

PERFECT

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







(PRE+MAINS+INTERVIEW) **PROGRAMME 2022**

OCTOBER 2022 SCHEDULE



October

PRELIMS

Timing: 12:00Noon-2:00pm

October

MAINS

Timing: GS Test: 9:00am-12:00Noon Essay Test: 1:00pm-4:00pm

INTERVIEW

Personality Test by a Panel of Retd. & Working Bureaucrats and Professors

SYLLABUS

PRELIMS & MAINS

TOPIC: FULL SYLLABUS (MAY TO SEPT.) **Current of June 2022**

Source:

Dhyeya Class Notes + Magazine Perfect-7 + Open Sources

SYLLABUS

ESSAY

(TOPIC: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics to cyber security; money-laundering and its prevention, Contributions of moral thinkers and philosophers from India and world)

Source: Open Source, Dhyeya Booklet









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.



International

Implications of Growing Indian Involvement with Gulf Countries

The world aware of the strategic. economic, political and diplomatic significance of the Gulf region. Neither world politics nor regional politics can undermine this area. Many regional powers including countries like India, China, USA, Russia etc. are taking a keen interest in this area which is otherwise known as the world's energy hub. The Gulf region is undeniably significant in several regards whether it is Counter Terrorism cooperation, energy security, or the stability of West Asia or the Middle East.

The Gulf region has multifaceted importance for India. the Hence. Indian government is continuously working on its diplomatic and economic ties with the gulf countries. Recently, External Affairs Indian minister. S. Jaishankar visited Saudi Arabia for the first time and this visit was crucial for many reasons. India now considers the Gulf Region as its extended neighbourhood. Consolidating this fact, two years back, Foreign minister S. Jaishankar addressed UAE as extended neighbour of India.

India has started to work on consolidating diplomatic and economic relations with the major Gulf countries. The recent visit of the Indian Foreign minister to Saudi Arabia proves the same. He co-chaired the Political, security, social and cultural committee of the Indo-Saudi Partnership Council discussed about current global political and economic concerns. Both nations agreed on working together with G-20 and other multilateral organisations. In recent years, Indo-Saudi relations have strengthened various sectors whether political, security, energy, trade, investments, health, food security, cultural, defence etc. Even during the Covid-19 pandemic, the top leadership of both nations remained in close contact.

Significance of Gulf Countries for India:

As per reports from the United Nations Population Division and IndiaSpend, India has largest expatriate community in the world and most of the immigrant Indians live in the Gulf countries. The report also mentions the number of working Indians as around 16 to 17 million. On the

other hand, according to United Nations World Migration Report. the number of working Indian immigrants is more than 16 million. The total Indian diaspora is around 30 million. As per the latest report of the World Bank in 2021, the remittances comprised 89 billion and remittances play a crucial role in consolidating the Indian economy. Gulf countries are abode to almost 8.7 million working immigrants comprising, 3.5 million in UAE, 2.5 million in Saudi Arab and 1.4 million Indian immigrants in Oman and Kuwait together.

Gulf countries are crucial for good relations with the Arab countries

Enhancing good relations with the Arab world has been one of major targets Indian foreign policy. However, the relationship between India and other Islamic countries like Gulf countries and East Asian countries has seen several ups and downs from time to time. The recent statement by a spokes person of the ruling party regarding the Prophet Muhammad had strained the relations between India and Gulf countries. Nevertheless,

the Indian government emphasized strengthening relationships assuring the Gulf countries and taking disciplinary actions. Moreover, in the context of the citizenship Amendment Act National the Register of Citizen, there were attempts to incite a sense of dissatisfaction among the Islamic countries on the matters of protests, rights and interests of Muslims in India. Consequently, many Gulf countries like Kuwait demanded from the Organisation of Islamic Cooperation that it should take cognizance of the issue for the protection of the muslim community in India.

GCC: As Trade Partner of India

Gulf Corporation Council has been one of the biggest regional trading partners India. The bilateral trade between the two was around 121 billion in 2018-19 which has now increased to 154.66 billion dollars in 2021-22. In this regard, UAE had a share of 60 billion dollars while Saudi Arabia had 34 billion in bilateral trade. Around 745 Indian companies are working in Saudi Arabia and they have an investment of two billion dollars. India is



further working with Saudi Arabia at the strategic partnership level.

India for its energy security is highly dependent on the Gulf countries. Around 15% of Indian total crude oil import is from Saudi Arabia. Although Saudi Arabia and Iran are two Rival nations, their membership in GCC paves way for India to maintain good relations with both the countries. Further, Qatar had been one of the biggest sources to acquire LNG for India and any political danger relating to Qatar

of India importing crude oil from Iran, India bore the pressure of USA while maintaining its sovereignty. USA seeks to stop any influence of countries like Iran, Russia and China in the Gulf region. Abraham Accord was signed under its leadership, under which UAE and Israel normalised their relations and it was welcomed by India too. India believes, the 6 countries belonging to The Gulf Cooperation Council, per their charter, should follow the path of coordination for achieving regional stability.

important step in limiting terror financing in South Asia in various aspects. Apart from the block of 6 nations belonging to the Gulf Cooperation Council, the European Commission is also a member of the task force as one block, and the funding mechanism of these countries will become even more rationale.

Being a full member of the task force, Saudi Arabia will ponder before giving grants and loans to any country, and will make sure that benefitting country is not the sustainable renewable energy sector while some Gulf countries are now members of the India-International Solar Alliance. Bahrain is the most recent member of the international solar alliance. India further intends to see the gulf countries as partners in the BRICS-led New development bank so that through strengthened development partnerships China can be subdued.

Further, it should be kept in mind that the gulf nations are members of OPEC as well as of the Organisation of Islamic cooperation and Arab league. These nations especially Saudi Arabia and UAE enjoy a special status in these organisations. From this perspective too, India needs to strengthen relation with Gulf countries. Another prospect that unveils the importance of Gulf countries, is global energy security. Since Russia has threatened to stop supplying gas to Europe amidst Russia Ukraine war, the importance of gulf countries increases even further for India as well as the other regions.



significantly impacts the energy security of India. Therefore India is always of the view that any problem in the Gulf region must be solved politically and peacefully. There should be considerable efforts on consolidating the mutual trust between the Gulf countries. Since the gulf region is the experimental ground for regional politics of superpowers, different groupings of the countries are encouraged too. In this regard, on the issue

Importance of GCC for subduing Pakistan:

Saudi Arabia recently became the 39th member of the Financial Action Task Force in 2019. Saudi Arabia, Israel, and America are strategic partners of India and with their support, India can limit the terror financing of Pakistan. Saudi Arabia is the first nation among the Arab nations that have got such membership. Its membership can be an

using the funds to finance terror activities. Since GCC as a regional block is a member of the task force, thus UAE, Kuwait, Bahrain, Oman and Qatar will have to act responsibly and scrutinize well before giving any financial help to Pakistan. There is a need to effectively implement the United Nations convention 1999, for preventing terror funding and fund transfer for terror activities.

India has invited Gulf countries to invest in



Internal Security

Hybrid Terrorists and Overground Workers Complicating Terrorism in Kashmir

Police recently arrested two hybrid linked terrorists, to Lashkar-e-Taiba. in Baramulla district of Jammu and Kashmir. Once again, the scepticism has emanated regarding the emergence of new breed of terrorists and new form of terrorism in the Kashmir Valley. Evidence of the hybrid terrorists and overground workers' activities came to the light during a search operation the Sopore area. Notably, the emergence of hybrid terrorism in different areas of Jammu and Kashmir poses a new challenge to the security forces. Furthermore, two hybrid terrorist linked banned with terrorist organisation, Gazwat-ul-Hind, were arrested by a joint group of security forces. Several weapons and explosives were also seized on large scale and hence, it becomes a sensitive issue from both national and international security perspective. Hybrid terrorist can shove drug trafficking, smuggling weapons, Hawala business and transaction of counterfeit money in India and on several occasions they had been successful. They have started to play a crucial role in linking the terrorism and organised crimes.

There had been several necessities that Jammu and Kashmir had longed for a while, for instance, making Jammu and Kashmir terror free, ensuring zero border infiltrations, cultivating a secure feeling among Kashmiri Pundits, and leading Jammu and Kashmir on the path of inclusive development. Now, that the Article 370 has been scrapped off, and Jammu and Kashmir has joined the main stream of national development national security. there is a need for strategy which can destroy any anti national power who dares to bring upon harm on Jammu and Kashmir.

There are various security related challenges present Organisations Kashmir. like Lashkar-e-Taiba and Hizbul mujahiddeen seeking every minor chance to destroy the prevailing peace and security. However, after review meeting by Home Minister Amit Shah, for security order in Jammu Kashmir, these organisations are on the target of Indian Army. Lashkar terrorists were targeted in the Kupwara and Shopian area of Jammu and Kashmir too. However, Hybrid terrorism is emerging as an entirely new challenge amidst the military actions of Indian Army.

Hybrid Terrorists:

Hybrid terrorists are not enlisted in the terrorist list of security agencies, however when signalled by the related terror organisation they execute a terror attack and get back to ordinary life afterwards. Though they are not marked as an extremist, they are radical enough to execute any terror attack and sorting back to ordinary life. Jammu and Kashmir police has inform that, these hybrid terrorists made terrorism a part time profession in Kashmir.

Overground workers encouraging terrorism in Kashmir:

Recently, indirect support of overground workers too, has paved the way for terror activities in Kashmir. The Indian Home Ministry informed that Jamaat-e- islami, who is the guardian organisation of Hizbul Mujahiddeen and Huryyat, responsible for spreading separatist and radical ideologies and activities in Kashmir. Further, it is continuously providing Hizbul Mujahiddeen with every sort of help and

support like recruitments, funding, weapons, shelter and logistics etc. It should be noted that Jamaat-e-

Hybrid terrorism example

Hybrid terrorism was seen in Shopian area of Jammu and Kashmir. Two natives namely, Shaukat Ahmed Sheikh and Parwaaz Ahmed Lon from Sedav area of Shopian, worked as hybrid terrorists for Lashkar-e-Taiba They bombed а private vehicle as and consequence Praveen Singh, soldierr from Uttarakhand was martyred. Abid Ramzan Sheikh, a main terrorist from Lashkare-Taiba trained these two hybrid terrorists for installing bomb.

islaami was constituted for encouraging education in religious institutions or Madarsas. Last year, Indian security forces arrested an overground worker of Hizbul Mujahiddeen at Kishtwar district and seized huge amounts of explosives, pistols and Chinese grenades. Further he was using his home to shelter and support terrorists.

Overground



workers although don't directly take part in the terrorist activities, they play a supporting role in violent terror attacks by terrorist while fulfilling their other related motives. They are influenced by separatist's ideology on the basis of religion and monetary benefits and they indirectly aid the terrorists by providing them their home for shelter and various essential equipment like mobile, sim card, weapons other and important necessities.

At times their activity include straying youth in the name of religion, and recruiting them in the terrorists groups. They have played a supporting role in terrorists recruitment and training. They further arrange various kinds of vehicles to supply weapons to terrorists.

In order to restrict the network of overground workers of terrorist organisation like Hizbul Mujahiddeen, the Indian Government in the beginning of 2019 banned Jamaat-e-islami in Kashmir. This organisation through its overground workers was found aiding the terror organisations and spreading separatism and encouraging stone pelting.

Reasons for emergence of Hybrid Terrorism in Kashmir:

The question arises as to how and why

this network of hybrid terrorists, overground workers, white coloured terrorists and sleeper cells has increased, that too, using the native citizens. straightforward The answer is that, this is a counter to the Perception Management Strategy of the Government of India in the Kashmir Valley, which is being done by terrorist organizations.

After several meetings between Indian Prime Minister, Home Minister, national security advisor Ajit Doval and Army Chief of the country, the Central Government

governance institutions in Kashmir. This is called public perception strategy under which home ministry is implementing civic action programme in these areas. These programmes are executed by central armed police forces(in case of Jammu & Kashmir, it is ITBP and BSF).

Working on this strategy can aid in preventing anti-India propaganda, misleading information system, prejudice, bigotry, extremist sentiment among the natives of Jammu and Kashmir. Kashmir, ranging several initiatives like, recruiting the energetic youth in the army for with four years the proposed Agnipath scheme, 'Operation All Out' in Kashmir valley, deployment of rifle women, inauguration of first industrial biotech park of north India in Jammu. integrating the natives with purple revolution through lavender festival, making Palli village in Samba district as the first carbon neutral panchayat.

It is further a delight to witness an emergence of new



concluded that only with boots on the ground it is not possible to maintain peace, security and law & order in Kashmir. For this, the government has to work on changing the perception of people in Kashmir valley, so that the youth believes in the leadership of the country and people trust the

The central government has launched several programmes and policies for the inclusive development of people of Jammu and Kashmir and further promoting education that is based on scientific research.

Efforts have been made in the direction of improving the future of

tendency in Jammu and Kashmir called 'economic paradiplomacy'. A 40 members delegation from UAE has come directly to Jammu to explore investment possibilities in Jammu. The Jammu and Kashmir government has also approved investment proposals of 26 thousand crores in this regard and

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is planning to increase it to Rs 70 thousand crores in the next 6 months. However, in order to attract more investments there is a need to create an environment that is secure and terror free.

lf the local other youth and classes in Kashmir are instilled with the sense good governance, development, authority and responsibility etc then the propaganda network Pakistani terrorist organizations and local extremists will collapse. Fearing that general public might not serve their

intentions any further, the terrorist organizations have increasingly been encouraging the network of hybrid terrorists, overground workers.

The central government, without getting affected by these incidents, should focus managing public through awareness delivery of best governance services and should have zero tolerance towards terrorism and take military action wherever necessary. In this way, the day will come when people of Jammu and Kashmir themselves will take up the campaign to make their area free from terrorism, it will no longer be the responsibility of the central government, state government or security forces only.

Over all we can relate a statement of Mao Zedong to the reasons for the sustainablof terrorism in Kashmir with this quotation of Mao Tsetung. Mao used to say that "Guerrilla extremists are like fish who know very well when and how to swim in the public eye". This statement simply means the use of general public for rebel purposes.

The "Violence Industry" οf Pakistani terrorist organizations was growing without any hindrance for a long time through this however, after the scrapping of Article 370, the time has come that the public resembling sea should not give any chance to any miscreant to swim but prepare the means that should drown them.





Economy

The Government and RBI Becoming More Cautious About Consumer Rights

The importance of data has increased more in recent times with the increasing technology and consumerist culture. In this context, recently, T Ravi Shankar Deputy Governor of Reserve Bank of India has emphasised (RBI) on the need for a law to protect the privacy of consumers. RBI said that proper monetization of data related to consumers would be possible only through the Data Protection Act. RBI Deputy Governor said, "In today's time data means money. Data can be monetized. Therefore, the importance of data for business is also high, but at the same time. we have to make rules and regulations that can protect the personal data of consumers and make it possible to carry out its monetization responsibly. It is necessary to mention that the personal data protection bill is pending in India, while a committee has been set up to make rules on non-personal data protection. These situations show that the RBI and the government in India are becoming more vigilant about data protection and consumer rights.

The tradition of

protection of the rights of the consumer and buyer has evolved with development of society. Kautilya's famous book 'Arthashastra' also mentions the rights of the buyer and the greedy tendency of the seller. The modern movement related to the protection of the consumer also called the consumer movement. started on March 15. 1962, in USA. On this day, US President Kennedy announced the inclusion of consumer rights in the 'Bill of Rights as well as the formation of a 'Consumer Protection Commission. Due to the rapid development of science and technology, consumer is very susceptible about the price and quality of product. People buy the product by relying modern business techniques and attractive advertisements, but it does not live up to their expectations. The problem is further compounded absence the of organizations to look after the interests of the consumers. Along with this, there is continuous exchange of data between companies to know the behavior of consumers occurs . This situation not

only violate the rights of the consumers but also affects the privacy of the consumers by trading their data. Keeping this situation in mind, the interests of the consumer becomes extremely essential.

Roth the central bank and the government of India are taking concrete steps for consumer rights and data protection. The consumer protection started in India with the enactment of the Consumer Protection Act, 1986. With the changing environment, this act was again introduced in Parliament bv making extensive amendments in 2019. In this act, comprehensive rules have been made on the definition of a consumer, his behavior, the rights of the consumer, and the punishment to be received for violating those rights. The Act clarifies the rights of consumers, some of which are:

- Protection against the marketing of goods and services that are risky to life and property.
- The quality, quantity, potency of goods or services, obtaining information about correctness,

- standards, and value.
- Receiving assurance of availability of goods and services at competitive prices.
- Seeking compensation in the event of unfair or restricted trade.

Along with this, the Central Government has made a provision for the formation of the Central Consumer Protection Authority (CCPA) promote, to protect and enforce the rights of consumers. CCPA matters will regulate relating to violation of consumer rights, unfair trade, and misleading advertisements. The CCPA will have an Investigation Wing (headed by the Director General) which investigate violations. The penalty has been made in this act for violation of consumer rights. According to this Act, if any person fails to comply with the orders of the district, state, or national commissions, he / she shall be punished with imprisonment of either description for a term which may extend from one month and not exceeding three years, and/ or shall be fined not less than Rs 25,000 which may extend to one lakh rupees or both. For false and misleading

advertisements, the manufacturer or endorser may be fined up to Rs 10 lakh and /or punished with imprisonment of either description for a term which may extend to two years. After this, the fine may increase to 50 lakh rupees and/or the punishment may be extended up to five years

The government has also created online portals for the protection of consumer rights through which quick complaints can be filed. Along with the government, the RBI is also constantly striving toward protecting consumer

setting up of Ombudsman in NBFCs in 2018.

With this, November 12, 2021, the Reserve Bank - Integrated Ombudsman Scheme (RB-IOS) was launched. The Customer's Charter has been issued by RBI which provides the right to fair treatment, transparency, fair and honest treatment, right to fairness, right privacy, right to grievance redressal, and compensation to customer or consumer. Along with this, RBI has made significant efforts in the direction of promoting consumer rights

This crisis is related to the buying and selling of consumer data. Hence, consumer rights cannot be kept separate from data protection in the present scenario. Data protection will not only protect consumer rights but also protect Indian companies from foreign competition through data localization. However. cybercrime, cross-border data, and the digital illiteracy of India's consumers pose a major challenge to data protection. Therefore the Data Protection (Personal and Non-Personal) Bills must be enacted to protect rights and the personal data of consumers.

In India, both the government and the RBI are striving to protect consumer rights.

Consumer protection started in India with the enactment of the Consumer Protection Act, 1986. In 2019, with the changing environment, this act was again introduced Parliament with amendments. extensive Many consumer protection efforts were also undertaken by the country's central bank RBI, in which the introduction of the Banking Ombudsman (Banlow) scheme, 1995-96. Customer Charter on Customer Rights, Fintech Regulation, etc. prominent.

But in today's time consumer rights and data protection are complementary to each other, so there is a need to enact data protection (personal and nonpersonal) bills along with consumer protection.



rights. Earlier RBI set up Grievance Redressal Cell 1995. Establishment an Alternative Grievance Redressal (AGR) Mechanism through the introduction of the Banking Ombudsman Scheme in 1995-96, and erstwhile Rural Planning and Credit Department, a full-fledged CSD Efforts have been made to protect consumer rights by creating and implementing the Internal Ombudsman Scheme, and Grievance Management System for banks. RBI has regulated fintech companies to reduce the problems of online loans and also curbed the trend of 'Buy Now Pay Later.

Due to the increasing trend of online shopping, new types of cases are coming up regarding consumer rights.

consumer rights; It will protect the right to privacy along with the protection of consumer rights.

Summary

In recent times, with increasing technology and the increasing importance of data in this consumerist culture, consumer rights are being affected. Hence there is a need to protect consumer



National

Preparation to Make Civil Aviation and Transport Sector Carbon Neutral

Recently, the Civil Aviation Minister of India has said that by 2024, about 90 airports in the country will be carbon neutral. Currently, Delhi and Kochi are carbon neutral. Solar panels have been installed there to make the airport carbon neutral.

In today's era, it has become a necessity to maintain a balance economic between development and environmental protection. Along with improving the standard of living of the people of the country, environmental protection is also necessary. Along with many countries of the world, India is also trying to establish a balance between economic development and environmental protection. We all know that while efficient transport sector is important for the economic development of the country and raising the standard of living of its people, it is also one of the largest carbonemitting sectors. Globally, the transport sector is responsible for 30% of the total energy consumption. India, is the third largest emitter of carbon dioxide. For achieving the goal of Net Zero by 2070 and

attaining sustainable economic development, it is necessary to make civil aviation and other transport sector in the country carbon neutral.

