 2010.
- ◆ The central government will take a final decision on whether to allow it for commercial cultivation or not.
- ◆Commercial use of DMH-11 will be subject to the Seeds Act and related rules and regulations.



assembly line in Seville, Spain within four years and the subsequent 40 aircraft will be manufactured and assembled by the TASL in India ▶ Under the agreement, Airbus will deliver the first as part of an industrial partnership between the two 16 aircraft in 'fly-away' condition from its final

♦ The C-295 MW is a transport aircraft of 5-10 tonne capacity with contemporary technology.

◆ It has a rear ramp door for quick reaction and paradropping of troops and cargo.

◆ It will be installed with the indigenous Electronic Warfare

Benefit

defence. India currently imports most of

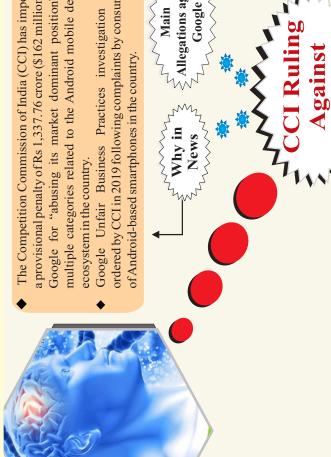
the defense products it uses. Private sector participation in defense will encourage foreign producers to forge strategic partnerships with various Indian businesses. This strategic collaboration will create many

defense sector is important in the direction of a self-reliant India in The project will strengthen the logistic capabilities of the IAF.

opportunities for producers in India's

defense sector.

- The project offers a unique opportunity for the Indian private sector to enter into technology-intensive and highly competitive aviation industry.
- It will augment domestic aviation manufacturing resulting in reduced import dependence and an expected increase in exports.
 - This is in line with the Atmanirbhar Bharat initiative.
- The Project will generate huge employment opportunities for



The Competition Commission of India (CCI) has imposed a provisional penalty of Rs 1,337.76 crore (\$162 million) on Google for "abusing its market dominant position" in multiple categories related to the Android mobile device

Google Unfair Business Practices investigation was ordered by CCI in 2019 following complaints by consumers

Google has perpetuated its dominant position in the online

contravention of the provisions of Section 4(2)(a)(i) of the

competition Act.

condition on the device manufacturers and thereby in

Mandatory pre-installation of entire Google Mobile Suite (GMS) under Mobile Application Distribution Agreement with no option to un-install the same- like YouTube etc) and their prominent placement amounts to imposition of unfair search market resulting in the denial of market access for competing search apps in contravention of Section 4(2)(c) of manufactured has reduced the ability and incentive of device apps (particularly Google Play Store) conditional upon signing of Anti-fragmentation Agreement (AFA), Android Compatibility Commitment Agreement (ACC), Revenue Sharing Agreement (RSA), etc for all android devices alternative versions of ANDROID. Thus it violates the Google, by making pre-installation of Google's proprietary manufacturers to develop and sell devices operating on provisions of Section 4(2)(b)(ii) of the Act. the Act. Directions for Google Allegations against Google

Smartphone makers should be allowed to choose which of Google's proprietary apps they want to install and should not be forced to pre-install the whole bouquet.

The licensing of Play Store to manufacturers should not be linked with requirements to pre-install Google search services, Chrome browser, YouTube, Google Maps, Gmail, or any other Google apps.

Google should allow users, during the initial device setup, to choose their default search engine for all search entry points, etc. Google shall not deny access to its Play Services APIs (which allow two programs to interact with each other) to disadvantage manufacturers, app developers, and its existing or potential competitors.

It consists of a Chairperson and 6

Competition Act, 2002.

Members appointed by the Central

Government.

CCI is a statutory body under the Ministry of Corporate Affairs and is responsible for enforcing the

Competition Commission

of India (CCI)

Google should not offer any monetary/ other incentives to OEMs such as those given in revenue-sharing agreements for ensuring exclusivity for its search services.

Google shall not impose anti-fragmentation obligations on OEMs, which means those manufacturers using an alternate Android version should be able to get access to Google's proprietary apps and vice versa.

Google shall not restrict uninstalling of its pre-installed apps by the users.



MCQs based on Preliminary Exam

- 01. With reference to 3D bioprinting consider the following statements:
 - 1. It is a form of additive manufacturing that uses cells and other biocompatible materials as inks.
 - 2. It prints living structures layer by layer which mimic the behavior of natural living systems.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 02. The celestial alignment of which two planets has been referred as the great conjunction which was seen recently?
 - (a) Jupiter and Saturn
 - (b) Earth and Mars
 - (c) Mercury and Venus
 - (d) Jupiter and Mars
- 03. Consider the following statements with reference to Reverse Osmosis:
 - In RO, the total dissolved solids in water which covers trace chemicals, virus, bacteria and salts, can be reduced to meet potable water standards.
 - 2. The UV radiation in RO, quickens the sedimentation of solid particles, remove stability and improves the clarity of the water.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 04. It is a cosmic phenomenon that results from the magnification of light due to the presence of a giant galaxy or cluster of galaxies in the universe. This is expected to help scientists to understand the star formation.

Which of the following best describes the above given phenomena?

- (a) Geotail
- (b) Spaghettification
- (c) Supernova explosion
- (d) Gravitational lensing
- 05. Which of the following trends were seen in the Indian Economy after the 1991 economic reforms?
 - 1. The growth rate steadily increased.
 - 2. Agriculture and Allied sector continuously show a positive growth rate.
 - Share of the public sector in total investment increased.

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

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 only
- (d) 2 and 3 only
- 06. Special Drawing Rights is an artificial currency instrument used by the International Monetary Fund and is built from a basket of important national currencies. which of the following currencies form the SDR basket?
 - 1. U.S. dollar
 - 2. Euro
 - 3. Chinese renminbi
 - 4. Japanese yen
 - 5. Pound sterling

Select the correct answer from the code given below:

- (a) 2 and 3 only
- (b) 1, 3 and 5 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3, 4 and 5
- 07. Which of the following correctly gives the definition of Hot Money?
 - (a) It refers to funds that are controlled by investors who actively seek short term returns.
 - (b) It refers to the domestic currency which is under enough pressure of depreciation.
 - (c) It is the international currency in which the highest faith is shown and is needed by every economy.
 - (d) It refers to the most volatile shares in the stock market.
- 08. With reference to the National Manufacturing Policy 2011 consider the following statements:
 - 1. It aims to raise the share of the manufacturing sector in India's GDP to 30%.
 - 2. It aims to create 10 million additional jobs by 2022.
 - 3. National Investment and Manufacturing Zones are created under this policy.

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

- (a) 1 and 3 only
- (b) 1 only
- (c) 3 only
- (d) 2 and 3 only
- 09. Consider the following statements regarding the Special Economic Zone (SEZ):
 - 1. It is set up under the provisions of foreign trade policy.
 - 2. Both central and state governments have the power to establish SEZ.
 - 3. It is deemed to be foreign territory for the

purpose of trade operations, duties and tariffs. Which of the statement/s given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 3 only
- (d) 2 and 3 only
- 10. Which of the following measure/s can help to reduce the Current Account Deficit?
 - 1. Revaluation of exchange rate
 - 2. Tight monetary policy
 - 3. Removing bottlenecks in the supply chain

Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) 2 and 3 only
- 11. With reference to the Forward Bloc consider the following statements:
 - 1. It was founded by Subhash Chandra Bose.
 - 2. It intended to function as a unifying force for all left wing elements.
 - 3. It voiced its active opposition to the Second World War.

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

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 12. Consider the following statements related to Trade Related Aspects of Intellectual Property Rights:
 - 1. It completely prohibits compulsory licensing and government use of a patent without the authorization of its owner.
 - 2. It allows members to exclude some types of plant and animal inventions from patenting in their countries.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 13. Which of the following is/are the benefit/s of Currency Swap?
 - 1. Hedge exposure to exchange rate risk.
 - 2. Used to predict the direction of a currency.
 - 3. Reduce the cost of borrowing in a foreign currency.