If we look at the transport sector in India, we find that roads are currently the main mode of transport in India. About 85% of the country's passenger traffic depends on the road sector. At the same time, road transport is also helpful to the industrial sector because it helps in carrying raw materials to industries and finished goods to the market. But data from the Ministry of Environment, Forest and Climate Change (2018) International the Energy Agency (IEA), 2020 show that road transport contributes to more than 90% of total CO emissions in the transport sector. The second major sector is the railways. It is also called the lifeline of India. India's rail network ranks fourth in the world, while it is also the single largest employer in India. In water transport, we mainly discuss sea transport although now inland waterways are also being built in the country. Maritime transport mainly carried out through 13 major ports which are

located on the coastline of more than 7500 km of India. 95% (quantitative) and 67% (by value) of the country's foreign trade is done through the sea route. Inland waterways are being developed through river interlinking projects and the Sagarmala project. The country's first National Waterway has been built from Banaras to Haldia (on the Ganges River). The country's civil aviation industry is growing rapidly and has become the third largest domestic aviation market in the world. It is projected that by 2024 it will overtake the United Kingdom to become the third largest air passenger market.

However, transport sector is still not able meet the entire transportation needs of India. Lack of connectivity with road transport in the rural and northeastern region and death in road accidents are one of the major challenges. India has 1% of the world's vehicles, but it accounts for 11% of all road accident deaths in the world. Along with this, road development creates a water crisis. The slow expansion of the rail network, high freight cost, etc. are major problems of the railway sector. In civil aviation, poor regional connectivity, inadequate hangar space, paucity of land for airport expansion coupled with high central and state taxes, air fuel in India is about 60% more expensive than in ASEAN and Middle East countries, are becoming a major challenge for the aviation sector. Oil spills are a major challenge for Water and sea transport. However, governments are committed to mitigating challenges, schemes like Bharatmala, Sagar Mala, Udan, PM Gatishakti, and Pradhan Mantri Gram Sadak Yojana are being run to improve the transport sector. With this, there will certainly be a huge growth in the transport sector in the coming times.

The transport sector is a large carbonemitting sector, in this situation if it keeps on increasing traditionally, it will undoubtedly cause an environmental crisis by increasing greenhouse gas. In this situation, there is a need for the transport sector to become carbon neutral because the dream of Green India cannot be realized without carbonneutral transport. The Government of India is

also committed to making transport net zero and carbon neutral by 2070. The government has also made many efforts in this direction, which have vielded better results. According to the Climate Action Tracker, India has seen a 6 to 10 percent decline in Greenhouse Gas (GHC) emissions in 2020 as compared to 2019. India is promoting electric vehicles to make road transport carbon neutral. along with the new vehicle policy, the government has made provisions to scrap 20 years old vehicles and promote electric vehicles. Simultaneously, NITI Aayog is playing a leading role in promoting EVs and sustainable transport through the National Mission on Transformative Mobility and Battery Storage. However, such electric transportation requires car and battery manufacturers as as the development of a robust battery charging ecosystem and demands investments of around \$180 billion by 2030.

Along with this, the use of biofuel is increasing rapidly in India. The National Policy on Biofuels, 2018 allows the production of ethanol from damaged food grains that are unfit for human consumption such wheat, broken rice, etc. This will help in reducing pollution by promoting ethanol blended petrol. Efforts are being made in the field of railways by

running metro trains and converting conventional trains to electric traction locomotives. partnership between the private and public sectors will also need to be enhanced to achieve the 2030 zero carbon emission target for Indian Railways. Simultaneously, the Production - Link-Initiative for lighter and more fuel-efficient aircraft should be started. In addition. NITI Aavog and World Resources Institute (WRI), India have launched the program 'Forum for Decarbonizing Transport'.

sector carbon neutral and is fulfilling the commitments towards Glasgow goals. A balance can be established between economic development and environmental protection by making the transport sector carbon neutral and using renewable energy (solar panels, electric vehicles. biofuels. etc.) in this sector. The goal of carbon-neutral transport can be achieved by the government's efforts as well as by running a mass movement for green transport like the cleanliness drive and

situation, there is an urgent need to make India's transport sector carbon neutral, including civil aviation, to achieve the country's goal of net zero (Glasgow target) by 2070. The government is constantly making efforts to make the transport sector carbon neutral, which includes increasing electric vehicles, biofuels, and renewable energy sources.Along with the efforts of the government a mass movement like a cleanliness campaign need to be started for green transport and Individuals,



Along with this, India is a member of the NDC Transport Initiative for Asia (TIA 2020-2023) which is working to help China, India, and Vietnam in their respective countries to reduce carbon dioxide emissions in the transport sector.

Conslusion:

Thus we can say that the government is taking various steps toward making the transport

encouraging individuals, families, and communities to adopt 'green travel habits'. Towards the goal of Net Zero by 2070.

Summary

While an efficient transport sector is important for the economic development of the country and raising the standard of living of its people, it is also one of the largest carbonemitting sectors. In this

families and communities need to be encouraged to adopt 'green travel habits'.



Art & Culture

Identification of a Site Worth Declaring a World Heritage Site in India is Essential

The culture and civilization of India have been unique since ancient times; As a result of which there has been a long chain of heritage in India. Recently, Dholavira, a Harappan site located in Gujarat, was included in the World Heritage Site, with which the number of World Heritage sites in India has increased to 40. Subsequently, six Indian places have been added to the tentative list of UNESCO (United Nations Educational, Scientific and Cultural Organization) World Heritage Sites: This takes the tentative list of World Heritage Sites in India to 49, which shows India's long cultural heritage.

The history of any nation is the foundation of its present and future. The more glorious the history of a country, the higher its place on the global stage will be considered. Although the past never comes back, the buildings built in that period and the literature written keep them alive forever. World Heritage Sites are considered important indicators of the civilization of any nation and its ancient culture. To give importance to the history of different countries, UNESCO started

the practice of granting the status of World Heritage Site. The first 'World Heritage Day was celebrated on 18 April 1982 in Tunisia. UNESCO has divided the world heritage sites into three categories:

- 1. Natural heritage sites
- 2. Cultural heritage sites
- Mixed heritage sites. Before a site is included in the World Heritage, a specified procedure is followed. In this process, any country has to prepare a provisional list of a site in the first phase. In the second phase, the World Heritage Center advises and assists in the preparation of the heritage list. In the third phase, the nomination file is assessed independent two organizations:
- The International Council for Monuments and Sites

World

2.

Conservation Union.
These institutions then recommend to the World Heritage Committee. In the fourth stage comes the decision of the World Heritage Committee. The World Heritage Committee meets once a year to decide whether to include the nominated site in the World Heritage List or not. In the fifth stage, sites are checked on the

ten UNESCO criteria. Before 2004, 6 cultural and four natural criteria were required to be met but now a single set of 10 criteria has been fixed. These criteria are:

- 1. Human creative genius
- 2. Transformation of values.
- 3. In line with cultural tradition.
- 4. Significance in Human History.
- 5. Extraordinary human settlement.
- 6. Associated with events of universal importance
- 7. Phenomenon o beauty.
- 8. Stages of Earth's history
- 9. Important ecological and biological processes.
- 10. Important for biodiversity are natural habitats.

Globally, so far (as of July 2021) 1154 sites have been declared World Heritage Sites, including 897 cultural, 218 natural, and 39 mixed sites.

India has been a flag bearer of a rich cultural tradition and a country giving importance to the environmental values. A total of 40 sites in India have been given the status of World Heritage Sites. There are many laws and

regulations in India that have been made to protect the World Heritage Site. The first law to protect historical heritage India was passed in 1810. Bengal Regulation-19. After this, Madras Regulation-8 was passed in 1817. Through these two laws, the government was empowered to protect government buildings of historical importance. Another important law was the Antiquities Export Control Act in 1947, under this law, licenses were made mandatory for the export of ancient relics. In 1951, the law related to ancient and historical sites was passed. In 1956 many monuments were declared of national importance under Part 126 of the States Reorganization Act. To preserve the historical heritage of the country, the Ancient Monuments, and Archaeological Sites and Remains Act was passed in 1958. The following year there was another legislation related to this, which came to be known Archaeological and Valuable Artifacts Act of 1972. Along with these laws, Article 51 (a) of the Constitution makes it a fundamental duty of the citizens to protect the heritage of India. Apart from this,



many other efforts have also been made. The Archaeological Survey of India has been making continuous efforts to preserve cultural and historical heritage. In the year 2012, the Supreme Court banned any construction within a radius of 100-200 meters. of historical heritage. To maintain the

There are many benefits of being included in the UNESCO World Heritage List. Many such examples in the world show that after being declared a World Heritage Site, many sites were not only protected but were also immediately saved from many potential dangers and damages.Rapti river diversion Nepal's in

oriented research, the development, conservation, and protection of heritage sites are being neglected.

After all this, the Ministry of Culture and the Department of Archeology in India are constantly trying to save the heritage. Due to these efforts, the tentative list of heritage in India is continuously increasing. Sometime back, Satpura Tiger Reserve (Madhya Pradesh), Ganga Ghat In Varanasi (Uttar Pradesh), etc. have been placed on the tentative list. If these are included in the World Heritage Site, then this will not only increase the honor of the country but they will be protected by protecting these areas from encroachment.



unesco

United Nations Educational, Scientific and Cultural Organization

cultural heritage of the country, the Ministry set up the 'National Cultural Fund'. Many other efforts have also been made.

due to encroachment World on Sites, **Benefits:**

Heritage marketism, and capitalism-

Royal Chitwan Park in

1990, Pyramido in Egypt

in 1995 were saved

by UNESCO. However,

Summary

The history of any nation is the foundation of its present and future, so to give importance to the history of different countries,

UNESCO started the practice of granting the status of World Heritage Site. Globally, so far (as of July 2021) 1154 sites have been declared World Heritage Sites. At the same time, about 40 places in India have got a place on this list.

There are many such laws and regulations in India that have been made to protect the World Heritage Site. Along with this, the Ministry of Culture and the Department of Archeology in India are constantly trying to save the heritage. Some time ago Satpura Tiger Reserve, Ganga Ghat In Varanasi etc. were placed on the tentative list. If these are included in the World Heritage Site, then this will not only increase the honor of the country but they will be protected by protecting these areas from encroachment.





Governance

The Need for Regulation of Election Donations to Political Parties

The election is a process by which 'we the people of India' transfer our will. India governs under a parliamentary system of government political parties have a lot of importance in the election process. Transparency and accountability are important dimensions of democracy, that is why the Election Commission of India has suggested several amendments to Representation the People Act 1951 to increase transparency and accountability. These suggestions are regarding to the donations received by political parties. seeing the importance of Political Parties in the Indian political system there is an urgent need to regulate the donations received political parties.

In the context of the regulation of donations to political parties, the Election Commission has made some recommendations, which are described as follows:

The information on donations exceeding ₹ 20,000 has to be given to the Election Commission through a report. The Election Commission has also said that digital

transactions or transfers should be check made mandatory for all expenses above ₹2000 by an individual (biological person or entity). To limit donations. the Election Commission has said that donations should be restricted to 20% of the total amount received by a party or a maximum of 20 crores (whichever is less). Along with this, each candidate should open a separate account election purposes. Along with this, to reduce foreign interference in the election process, the Election Commission has said that it should be ensured that no foreign contribution is received in the funds of the parties under the Representation of the People Act and the Foreign Contribution Exchange Act.

A free and fair electoral process is essential for a successful democracy, but in India. many factors affect the free and fair election process. The most prominent factor among these factors is criminalization politics. In 2004, 24% of the MPs were from a criminal background which has increased to 46% in 2019. In 2019. 13% of the candidates contesting elections facing are

heinous crimes including murder, attempt to murder. and kidnapping, Criminal people enter politics to maintain their influence and public penetration. Their main objective is to either closed the cases against them or stall the proceedings against them. After the criminalization of politics in India, the use of 'money power' in elections is a big problem. In the absence of economic equality, poor people are sometimes forced to sell their votes. This huge amount of money spent on elections, not only removes the common man from the process of the election but also encourages corruption crony capitalism. Black money and foreign funds are often used in donations given to political parties, they not only affect the fairness of elections but also affect the economic sovereignty of India. Social equality has not vet been established in India, due to which communal polarization and caste issues remain important in elections. Tickets are distributed by many political parties according to the caste factor. All these factors cause deviation from a progressive society. It is often seen that we often

blame the present political system for our problems but we forget that these defects of the political system are a mirror of the society. We have to understand that a political system is a very essential requirement that is helpful in the development of society and nation.

Many efforts were made to improve the political system and make it an ally in the development of society and the nation. Various committees and commissions have made suggestions from time to time to improve our election system and election machinery. Among these committees, Tarkunde Committee (1974-75),Dinesh Goswami Committee (1990), Vohra Committee (1993), Veerappa Moily Committee (2007),and Tankha Committee (2010)are important. Along with this, many important steps have been taken by the Parliament electoral reforms. Parliament has banned criminals from contesting elections by amending the Representation of the People Act, 1951. Section 8 of the Act provides that if a member of the legislature (Parliament or Vidhan Sabha) commits murder, rape, untouchability,



foreign exchange, causing trouble on grounds of religion, language, or region, insulting the Indian Constitution, if he is involved in importing and exporting the prohibited goods and terrorist activities, he will considered eligible under this section and will be disqualified for To bring transparency to electoral donations, the government arranged for election bonds. Electoral bonds can be issued in denominations of one thousand, 10 thousand, 1 lakh 10 lakh, and 1 crore rupees without any ceiling. However, it is not very transparent as the identity details of

transparency. With this we can say that along with regulating donations, there is a need to regulate criminal matters and also problems like hate speech so that we can move towards an advanced democracy in a clean political scenario.

Challenges before fair

of donations of parties. political The scenario of India is constantly plagued by problems like money power, muscle crony-capitalism power, in elections, although the government, Supreme Court and **Parliament** are constantly trying to reduce these problems. Along with these efforts,



6 years. Parliament also approved the use of EVMs and VVPATs to make the election process more transparent.

The Hon'ble Supreme Court in its Association for Democratic Reforms vs Union of India case also stipulated that every candidate must disclose his criminal record. financial record. educational qualification at the time of contesting elections. Along with these efforts, the public will have to be aware of the election process and also ensure active participation.

donors contributing less than ₹ 20000 through the purchase of election bonds are not disclosed and are redeemable only in the specified account of the registered political party.

Freedom and fairness are two ends of a democracy. Free and fair elections are essential for a free and fair system of governance. Therefore, this suggestion given by the Election Commission is worth discussing, although it violates the privacy of political parties. But the privacy of political parties is not greater than national

elections in india:

- Use of money power in politics.
- Criminalization politics
- Communal polarization
- Caste Politics
- Crony Capitalism

Summary

Transparency in political parties is essential for the smooth functioning of democracy in India. In order to increase this transparency, the Election Commission has recently made a recommendation related to the regulation

public awareness is also necessary. Through these efforts, we can move towards an advanced democracy in a clean political scenario by reforming the electoral system.



Environment

India Expanding Global Alliance for

Environmental Conservation and Climate Change Management

Environment related problems have emerged as a common challenge for the Nations around the world. These problems have not only negatively impacted economy the national but they have impacted the global economy, tourism, biodiversity and sustainable development. Developing Nations like India have always strived to tackle the issues of global warming, climate change, plastic and ocean pollution. desertification and soil degradation, through global regional partnerships and alliances. With this perspective, India has secured bilateral and multilateral partnerships with several Nations.

this In regard, the Indian Ministry of Environment. **Forest** and Climate Change America's US and Agency for International Development launched the program named 'Trees Outside Forests in India" on 8 September 2022. India-based US Embassy called this program a new emerging are for India-USA relationship. Through this program, work will be done in the direction of carbon sequestration, supporting native community and developing farming techniques that align with climate change. This 20 million dollar program will bring farmers, companies and private organisations of India on a common platform. It will work with the aim of enhancing tree coverage on 28 lakh hectare outside the traditional forest.

India's solar partnership through the International Solar Alliance:

Many developed and developing countries are becoming members of the India-led International Solar Alliance. From a small Himalayan country, Bhutan, to а global superpower USA recently became а member of the International Solar Alliance. India is continuously working and succeeding in the direction of making the solar energy trade a global campaign for the development of renewable energy resources. Last vear USA became the 101st signatory member of the International Solar Alliance Framework agreement. 2022 Antigua and Bermuda became the 102nd member country to sign the International Solar Alliance Framework Agreement.

Until now almost 109 countries have signed

the International Solar Alliance Framework This series agreement. from 100 to 109 countries is as follows; Israel 100th, USA 101st, Antigua and Bermuda 102nd, Syria 103rd, Bahrain 104rth, Nepal 105th, Norway 106th. Hungary 107th, 108th, Panama and Bhutan 109th. The recent country which signed the ISA Framework Agreement was Bhutan. Now the total number of members of the international solar Alliance is 90. USA is the 90th country that became a member of ISA and signed and ratified the ISA Framework Agreement. It should be noted that when a country signs the ISA Framework Agreement and has ratified it, it becomes its full member. Recently the countries that became full member of ISA include, Greece 85th, Bahrain 86th, Norway 87th, Syria 88th, Bhutan 89th, and the very recent the United States of America which is 90th.

India-UK Environmental Alliance:

India and UK, in the form of like minded Nations, are an Alliance to mitigate and deal with the effects of climate change. Both Nations

have agreed on various crucial issues that include, Clean Energy, low carbon economy, development of green hydrogen, issues on waste management and greenhouse emission from vehicles. The nations have stressed on development of a green economy and blue economy. Both Nations launched a web portal name E-Amrit at Cop-26 Summit at Glasgow. E-Amrit is a onestop destination or portal, for all the information relating to Electronic vehicles where myths and queries regarding the adoption of e-vehicles, vehicles purchase, investment opportunities, policies, subsidies have been addressed. This portal was developed and hosted by Niti Aayog under a collaborative learning program with the UK government.

This portal is a part of Indo-UK United Road Map 2030 which was signed by both the prime ministers of respective E-amrit Nations. will aid the government in initiative to create awareness about electric vehicles and educate consumers on the benefits electric vehicles. Recently the government has taken several initiatives

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in the direction of making transportation carbonand accelerating the adoption of electric Initiative mobility. like 'Fame' and 'PLI' have been crucial in making a conducive atmosphere for the quick adoption of electric vehicles.

For promoting the development of 21stcentury infrastructure water and in the environmental factor C-Ganga (centre for Ganga river basin management and studies) and British

India and France are working together for tackling global warming and climate change. Both Nations, in a joint pledged to statement, extend their partnership the development of renewable energy under the banner of the International Solar Alliance. In the year 2015 during Cop-21 summit Paris, the leaders of France and India launched the International Solar Alliance. India and France have recently expressed

have also flourished. view on

Recently German assured its commitment to help India with 10 billion Euros so that it can meet its goal by 2030. Joint statement at 6th Indo German intergovernment consultation, Germany announced its Environment partnership with India. The financial collaboration will play a crucial role in helping India to be able to generate 500 gigawatts of non-fossil fuel power, that is, renewable energy.





Water have signed memorandum of understanding. Both India and Britain have together launched a 'Global Green grid' to promote the use of solar energy at the global level and to tackle climate change. In this direction, the Prime Minister of India rendered the spirit of, 'One Sun, One World, One Grid, India strives to develop this Global grid in the same manner as the International Solar Alliance.

Environmental Cooperation between France and India:

their shared commitment to the promise that, they will work to ensure the use of Eco-Friendly Technology on a large scale to tackle climate change. India has also invited France to become part of its 'Green Hydrogen Mission'. France can play a crucial role in making India a 'Green Hydrogen Hub'. The two countries are also meeting to enhance their capacity to produce solar energy and supply them to the markets like Asia and Europe.

Along with France, the environment Alliance of India with Germany

Biodiversity conservation agreement between India and Nepal

Under the chairmanship the of Prime Minister, the Union Cabinet has approved the signing of memorandum understanding biodiversity conservation with Nepal government. The objective behind this is to restart the corridors and interconnected areas between the two countries. Further, through sharing knowledge and best experience, coordination increase and cooperation in the fields of forest, wildlife,

environment, biodiversity conservation and climate change. In 2015 the Indian Prime Minister announced target of generating 175 gigawatt of renewable energy in which it has achieved target of 100 gigawatt (excluding the large hydro power). India has only tapped on to a small piece of it's humongous capacity of renewable energy. Thus, it has increased its target of 450 gigawatt of renewable energy by 2030. Hence it is necessary to enhance environmental global partnership. The Indian government needs make a solid strategy to attract investments in the renewable energy sector and it has started to work for the same. In partnership with FICCI, the Ministry of New and Renewable Energy organized several programs at Expo 2020 organized by Dubai during climate and biodiversity week from 6 to 8 October 2021. These programs topics related covered India's renewable energy achievements and milestones. emerging areas and renewable energy opportunities in India. From there, India has started inviting global entrepreneurs to invest in the renewable energy sector.