Select the correct answer from the code given below:

- (a) 2 only
- (b) 1 only
- (c) 1, 2 and 3
- (d) 2 and 3 only
- 14. Consider the following pairs:
 - 1. Manas National : Pygmy hog
 - 2. Dachigam National : Kashmiri stag Park

3. Silent valley : Lion tailed National park : macaque

Which of the pairs given above are correctly matched?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 15. Which of the following is/are the basic objective/s of National Parks, Wildlife Sanctuaries and Biosphere Reserves?
 - 1. Controlled and limited use of species of animals.
 - 2. Maintenance of viable number of species in protected areas.
 - 3. Educating the public about wildlife protection. Select the correct answer from the code given below:
 - (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 16. Which of the following modifications can be seen in the mangroves?
 - 1. Viviparity
 - 2. Salt secreting glands
 - 3. Pneumatophores

Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 17. With reference to the Gangetic Dolphin commonly called Susu consider the following statements:
 - 1. They live in freshwater and come to the surface to breathe.
 - 2. They are effectively blind and primarily rely on ultrasonic waves to communicate.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 18. Who among the following are associated with All India kisan Sabha?
 - 1. Swami Sahajanand
 - 2. Indulal Yagnik
 - 3. Aacharya Narendra Dev
 - 4. Bankim Mukherjee

Select the correct answer from the code given below:

- (a) 1, 2 and 4
- (b) 1, 3 and 4
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4
- 19. The term Strategic Trade Authorization sometimes seen in the news is associated with India's economic relations with which of the following Countries or Union?
 - (a) Japan
- (b) European Union
- (c) China
- (d) USA

- 20. With reference to the administration of the Vijayanagara Empire consider the following statements:
 - 1. The Provincial Governors were always appointed from royal Princes.
 - 2. The office of Nayakas became hereditary.
 - 3. Under their rule the Chola traditions of local self governing institutions were expanded and got strengthened.

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

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 21. Recently, Shaphari scheme launched by MPEDA is related to which specific sector?
 - (a) Horticulture
- (b) Pisciculture
- (c) Aquaculture
- (d) Textiles
- 22. Consider the following statements regarding Ganges river dolphin and Irrawaddy dolphin:
 - The irrawaddy dolphin lives in both salt and freshwater.
 - 2. The endangered Ganges river dolphin can only live in freshwater.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 23. Consider the following statements regarding Ahaar Kranti:
 - 1 It has been launched by NITI Aayog.
 - 2. The movement is designed to address the peculiar problems of hunger and diseases in abundance being faced by India and the World.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 24. Recently which region has been affected by cyclone Seroja?
 - (a) Southern Indonesia East Timor
 - (b) South America
 - (c) Arabian Sea
 - (d) Japan
- 25. Consider the following statements regarding Indian Rhino vision 2020:
 - 1. It was designed in 2010.
 - 2. The plan was to spread the rhinoceros across four protected areas beyond Kaziranga National Park,

Orang National Park, and Pobitora National Park.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 26. Introducing salt into the environment for de icing roads, fertilizing farmland and other purposes releases toxic chemicals that pose a threat to freshwater supply system.

The above mentioned process is:

- (a) Freshwater Salinization Syndrome
- (b) Saline Pollution
- (c) Water Alkaline Syndrome
- (d) Salt Chemical Pollution
- 27. Recently scientists discovered a new bat species named as disc footed bat at which place?
 - (a) Assam
- (b) Meghalaya
- (c) Sikkim
- (d) Madhya Pradesh
- 28. Recently Joynagar Moa got GI tag and it is mostly confined to the town of Joynagar near Kolkata, so Joynagar Moa is:
 - (a) Popped rice ball
- (b) Rasogulla
- (c) Sugar candy
- (d) Rajbhog
- 29. Consider the following statements regarding E-2025 Initiative:
 - 1. It is launched by United Nations.
 - 2. It is a program to stop the transmission of malaria across 25 countries.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 30. Consider the following statements regarding MACS 1407:
 - It is a high yielding and pest resistant variety of rice.
 - 2. This newly developed variety is suitable for cultivation in the states of Assam, West Bengal, Jharkhand and Chhattisgarh.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 31. Consider the following statements regarding Innovators Growth Platform:
 - 1. It has been launched by RBI.
 - 2. The IGP as a platform has the promise to



increase Indian capital availability significantly and address the key issue of listing.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 32. Consider the following statements regarding Diammonium Phosphate fertilizer:
 - 1. It contains both phosphorus and magnesium.
 - 2. It is very less soluble and it takes more time to get dissolved in soil.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 33. Recently a report titled Connected Commerce: Creating a road map for a digitally inclusive Bharat has been released by:
 - (a) NITI Aayog
 - (b) Ministry of Finance and RBI
 - (c) RBI and NITI Aayog
 - (d) NITI Aayog and Master card
- Where is Mount Nyiragongo is located which has 34. been erupted for the first time in nearly two decades?
 - (a) Guyana
 - (b) Zimbabwe
 - (c) Democratic Republic of Congo
 - (d) Kenya
- Malerkotla has become the 23rd district of which 35. state?
 - (a) Haryana
- (b) Punjab
- (c) Rajasthan
- (d) Madhya Pradesh
- Consider the following statements regarding YUVA 36. - Prime Minister's Scheme for mentoring young authors:
 - The Ministry of Education, Department of 1. Higher Education has launched this scheme.
 - The objective of this scheme is to train young and budding authors, below 30 years of age in order to promote reading, writing and book culture in the country.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 37. With reference to Island Development Authority, consider the following statements:
 - 1. It was constituted under the aegis of Union

Ministry of Home affairs.

It is chaired by Prime Minister.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 38. Consider the following statements regarding Federation of Indian Export Organisations:
 - 1. It is the apex trade promotion organization in India set up by the Ministry of Finance.
 - The organization is responsible for representing and assisting Indian entrepreneurs and exporters in foreign markets.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 39. Match the following mango varieties with their GI tag state:
 - A. Zardalu
- 1. Gujarat
- B. Kesar
- Bihar
- C. Alphonso
- West Bengal
- D. Khirsapati
- 4. Maharashtra

Select the correct answer from the code given below:

- (a) A-3, B-2, C-1, D-4
- (b) A-2, B-1, C-4, D-3
- (c) A-4, B-3, C-2, D-1
- (d) A-1, B-3, C-3, D-4
- Consider the following statements regarding Jalgaon Banana:
 - 1. It got GI certification in 2016.
 - Jalgaon is known as the capital city of bananas. Which of the statement/s given above is/are correct?
 - (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- Which is the country's 52nd tiger reserve?
 - (a) Ramgarh Vishdhari Wildlife sanctuary
 - (b) Periyar tiger reserve
 - (c) Kamlang tiger reserve
 - (d) Srivilliputhur Megamalai tiger reserve
- 42. What is Ambergris, which has been in news recently?
 - (a) Excretion of whale
- (b) Coral reef
- (c) Newly discovered fish (d) Grey stone
- What is Project-75 I, which has been recently 43. approved by Defence Acquisition Council?
 - (a) Drones development project



- (b) Submarines construction project
- (c) Patrolling vessel development project.
- (d) Radar development project
- 44. Consider the following statements regarding EnVision space project:
 - 1. It is an ESA led mission with contribution from NASA.
 - 2. It will visit Mercury Planet by the year 2030. Which of the statement/s given above is/are correct?
 - (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 45. Which state has started field trial of world's first genetically modified GM rubber?
 - (a) Assam
- (b) Sikkim

- (c) Meghalaya
- (d) West Bengal
- 46. Dandari Gussadi festival is celebrated by:
 - (a) Munda tribe
- (b) Santhali tribe
- (c) Tharu tribe
- (d) Raj Gond tribe
- 47. Consider the following statements regarding Positive Indigenization List:
 - 1. It is also called as Defense Negative Export List.
 - 2. In August 2020, the first positive indigenization list comprising 101 items, was notified.