SHORT ISSUES

ENATIONAL



1

National Conference of State Tourism Ministers

Why in News:

- Recently, the Union Tourism Minister had organized a threeday meeting for the National Conference of State Tourism Ministers in Dharamsala, Himachal Pradesh.
- This conference took place from 18 to 20 September in the presence of Union Tourism Minister G Kishan Reddy.
- Tourism ministers from 12 states including Assam, Madhya Pradesh, Arunachal Pradesh, Goa, Haryana, Mizoram, Odisha, Tamil Nadu, Uttar Pradesh, Punjab, Maharashtra and Himachal Pradesh participated in this conference.
- A Special discussion was held in the meeting on the draft

- Decision to put up the national flag at all hotels and tourist places.
- Aim to include India in the top 10 tourism countries of the world by the year 2025.
- By the year 2047, the tourism sector aims to achieve a valuation of US\$ 1 trillion.
- Aim to establish India as a major tourist destination during the presidency of the G20 in the year 2023.
- Emphasizing the need to improve visa reforms, ease of travel, passenger friendly immigration facilities at airports and openness to international travel etc.
- Emphasis on creating youth tourism clubs to realize the true

- decided to organize Tourism Investor Conclave in the coming days.
- Decision to post tourism officers in all embassies.
- Emphasis on increasing forest and wildlife tourism.

Tourism related possibilities:

- After the Corona pandemic, the Indian tourism industry is growing rapidly.
- Exploring possibilities in rural, religious, yoga and medical tourism.
- Tourism contributes US\$ 50 billion to the country's GDP.
- By the year 2030, the Indian tourism industry is expected to contribute USD 250 billion to the GDP.
- 137 million jobs are expected to generate in the tourism sector.
- Expected to receive \$56 billion in foreign exchange earnings.

Way Forward:

- Indian tourism industry has been the largest income producing industry and in order to keep getting desired results in the future, tourism should be marketed at national and international level.
 - There are more than three thousand heritage destinations in India, so awareness programs should be run through various mediums to make this information available to the tourists.



राज्य पर्यटन मंत्रियों का राष्ट्रीय सम्मेलन NATIONAL CONFERENCE OF STATE TOURISM MINISTERS

National Tourism Policy to enhance and improve tourism in the country.

Goal Setting:

 Emphasis on organizing such conferences from time to time to provide opportunity to interact and learn from each other. potential of tourism.

- US\$ 30 billion in foreign exchange earnings and a target of 15 million foreign arrivals by 2024.
- Emphasis on creating a website by the Ministry of Tourism for Promotion.
- The Ministry of Tourism has

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2

Growing rift between governor and chief minister

Why in news:

In a rare break from convention, Kerala Governor Arif Mohammed Khan called a press conference at Raj Bhavan to raise number of charges against LDF government. The governor accused Chief Minister of issues like appointment of university vice chancellor, inaction of police against criminal and inducting ex-MP into chief minister's staff.

The Rift:

The tussle between the Governor and the CM is not new. There are many states where conflict is becoming a perennial problem. States like West Bengal and Tamil Nadu are becoming a regular battleground between the Governor and the Chief Minister.

Issues with the governor:

- Misuse of power by the central government through the governor
- Partisan ideology Former MPs and MLAs are appointed as governors who belong to the central ruling party.
- Puppet ruler In many cases governor supports his ruling party at centre.
- Favoring a particular political party - When there is a hung assembly during the appointment of the Chief Minister, he takes the side of the political party of the central government.

Governor:

- Article-153: There shall be a governer for each state
- According to Article-154 of the Constitution of India, a Governor is the constitutional head of the

states.

- The Governor is appointed by the President of India for a term of five years, and holds office at the pleasure of the President.
- The governor is the legal head of the state government; All its executive action is done in the name of the Governor. However, the Governor acts on the advice of the popularly elected Council of Ministers, headed by the Chief Minister, who has de facto executive authority at the state level.

Discretionary powers of the Governor

- Article 163 There shall be a Council of Ministers with the Chief Minister to aid and advise the Governor in the exercise of his functions, except at the discretion granted by the constitution.
- If any question arises whether a matter is in the discretion of the Governor or not, the decision of the Governor shall be final.

Constitutional Discretionary Powers:

- Article 167- Governor can take information from the Chief Minister about administrative and legislative matters of the state.
- Article 200- Governor can reserve any bill for the consideration of the President
- Article 356- Governor can recommend to the President imposition of President's rule on failure of constitutional machinery
- The Governor is not bound to act on the aid and advice of the

- Chief Minister and the Council of Ministers (in case of additional charge) while performing his duties as Administrator of a neighbouring Union Territory.
- Sixth Schedule- the Governor may determine the amount payable to an Autonomous Tribal District Council as royalty from mineral exploration licenses by the governments of Sixth Schedule areas (Assam, Meghalaya, Tripura and Mizoram).

Situational discretionary powers:

- During a hung assembly the governor can appoint the chief minister if no party has a clear majority.
- No-confidence- The Governor can dismiss the Council of Ministers when he cannot prove the confidence of the State Legislative Assembly.
- When the Council of Ministers loses its majority, the Governor can dissolve the State Legislative Assembly.
- Appointment of caretaker government- The governor can appoint a caretaker government for a temporary period until a regular government is elected or formed.

Conclusion:

The recommendations of Sarkaria and Punchhi Commission should be implemented for proper functioning of the office of Governor. At the same time, the decision of SR Bommai should be kept in mind.

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3

'Artificial Intelligence in Education - Here, There and Everywhere'

Why in news:

Recently, UNESCO has released the report titled 'Artificial Intelligence in Education - Here, There and Everywhere' for India 2022 State of the Education Report. The latest UNESCO report states that the lack of resources and infrastructure affects the expansion of Artificial Intelligence (AI) in the education sector in India.

Highlight of the report:

- The report said that social inequality, gender inequality, digital divide and even regionbased inequalities hindered Al education in India.
- The report claimed that the high student-teacher ratio and shortage of professionally qualified teachers in the Indian education sector can be addressed by Al-powered tools.
- Al market in India is expected to reach US\$7.8 billion by 2025. Apart from this, 10 recommendations have also been made in the report which can boost Al education in India.
- These recommendations include ensuring that all students and teachers have access to the latest technology, expanding Al literacy efforts, and involving the private sector to involve students and academics in developing Al products.
- In order to align India's curriculum to the 21st century and prepare students for the AI economy, the National Education policy (NEP) 2020 emphasizes the need to provide essential technical knowledge at all levels of education.
- NEP emphasizes on integration

of AI in education and also promotes quality and skill based education.

Artificial intelligence:

Artificial Intelligence (AI) is machinedisplayed intelligence that simulates human behaviour or thinking and can be trained to solve specific problems. AI models trained using large amounts of data have the ability to make intelligent decisions.

Benefit of AI in education:

- Personalization: Creating personalized learning programs for students based on their learning experience and knowledge.
- Automation: Automating a variety of manual processes for teachers to leave more time to focus on their core competencies.
- Universal Access: Providing classes for students around the world who speak different languages or have hearing or vision problems.
- Tuition: Assisting students with homework and test preparation without involving faculty.
- Interaction: Providing students with quick answers to their questions, using existing knowledge bases and without involving faculty.

National education policy, 2022:

The National Education Policy 2020 proposes various reforms in school education as well as higher education including technical education.

Salient features of NEP 2020:

1. Ensuring Universal Access at All Levels of schooling from pre-

- primary school to Grade 12;
- 2. Ensuring quality early childhood care and education for all children between 3-6 years;
- 3. New Curricular and Pedagogical Structure (5+3+3+4);
- Establishing National Mission on Foundational Literacy and Numeracy;
- 5. Emphasis on promoting multilingualism and Indian languages; The medium of instruction until at least Grade 5, but preferably till Grade 8 and beyond, will be the home language/mother tongue/local language/regional language.
- Setting up of a new National Assessment Centre, PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development);
- 7. Setting up of State School Standards Authority (SSSA);
- 8. Exposure of vocational education in school and higher education system;
- 9. Increasing GER in higher education to 50%;
- Holistic and Multidisciplinary Education with multiple entry/ exit options;
- 11. Establishment of Academic Bank of Credit;
- 12. Setting up of Multidisciplinary Education and Research Universities (MERUs);
- 13. Setting up of National Research Foundation (NRF);
- 14. Teacher Education 4-year integrated stage-specific, subject- specific Bachelor of Education
- 15. Achieving 100% youth and adult literacy
- 16. All education institutions will

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be held to similar standards of audit and disclosure as a 'not for profit' entity.

17. The Centre and the States will work together to increase the public investment in Education sector to reach 6% of GDP at the

earliest.

Conclusion:

India has the world's largest population in the 5-24 age groups with 580 million people, which presents a huge opportunity in

the education sector. The leverage of AI in education can potentially deliver fruitful results and boost our education industry.



Rules for identifying criminals

Why in News:

- The Central Government has notified Criminal Procedure (Identification) Rules, 2022 in order to specify the procedure for taking measurements of convicts and other persons for the purposes of identification and investigation in criminal matters and to preserve records.
- Criminal Procedure (Identity)
 Act, 2022 replaces the
 Identification of Prisoners Act,
 1920, a colonial era law, and
 authorises police officers to
 take measurements of people
 convicted, arrested or facing
 trial in criminal cases.

About the law:

- The Act enables the use of new "measurement" techniques that have hitherto been limited to capturing only fingerprints, footprints and photographs of convicted prisoners and certain categories of arrested and nonconvicted persons on the orders of a magistrate.
- The Act empowers a magistrate to direct any person to measure, which was hitherto reserved for convicts and those involved in heinous offences.
- It enables the police to take measurements of any person up to the rank of head constable who opposes or refuses to give the measurement.

Measurements include:

- Fingerprints
- Palm print and footprint
- Photo
- Iris and retina scan
- Physical, biological samples and their analysis (including DNA profiling)
- Behavioural features including signature, handwriting

Section 53 of the Code of Criminal Procedure, 1973 or any other examination referred to in section 53A.

Data repository:

- National Crime Records Bureau (NCRB), under the Ministry of Home Affairs, will be the agency to store and protect the data of arrested persons.
- The State Government may store the data: It shall provide a compatible application programming interface to share the measurement or record of measurement with the NCRB.

Provisions for destruction of records in case of acquittal of a suspect (yet to be specified by NCRB):

- Nodal Officer: Any request for destruction of records will be made to the Nodal Officer to be nominated by the concerned State Government.
- Recommendation for destruction: He shall recommend destruction after verifying that such record of measurement is

not connected with any other criminal case.

Significant of the Act

- The Act makes provisions for the use of modern techniques to capture and record appropriate body measurements.
- It provides legal sanction for taking proper body measurements of those persons. Crime investigation will be more efficient and faster which will also help in increasing the conviction rate.

Concerns about the act:

- Privacy issues
- It also allows recording of samples of political prisoners.
- The rules do not specify the procedure to be followed for the guilty persons.
- It is also violation of article 20 of the Indian constitution.

Did Identification of Prisoners Act, 1920 need to be changed?

- Over the years, the need to amend/update the Identification of Prisoners Act, 1920 has been voiced several times.
- In 1980, the 87th Report of the Law Commission of India reviewed the law and recommended several amendments.
- This was done in the backdrop of the State of UP vs Ram Babu Mishra case, where the Supreme



Court highlighted the need for an amendment to this law.

Conclusion:

Concerns over privacy and security of data are undoubtedly important.

It should be introduced only after a strong data protection law, with severe punishment for breaches. Apart from better scrutiny and data protection legislation, measures also need to be taken for better implementation of the law.

5

NCC's 'Puneet Sagar' Touches new Heights

Why in news:

National Cadet Corps (NCC) and United Environment **Nations** Programme (UNEP) signed Memorandum of Understanding (MoU) in the presence of Raksha Mantri Shri Rajnath Singh in New Delhi on September 22, 2022 to tackle the issue of plastic pollution and achieve the universal goal of clean water bodies through 'Puneet Sagar Abhiyan' and 'Tide Turners Plastic Challenge programme'.

'Puneet Sagar Abhiyan':

• The NCC had, on December 01, 2021, launched 'Puneet Sagar Abhiyan', a nationwide flagship campaign, initially for one month, to clean sea shores of plastic & other waste material, while raising awareness about the importance of cleanliness. It was subsequently extended as a Pan-India round-the-year campaign to cover rivers and other water bodies as well.

'Puneet Sagar Abhiyan' - A Tide Turner

Following the growing support and success of the NCC campaign, UNEP, engaged in this initiative through its 'Tide Turner Challenge Programme', decided to join hands with the NCC with the aim of harnessing the strength of the youth organisation. The United Nations body has a program to engage

more youth in this campaign to address various issues related to the environment including plastic pollution. The MoU between NCC and UNEP aims at synergy and efforts towards involving youth in promoting clean water bodies.

Role of NCC:

NCC, the world's largest uniformed youth organization, has inspired its cadets to collect plastic and other waste materials. Since the launch of 'Puneet Sagar Abhiyan' more than 12 lakh NCC cadets, alumni and volunteers have collected the plastic waste spread in them with the aim of creating clean water bodies. The campaign has gained tremendous momentum and participation since its launch.

Purpose of making water bodies clean:

This campaign aims to create awareness on environmental sustainability through information sharing and training initiatives. Simultaneously, opportunities for NCC cadets to participate in appropriate national and international platforms related to environment and climate change are being promoted. The objective of this MoU, to be implemented for a period

of three years, is to strengthen, develop and expand their cooperation and effectiveness to achieve common objectives in the field of environment.

Achievement of the Abhiyaan:

 Since the launch of 'Puneet Sagar Abhiyan', over 12 lakh NCC cadets, alumni and volunteers have collected over 100 tonnes of plastic waste from around 1,900 locations, affecting 15 million people. Out of around 100 tonnes of plastic waste collected through this campaign, more than 60 tonnes have been handed over for recycling.

Conclusion:

'Puneet Sagar Abhiyan' is an initiative taken by the government to realize the goal of Swachh Bharat. Such campaigns can really help in achieving the Panchamrut goal which was announced by the Prime Minister of India at the 26th Glasgow Summit.



6

Moonlighting

Why in News:

Wipro had fired its 300 employees after finding out that they were working with one of its competitors at the same time. The Wipro Chairman Rishad Premji asserted that he stands by his recent comments on moonlighting being a complete violation of integrity "in its deepest form".

About moonlighting:

- Moonlighting means taking up a second job or multiple other work assignments apart from one's full-time job. In this, the employer is usually not aware of the employee's other work or job. Not only in the IT sector, but also in other areas, people do other things to increase their income apart from their jobs.
- It is called moonlighting because people usually work eight to nine hours a day and do the other work at night. However, there is no fixed time for other work. Night shifters also do other work in the afternoon.
- Any job can be taken for moonlighting. Like some people take projects similar to their original work, from outside. Different tasks taken up for moonlighting includes delivery of goods, translation in other languages, dubbing, writing, website designing, consultancy services etc.

Pros of Moonlighting:

• **Financial stability:** Some people work two jobs to have financial stability in life. It can be used to pay off debt, or to cover unforeseen expenses like car or house repairs.

- Acquire New Skill: A second job can help one acquire new skills. In addition, the skills and experience will improve your resume.
- New opportunities: Working a second job means one will cross paths with more people, learn new skills and face new challenges. This can open up new opportunities for people.

Cons of Moonlighting:

- No work life balance: Working two jobs can be hectic and does not provide a proper work life balance. This can be a big disadvantage for people with a family as they won't be able to give time to family members.
- Increase in Stress levels: Working two jobs will increase stress and stress lead to many health problems.
- Conflict of interest: Working for a competitor may put you in a difficult position at your fulltime job.
- Problems with performance:
 Due to extra hours, less sleep and divided attention, your performance at your full-time job may slip and have a negative effect on your career.

Rule and law related to moonlighting in India

- There is no fixed law in India regarding it. But, companies keep the terms and conditions related to it in the contract.
- Many companies do not allow moonlighting in the contract, while some companies allow it with conditions. Under this, conditions like no conflict of interest, not working for the

- second job during the working hours of the first job and confidentiality are kept.
- If someone's contract has a clause that they cannot work elsewhere, then 'moonlighting' can be considered as fraud. These days most of the job contracts mention this condition.

Conclusion:

Recently the Swiggy Company has allowed its employees to do the moonlighting provided that time of the work should not be same. The company says that the future is of moonlighting in which employees can further expand the source of their income. Also, different companies will be able to get the benefit of the same experience and skills. moonlighting should be a choice unless it affects the efficiency and integrity of employees' primary job. Swiggy Wipro's respective views refer to moonlighting as a complex ethical question.

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Sign language dictionary

Why in news:

The Indian Centre for Sign Language Research and Training has so far prepared a dictionary of ten thousand words and expressions.

Sign language:

• There are many people who are either unable to hear, or are unable to express themselves through speech. But a major problem in India over the years was that there were no clear signs, no standards for sign language. To overcome these difficulties, the Indian Sign Language Research and Training Centre was established in the year 2015. This centre has prepared a dictionary of sign language. Now people with disabilities will be able to express

themselves with the help of the dictionary.

- Several school courses have also been started in sign language on the Sign Language Day on 23 September.
- The National Education Policy also lays great emphasis on maintaining a certain standard for sign language.

Braille version of Assamese dictionary 'Hemkosh'

 Hemkosh is one of the oldest dictionaries of Assamese language. It was prepared in the 19th century. It was edited by eminent linguist Hemchandra Barua. The Braille edition of Hemkosh is about 10,000 pages and is going to be published in more than 15 volumes.

Conclusion:

 Any effort like a sign language dictionary will help enhance the skills and abilities of people with disabilities. Today India is also excelling in Para Sports. Today there are many people who are engaged in promoting fitness culture among the handicapped at the grassroots level. It provides a lot of strength to the self-confidence of the speciallyabled."



INTER-NATIONAL



1

One person is dying every four seconds due to hunger: NGOs

Why in News:

- In an open letter to world leaders gathered in New York for the United Nations General Assembly, more than 200 NGOs warned that one person is starving in every four seconds.
- NGOs from 75 countries have taken initiatives to alert global policy makers. The list includes NGOs such as Oxfam, Save the Children and Plan International etc. NGOs expressed displeasure at the skyrocketing levels of hunger globally.
- Starving is a clear violation of Sustainable Development Goals that were endorsed by world leader at UN general assembly.

Concerns of NGO:

- 345 million people are now experiencing acute hunger, a number that has more than doubled since 2019.
- Despite promises from world leaders that there will never be a famine again in the 21st century, famine is imminent once again in Somalia & Afghanistan.
- Worldwide, 50 million people in 45 countries are on the verge of starvation.
- NGOs reported that an estimated 19,700 people were starving every day.
- It is not about one country or one continent but it is an injustice to the whole of humanity.

About Hunger:

 Hunger is defined as a condition in which a person does not have the physical or financial ability to eat enough food to meet basic nutritional needs for a sustained period of time.

- According to FAO, Hunger is an uncomfortable or painful physical sensation caused by insufficient consumption of dietary energy. It becomes chronic when the person does not consume a sufficient amount of calories (dietary energy) on a regular basis to lead a normal, active and healthy life.
- For decades, FAO has used the Prevalence of Undernourishment indicator to estimate the extent of hunger in the world, thus "hunger" may also be referred to as undernourishment.

About food insecurity:

 A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food. Food insecurity can be experienced at different levels of severity.

Relation between hunger and food insecurity:

 People experiencing severe food insecurity, ran out of food and, at the most extreme, they have gone days without eating. This group of people are those we call the "hungry". Thus severe food insecurity means hunger.

Causes of hunger:

- Poverty- When people are in a state of poverty, they lack the resources to meet their basic needs like food, water and shelter
- Conflict- conflict uproots people

- from their homes, thus food and food production completely.
- Gender Inequality- In developing countries, women produce majority of food. Women also playing important role in child care thus any inequality toward women increase malnutrition.
- Seasonal change- Rural peoples mostly relying on farming and livestock for food security, thus any change in seasons will affect rural people food security.
- Natural calamity- natural disaster can destroyed land, home and job which increase food insecurity.
- Lack of access to safe water-Unsafe or scarce water creates and exacerbates malnutrition

Conclusion:

In today's technological era, when there is a competition among nations to reach at Mars, Moon and Sun, it is a matter of concern that so many people dies due to hunger on the earth. Despite this a large quantity of foodgrains becomes useless. The world community will have to think about it and find a solution. In India right to food is a fundamental right under article 21 of the Indian constitution. Schemes like as mid-day meal Yojana and PDS Yojana is in right direction to reduce starvation and hunger problem in India.



International Treaty on Plant Genetic Resources for Food and Agriculture

Why in News:

The 9th Session of Governing Body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) was inaugurated by Shri Narendra Singh Tomar in New Delhi. The Governing Body convened as per Article 19 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

The Theme:

The theme session is of "Celebrating Guardians the of Crop Diversity: Towards an Inclusive Post-2020 Global Biodiversity Framework". The theme aims to acknowledge the contribution of the world's small-holder farmers to the effective management of PGRFA, while providing an opportunity to consider how the Treaty and its community will contribute to the new global biodiversity framework.

About ITPGRFA:

The ITPGRFA is a legally binding comprehensive agreement signed during the 31st session of the United Nations Food and Agriculture Organization (FAO) in Rome in November, 2001, which took effect on 29 June 2004, and currently has 149 Contracting Parties including India. This treaty, in consonance with the Convention Biological Diversity, seeks to achieve food security through the conservation, exchange and sustainable use of the world's Plant Genetic Resources for Food and Agriculture (PGRFA), equitable sharing of profits from its use, as well as playing an important role in the recognition of rights of farmers. PGRFA provides scale-free solutions to achieve food and nutritional security as well as climate resilient agriculture.

Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD), known informally as the Biodiversity Convention, is a multilateral treaty. The Convention has three main goals:

- conservation biological diversity
- sustainable use of its components
- fair and equitable sharing of benefits arising from genetic

International Treaty of Plant Genetic

Resources for Food and Agriculture







- Its objective is to develop national strategies for the conservation and sustainable use of biological diversity, and it is often seen as the key document regarding sustainable development.
- has two supplementary agreements, the Cartagena Protocol and Nagoya Protocol.

India's PPV&FR Act, 2001 for protection of plant genetic resource and farmer right

- It was enacted by Indian parliament in 2001 for adopting sui generis system (system that is unique.
- The legislation recognizes contributions of both commercial plant breeders and farmers in plant breeding activity and also provides to implement Trade-Related Aspects of Intellectual Property Rights in a way that supports the specific socio-economic interests of all the stakeholders including private, public sectors and research institutions, as well as resource-constrained farmers.
- Article 9 of the International Treaty on Plant Genetic Food Resources for and Agriculture recognise farmer's rights.

Conclusion:

In a historical first, Federation of Seed Industry of India (FSII) contributed Rs 20 lakhs (~USD 25,000) to the Benefit-Sharing Fund (BSF) as the first collective contribution from Indian seed sector, during the GB-9 meetings. The BSF is the funding mechanism of the Treaty used for support of capacity building, Conservation and sustainable use projects among the Contracting Parties of the Treaty. At the same time a resolution on implementation of Farmers Rights under Article 9 was finally agreed upon ensuring equilibrium and justice. All of these measures will strengthen the treaty.



3

50 million people worldwide in modern slavery

Why in News:

- The Global Estimates of Modern Slavery, a report published by International Labor Organization (ILO), International Organization (IOM) Migration international human rights group Walk Free foundation, stated that 50 million people were living in modern slavery in 2021. Of these people, 28 million were in forced labour and 22 million were trapped in forced marriage.
- The UN had set a goal to eradicate all forms of modern slavery by 2030, but the number of people in modern slavery has increased significantly over the past five years. There were 10 million more people in modern slavery in 2021 than in 2016 global estimates.

Modern slavery

It consists of two major components:

- forced labour and
- forced marriage.

Both refer to situations of exploitation that a person cannot refuse or abandon because of threats, violence, deception, abuse of power, or other forms of coercion.

Forced Labour:

- Most cases of forced labour (86 per cent) are found in the private sector. Commercial sexual exploitation accounts for 23 percent of all forced labour while forced labour in other areas accounts for 63 percent of all forced labour. Nearly four in five of those who commit commercial sexual abuse are women or girls.
- Forced labour accounts for 14 percent of the state-employed

bonded labourers.

 Nearly one in eight of those in bonded labour are children (3.3 million). More than half of these are in commercial sexual abuse.

Forced marriage:

- An estimated 22 million people were living in forced marriage on any given day in 2021. This represents an increase of 6.6 million since 2016's global estimates.
- Child marriage is considered a forced marriage because a child cannot legally consent to the marriage.
- Forced marriage is closely linked to long-established patriarchal attitudes and practices and is highly context specific. The overwhelming majority of forced marriages (over percent) were driven by family pressure. Although two-thirds (65 percent) of forced marriages are found in Asia and the Pacific, when regional population sizes are considered, the prevalence is highest in the Arab states, with 4.8 out of every 1,000 people in the region.
- The COVID-19 pandemic, armed conflict and climate change have in recent years led to unprecedented disruption of employment and education, an increase in extreme poverty and forced and unsafe migration, and an increase in reports of gender-based violence.
- The poor and socially excluded, those working in the informal economy, unregulated or otherwise vulnerable migrant workers, and victims of discrimination are most affected by modern slavery.

Ending modern slavery:

The report proposes a number of recommended actions which, taken together and swiftly, would mark significant progress towards ending modern slavery. They include-

- 1. Improving and enforcing laws and labour inspections.
- Ending state-imposed forced labour; stronger measures to combat forced labour and trafficking in business and supply chains.
- Extending social protection, and strengthening legal protections, including raising the legal age of marriage to 18 without exception.
- Addressing the increased risk of trafficking and forced labour for migrant workers
- 5. Promoting fair and ethical recruitment.
- Greater support for women, girls and vulnerable individuals.

Conclusion:

The world will not be able to achieve its sustainable development goals if such a major portion of population is under modern slavery or slavelike conditions. Therefore, it is high time that the world should take proper action against the forced labour, forced marriage and human trafficking in order to make the world a better place to live.



Change in India's stand towards Russia

Why in News:

- India voted against Russia during the vote on Ukraine in the United Nations. This is the second instance that India has voted against Russia. Earlier, India had voted against Russia during the procedural vote of the United Nations Security Council.
- New Delhi's emphasis on dialogue and diplomacy while considering the national interest, is something the world has noted. India expressed the sentiments of many other countries with its independent stand. Prime Minister Narendra Modi's message, 'This cannot be an era of war', India had sent a clear message to Moscow that the need of the hour is to end this conflict in Ukraine and get back on the negotiating table.

Where any such incident occurs, it is necessary that they should be investigated in an impartial and independent manner. This is the position we took with regard to the murders in Bucha and this is the position even today. The need of the hour is to end this conflict in Ukraine and return to the negotiating table. This Council is the most powerful contemporary symbol of diplomacy. The global order to which we all subscribe is based on international law, the United Nations Charter and respect for the territorial integrity and sovereignty of all states. These principles must also be upheld without exception."

India-Russia relations are changing



India statement in the UN:

External Affairs Minister S. Jaishankar said. "I want to emphasize before the Council today that even in situations of conflict, there can be no justification for human rights or international law violations.

ties with China.

- Russia's diminished importance for India's foreign policy agenda.
- India's growing security relationship with the United

The collapse of the Soviet Union, the rise of India and China, US-China tensions, the deepening of US-India relations and the Russia-China partnership exacerbated by Russia's breakup with the West and the war against Ukraine has had a profound impact on India- Russia relationship.

Another dimension of India-Russia relations:

- Russia remains a major supplier of arms to India, and Russian equipment still forms a large part of the force structure of the Indian Armed Forces; But Russia is facing competition in the Indian arms market. India's desire to diversify its arms supply and develop its own defense industry has resulted in a reduction in Russian arms supplies to India in recent years. However, in other areas, the rift in our relations has increased.
- Nevertheless. the Russian-Indian partnership will continue. For India, Russia remains an important supplier of weapons and, more recently, oil. India has not joined the West's sanctions on Russia. By doing so it has demonstrated its independent foreign policy. India is an important market for arms and oil for Russia. Indo-US Security ties are relatively new, while India-Russia relations span more than two generations. India has no reason to forgo the benefits of this relationship. Neither does Russia.

Conclusion:

Since Russia is India's oldest trusted friend, so any move by India against Russia has to be taken very carefully. We need to think deeply about it keeping our interests in mind before taking any decision.

ENVIRONMENT



1

Green Fins Hub

Why in News?

 Recently, the United Nations Environment Program (UNEP) in collaboration with the UK-based charity Reef-World Foundation, launched the Green Fins Hub to promote sustainable marine tourism.

About Green Fins Hub:

 It is a global digital platform for diving and snorkeling operators and the first-ever global maritime tourism industry forum. Its main objective is to promote sustainable maritime tourism in the future.

Importance:

- The Green Fins Hub will help the operators to make simple and cost-effective changes to their daily practices using solutions that are tested on diving and snorkeling operators around the
- The Green Fins Hub currently has around 700 operators in 14 countries with the potential to grow to 30,000 in the future.
- The platform will help the operators to track their annual improvements and communicate with their communities and customers.
- It will not only conduct an

- annual assessment of certified members but will also personally train them.
- Green Fins Solutions Library will provide access to over 100 environmental solutions for common daily operational challenges.
- The Green Fins Community Forum will be a platform for operators around the world to address industry needs, discuss environmental issues and share experiences and ideas with like-minded industry leaders, non-profit organisations and governments.
- For example, Dive centres can use the platform to gain resources and expertise to take immediate conservation action to avoid outbreaks of invasive species such as Crown-of-Thorns seastars (COTS) at their dive sites.
- This action plan will enable tracker members to achieve an annual sustainability action plan with set goals. An advanced user interface will allow them to track their progress over time.
- Coral reefs contribute almost 40% to GDP in some island countries. They are the most vulnerable ecosystems to global warming and climate change

- and are stressed by slight temperature increase.
- Increasing access to best practices, knowledge and citizen science, through the Green Finns Hub can be a game changer in ensuring the future of coral reefs and other fragile marine ecosystems.

What is Green Fins?

- Green Fins is the joint vision of The Reef-World Foundation and UNEP to preserve and manage marine tourism at an international level.
- Its main objective is not only to promote stable diving and snorkeling but also to protect coral reefs from negative environmental impacts.
- It sets international environmental standards for maritime tourism.

Challenges Related to Sea Tourism:

- The COVID-19 pandemic has disrupted maritime tourism.
- The rise in sea level and its temperature has affected marine life.
- The frequent occurrence of destructive tsunamis and cyclones.

2

Shallow Water Mining: Threat to Biodiversity

Why in News:

 In recent days, environmental researchers have characterized shallow water mining as a serious threat to marine biodiversity and its sustainability.

Shallow Water Mining:

- It is a process of mining valuable metals in shallow water at a depth of 200 meters. It has so far been considered the least risky and low cost in comparison to terrestrial mining and deep sea mining, for marine biodiversity and its sustainable development.
- For this reason, gold, silver, cobalt, copper, platinum and other valuable metals are mined by Namibia and Indonesia countries from the shallow waters of their coasts
- Countries like Mexico, New Zealand and Sweden have

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implemented many schemes for shallow water mining. Mexico is considering mining nodules containing phosphates used in marine phosphorites, fertilizers and industrial chemicals, at depths of 50-100 meters.

• Sweden is also exploring polymetallic nodules, nickel, cobalt, copper, titanium and rare earth elements and minerals from the shallow waters (60–150 m) of the Bothnian Sea.

Impact on Marine Ecosystem:

Marine researchers have warned that the mining of shallow seawater will negatively impact marine life, the impacts can be:-

- Sustainable development of the ocean can be hindered
- Habitats that harbor sea

- creatures will be destroyed,
- Water quality may be affected,
- The mixing of harmful chemicals into the sea water will create an imbalance in the environment, and
- The risk of extinction of important species might increase etc.

Suggestion:

- Mining of metals should be allowed only after a thorough examination of the environmental, social and economic impacts of shallowwater mining activities.
- Necessary principles and laws should be implemented for mining in shallow sea areas.
- Researchers believe that mining permits should not be granted

until the potential risks to deepsea biodiversity, and ecosystems are fully assessed.

Way Forward:

Human mining activities. pollution. land use and development in coastal areas, etc. significantly reduce the overall biodiversity due to large pressures on the marine environment. coastal fauna growth and the rate of reproduction of fauna. Therefore, it is crucial to stop both deep water mining and water shallow mining the protection of the marine environment.

3

Hurricane Fiona

Why in News:

- Recently, 'Hurricane Fiona' has caused havoc in Puerto Rico and other areas of America.
- The speed of this storm has been measured up to 86 miles per hour i.e. 140 Km / h.
- After 'Hurricane Maria' which had a speed of 280 km / h in the year 2017, it is considered to be a very destructive storm.

Impact:

- After the severe destruction in the island of Puerto Rico, the Turks and Caicos Islands located in the northwest have also been affected by it.
- Due to excessive rain, rivers are drifting at a height of more than 20 feet.

About Hurricane:

• It is a type of storm, which

- is called a tropical cyclone. Hurricane is the most powerful and destructive storm among tropical cyclones.
- It originates in the Atlantic Ocean, the Caribbean Sea, the Gulf of Mexico and the eastern North Pacific Ocean within the Atlantic Basin. For its origin, the depth of the ocean should be least 50 meters above the surface and the temperature must be 27 °C.

Categories:

- When a storm is at maximum speed is 74 m/h, it is called a hurricane.
- Hurricane intensity is measured on the Saffir-Simpson Hurricane Wind Scale.
- On the basis of speed, hurricanes are divided into the following five categories-

- Category-1 : Speed 74-95 m/h
 i.e. 120-153 km/h
- Category-2 : Speed 96-110 m/h i.e. 155-177 km/h
- Category-3 : Speed 111-129 m/h
 i.e. 179-208 km/h
- Category-4: Speed 130-156 m/h
 i.e. 209-251 km/h
- Category-5 : Speed 157 m/h i.e. 253 km/h
- Hurricane Irma, the most powerful and destructive hurricane ever to hit the northeastern Caribbean island, with a speed of about 300 km/h, occurred between August 30, 2017 and September 13, 2017.
- Hurricane can come anytime from June to November.

National Oceanic and Atmospheric Administration:

 These storms are predicted and investigated through



the 'National Oceanic and Atmospheric Administration' (NOAA) organization working under the US Department of Commerce.

• Established in October, 1970, NOAA is Headquartered in Maryland, USA.

Naming:

 Six lists of names for tropical cyclones are prepared by the United Nations unit 'World Meteorological Organization'. Based in Geneva, World Meteorological Organization was established on March 23, 1950, under the United Nations Organization with 193 member countries.

4

Cheetah Rehabilitation Project

Why in News:

Under the Cheetah Reproduction Project, 8 cheetahs, brought from Namibia have been released by the Prime Minister of the country on 17th September 2022, on the occasion of his birthday, to enhance the ecosystem in the Kuno National Park in Madhya Pradesh.

Key Points:

- After almost 70 years, all five species of big cats will now be seen in India.
- In the year 1952, the Government of India officially declared the cheetahs to be extinct.
- A modified Boeing 747 aircraft carrying five female and three male cheetahs reached Gwalior, after traveling about eight thousand kilometres from the Namibian capital Hosia.
- A Special Chinook helicopter was brought from Gwalior to Kuno National Park in Madhya Pradesh.
- Due to the favorable climate and environment, Kuno National Park was chosen for these cheetahs.
- The first plan relating to cheetah recovery was made in the 1970s when it was proposed to bring Asiatic cheetahs from Iran to India in exchange for Asiatic lions.
- The 'African Cheetah

Introduction Project in India' was started in the year 2009 to bring cheetahs to the country.

- After surveying ten wild sanctuaries of the country from 2010 to 2012, Kuno National Park in Madhya Pradesh was selected for cheetahs.
- The Government of India has allocated a budget of Rs 38.70 crore for the Cheetah Rehabilitation Project during 2021-22 to 2025-26.

Cheetah rehabilitation:

- 'Rehabilitation' of a species means releasing it to an area where it can easily survive.
- Cheetah is the only large carnivore that has been wiped out mainly due to overhunting in India.
- Conservation of cheetahs helps



to regenerate grasslands, their biomes and habitats.

Cause of Extinction:

• The main reason for cheetah extinction in India has been their

hunting in large numbers, then habitat destruction, domestic rearing, rapid climate change and excessive population growth etc.

The cheetah:

- The cheetah is one of the oldest of the big cat species, with evidence of ancestry dating back to the Miocene epoch.
- It is the fastest land mammal in the world that lives in Africa and Asia.

African Cheetah:



- IUCN Status: Critically Endangered.
- CITES Status: Appendix-I of the
- The number of African cheetahs is about 6,500-7,000, which is the largest in the world.
- Physical Characteristics Larger than Asiatic cheetahs.

Asiatic Cheetah:

- IUCN Status: Sensitive.
- CITES Status: Appendix-I of the

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List.

- In the forests of Iran their number is about 40 to 50.
- They are smaller in size and yellow in color than African cheetahs. Usually, these redeved cheetahs have small head

and a long neck.

Way Forward:

There are about 7100 cheetahs left in the forests around the world. To maintain sufficient numbers of cheetahs in the country, the Government of India

should ensure their monitoring by better tracking devices and start public awareness programs among the local people to prevent human-wildlife conflict.

5

Graded Response Action Plan for Control of Air Pollution

Why in News:

- The Commission for Air Quality Management is going to implement the revised Graded Response Action Plan in the 'National Capital, Delhi' from October 1, 2022.
- The scheme will come into force 15 days before the normal date, to prevent the build-up of pollutants followed due to the change in wind direction in the northwest and a drop in wind speed after the withdrawal of the monsoon.
- the listed measures when the air quality progresses from 'poor' to 'very poor'.
- In Delhi-NCR, this plan has been classified under four different stages of adverse air quality:
- Stage I- 'Poor' (AQI 201-300);
- 2. Stage II 'Very poor' (AQI 301-
- Stage III- 'Severe' (AQI 401-450);
- 4. Stage IV- 'Severe Plus' (AQI>450).

Measures to prevent air pollution:

Under stage-I, this plan prohibits



Graded Response Action Plan (GRAP):

- Based on the directions of the Supreme Court, the Graded Response Action Plan is an emergency measure to control air pollution notified by the Union Environment Ministry in 2017.
- This plan is implemented with
- the use of coal and firewood including tandoor in hotels, restaurants, and open eateries, excluding diesel generator sets, emergency and essential services.
- In case the situation becomes "severe" (Phase-III), excluding necessary projects such as railways, metro, airports, ISBTs,

- security/defencenational related projects of national importance and non-polluting activities such as plumbing, carpentry, interior decoration electrical works, activities relating to construction and destruction are banned in
- Under the "Severe Plus" category Phase-IV, Registered medium and heavy diesel vehicles and entry of trucks into Delhi are banned nationally, except for vehicles carrying essential commodities.
- This revised plan also bans BS IV four-wheeler diesel vehicles in violation of the Air Quality Index (AQI) of 450 points, except vehicles that are engaged in essential services in the border districts of Delhi and NCR.
- This action plan uses a real-time source segmentation system to understand the real-time impact of pollution sources such as vehicles, road dust, construction dust, biomass burning, farm fires and industrial emissions.
- Violations and complaints will also be monitored through the Green War Room.
- Keeping in view the festivals, there will be a complete ban on firecrackers.
- However, no decision has been taken vet on implementing the "Red Light on vehicle Off"



- campaign in this action plan.
- The campaign encourages drivers to stop their vehicles while waiting for traffic lights to turn green, to reduce vehicular pollution in the capital.

Other efforts of the Government of India:

- Establishment of surveillance travel network for assessment of ambient air quality.
- Promotion of clean gaseous fuels like CNG and LPG.
- Increasing the amount of

- ethanol in petrol.
- Introduction of National Air Quality Index (AQI).
- Implementation of BS-VI standards.
- To make pollution control certificates mandatory for all engine-driven vehicles.
- Enforcement of the Air (Prevention and Control of Pollution) Act, 1981.

Way Forward:

• Air pollution is one of the world's biggest health hazards.

Due to this, about 70 lakh people die every year, including 6 lakh children. To deal with this, it is crucial to have the proper political will, awareness among the people and maximum transparency.

6

Global Clean Energy Action Forum-2022

Why in News?

- Recently, India announced the launch of the "Innovation Road-Map: Mission Integrated Biorefineries" at the Global Clean Energy Action Forum-2022, held in Pittsburgh, USA.
- The forum was a joint conference of the 7th Mission Innovation and the 13th Clean Energy Ministerial-2022.
- The first round table conference of this forum held in Pittsburgh, Pennsylvania from 21 to 23 September was addressed by the Union Minister Dr. Jitendra Singh.

Innovation Road-Map: Mission Integrated Bio-refineries:

- This road map has been developed based on the results and findings from Brazil, Canada, EC and UK.
- The mission will provide a strategic framework for the policymakers to establish a growing RD&D portfolio in the next five years
- It will suggest specific financing

proposals and prompt action across the entire spectrum of important bio-refinery technologies.