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

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

ANSWER					
1. 2.	(c) (a)	17. 18.	(c) (d)		d)
3.	(a)	19.	(d)		c) b)
4. 5.	(d) (c)	20. 21.	(b) (c)		c) a)
6. 7.	(d) (a)	22. 23.	(c) (b)	38. (1	b) b)
8. 9.	(c) (c)	24. 25.	(a) (b)	40.	c) a)
10. 11.	(d) (d)	26. 27.	(a) (b)	42.	a)
12.	(b)	28.	(a)	44.	b) a)
13. 14.	(c) (d)	29. 30.	(b) (b)		a) d)
15. 16.	(d) (d)	31. 32.	(b) (d)		b)



MCQs Based on Current Affairs

1. Consider the following statements about the National Investigation Agency (NIA):

- 1. It acts as the Central Counter-Terrorism Law Enforcement Agency.
- 2. It can probe terror attacks targeting Indians and Indian interests abroad.
- 3. It is empowered to deal with terror-related crimes across states without special permission from the states. Which of the statement(s) given above is/are correct?
 - A. 1 and 2 only
 - B. 2 and 3 only
 - C. 1 and 3 only
 - D. 1, 2 and 3

Answer- D

2. Consider the following statements.

- 1. The Genetic Engineering Appraisal Committee is the apex regulator of GM crops in India.
- 2. India has permitted the commercial cultivation of GM rice.

Which of the above statements is/are correct?

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

Answer- A

3. 'Polycrack technology' is used in which?

- A. Poppy seeds production
- B. Waste-to-energy plants
- C. Denitrification of Urea
- D. Shale gas manufacturing

Answer-B

4. India announced which of the following climate targets at the COP26 summit in Glasgow?

- 1. Meet 50% of energy requirements from renewables by 2030.
- 2. To increase installed renewable capacity to 500 GW by 2030.
- 3. Reduce India's carbon emissions intensity by 45% by the year 2030 compared to 2005 levels.

Select the correct answer using the code below:

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

Answer- D

5. Consider the following statements regarding GSLV Mk-III.

- 1. It is designed to carry satellites into both Geosynchronous Transfer Orbit (GTO) and Low Earth Orbit (LEO).
- 2. It uses a Russian-developed cryogenic engine in the upper stage.
- 3. Missions like Gaganyaan and Chandrayaan-3 will be launched on GSLV Mk-III.

Which of the above statement(s) is/are 'not' correct?

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

Answer- A

6. Consider the following statements:

- 1. The Financial Action Task Force (FATF) is an intergovernmental body established in 1989 on the initiative of the G7.
- 2. It is a policy-making body which works to generate the necessary political will to bring about national legislative and regulatory reforms in various areas.
- 3. The FATF Secretariat is housed at the OECD headquarters in London, England.

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

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

Answer- A

7. The 'Climate Transparency Report' published by:

- A. IUCN
- B. WEF
- C. IPCC

D. None of the above

Answer- D

8. Consider the following statements regarding Metaverse.

- 1. Metaverse is a parallel and virtual world where users can have different identities, possessions and characters.
- 2. Facebook is the only company which has built a metaverse.
- 3. Services could be offered virtually in exchange for virtual assets or Cryptocurrencies.
- 4. Interoperability is key to the success of metaverse. Which of the above statement(s) is/are correct?
 - A. 1, 2 and 3 only
 - B. 2 and 3 only
 - C. 1, 3 and 4 only
 - D. 1, 2, 3 and 4

Answer- C

9. 'Global Financial Stability Report' is prepared by

- A. European Central Bank
- B. International Monetary Fund
- C. International Bank for Reconstruction and Development
- D. Organization for Economic Cooperation and Development

Answer- B

10. Consider the following statements regarding the Uniform Civil Code.

- 1. A Uniform Civil Code is one that would provide for one law for the entire country, applicable to all religious communities in their personal matters such as marriage, divorce, inheritance and adoption.
- 2. Article 46 of the Constitution lays down that, it shall be the obligation of the state to secure a Uniform Civil Code for the citizens throughout the territory of India.