Objectives of Mission:

- The mission aims to achieve greater international cooperation to boost funding for energy research, development, public and private investment and demonstration (RD&D) during the next five years.
- Identifying and addressing the gaps and challenges in the current bio-refining value chain.
- To guide the overall path of the mission to achieve its goal.

India's Initiatives:

- India has agreed to implement the following initiatives while continuously working towards transforming the energy landscape of the country with a significant clean energy share:
- By 2030, 500 GW of non-fossil energy capacity.
- Shifting 50% of energy requirements to renewable

- energy by 2030.
- Reducing total estimated carbon emissions by one billion tonnes by 2030.
- Reducing carbon intensity by 45% from 2005 levels.
- Achieving net zero emissions target by 2070.
- An integrated indigenous plant, with 10 tonnes per day enzyme production capacity, is being set up at Panipat, which will be started by December 2022.
- Indian Oil Corporation Limited has constructed a 2G ethanol plant for alternative biofuel production, which is expected to be started by 2024.

Past Steps Taken by India:

- India launched the PPP (Public Private Partnership) mode initiative in April 2022 with the full launch of "Mission Integrated Bio-refineries" to accelerate clean energy solutions through public-private alliances.
- It is a step to promote the "Clean Energy" initiative in PPP (Public Private Partnership) mode.



- India has set up five bio-energy stations, where sustainable biofuels are being produced using modern biotechnological equipment.
- To increase the share of electric vehicles in new vehicle sales by at least 30% by 2030 under the global 'EV30/30 campaign'.
- To focus on the production of hydrogen through green energy

resources.

Way Forward:

 Sustainable biofuels play an important role in reducing greenhouse gas emissions from the transport sector. Hence, the successful performance of the mission launched by the Government of India will not only provide indigenous technology and self-reliance to the nation but will also help in reducing the carbon footprint from the transport sector.

7

Waterlogging in Indian Cities

Context:

- Several big cities including Bengaluru, Mumbai, Ahmadabad, Lucknow, Bhopal, Surat and Patna witnessed severe waterlogging and flooding during this year rainy season. Many government schemes like as Smart Cities Mission, Swachh Bharat Mission and Atal Mission for Rejuvenation and Urban Transformation fail to provide a comprehensive vision and strategy to address issues of urban flooding.
- Taking serious note on waterlogging, National Green tribunal has sought suggestion from centre and states to address this issue. NGT said that this important issue can be addressed by policy, planning, implementation and monitoring of the issue.
- Water-logging occurs when there is heavy rainfall and due to improper drainage system, the water gets collected on the road and causes problems.

Reason for waterlogging and flood in Indian cities:

- Dying water bodies
- Improper garbage disposal

- Poor land policy
- poorly maintained drains
- Disposed plastic bags
- Shrinking open spaces
- Climate change
- Urban encroachment
- Heavy rain fall

Problem with water logging in Indian cities:

- People spending more time in traffic
- Lost productivity
- Increased vehicle wear and tear
- More accidents
- Cut in electricity supply
- Incidence of disease
- Defective air circulation
- Destruction of roads occurred due to reduced bearing capacity of waterlogged soil
- Durability of road decreases.
- Growth of unwanted wild plants

Solution of water logging in Indian cities:

- Proper design and maintenance of storm water drainage system.
- Extra provision for gardening / growing up of tree it reduces flood intensity by absorbing water.
- Construction of Flood gates and flood reservoir. With flood

- reservoir, stored water can be used at the region where there is shortage of water.
- Absolute ban on plastic bag. Plastics create choking points in drainage. It's closes down the sinks on streets.
- There should be best mechanism for garbage disposal. Urban Solid Waste has become real problem everywhere. Collection and scientific disposal should be priority to deal with Solid Waste.
- Drainage cleaning activity should take place round the year, not just during monsoon. It should be mechanised.
- One authority should be made responsible for drainage.

Conclusion:

 There are many schemes which are running in cities for infrastructure development and reduce water logging yet the desirable result come. Thus it is very important that local governance would strengthen for solving the water logging problems in Indian cities.

SCIENCE - TECH



1

World's First Cloned Wild Arctic Wolf

Why in News:

- Cinogen Biotechnology, a gene firm in Beijing, has recently announced the first worldwide successful clone of a wild female arctic wolf.
- This cloned wolf was procreated about 100 days ago by the company in a lab in Beijing, and has been named Maya.

Cloning Technique:

- Cloning technique is a technique that produces an organism from another organism through Asexual method.
- By this method copies of living organisms including cells, tissues etc. are made and all the organisms prepared by this method are completely genetically and physically almost identical to their parent.
- The first successfully cloned mammal was, Dolly the sheep.
 It was successfully cloned at the

- Roslin Institute in Scotland on 5 July 1996.
- Dolly was created by collaboration of scientists, Ian Wilmut and Keith Campbell.
 While the first cloned vertebrate animal was a frog which was created in 1952.
- Cloning is an crucial method to protect gene diversity and increase the population of species.

About Arctic Wolf:

- It is called commonly the polar wolf or the white wolf. It is a subspecies of the gray wolf.
- It is a carnivorous mammal, which is found in the Arctic regions of North America and Greenland.
- Its scientific name is 'Canis Lupus Arctos' and its weight ranges from 70 to 175 pounds, while its length can be from 3.2 to 5.9. Its life span is about 7-10 years. It is

included in the IUCN Red List of Least Concern.

Hazard:

- According to the World Wildlife Fund, wolves found in arctic regions though get away from poachers but they are always at risk of the food supply posed by climate change.
- At the same time, human infrastructures such as the network of roads and pipelines spreading across the world are encroaching on their areas.

Way Forward:

The birth of the world's first female arctic wolf clone is a significant achievement in cloning technology. Further, it can also be an effective way to retrieve extinct species from the world, therefore cloning technology should be encouraged in India too.

2

Hybrid motor testing by ISRO

Why in News:

- Indian Space Research Organization (ISRO) has successfully tested a 30 kN hybrid motor at ISRO Propulsion Complex (IPRC), Mahendragiri, Tamil Nadu on September 20, 2022.
- The purpose of this test was to discover a new propulsion system for the upcoming launch vehicles.

About 30KN Hybrid Motor:

 It is a scalable and stackable type of hybrid motor that uses solid fuel and liquid oxidizer on contrary to to solid-solid or liquid-

- liquid combinations.
- During testing, this motor used liquid oxygen (LOX) as the oxidizer and hydroxyl-terminated polybutadiene (HTPB) as the fuel.
- The 30 kN hybrid motor has successfully demonstrated ignition and continuous combustion for the desired duration of 15 seconds during the test.

Advantages of this motor:

- The use of fluids aids in throttling which enables the LOX's ability to resume flow rate control.
- Although both HTPB and LOX are

- in green color, but LOX is safer to handle.
- This motor uses solid fuel and liquid oxidizer, in contrast to solid-solid or liquid-liquid combinations.
- This motor will pave the way for a new propulsion system for upcoming launch vehicles.

Indian Space Research Organization (ISRO)

- ISRO is the national space agency of India. Its headquarter is in Bangalore.
- It is India's primary agency for space based applications,



- development of latest technologies and work related to space exploration.
- ISRO was formerly known as the Indian National Committee for Space Research (INCOSPAR) established in the year 1962. Later ISRO was formed as an autonomous body on August 15, 1969. ISRO has 22 centres across India.
- Indian Space Research Organization's technologies and programs have played an important role in the socio-

- economic and industrial development of India.
- ISRO supports military and civilian domains in many aspects such as navigation, disaster management, and spy missions.
- ISRO works under the Department of Space and it is directly supervised and controlled by the Prime Minister of India.

About Chandrayaan-3:

 Chandrayaan-3 is planned to be launched in the first quarter of 2023. It is a repeat mission of the spacecraft Chandrayaan-2 and will only consist of a lander and rover similar to Chandrayaan-2. The spacecraft will not include an orbiter, but its propulsion module will function like a communications relay satellite.

Way Forward

 The Government uses satellite data for various developmental applications and security. Hence there is a need for proper and better management of satellites to access and protect these

3

India won United Nations Award for Hypertension Control Initiative

Why in News:

 Recently, India has been awarded the United Nations Award for the its commendable efforts against hypertension.

2022 UN Interagency Task Force, and WHO Special Programme on Primary Health Care Award:

- This award has been given to IHCI(India Hypertension Control Initiative), by the United Nations General Assembly at a special event held in New York, USA on September 21, 2022.
- The United Nations Award recognizes India's outstanding commitment and action to prevent and control Non-Communicable Diseases (NCDs).

High Blood Pressure:

- High blood pressure is also called silent disease.
- The problem of blood pressure arises after crossing the level of 140/90.
- Hypertension is a major risk factor in cases of heart attack, stroke, kidney disease and premature death.

- Estimates suggest that one in four adults in India has high blood pressure.
- Control of hypertension at the level of the primary care system contributes to reducing deaths due to heart attack, stroke and kidney failure.
- Hypertension Day is observed every year on 17th May with the aim of creating awareness about high blood pressure and its symptoms.
- India is committed to the target of "25 by 25", i.e. to reduce the mortality rate due to noncommunicable diseases to 25% by the year 2025.

IHCI:

- The India Hypertension Control Initiative is a joint initiative of the Ministry of Health, the Indian Council of Medical Research, the state governments and the World Health Organization.
- India's Hypertension Control Initiative - IHCI under National Health Mission has been appreciated globally to control and prevent hypertension.

- This initiative was launched in 2017. Its aim is to reduce the prevalence of relative blood pressure by 25%.
- It was expanded in a phased manner to cover more than 130 districts in 23 states.
- Under the National Health Mission by the India Hypertension Control Initiative, 34 lakh people with hypertension have been identified and treated in various government health facilities and Ayushman Bharat Health Wellness Centre was also involved in this treatment.
- It is a supplementary of the National Program for the Prevention and Control of Diabetes, Heart Disease and Stroke. This initiative is meeting the goals of the government by promoting Ayushman Bharat program by ensuring continuous care.

Way Forward:

 Worldwide, more than a billion people have high blood pressure. It is one of the leading causes for heart diseases and



premature deaths. This disease usually occurs in older people, however, presently the younger population have started exhibiting the symptoms too. It can be prevented with regular check-up and treatment.



DGCA raises concern over 5G Rollout

Why in news:

As India's telecom operator prepare for 5G rollout services, the country's aviation safety regulator has written to the telecom department flagging concerns over the likely interference of 5G C- band spectrum with aircraft radio altimeter. The main concern of DGCA emerges from the fact that both radio altimeter and 5G use same C band spectrum. Thus it is more likely interference between 5G and aircraft radio altimeter.

C- band:

 C-band falls in the middle of the radio spectrum used for 5G networks. It refers to the frequency bands of 3.7–3.98 GHz. This is on the low end of a wider C-band spectrum. Although the C band for radio altimeters falls between the frequency bands of 4-4.5 GHz

Radio altimeter:

A radio altimeter is an instrument that provides direct height above terrain information to various aircraft system. The radio altimeter uses the radar principle. In a typical radio altimeter setup, there are two antennas. One sends a signal and the other receives it. The signal is sent by the transmitter antenna. This signal is then reflected from the ground or the surrounding area and is then received by the receiver antenna. Since signals travel at the speed of light, distance can be

calculated simply by measuring the time it takes for the aircraft to receive the reflected signal.

5G:

- 5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G and 4G networks. 5G enables a new type of network that is designed to connect almost everyone and everything together, including machines, objects, and equipment.
- 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra-low latency, greater reliability, vast network capacity, increased availability and a more uniform user experience to more users. Higher performance and improved efficiency empower new user experiences and connect new industries.
- Ideally the 5G network speed should be 20 gigabytes per second for downloading and 10 gigabytes per second (Gb / s) for uploading.

Reasons for Concerns by department of telecommunication:

 The radio altimeter operates at a frequency of 4.2–4.4 GHz and for a long time, this band has been protected to reduce harmful radio interference. When mobile telecommunications boomed in the 21st century, it did not initially pose a risk to radio altimeters

- because communication operating frequencies were far below radio altimeter operating frequencies.
- The 5G frequency band is between 3.7-3.98GHz, which is very close to the radio altimeter frequency. This can cause interference to the radio altimeter which can lead to an incorrect altitude measurement.

Why are both using C band

For the telecom service providers,
 The C band presents a sweet
 spot for rolling out 5G services,
 ensuring coverage as well as
 high band width, resulting in
 faster internet speed. For aircraft
 operation, the use of altimeter in
 this band ensures highly precise
 measurements of the plane
 altitude.

Conclusion:

 The use of 5G is increasing globally. In this situation, it is mandatory to increase 5G to make India competitive in the industrial sector. But the government should promote 5G keeping in mind of other dimension of technology.

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October 2022/Issue-01 ECONOMY



'Scale App' for Skill Development in Leather Sector

Why in News:

- On September 20, 2022, the Minister of Education and Skill Development launched the 'Scale App' for skill development in the leather sector in Chennai.
- The objective of this app is to integrate Quality Assurance under the Skill India Mission in the leather sector.

About 'Scale App':

- The abbreviated form of 'Scale' is 'Skill Certification Assessment for Leather Employees'
- To change how skill development programs are designed and delivered to the apprentices in the leather sector, the Leather Skill Sector Council has developed this Android app SCALE.

Importance:

- It will provide a one-stop solution to the skilling, learning, assessment and employment needs of the leather industry.
- With this app, leather craft enthusiasts of all ages can access online live streaming classes from the state-of-the-art studios in the office of Leather SSC.
- There will be the digitization of the leather industry i.e. it will be linked to e-commerce.

Leather Industry in India:

- The leather sector plays an important role in generating wide employment in the country.
- This includes 0.88 million full-time workers in the leather industry, 0.77 million workers in small businesses and 0.74 million selfemployed or daily wage earners.
- The Indian leather sector has 55% youngest workforce that is below 35 years of age.
- A total of 2.39 million new jobs are estimated to be created in the leather sector between 2017 and 2022.
- India is the second largest producer of footwear in the world.
- India is the second largest producer and consumer of shoes in the world. About 13% of the world's leather and hides are produced in India. 9% of the shoes produced worldwide are produced in this country.

Leather Sector Skill Council (LSSC):

- It is a non-profit organization created to help meet the demand for qualified workers in the leather sector of India.
- It was established in the year 2012.

Its main objective is to meet the training and employment needs of the sub-sectors of finished leather, footwear, apparel, leather goods, and accessories.

The main objectives of the Leather Sector Skill Council are:

- To encourage the creation of skilled manpower required for sustainable development the leather and leather goods industry.
- Ensure capacity development in the sector to ensure the availability of trained and skilled manpower at industrial areas and organizational levels.

Way Forward:

- The industrial changes brought about by the development of digital technology and ecofriendly practices require a renewed focus on skilling, reskilling and up-skilling as well as driving capacity building.
- A national level capacity building program should be initiated at CSIR-CLRI to enhance the capacity of professionals working in this industry.

PM PRANAM Scheme

Why in News:

- To reduce the use of chemical fertilizers, the Government of India will launch 'PM PRANAM Yojana'
- 'PM PRANAM': 'Promotion of Alternative Nutrients for Agriculture Management'.

Purpose:

- To promote balanced use of organic fertilizers across the country.
- To reduce the financial burden of chemical fertilizers subsidies.
- Subsidy on fertilizers is estimated to be Rs 2.25 Lakh Crore in 2022-23 which is 39% higher than Rs

1.62 Lakh Crore in 2021.

Features of the Proposed Scheme:

- No separate budget will be earmarked for this scheme.
- The scheme will be financed through "saving of existing fertilizer subsidies under schemes run by the Department of



Fertilizers".

- Those states who will save money through operating Urea schemes, will be given 50% of the subsidy savings as a grant.
- 70% of the grant provided under this scheme will be used for the technical development of alternative fertilizer production units functioning at the village, block and district levels.
- While the remaining 30% of the grant amount can be used to reward and encourage farmers, panchayats, farmer producer organizations and self-help groups for reducing fertilizer use and creating local awareness.
- The comparative assessment of the reduction in usage of Urea as a chemical fertilizer in a year will be done with the average consumption of urea over the last three years.

Fertilizer:

- Fertilizers are organic or inorganic chemical substances that increase the growth of crops and the fertility of the land
- The fertilizer industry is one of the eight core industries of India. India is the second largest consumer of urea fertilizer in the

world after China.

Current status of fertilizer use in the country:

- During the year 2020-21, the total consumption of four fertilizers namely urea, di-ammonium phosphate, muriate of potash and NPK in the country was 640.27 Lakh Metric Tonnes whereas in the year 2017-18 it was 528.86 lakh metric tonnes i.e. fertilizer consumption has increased by 21%.
- DAP has recorded the highest consumption among all other fertilizers. It increased from 98.77 lakh metric tonnes in the year 2017-18 to 123.9 lakh metric tonnes in the year 2021-22.

Other Initiatives Launched by the Government:

- Under the Direct Benefit Transfer scheme (operative since October 2016) the fertilizer companies, based on the profit made by the retailers, received 100% subsidy from the central government.
- Under the Fertilizer Control Order-1985, the government has included new nutrients like nano urea and bio-stimulants, that aid the growth of crops and increase

the metabolic process in plants.

- It has been made mandatory by the government to produce 100% urea in the form of Neem Coated urea.
- The use of Neem Coated urea has many benefits like improvement in soil health, reduction in the use of plant protection chemicals, reduction in pest attack and disease, increase in crop yield etc.

Objectives of New Urea Policy-2015:

- Maximizing indigenous urea production.
- Enhancing energy capacity for urea production in urea units.
- To reduce the subsidy burden on the Government of India equitably.

Way Forward:

 The agricultural sector is as important as it is sensitive to the Indian economy. The government should encourage maximum use of organic fertilizers, instead of chemical fertilisers, for the welfare of farmers, soil conservation and reducing the financial burden of fertilizer subsidy.



Global Fintech Fest-2022

Why in News?

- On September 20, 2022, the Finance Minister of India inaugurated the Global Fintech Fest-2022 at Jio World Convention Centre, Mumbai.
- The objective behind organizing the Global Fintech Fest 2022, was to provide a platform to discuss ways to achieve sustainable finance.

Key Points:

- Global Fintech Fest is organized jointly, by the National Payments Corporation of India, Payments Council of India and Fintech Convergence Council, every year.
- The theme of the fest this year was "Creating a Sustainable Financial World – Global, Inclusive, Green".
- This event has presented India as a global thinker in Fintech and attempted to show India's Fintech

- ecosystem at the international level.
- India's digital payment system is set to become more inclusive with this event. More than 300 million users are likely to join India's digital payment process in the future.

About Fintech:

 Fintech is an acronym for Financial Technology. The technology



- related to the management of financial operations is called FinTech.
- In other words, FinTech is the application of modern technology to manage the financial aspects of traditional financial services and business activities of companies. The term Fintech refers to the use of new technologies that bring autonomy and improvement in financial services and their management.
- Digital payments, digital loans, bank tech, insure tech, regtech, cryptocurrency, digital cash, smart contracts, open banking, cyber security, blockchain technology etc. are some of the major components of Fintech.
- At present, Fintech has also started to include education, retail banking, fund raising and non-profit work, investment management etc.

Importance of Fintech:

- By linking Rupay Credit Card to UPI, the consumers have been assured of more opportunities to use the credit card.
- It is also helping merchants to increase sales by being a part of the credit ecosystem.
- It has enabled UPI Lite users to do low-value transactions in near-offline mode, integrated with BHIM App.
- It has reduced the debt burden on the core banking system and also improved the transaction success rate.
- It has made payment of crossborder bills easier for people living abroad who maintain a home in India.
- It enables NRIs to pay utility, water and telephone bills on behalf of their families residing in India.

- Strong potential of increased cyber-attacks.
- Misuse of personal and financial data may increase i.e. data privacy issues.
- At present, a major problem has emerged in the regulation of cryptocurrencies which is an important area of Fintech.
- At present, no special provisions are made to prevent incidents of scams and fraud in the field of Fintech at the national and international levels.

Way Forward:

 Although significant work has been done on personal data security, cyber security and the public awareness in India for the success of Fintech, but a special attention is required in implementation and regulation.

Challenges:

4 4

Challenges faced by Indian tea industry

Why in News:

- The tea industry has been under severe stress with increasing production costs and stagnating prices, which threatened the long term viability of the tea sector industry.
- India is today the second largest producer of tea in the world, accounting for a fifth of the world's production with an annual production of over 1.2 billion kilograms. It is also the fourth largest exporter after China, Sri Lanka and Kenya.

Issues affecting tea production in the county

Decline in the Price of Tea:

• Due to various reasons, the

auction price of tea has seen a steady decline over the years. According to the World Bank, tea prices have fallen by about 44% in real terms.

License and Quota:

- A separate license is required to make tea.
- Exports are controlled and there are quotas and allocations.

Low production:

- Tea industry is facing problems like
- » finance crisis,
- » Unavailability of power,
- » labour issues,
- » poor labour laws,
- » inadequate communication

- system,
- » increase in revenue tax for tea gardens,
- » increase in pollution fee,
- » less transport subsidy etc.
- All these have put the tea industry as a whole in a bad position, resulting in reduced production of tea leaves and tea.

No proper storage:

 Storage of premium quality tea has always been a problem. Due to transport delays and lack of storage facilities, processed tea deteriorates in quality.

Climatic Factors:

 Unfavourable climatic conditions for tea gardens due to low or very



heavy rainfall have badly affected the tea industry.

Solutions:

- To tackle climate change, the industry will have to work with multiple agencies and partners to research and develop new tea verities; provide information on improving soil fertility and rain and water management systems.
- There is a need to provide a marketing mechanism to help small tea growers to sell their produce at the right price and increase their market reach.
- Raise awareness about better plantation techniques and rights of plantation workers and provision of financial assistance for increasing mechanization in tea gardens.
- Build capacity of smallholders on good agricultural and pest management practices and improve integration with the rest of the industry

Government Initiative

- To help Indian exporters' market tea of Indian origin in overseas markets, the Tea Board of India launched a scheme: Promotion of Packaged Tea of Indian Origin.
- Tea Board also provides subsidy to domestic exporters for participating in international fairs and exhibitions.
- It aims to provide a platform for exporters to showcase their products at international events and facilitate the creation of business opportunities.

Tea Development and Promotion Scheme:

This scheme was launched in November 2021 by the Tea Board of India for the period of 2021-26. The objective of this scheme is to enhance the productivity and quality of the production in India.

Tea board:

 Tea Board was set up as a statutory body on 1st April, 1954 as per Section (4) of the Tea Act, 1953. As an apex body, it looks after the overall development of the tea industry.

- The Board consists of 32 Members, including Chairman and Deputy Chairman appointed by the Government of India representing different sections of the Tea industry.
- The Board's Head Office is situated in Kolkata and there are two Zonal offices- Jorhat, Assam and Coonoor, Tamil Nadu.
- For the purpose of tea promotion, three overseas offices are located at London, Dubai and Moscow.

Conclusion:

To address the sustainability challenges facing the Indian tea industry and communities, it must provide solutions on how to develop large-scale approaches so that growers thrive, workers survive and the environment improves.

5 National Logistics Policy

Why in news:

 Prime Minister, Shri Narendra Modi launched the National Logistics Policy in New Delhi. Under the policy Unified Logistics Interface Platform (ULIP) will be prepared as an integrated portal in which information about the location of goods can be obtained on a real-time basis with considerable ease.

Vision of the policy:

 The vision of the policy is to develop a technologically enabled, integrated, costefficient, resilient, sustainable and trusted logistics ecosystem in the country for accelerated and inclusive growth.

- The policy aspires to reduce cost of logistics in India to be comparable to global benchmarks by 2030, endeavour to be among top 25 countries by 2030 in the Logistics Performance Index ranking, and create data driven decision support mechanism for an efficient logistics ecosystem.
- The Policy will be implemented through a Comprehensive Logistics Action Plan (CLAP). The interventions proposed under the CLAP are divided into eight key action areas-
- 1. Integrated Digital Logistics Systems
- 2. Standardisation of physical assets

- and benchmarking service quality standards
- Logistics Human Resources
 Development and Capacity
 Building
- 4. State Engagement
- 5. EXIM (Export-Import) Logistics
- 6. Service Improvement framework
- 7. Sectoral Plan for Efficient Logistics
- Facilitation of Development of Logistics Parks.

Benefit of National Logistic Policy:

- reduced logistics cost
- promotion of international trade
- Helping India become self-reliant
- Opening up new opportunities for our startups
- To increase the income of



- the farmers of the country by reducing the logistic cost of farm produce
- This will also bring down prices in the whole economy.

Initiatives by government to reduce logistic cost

- Krishi UDAN- launched in 27
 October 2021, aims to ensure seamless, cost-effective, time-bound air transportation and associated logistics for all Agriproduce originating especially from North East, hilly and tribal regions of the country.
- Bharatmaala- a flagship project launched in 2015 that aims to transform India's logistics infrastructure.
- **Sagarmala-** launched in March 2015, project is to promote

- provide world-class infrastructure across the country.
- PM GatiShakti National Master Plan- launched on 13th October 2021 for providing multimodal connectivity infrastructure to various economic zones.
- e-sanchit- makes the entire consignment clearance process paperless and faceless.
- e-way bills system- launched in 1st April 2018, provides the industry with a range of benefits, like as Faster and more seamless movement of goods, both intraand inter-state.
- FASTag- enables automatic deduction of toll fees and allows you to pass through without you having to wait for any kind of cash

- India's logistics is estimated to account for about 14.4% of the GDP. More than 22 million people depend on it for their income. The Logistics Department of the Department of Commerce for India was established on 7 July 2017 and was entrusted with the responsibility of integrated development of the logistics sector.
- India's logistics sector comprises 37 Export Promotion Councils, 40 Participating Government Agencies (PGAs), 20 Government Agencies, 10,000 commodities and 500 certifications.
- In 2019, the Indian logistics sector was valued at Rs. 15.1 lakh crore (US\$ 190 billion). The unorganized sector comprises 99% of the logistics sector which includes owners of less than five trucks, brokers or associates of transport companies, small-scale warehouse owners, customs brokers and freight forwarders.

Conclusion:

National Logistics Policy, comprehensive effort to address issues of high cost and inefficiency by laying down an overarching interdisciplinary, cross-sectoral and multi-jurisdictional framework for the development of the entire logistics ecosystem. The policy is an endeavour to improve the competitiveness of Indian goods, enhance economic growth and increase employment opportunities. From 13-14 per cent logistics cost, we should aim to bring it to single-digit as soon as possible.



port-led direct and indirect development and to provide infrastructure to transport goods to and from ports quickly, efficiently and cost-effectively.

 National Infrastructure Pipelinelaunched with projected infrastructure investment of around 111 lakh crore (US\$ 1.5 Trillion) during 2020-2025 to transaction.

- faceless assessment for customs
- GST- launched in 1 July, 2017, lower the cost of goods and services give a boost to the economy and make the products and services globally competitive.

Logistic sector of India:

ART & CULTURE



1

Exploration of Cave of the Ramses-II Era

Why in News:

A team of archaeologists from Israel has recently discovered a very rare cave of Ramses-II era.

Cave:

 The cave is about 3,300 years old and was discovered during construction work in Palmachim National Park, south of Tel Aviv.

Other Evidence:

- Along with the discovery of this cave, experts have discovered other objects related to the reign of this king, like!- pottery pieces, bronze artefacts, some bowls, cups, cooking utensils, storage jars, lamps and bronze arrows or spears etc.
- The items have a mention of the period and the name of the king, which completely affirms and proves the time period.

About Ramses-II:

• Ramses-II was the third pharaoh

of the 19th dynasty of Ancient Egypt that ruled the Canaan and Nubia region from 1279 to 1213 BC. His reign is called the 'Golden Age of Egypt'.

- Ramses-II became the heir and crown prince of Egypt at the age of 14, ascended the throne of Egypt as a child and ruled for 66 years until he attained the age of 90, which is the longest reign among pharaoh kings. At the beginning of his reign, he intially built monuments and temples, later he focused on building cities. He established a city named Pee Ramses to attack Syria and then made this city his new capital.
- Ramses-II was the most famous and powerful pharaoh in ancient Egypt, and the last greatest pharaoh of Egypt. After his death in 1213, Egypt weakened and became a province of foreign kingdoms. Due to the might of Ramses-II, people forgot the valor of all the previous great pharaohs

like Seti-I and Thutomose-III.

 At present, the Canaan and Buniya region is believed to have joined modern Israel and the Palestinian Territories.

Way Forward:

 The Israel Antiquities Authority believe that with discovery of



this cave several burial customs of Bronze age will be revealed but also, many important facts relating to the period can be brought in light.

2

Qutub Shahi Tomb

Why in news:

Recently a project was launched in Hyderabad with an aim to restore 6 wells (baoris) inside the Qutb Shahi Tomb complex, which will help in building a strong base for the UNESCO World Heritage City.

Key points:

- The project is funded by the US Consulate and operated by the Aga Khan Cultural Trust.
- The project supports the conservation of 6 stepwells inside the mausoleum complex, which will conserve 15 million litres of

- rainwater during monsoons and meet the water needs for the 106-acre heritage park.
- Restored medieval wells include, the 16.5-metre-deep (approximately five-storey) large stepwell with a capacity of 3.5 million litres and an equally huge stepwell near the tomb of Jamshed Quli along with the Hammam Baoli of capacity 4.7 million litres.
- The state government is also planning to rehabilitate Jillau Khana near Lad Bazar.
- The 15th-century Qutb Shahi

tomb complex comprises several tombs, Golconda fort, funeral mosque, wells and manicured gardens.

Golconda Fort:

- This fort was built in the year 1143 AD on top of a hill which is situated at the western part of present day Hyderabad. Earlier this fort was known as Mankal.
- It was a mud fort in ancient history during the reign of the kings of Warangal.
- It was patronized by the Bahmani Sultans and then the Qutb Shahi

16



- dynasty between the 14th and 17th centuries. This Golconda has also been the main capital of the Qutb Shahi kings.
- The interior of the fort contains the ruins of a palace, mosque and a hill pavilion, which is about 130 meters in height and provides a panoramic view of the other buildings.

Outub Shahi Tomb:

- Qutb Shahi Tomb is located two kilometres away from the Golconda fort in the north and is 42 meters high. It is built in Persian, Hindu and Pathani styles of architecture.
- One of the most impressive tombs, this tomb was built by the founder of Hyderabad, Mohammad Quli Qutb Shah.

 These tombs have been established amidst the beautiful gardens of Ibrahim Bagh, which further enhances their beauty. These tombs are dedicated to seven Qutb Shahi kings who ruled Golconda for about 170 years.



 In this, the small tomb is one storey and the big tomb is two storeyed. Their domes were made of blue and green stones, but with the passage of time they were eroded and today only a few of these stones are left as relics.

 The gardens nearby these tombs, attract a large number of tourists to themselves.

The Aga Khan Cultural Trust:

• The Aga Khan Cultural Trust, established by the Aga Khan IV (Imam) in the year 1988, is an organization under the Aga Khan Development Network. This organization works for the physical, social, cultural and economic improvement of the buildings and communities of Muslim society. The headquarters of this organization is at Geneva, Switzerland.

3

Ambedkar Circuit

Why in News:

- In recent times, the Government of India has announced to run special AC trains to promote the proposed Ambedkar circuit.
- The Union Tourism Minister inaugurated a 3-day conference with state tourism ministers in Dharamsala and announced the launch of a special train to cover several locations of the Ambedkar Circuit.

Ambedkar Circuit:

- Ambedkar Circuit or Panch Teerth was first proposed by the central government in the year 2016.
- The following landmarks will be connected to this circuit:
- 1. Janmabhoomi (Birthplace of Ambedkar in Madhya Pradesh),
- 2. Shiksha Bhoomi (place in London where he studied)
- 3. Diksha Bhoomi (place in Nagpur

- where Ambedkar embraced Buddhism), Government of India will develop this Deeksha Bhoomi as an international tourist center.
- 4. Mahaparinirvana Bhoomi (the place in Delhi where he died) and
- 5. Chaitya Bhoomi (the place of his cremation in Mumbai).
- The proposed Ambedkar circuit will be built on the lines of the recently launched Ramayana circuit and the Buddhist circuit.
- Presently, special trains are being run for Ramayana, Buddhist and North East circuits.
- In the month of June, a special train was being run for the Ramayana circuit connecting Ayodhya and Janakpuri in Nepal.

Swadesh Darshan Scheme:

 It was launched by the Ministry of Tourism in the year 2014-2015 to achieve the integrated

- development of theme based tourism circuits.
- This scheme is operated under the National Tourism Policy, wherein 15 tourist circuits have been identified by this central sector scheme, which are as follows-
- 1.Ramayana Circuit, 2.Buddhist Circuit, 3.Coastal Circuit, 4.Desert Circuit, 5.Eco Circuit, 6.Heritage Circuit, 7.North East Circuit, 8.Himalayan Circuit, 9.Sufi Circuit, 10.Krishna Circuit , 11. Rural Circuit, 12. Tribal Circuit, 13. Tirthankar Circuit, 14. Spiritual Circuit and 15. Wildlife Circuit.
- As of March 2022, the Government of India has approved 76 projects for the construction and development of these 15 circuits and Rs 5,445 crore has been allocated for these projects.



Prasad Scheme:

 The Government of India under the Ministry of Tourism had launched the PRASAD scheme in the year 2014-2015. The full form of PRASAD scheme is 'Pilgrimage Rejuvenation and Spiritual Enhancement Campaign'. The scheme focuses on increasing religious tourism and developing and identifying pilgrimage sites in India.

Way forward:

The principal objective of these circuits is to attract a large number of domestic and foreign tourists across the country by integrating schemes like Swachh Bharat Abhiyan,

Skill India, Make in India etc and is to promote infrastructure, road and rail connectivity and create jobs in the tourism sector.



Varanasi named as SCO Tourism and Cultural Capital

Why in news:

The city of Varanasi has been nominated as the first-ever SCO Tourism and Cultural Capital during the period 2022-2023 at the 22nd Meeting of Shanghai Cooperation Organization (SCO) Council of Heads of State in Samarkand, Uzbekistan on September 16, 2022. Prime Minister Shri Narendra Modi had participated in the Summit.

Effect of the nomination:

- The nomination of Varanasi as the SCO Tourism and Cultural Capital will promote tourism, cultural and humanitarian exchanges between India and SCO member countries.
- It also underscores India's ancient civilizational ties with the SCO member states, particularly the Central Asian republics.
- 3. Under the framework of this flagship cultural outreach programme, several events will be organized in Varanasi during 2022-23, in which guests from SCO member states will be invited to participate.
- These events are expected to attract Ideologists, scholars, writers, musicians and artists, photo journalists, travel bloggers and other invited guests.

About Varanasi

- 1. Varanasi is a city situated on the Ganges River in northern India. It is one of the oldest continuously inhabited cities in the world.
- 2. The city has long been an educational and musical centre: many prominent Indian philosophers, poets, writers and musicians live or have lived in the city, and it was the place where the Banaras Gharana form of Hindustani classical music developed. In the 20th century, Hindi-Urdu writer Premchand and shehnai player Bismillah Khan were associated with the city.
- 3. The oldest Sanskrit college in India, the Banaras Sanskrit College, was established during the rule of the East India Company.

About SCO:

- 1. The Shanghai Cooperation Organisation Eurasian is а political, economic and security organization. In terms geographic scope population, it is the world's largest regional organization, covering approximately 60% of the area of Eurasia, 40% of the world population and more than 30% of global GDP.
- 2. The SCO was founded at a summit in Shanghai in 2001 by the presidents of Russia, China,

- the Kyrgyz Republic, Kazakhstan, Tajikistan and Uzbekistan.
- Over the years, it has emerged as one of the largest trans-regional international organisations. India and Pakistan became its permanent members in 2017.
- Iran and Belarus became its permanent members at 22nd SCO summit at Samarkand, Uzbekistan.

Conclusion:

This step will definitely enhance the unity in diversity of SCO and will give impetus to achieve the goals of the organization. India's rich cultural and civilizational history will connect member countries more closely with India to work together.



NEWS OF NATIONAL AND INTER-NATIONAL IMPORTANCE

1. Lithium Ion Cell

- India's first lithium battery manufacturing plant has been set up in Tirupati,
 Andhra Pradesh.
- This state-of-the-art plant has been set up by Chennai-based Munoth Industries Limited with an outlay of Rs 165 crore. The plant will meet almost 60 per cent of India's needs by producing 20,000 cells with a capacity of 10 amperes per hour (Ah).
- Currently, India imports lithium-ion cells mainly from China, South Korea,
 Vietnam and Hong Kong.
- Lithium-ion battery is a type of re-chargeable battery. When the battery is discharged, lithium ions flow from the cathode to the anode, while lithium ions flow in the opposite direction when the battery is charged.



2. East Asia Summit

Minister of State for Commerce and Industry, attended 'East Asia Summit Economic Ministers' Meeting recently in Siem Reap City of Cambodia The meeting saw representation from all 10 ASEAN countries as well as 8 partner countries including Australia, China, India, Japan, New Zealand, South Korea, Russia & the US.

• The Ministers exchanged views on global and regional economic developments including the outcomes of the 12th WTO Ministerial Conference, post-pandemic economic recovery efforts and measures adopted to mitigate the impact of global supply chains disruptions and strong inflation pressure.

About East Asia Summit (EAS)

- The EAS is the Indo-Pacific's premier forum for strategic dialogue. It is the
 only leader led forum where all key Indo-Pacific partners meet to discuss
 political, security and economic challenges that this region faces.
- The EAS has 18 members.
- ASEAN leads the forum, and the chair position rotates between ASEAN Member States annually.



3. UAE to Launch First Lunar Rover

The United Arab Emirates will launch its first lunar rover in November 2022. **Key Highlights:**

The Rashid rover, named after Dubai's ruling family, will be launched from the Kennedy Space Centre in Florida. The lunar mission is part of the UAE's broader strategy to become a major player in the field of space exploration. If the moon mission succeeds, the UAE would join the league of the only nations like Japan, USA, Russia and China, that have successfully landed a spacecraft on a lunar surface. Already, an Emirati satellite is orbiting Mars to study the red planet's atmosphere. The Rashid rover is expected to study the lunar surface, mobility on the moon's surface and how different surface interact with lunar particles. The 10-kilogram (22-pound) rover will carry two highresolution cameras, a microscopic camera, a thermal imagery camera, a probe and other devices.





4. Global Registry Of Fossil Fuels

A first-of-its-kind database for tracking the world's fossil fuel production, reserves and emissions was launched recently.

- The inventory includes data from more than 50,000 oil, gas and coal fields in 89 countries, covering 75 percent of global production.
- The top 12 most polluting sites were all in either the Gulf or Russia. It also shows these reserves would generate 3.5 trillion tonnes of greenhouse gas emissions, which is more than all of the emissions produced since the Industrial Revolution.
- **Significance:** By increasing transparency and accountability around fossil fuel production, the Registry aims to improve understanding of extraction impacts on the remaining carbon budget and ultimately to inform its management by decision makers.



5. India's Presidency For AIBD Extended for One More Year

India's Presidency for the prestigious Asia-pacific Institute of Broadcasting Development, (AIBD) has been extended for one more year.

- This was unanimously decided by the AIBD member countries at the two-day General Conference held in New Delhi.
- Currently, Chief Executive Officer of Prasar Bharati and Director General of Doordarshan Mayank Kumar Agrawal is the President of AIBD.
- The AIBD was established in 1977.
- It is a unique regional inter-governmental organisation of the United Nations Economic and Social Commissionfor Asia and the Pacific (UNESCAP) in the field of electronic media development.
- AIBD currently has 26 countries as full members represented by 43 organizations and 52 affiliate members.



6. Ocean Observing System Report Card 2022

The report was released by Global Ocean Observing System (GOOS).

- The report has been published annually since 2017.
- According to the report, the system to observe carbon concentration in the world's oceans is extremely inadequate given that 26 % of the 40 gigatonnes of carbon emitted into the atmosphere annually because of human activities is absorbed by the oceans.
- GOOS is a global system for sustained observations of the ocean. It is an Intergovernmental Oceanographic Commission (IOC)-led programme. The IOC is part of UNESCO.
- The IOC supports the International Argo program which maintains a global array of about 3,800 floating robotic instruments that measure pressure, temperature and salinity of the upper 2,000 metres of the world's ocean.
- Another network, called global tropical moored buoy array (GTMBA) which is a vast network of moorings stretching across all the ocean basins, is supported by NOAA, USA



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7. Strategic Gas Reserve

India is expediting a plan to set up a strategic gas reserve on the lines of its strategic petroleum reserve (SPR)

- India is the 4 th largest LNG importer in the world.
- Imports and local production of natural gas in FY22 resulted in supplies of 64.8 billion cu. m in the country.
- India produced 34.02 billion standard cu. m (mscm) of gas in FY22.
- The recent development of GAIL failing to secure its contracted product from Russia's Gazprom and having had to buy at exorbitant prices in spot markets has expedited the plans for the strategic reserve.
- The current spot prices (at which GAIL is forced to buy) are way higher than those earlier contracted (with Gazprom), ranging from \$15-17 per mmBtu.