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

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

Answer- A

11. Consider the following statements:

- 1. The Coal sector was nationalized by the Government of India under India Gandhi.
- 2. Now, coal blocks are allocated on auction basis.
- 3. Till recently, India imported coal to meet the shortages of domestic supply, but now India is self-sufficient in coal production.

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

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

Answer-B

12. 'Global Hunger Index' is released by

- A. UNDP
- B. OXFAM
- C. Amnesty
- D. None of the above

Answer- D

13. "Sustainable Alternative Towards Affordable Transportation" is an initiative of

- A. NITI Aayog
- B. Ministry of Road Transport and Highways of India
- C. Ministry of New and Renewable Energy
- D. Ministry of Petroleum and Natural Gas

Answer- D

14. Recently, which one of the following has released its biennial "Living Planet Report 2022" showing trends in global biodiversity and the health of the planet?

- A. IUCN
- B. FAO
- C. WWF
- D. WEF

Answer- C



Personality



Surendra Nath Banerjee

Surendra Nath Banerjee was born on 10 November 1848. His father Durga Charan Banerjee was a doctor. Surendra Nath Banerjee did his education at Presidency College. After graduation, he went to England with Ramesh Chandra Dutt and Bihari Lal Gupta to appear in the Indian Civil Services Examination in 1868. He passed this examination and became eligible to serve in the Government of British India. In 1868, he was the second Indian to pass the ICS examination. Before this in 1867, Satyendranath Tagore was the first Indian to qualify for the ICS exam. After clearing the ICS exam, Surendra Nath Banerjee got the appointment as Assistant Magistrate in Sylhet (Bangladesh). But soon in a report prepared by one of his subordinates, Surendra Nath was dismissed from the post of Assistant Magistrate based on a technical objection to age. The report falsely stated his age as 22 whereas the age to pass ICS was 21. Banerjee also went to London to appeal his case, but he was unsuccessful. On 26 July 1876, he founded the Indian National Association with Anandamohan Bose which was also known as the Indian Association, which proved to be the biggest platform to spread political awareness against British imperialism to the Indian youth in that decade.

Banerjee was known as "Indian Burke" due to his education and political thought. Edmund Burke was a wellknown British political thinker and theorist. Banerjee also founded the All India National Conference and contributed to organizing the first All India National Conference in Calcutta in 1883. This national conference was the first attempt at an all India level. Banerjee had an important role in the Swadeshi movement. He advocated the indigenous goods of India against foreign products. He opposed the Ilbert Bill and he opened a college named Marquis of Ripon, the Viceroy of India in 1882. Now the name of this college is Surendra Nath Banerjee College. In 1879, he bought an English language newspaper 'Bengali' and worked as an editor for it. This newspaper was the leading paper of his liberal political views. After the establishment of the Congress in 1885, Surendra Nath Banerjee merged his organization with the Indian National Congress. Surendra Nath Banerjee presided over the 11th session at Poona in 1895 and the 18th session in 1902 at Ahmedabad. At the same time, Surendra Nath Banerjee was also a member of Calcutta Corporation and Bengal Legislative Council till 1900. By that time, he became an important leader of the Congress. Due to his liberal views, he was a leading leader for Indian demands in England. When Lord Curzon announced the partition of Bengal in 1905, Banerjee strongly opposed it through public meetings and rallies. Banerjee supported the Morley-Minto Reforms of 1909 and criticized the method of civil disobedience of Gandhi. As a result, he had to face the displeasure of the Indian public and nationalist politicians. He was elected to the Legislative Council for the Reform of Bengal in 1921. He was also awarded the title of a 'knighthood' and also served as a minister for local self-government from 1921 to 1924. Despite all this, Surendra Nath Banerjee was defeated by Swaraj Party's candidate Dr. Vidhan Chandra Roy with a huge margin in the 1923 Bengal Legislative Council election. Banerjee died on 6 August 1925 in Barrackpore. Before his death, he wrote his autobiography, 'A Nation in Making' in 1925.



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इतिहास

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23rd Nov. / 8:30am

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English Medium

HISTORY

by Javed Sir

23rd Nov. / 6:00pm

Optional Subject

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Sociology by Kumar Amit Sir

10th Nov. / 12Noon

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