About the Plan:

- Existing liquified natural gas (LNG) tunnels and exhausted oil wells are likely to be utilised for the gas reserve, along with the construction of new underground infrastructure such as large salt caverns.
- The storage facilities may be chosen close to the pipeline infrastructure so that the fuel can be easily transported in times of need.
- India is also expanding its national gas grid to 35,000km from the current 20,000km.
- The country's gas demand is expected to be driven by the fertiliser industry, power, city gas distribution, and steel sectors.
- India has 5.33 million tonnes of underground strategic oil reserve facilities at Visakhapatnam,
 Mangalore & Padur.

8. Cattle Control Bill

The Gujarat Legislative Assembly recently unanimously withdrew a Bill aimed at prohibiting the movement of stray cattle on roads and public places in urban areas of the State.

- The Bill mandated that the cattle-rearers were required to obtain a licence to keep animals such as stray cows and bulls in cities and towns and get them tagged, failing which they might face police action.
- The Bill mandated that after getting a licence for their cattle, the owner was
- required to get the cattle tagged and refrained from letting the cattle move on
- roads or any other public places in the city.

Cattle Tagging

- If the owner fails to get its cattle tagged in 15 days, he will be punished with imprisonment which may extend up to one year or a penalty of ₹10,000 or both, as per the provisions of the Bill.
- The sale of fodder for cattle in non-designated areas in cities is also prohibited under the Bill as it creates nuisance in the public places and particularly on the roads.
- Moreover, any person who assaults officials or creates hurdles during cattle catching operations by the civic officials, will be punished with one year of imprisonment and a minimum fine of ₹50,000.
- Cattle without tags would be seized and shifted to a permanent shed by the authorities and released after taking a fine of ₹50,000.



9. Commercial Papers

SEBI has allowed Real Estate Investment Trust (REIT) and Infrastructure Investment Trust (InvIT), to issue commercial papers.

- Reserve Bank of India, last month, indicated that InvIT and REIT having net worth of at least Rs 100 crore are eligible to issue commercial paper.
- A commercial paper is an unsecured money market instrument issued in the form of promissory note to raise short-term borrowings (7 days-1 year).
- It was introduced in 1990 as a privately placed instrument to enable highly rated corporate borrowers to diversify their sources of short-term borrowings.
- Operational Guidelines on CPs are issued by Fixed Income Money Market & Derivatives Association of India (FIMMDA).

Who is Eligible to Issue?

- Non-Banking Finance Companies (NBFCs) and All India Financial Institutions (AIFIs).
- Co-operative societies/unions, government entities, trusts, limited liability partnerships and any other body corporate having presence in India with a net worth of ₹ 100 crore or higher.
- Any other entity specifically permitted by the Reserve Bank of India (RBI). Mandatory Features of CP
- Issued in the form of a promissory note and held in a dematerialized form through any of the depositories approved by and registered with SEBI.

Essential characteristics of Commercial paper:

- Issued in minimum denomination of ₹ 5 lakh and multiples thereof.
- Issued at a discount to face value.
- No issuer shall have the issue of a CP underwritten or co-accepted.
- Options (call/put) are not permitted on a CP.

10. Export Promotion Council for Medical Devices

The long sought and requested Medical Devices Exports Promotion Council is finally sanctioned to be created under the aegis of department of pharmaceuticals DoP, Govt. of India.

- It will be headquartered at Noida and will have offices in Andhra Pradesh and Telangana.
- The council will help exporters in promoting their products in international markets.
- A big boost to Indian Medical Devices Manufacturing.
- This strategic step will go a long way in accelerating the exports and manufacturing growth of the medical devices sector." India currently exports Rs. 23,766 crore (2021-22) of medical devices up from previous year Rs 19,736 crore.
- **Significance:** The Exports Promotion Council for Medical Devices will help bring in coordinated inter-ministerial policy measures for unleashing the huge export potential and investment potential of over Rs. 80,000 Cr for manufacturing medical devices for the Global market in India's quest to be one of Top 5 preferred supplier base of medical devices worldwide





11. Anti-hijab protests in Iran

- At least 31 people were killed in clashes between security forces and protesters during anti-hijab demonstrations in Iran's capital Tehran. Women burnt hijabs and chopped their hair in more than 80 Iranian cities.
- The demonstrations began when a 22-year-old Kurdish woman, Mahsa Amini, in the north-western city of Saqez was dead due after being tortured by Moral police for not following a mandatory dress code.
- A mandatory dress code in Iran requires women to wear a headscarf and loose-fitting clothing to conceal public identity.
- The US has strongly condemned the incident and banned the Moral Police.



12. Chhello Show

- Gujarati film 'Chhello Show' has been nominated at the 95th Academy Awards, leaving behind The Kashmir Files and RRR. Directed by Pan Nalit, the story of the film revolves around a nine-year-old boy living in a village in Saurashtra, Gujarat state, who loves to watch movies.
- After its world premiere at the 20th Tribeca Film Festival on 10 June 2021, it was released in Germany, Spain, Japan, Israel and Portugal. The film won the Golden Spike for Best Film at the 66th Valladolid Film Festival in October 2021. It was nominated for the Tiantan Awards at the 11th Beijing International Film Festival.
- This Academy Award is also called Oscar, given by the Academy of Motion Picture Arts and Sciences, established in America in 1927.



13. JIMEX-2022

- On the occasion of 70th anniversary of the establishment of diplomatic relations between India and Japan, the sixth edition of Japan-India Naval Bilateral Exercise-2022, GIMEX-22, was conducted by the Indian Navy in the Bay of Bengal recently.
- This edition of GIMEX-22 marks the 10th anniversary of GIMEX, which
 debuted in Japan in 2012. GIMEX-22 seeks to strengthen the high
 level of mutual coordination between the maritime forces of the two
 countries through complex exercises in surface, sub-surface and air.
- The exercise was conducted in two phases, first at sea, then at Visakhapatnam port, after the 2+2 India-Japan Ministerial talks.





Current Affairs at a Glance

- 1. Former Dutch hockey player and former Indian women's hockey coach, Sjoerd Marijne has written a new book titled "Will Power: The Inside Story of the Incredible Turnaround in Indian Women's Hockey". It is published by HarperCollins Publishers India.
- 2. India's 'First Forestry University' will be established in Telangana.
- 3. The author, P.C. Balasubramaniam (PC Bala) wrote a new book in English titled "Rajni Ke Mantra: Life Lessons from India's Most Loved Superstar". It is published by Jaco Publishing House (India).
- 4. Recently, India has entered into an agreement with Madagascar for the training of diplomats.
- 5. Darjeeling Zoo has been rated as the best zoo in the country by the Central Zoo Authority. On the other hand, the Zoological Park of Chennai got the second position and the Mysore Zoological Garden got the third place. All these are assessed on the basis of zoo management and other parameters.
- 6. Jharkhand State Government increased the reservation for SC, ST and others to 77%.
- 7. Telangana State Government has announced to name its Secretariat after 'Dr B R Ambedkar'
- 8. Maharashtra became the first state to digitize property registration.
- 9. The second edition of the three-day International Conference- 'Courtyard 2022' (Theme-Augmenting Nature by Green Affordable New-Habitat) on "Zero-Carbon Transformation in Buildings" took place.
- 10. Recently Bangalore FC won the 131st edition of Durand Cup.
- 11. The Tamil Nadu State Government has notified 'Nanjarayan Tank' as a 'Bird Sanctuary'.
- 12. Prasanna Kumar Motupalli has been appointed as the CMD of LIC India Limited.
- 13. Army Chief Manoj Pandey has inaugurated the 'Kargil International Marathon' in Ladakh.
- 14. Recently, Bangladesh cricketer Rubal Hossain has announced his retirement from Test cricket.
- 15. The Lieutenant Governor of Delhi recently launched the community policing initiative 'We Care'.
- 16. Recently, Adani Green has started 325 MW wind power project in Madhya Pradesh.
- 17. Odisha State Government has decided to invest Rs. 261 crore for 'Livelihood Action Plan'.
- 18. Maharashtra State Government recently announced to change the name of 'Daulatabad Fort' to 'Devagiri Fort'.
- 19. The first three-day "Floating" photo exhibition organized by the Union Ministry of Information and Broadcasting in Imphal, Manipur, at Loktak Lake. This innovative exhibition was mounted on a specially constructed floating platform on the lake.
- 20. Russia announced annexation of 4 Ukraine regions, Donetsk, Luhansk, Zaporizhzhia and Kherson.

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The Department of Animal Husbandry & Dairying, Government of India is implementing the scheme of National Livestock Mission since the financial year 2014-15. In view of the present need of the sector the NLM scheme has been revised and realigned from F/Y 2021-22.

1. Mission Objectives:

- Employment generation through entrepreneurship development in small ruminant, poultry and piggery sector & Fodder sector.
- Increase of per animal productivity through breed improvement.
- Increase in production of meat, egg, goat milk, wool and fodder.
- Increasing availability of fodder and feed to substantially reduce the demand – through strengthening the fodder seed supply chain and availability of certified fodder seeds.
- Encouraging establishment of fodder processing units to reduce the demand supply gap.
- Promoting risk management measures including livestock insurance for farmers.
- Promoting applied research in prioritized areas of poultry, sheep, goat, feed and fodder.
- Capacity building of state functionaries and livestock owners through strengthened extension machinery to provide quality extension service to farmers.
- Promoting skill based training and dissemination of technologies for reducing cost of production, and improving production of livestock sector.

2. Jurisdiction of the scheme:

• The scheme will be implemented all over India from 2021-22.

3. Mission Design:

The realigned National Livestock Mission will have following three Sub-Missions:

- a) Sub-mission on Breed Development of Livestock and Poultry
- b) Sub-mission on Feed and Fodder Development
- c) Sub Mission on Innovation and Extension



National Livestock Mission

- Timely utilization of funds released by the Department as Central Share.
- Project implementation time.
- Timely release of State share.
- Increase in production of egg, meat and wool in the state.
- Increase in availability of good germplasm through entrepreneurship programme

4. Implementing Agency:

 The National Livestock mission has been implemented through the State Implementing Agency established under the State Animal Husbandry Department.

5. Monitoring of the Scheme:

- The programme will be monitored through MIS system for maintaining data and online monitoring.
- The assets will be monitored through GI tagging.
- Implementation of the scheme will be reviewed at National Review Meeting, Regional Review Meeting and State Review Meeting.
- Further, each State will need to submit the physical and financial progress of the schemes in every quarter.

6. Ranking of the States for performance:

The parameters for the performance will be :

- Number of units established under entrepreneurship programme.
- No. of jobs created through such entrepreneurship development.
- Quantity of fodder seed produced and improvement of fodder production.
- Number of farmers benefitted.
- Number of Livestock Insured under insurance programme.
- Number of innovative projects promoted and actually implemented.
- Creation of awareness amongst the farmers and youth for the scheme.



India took a giant leap towards providing accessible and affordable healthcare to the common man with the launch of Ayushman Bharat — Pradhan Mantri Jan AarogyaYojana (AB-PMJAY) by the PM, Shri Narendra Modi on 23rd September, 2018 at Ranchi, Jharkhand. This is the "world's largest government funded healthcare program" targeting more than 65 crore beneficiaries.

1. Salient Features:

- AB-PMJAY is the world's largest Government funded health assurance scheme.
- AB-PMJAY provides health assurance of up to Rs.5 Lakh per family per year for secondary and tertiary healthcare hospitalizations.
- AB-PMJAY is a completely cashless and paperless scheme.
- The benefits under AB-PMJAY are portable across the country.
- There is no cap on family size, or age or gender.
- The beneficiary families have been identified from the Census 2011 across rural and urban areas.
- The number of eligible beneficiaries is 10.74 crore families (50 crore people).
- 33 States/UTs implementing AB-PMJAY have further expanded the coverage of the scheme to include 13.44 crore families (65 crore people).
- AB-PMJAY is being implemented in all States and UTs barring West Bengal, NCT of Delhi and Odisha.
- AB-PMJAY is completely funded by the Government and costs are shared between Central and State Governments in the ratio as per the extant directives issued by Ministry of Finance.
- The States/UTs have been provided

2. Three-tier model:

The scheme is implemented across the country through a three-tier model.

- National Health Authority: NHA an attached office of the Ministry of Health and Family Welfare with full functional autonomy is the apex body implementing AB-PMJAY across the country.
- State Health Agencies: For effective implementation of AB-PMJAY at States/UTs level, SHAs have been established.
- District Implementation Units:
 DIUs have been set up for ensuring on-ground coordination between scheme stakeholders and for smooth implementation.



Ayushman Bharat – Pradhan Mantri Jan AarogyaYojana

with the flexibility to implement the scheme in the operational model best suited to the local conditions. Thus, AB-PMJAY is being implemented in Insurance mode, Mixed mode and Trust mode.

3. Steps taken to improve registrations:

- Aapke Dwar Ayushman: Leveraging grassroots network of
- » Healthcare workers (HCWs),
- » Frontline workers (FLWs),
- » Panchayati Raj institutions (PRIs),
- » Village level entrepreneurs (VLEs) to mobilize and verify beneficiaries under ADA initiative.
 - Using the updated databases of welfare schemes of Central Government Ministries/ Departments for better targeting of PMJAY beneficiaries to reach out to eligible individuals from this list to issue Ayushman cards to them.
- Four additional agencies onboarded, for the generation of Ayushman cards across the country.
- Eight additional agencies onboarded to ensure immediate approval of Ayushman card requests.
- An enhanced location hierarchy-based search option to access village level beneficiary data.
- A revamped "Self BIS" system launched for self/assisted verification.
- Crowd sourced approval functionality enabled for beneficiary record approval.

4. Fraud detection and Data privacy:

- Detailed guidelines have been provided to address the issues around potential fraudulent activities that could be committed by any individual or organization.
- Anti-fraud cells will be established at the national and state level, and strong IT tools will be deployed to prevent and detect fraud.



1. Why in News:

- Sign language day was celebrated by Indian Sign Language Research and Training center (ISLRTC) under aegis of 'Azadi ka Amrit Mahotsav'
- ISLRTC is an autonomous body under Department of Persons with disability of Ministry of Social justice and empowerment.

2. Major happenings on the day:

- Theme: "Sign Language Unite Us"
- Launch of Indian sign language(ISL) dictionary app
- Several e-contents were launched, which include:
- 1. ISL e-content for NCERT Books for class 6
- 2. ISL e-content of NBT's selected books of Veergatha series
- Total of 500 academic words in Indian sign language were launched
- 5th ISL competition for deaf students and interpreters, to showcase their creativity, skills and knowledge.

3. About International Day of Sign Language:

- Sign language is a set of hand and facial gestures used for communication
- 23rd September was designated as an international day of sign language by United Nations general assembly.
- Indian Sign Language Research and Training center (ISLRTC) celebrates it every year.
- National Implementation Committee chaired by home minister approved its celebration .

4. Issues faced by disabled:

- Disability is often a social construct which takes away inclusiveness of disabled in society
- The society needs to be more accommodating so that it can serve good for all.
- There is a need for social valorization for the impaired community, it can be achieved through:
- 1. Creating an infrastructure that is accessible to all
- Equipping the public places with facilities like escalators, lift etc for

- easy movement
- 3. Commonize Indian Sign language for general public
- 4. Educating people on the aspects of disability that are often ignored, thus striving to eradicate stigmatization.
- 5. Skill development and efficient education policies that can aid a specially abled person to lead a happy life.



International Day of Sign language

- under Azadi ka Amrit Mahotsav this year.
- International Day for Sign Language was first celebrated in 2018 as a part of International week of the deaf.
- The day was proposed by World Federation of the Deaf (WFD).
- 23rd September was chosen as it is the day when WFD was established in 1951.

5. How India ensures inclusivity for Disabled:

- Article 41 of the Indian constitution envisages security of work, education and public assistance to disabled people.
- State list has the subject of Relief of the disabled and unemployable
- Schedule 11 and 12 pertaining to Panchayats and municipalities recognizes the welfare of people with disability.
- The persons with disability Act, 1995 was the first law for the inclusivity of disabled people
- In 2007 India became party to United Nations convention on rights of person with disability (UNCRPD)
- 11th five year plan acknowledged the distraught deaf community faced
- In 2015, ISLRTC was formally established for inclusivity of deaf community.
- Central government announced for standardization for ISL in Budget 2021-22.



1. Why in News:

Assam's Chief Minister Himanta Biswa Sarma recently, unveiled a memorial of three rhinos statutes created from the ashes collected from burning of about 2479 rhino horns.

2. About:

- It is celebrated on 22 of September every year
- It was first announced by World Wildlife Fund (WWF)
- First celebrated in 2011
- Theme of the year 2022: "Five rhino species forever"

3. Abode of Unicorns:

- The memorial was named as Abode of Unicorns
- It was unveiled at Kaziranga National Park, Assam
- It comprises three rhinos: one calf, one male and one female
- The rhinos are made from ashes of about 2479 rhino horns
- Last year, Assam government burnt about 2479 rhino horns collected by conservation authorities
- The statue of Rhinos are accompanied by forest guards that are made of different materials

4. Conservation initiatives:

- IUCN red list status: Vulnerable
- CITES: appendix 1
- Wildlife Protection Act, 1972 : schedule 1
- The New Delhi declaration on Asian rhinos 2019 strive to conserve and protect the rhinos

5. The Great Indian Rhino::

- The word rhinoceros is derived from Ancient Greek which literally means 'nose horned'
- They are mammals belonging to family Rhinocinotidae
- There are a total of five species of Rhinos:
 - 1. Sumatran Rhino
 - 2. Great One-Horned Rhino
 - 3. Black Rhino
 - 4. Javan Rhino



WORLD RHINO DAY

7. Indian rhino vision 2020:

- It is an initiative by government of Assam in partnership with World Wildlife Fund India International rhino Foundation and various other organisations
- It's main aim was to increase rhino population to 3000 through reestablishment and relocation.
- Ministry of environment forest and climate change has created DNA profiles for rhinos
- National rhino conservation strategy 2019 further aim to protect one horned rhinoceros

5. White Rhino

- The great one-horned rhino, also known as the Indian rhino is the species native to India and Nepal
- They total population today stands at around 3700 individuals
- They have single black horn and a grey Brown hide with skin folds
- The horn is made of Keratin, a kind of protein that forms nail and hair
- In India, they can be found in Assam, Uttar Pradesh and West Bengal
- Kaziranga National Park and Pobitora wildlife sanctuary in India, Chitwan National Park and Bardia National Park in Nepal are some of the major protected areas for rhinos

6. Threats:

- Habitat destruction due to disasters and human activities
- The population is continuously on decline in the other areas around due to anthropogenic pressure
- Rhino mortality changes from season to season for instance during droughts due to lack of food and water.
- The anthropogenic causes include electrocution and poisoning
- Poaching: Rhinos are particularly poached for their horns for they are believed to have some medicinal value which in-fact is a sheer absurdity, and is unproven and flawed.



1. About DBT:

- DBT was started on 1st Jan, 2013 with the aim of reforming Government delivery system in welfare schemes for simpler and faster flow of information/funds and reduction of fraud.
- DBT Mission was created in the Planning Commission to act as the nodal point for the implementation of the DBT programmes.
- The Mission was transferred to the Department of Expenditure in July, 2013 and continue to function till 14.9.2015.
- To give more impetus, DBT Mission and matters related thereto has been placed in Cabinet Secretariat under Secretary (Co-ordination & PG) w.e.f. 14.9.2015.

2. Objectives of DBT:

- Curbing pilferage and duplication
- Accurate targeting of the beneficiary
- Reduced delay in payments
- Electronic transfer of benefits, minimizing levels involved in benefit flow

3. Components of DBT:

- Beneficiary Account Validation
- Payment and Reconciliation
- Core Banking Solutions
- Aadhaar Payment Bridge (APB)

4. Benefits of DBT:

 DBT and other governance reforms have led to removal of duplicate/ fake beneficiaries and plugging of leakages etc., as a result of which the government has been able to

5. The Reach:

- 319 schemes from 53 Ministries/ Departments are being implemented under DBT.
- As a process, Centrally Sponsored Schemes are implemented through State Governments and granular level details are being maintained by the respective State Governments.



Direct Benefit Transfer (DBT)

- target the genuine and deserving beneficiaries.
- DBT will bring efficiency, effectiveness, transparency and accountability in the Government system and infuse confidence of citizens in governance.
- Use of modern technology and IT tools will help realize the dream of Maximum Governance, Minimum Government. DBT is among the high priority and focus area of the Government

6. Major Central schemes seeded with DBT:

PM Kisan Samman Nidhi (PM-KISAN):

- PMKISAN Scheme is a Central Sector Direct Benefit Transfer (DBT) Scheme,
- Financial assistance of Rs.6000/- per annum is provided.
- The amount is transferred in three four-monthly instalments of Rs. 2000/- each.
- It is paid directly into the bank accounts of the beneficiary farmers identified by the State/UT Governments.

MG NREGS:

- It is a demand driven wage employment programme
- Provides for the enhancement of livelihood security of the households in rural areas of the country.
- At least one hundred days of guaranteed wage employment is provided in every financial year to every household whose adult members volunteer to do unskilled manual work.

Pradhan Mantri Matru Vandana Yojna:

- PMMVY Scheme enables beneficiaries to receive the scheme benefits through DBT.
- It aims at encouraging improved health seeking behavior among Pregnant Women and Lactating Mothers (PW&LM).

Pradhan Mantri Awaas Yojana- Gramin:

 To address the gaps in the rural housing program and in view of Government's commitment to providing "Housing for All" by the scheme 2022, the Indira Awaas Yojana (IAY) has been re-structured into Pradhan Mantri Awaas Yojana –Gramin (PMAY-G) w.e.f. 1st April 2016.

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1. About RGM:

- The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since December 2014.
- This programme will also benefit women in particular since over 70% of the work involved in livestock farming is undertaken by women.

2. Objectives:

- To enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies.
- To propagate use of high genetic merit bulls for breeding purposes.
- To enhance Artificial insemination (AI) coverage through strengthening breeding network and delivery of Artificial insemination services at farmers doorstep.
- To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner.

3. Duration of the Project:

 Rashtriya Gokul Mission will be implemented throughout the country from 2021- 2022 to 2025-26 on the funding pattern.

4. Scope and Area of Operation:

- Area: Rashtriya Gokul Mission will be implemented throughout the country.
- Scope: All Components related to genetic upgradation of bovine population as mentioned in the guidelines will be eligible for funding under RGM.

5. Implementing Agencies:

- State Livestock Development Boards
- State Milk Federations
- Central Frozen Semen Production and Training Institute
- Central Cattle Breeding Farms,
- National Dairy Development Board
- Indian Council of Agricultural Research and its Institutes



Rashtriya Gokul Mission

8. Monitoring of the project:

- Project will be monitored by National Dairy Development Board over duration of five years.
- Monthly progress report will be prepared
- All the activities related to IVF pregnancies shall be uploaded on INAPH data base.

operation of Rashtriya Kamdhenu Aayog

Skill Development
Farmers Awareness
Research Development and
Innovation in Bovine Breeding

6. State Ranking:

RGM ranking would be provided on the following parameters:

- (i) Increase in AI coverage from existing AI coverage;
- (ii) % of targets achieved under implementation of Nationwide Al programme;
- (iii) % of targets achieved in establishment of MAITRIs;
- (iv) completion of projects sanctioned under the scheme and
- (v) feedback from farmers/ beneficiaries of NAIP/ sex sorted semen/IVF technology.

7. Components:

Availability of High genetic Merit Germplasm:

- a) Bull Production Programme
 - » Progeny Testing
 - » Pedigree Selection
 - » Genomic Selection
 - » Import of Germplasm
- b) Support to semen stations: Strengthening of existing semen stations.
- c) Implementation of IVF Technology
 - » IVF Laboratories
 - » Implementation of In Vitro Embryo Production Technology
 - » Implementation of IVF technology for getting assured pregnancy
- d) Breed Multiplication Farms

Extension of Artificial Insemination Network

- a) Establishment of MAITRIs
- b) Nationwide Al programme
- Using sex sorted semen for getting assured pregnancy
- d) Implementation of National Digital Livestock Mission

Development and Conservation of indigenousBreeds

- Assistance to Gaushalas, Gosadans and Pinjarapoles
- b) Administrative expenditure/

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1. Why in News:

Researchers from the University of Finland found that plastic can travel into the human food web through plants, animals and Fish.

2. What are Nano Plastics?

- Nano plastics are tiny plastic debris particles smaller than 1,000 nanometres.
- They are smaller than the microplastics
- They are invisible to the naked eye and at times can't be detected in an ordinary optical microscope
- Due to their small size, they easily pass physiological barriers and enter an organism
- They are of mainly two types:
- 1. Primary: that are deliberately manufactured for cosmetics soap etc
- 2. Secondary: that are produced out of waste plastic disintegration.

3. Plastic as a threat:

- Plastic is a classic example of boon turned bane.
- It derives its name from 'plastikos', which means capable of being shaped
- Since 1950 to 2015, almost 8300 million tones of plastic has been produced.
- As per current production and management rate, by 2050 this plastic production would reach 12000 MT
- Packaging material accounts 24% of the total domestic consumption of plastic
- Nearly every piece of plastic begins as a fossil fuel and green house gases are emitted at each phase of plastic life cycle.

4. Plastic in India:

- Approximately 3.4 million tones of plastic was generated in India during 2019-20
- Plastic industry is one of the biggest employment generator valued around 5.1 lakh crore
- Out of 30000 units that produce plastic 90% of them are small and medium-sized enterprises.



Nano plastics

uses AI to collect floating waste

 NetTag, low cost transponder that allow fishers to locate and recover lost nets

5. Indian initiatives:

- In 1999, ministry of environment and forest (then MoEF) notified first law on Plastic namely The plastic manufacture sale and usage rules.
- Plastic waste management and handling rules 2011 were introduced to address issue of Plastic waste management (PWM)
- These rules were introduced under environment protection act, 1986 by ministry of environment forest and climate change(MoEF&CC)
- Indian government adopted threepronged approach ie:
- 1. Behavioral change
- 2. Institution mechanism
- 3. Extended producer responsibility
- In 2019, Indian prime minister called to phase out SUP(single use plastic) by 2022
- As per notification dated 18
 January 2022 the determination of degree of degradability and degree of disintegration shall follow appropriate standards developed by BIS
- PWM amendment rules notified on 16 February 2022 gave legal force to 'extended producer responsibility for plastic packaging'

6. Technology for Plastic Pollution Prevention:

- GoJelly project funded by EU where jellyfish mucus captures and binds nanosized particles thus removing them from wastewater
- CLEVER-volume by portugal uses sensors that allows the port authorities to certify the amount of ship waste reported
- CoraBalls in united states, capture microfibre sheds when placed in laundry machine
- BluePhin, a battery poweredzero carbon emission robot that



MCQs based on Preliminary Exam

- **01.** Consider the following statements:
 - 1. The boundaries of a National Park are defined by legislation.
 - 2. A Biosphere Reserve is declared to conserve a few specific species of flora and fauna.
 - 3. In a Wildlife Sanctuary, limited biotic interference is permitted.

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

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **02.** Human activities in the recent past have caused the increased concentration of carbon dioxide in the atmosphere, but a lot of it does not remain in the lower atmosphere because of:
 - 1. Its escape into the outer stratosphere.
 - 2. The photosynthesis by phytoplankton in the oceans.
 - 3. The trapping of air in the polar ice caps. Which of the statement/s given above is/are correct?
 - (a) 1 only
 - (b) 1 and 2 only
 - (c) 2 and 3 only
 - (d) 1, 2 and 3
- **03.** In the context of ecosystem productivity, marine upwelling zones are important as they increase marine productivity by bringing the:
 - 1. Decomposer microorganisms to the surface.
 - 2. Nutrients to the surface.
 - 3. Bottom-dwelling organisms to the surface. Which of the statement/s given above is/are correct?
 - (a) 1 only
 - (b) 2 only
 - (c) 2 and 3 only
 - (d) 1, 2 and 3
- **04.** Which of the following elements are present in all proteins?
 - 1. Carbon
 - 2. Hydrogen
 - 3. Oxygen

4. Nitrogen

Select the correct answer using the codes given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- **05.** Which of the following leaf modifications occurs/ occur in desert areas to inhibit water loss?
 - 1. Hard and waxy leaves
 - 2. Tiny leaves or no leaves
 - 3. Thorns instead of leaves

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **06.** Consider the following kinds of organisms:
 - 1. Bat
 - 2. Bee
 - 3. Bird

Which of the above organism/s is/are pollinating agent/agents?

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **07.** Consider the following places:
 - 1. Siliguri
 - 2. Kolkata
 - 3. Sittwe
 - 4. Paletwa
 - 5. Imphal

Which of the above places will be connected by Kaladan multi-modal transit transport project?

- (a) 1, 2, and 3 only
- (b) 2, 3, and 4 only
- (c) 3, 4, and 5 only
- (d) 1, 2, and 5 only
- **08.** Regarding the 'Sagarmala Project', consider the following statements:
 - 1. It is the flagship project under the Ministry of Road Construction and Highways.



- 2. The main aim of Sagarmala Yojana is to develop port infrastructure in India and provide port connectivity with multiple modes of transport like roadways and railways.
- 3. It was announced by Prime Minister Narendra Modi during National Inland Waterway Summit in 2014.

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

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **09.** Consider the following pairs:

Oil Reserves : State

Digboi : West Bengal
 Bina : Madhya Pradesh

3. Ashoknagar : Assam4. Koyali : Gujrat

Which of the pair/s given above is/are correctly matched?

- (a) 2 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- **10.** Which of the following statement/s is/are correct about Guru Tegh Bahadur?
 - 1. He was the sixth Sikh guru.
 - 2. The year 2021 was celebrated as the 400th Prakash parv to celebrate his 400th birth anniversary.
 - 3. Gurudwara Rakabganj Sahib in New Delhi was built over the place where he was beheaded.

Select the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **11.** Consider the following statements:
 - 1. Heavy metals are those metals that have high densities but low atomic weight.
 - 2. Large concentration of heavy metals in drinking water can cause Alzheimer's disease.

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
- **12.** Consider the following organisms:
 - 1. Agaricus
 - 2. Nostoc
 - 3. Spirogyra

Which of the above organism/s is/are used as biofertilizer/biofertilizers?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **13.** Full convertibility of the rupee may mean:
 - 1. Its free float with the international currencies.
 - 2. Its direct exchange with any other international currency at any prescribed place inside and outside the country.
 - 3. It acts just like any other international currency.

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

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **14.** Consider the following statements made about Sedimentary Rocks:
 - 1. Sedimentary rocks are formed at the earth's surface by the hydrological system.
 - 2. Formation of sedimentary rocks involves the weathering of pre existing rocks.
 - 3. Sedimentary rocks contain fossils.
 - 4. Sedimentary rocks typically occur in layers.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 3, and 4 only
- (d) 1, 2, 3 and 4
- **15.** Consider the following climatic and geographical phenomenon:
 - 1. Condensation
 - 2. High temperature and humidity
 - 3. Orography
 - 4. Vertical wind



Thunder cloud development is due to which of **19.** these phenomenon?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- **16.** Holding companies mean:
 - 1. All the holding companies, investing in the shares of other companies.
 - 2. Such companies, which have dividend as their main source of income.
 - 3. Such companies, which are not indulged in the production of goods and services.

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

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **17.** A unit is considered to be a prey to Industrial Sickness, which:
 - 1. Is unable to pay the debts and interests of creditors since last three months or more.
 - 2. Shows a cumulative loss of 50 percent or more of its networth during one or more years.

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
- **18.** Which of the following cause/s is/are not **21.** responsible for reduced Authority of District Magistrate?
 - 1. Establishment of welfare state at the place of police state.
 - 2. Separation of judiciary from executive.
 - 3. Introduction of I.A.S. at the place of I.C.S.
 - 4. Increase in political awareness of people.
 - 5. Establishment of Federal State at the place of Unitary State.

Select the correct answer from the code given below:

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

- 9. Which of the following provisions were placed by C.R. Das, related to the resolution of Non-Cooperation Movement?
 - 1. Renouncing titles and honorary offices.
 - 2. The boycott of foreign clothes, government schools, colleges and courts.
 - 3. Resignation from government jobs and disobedience of law.
 - 4. Founding of National schools.

Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 1, 2 and 3 only
- (d) All of the above
- **20.** Consider the following statements regarding Congress Socialist Party (CSP):
 - 1. This group was influenced by the idea of Fabianism.
 - 2. They (CSP) assigned themselves the task of both transforming and strengthening of the Congress.
 - 3. They (CSP) never tried to oppose the existing leadership of Congress.

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

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) All of the above
- **21.** Which of the following statement/s is/are true about Indian Councils Act of 1892?
 - The right of putting questions to executive council was given to legislative council members (but not supplementary questions).
 - 2. Right to discuss the budget was given.

Select the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **22.** Match the List-I with List-II and select the correct option:

List-I List-II

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(Originating Phases) (Resultant tides)

- A. The sun and the moon are at the right angle with the earth
- B. The sun, the moon and the earth are in a straight line
- a straight line
 C. The moon is the 3. Apogean tide nearest to the earth

2. Neap tide

D. The moon is the 4. Perigean tide farthest from the earth

Select the correct answer from the code given below:

- A B C D
- (a) 2 1 4 3
- (b) 2 1 3 4
- (c) 1 2 4 3
- (d) 1 2 3 4
- **23.** Consider the following statements:
 - 1. In India, ground nut is principally grown as rain fed crop.
 - 2. In India, sesamum is grown as Kharif crop in northern India but in south India, it is generally grown during Rabi season.

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.** Consider the following statements about Meghalaya Plateau:
 - 1. Meghalaya Plateau is a part of Peninsula, as per geological structure similarities.
 - 2. Shillong peak is the highest peak of Meghalaya Plateau.
 - 3. Mawsynram is located on the Khasi hills and Cherrapunji is located on Garo hills.

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

- (a) 1 only
- (b) 1 and 2
- (c) 1 and 3
- (d) All of the above
- **25.** In an ecosystem, 'standing crop' represents:
 - (a) The amount of living matter at a trophic level.
 - (b) The amount of nutrients at a trophic level.
 - (c) The number of trees in an ecosystem.

- (d) Total number of trophic levels in an ecosystem.
- **26.** Which of the following is/are not a part/parts of Panchasheel Agreement?
 - 1. This agreement compels India and China to secure integrity and sovereignty of each other.
 - 2. It gives a way for non-interference in each other's internal issues
 - 3. It talks about peaceful co-existence, grants and aids.
 - 4. It talks about enhancing economic growth.

Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 4 only
- (d) None of the above
- **27.** Consider the following statements:
 - 1. Ryotwari system was most distributed pattern of revenue as far as land area cover is concerned.
 - 2. Permanent settlement was a method of land revenue but it covered lesser land area than that of Mahalwari.

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

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **28.** Consider the following statements regarding Vaikom Satyagraha:
 - 1. It was associated with the entry of scheduled castes in temples which was banned.
 - 2. Ezhava and pulayan tribes were mostly affected by it.

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
- **29.** Who among the following personalities were not related to Justice Party?
 - 1. C.N. Mudaliar
 - 2. P. Theagaraya
 - 3. K. Kelappan
 - 4. T.K. Madhavan



Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 1 and 4 only
- (d) 2 and 4 only
- **30.** Which of the following statements are correct about Social Service League?
 - 1. It was focused on labour society.
 - 2. It was focused on helpless and poor people.
 - 3. It helped to create livelihood and better life conditions for poor.
 - 4. It opened day and night schools.

Select the correct answer from the code given below:

- (a) 1 and 4 only
- (b) 2 and 3 only
- (c) 1, 2, 3 and 4
- (d) 1, 2 and 3 only
- **31.** Correctly match the following pairs:

List-A

List-B

- A. Warkari Sect
- 1. Tukaram
- B. Dharkari Sect
- 2. Ramdas
- C. Sahajiya Sect
- 3. Chandidas
- D. Nipakh Sect
- 4. Dadu Dayal

Select the correct answer from the code given below:

- A B C D
- (a) 1 2 3 4
- (b) 1 2 4 3
- (c) 3 4 1 2
- (d) 4 3 2 1
- **32.** Consider the following statements:
 - Navya Nyaya or Neology is the new development of Nyaya school which occurred in the 13th century in Bengal and Mithila.
 - 2. The theory of atomic structure was established by the Vaisheshik school.
 - 3. Sankhya philosophy explains the dynamics of body and nature of mind.
 - 4. Vedanta philosophy was considered as the father of Mathematics in Ancient Indian History.

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

- (a) 1 only
- (b) 4 only

- (c) 2 and 3 only
- (d) None of the above
- **33.** Which of the following is/are considered as Muslim Sanskaras?
 - 1. Circumcision
 - 2. Aqiqah
 - 3. Chilla-Nashini
 - 4. Nigah

Select the correct answer from the code given below:

- (a) 4 only
- (b) 1 and 4 only
- (c) 2 and 3 only
- (d) All of the above
- **34.** Which of the following statements can be treated as exception to Right to Equality?
 - 1. President and Governors are free from court related issues.
 - 2. Privileges to Members of Parliament.
 - 3. Ambassadors and Diplomates are free from court related liabilities and obligations.

Select the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) 3 only
- (d) 1, 2 and 3
- **35.** Which of the following statement/s is/are not correct?
 - 1. All the planets revolve around the sun in elliptical path known as orbit.
 - 2. All planets rotate in the same direction except Mercury and Uranus.
 - 3. As the distance of the planet from the sun increases, the time taken by it to complete one revolution also increases.

Select the correct answer from the code given below:

- (a) 3 only
- (b) 1 and 2 only
- (c) 2 only
- (d) 2 and 3 only
- **36.** Which of the following statement/s is/are correct?
 - 1. There is a narrow strip of lowland along the Atlantic coast in the western part of South

America.

2. Andes form the second longest mountain range/system in the world after the Himalayas.

Select the correct answer from the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 37. Correctly match List-I (River) with List-II (Political Boundary):

List-I

List-II

- Amur
- 1. Cambodia and Thailand
- B. Danube
- 2. Russia and Hungary
- C. Mekong
- 3. China and Russia
- D. Salween
- 4. Romania and Bulgaria
- 5. Myanmar and Thailand

Select the correct answer from the code given below:

- C D Α В
- 1 3 2 4 (a)
- (b) 1 5 3 4
- 3 1 2 4 (c)
- (d) 4 1 5 3
- Correctly match List-I (Valley) with List II (Sate): 38.

List-I

List-II

- A. Markha Vallev
- 1. Sikkim
- B. Dzukou Valley
- 2. Himachal Pradesh
- C. Sangla Valley
- 3. Jammu and
- D. Yumthang Valley
- Kashmir 4. Nagaland

Select the correct answer from the code given below:

- В D Α C
- (a) 2 4 3 1
- (b) 3 1 2
- (c) 2 1 3 4
- (d) 3 4 2
- Which one of the following pairs of states and tribes is not correctly matched?

(State)

(Tribe)

(a) Assam

Miri

(b) Nagaland

- Konyak
- (c) Arunachal Pradesh (d) Madhya Pradesh
- Lambadi

- **Apatani**

- 40. Consider the following statements:
 - It is extreme weather related cloud.
 - 2. This is a vertical cloud with a rounded top and horizontal base.
 - 3. Related to the humid tropical regions and associated with uprising conventional currents.

The above description is related to which of the following clouds?

- (a) Cumulonimbus cloud
- (b) Cirrostratus cloud
- (c) Alto cumulus cloud
- (d) Cumulus cloud
- 41. Consider the following statements:
 - 1. Angora wool is obtained from the goats of Angora species which are found in the hilly areas of Jammu and Kashmir.
 - 2. Soft hair are found near the skin of Kashmir's Pashmina goat, by which superfine shawls are made, which are called as 'Pashmina shawls'.
 - 3. Pashmina goat is also called as 'Changthangi'.
 - 4. Pashmina, shawl has got a 'geographical indication'.

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

- (a) 1 and 4 only
- (b) 2 and 3 only
- (c) 3 and 4 only
- (d) 1, 2, 3 and 4
- Consider the following statements regarding Polymerase Chain Reaction (PCR):
 - 1. Using this technique, lakhs of DNA copies can be made in a very short period of time.
 - 2. With the help of this technique, cancer and AIDS can be diagnosed at a very early stage.
 - 3. It is used in Fingerprinting Technique.
 - 4. Kary Mullis was awarded with Nobel Prize in 1993 for the invention of this technique.

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

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 4
- 43. Indian Constitution has the provision of President Rule in the states, in the condition of failure of constitutional machinery. In this context consider the following statements:



- 1. If the state government fails to follow the directions given by the central government in accordance with constitutional provisions, it will be regarded that the constitutional machinery in the state has been failed.
- 2. Article 365 defines the failure of constitutional machinery.

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

44. Fiscal drag means:

(a) Adverse impact on tax revenue due to

- economic depression.
- (b) Adverse impact of fiscal policy on inflation and economic growth.
- (c) Fall in the tax revenue due to tax rebates and exemptions.
- (d) Impact of inflation on GDP and tax revenue.

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



MCQs Based on Current Affairs

1. Consider the following statements:

- 1. The 9th Session of Governing Body of the 'International Treaty on Plant Genetic Resources for Food and Agriculture' (ITPGRFA) was held in New Delhi.
- 2. The theme of session was "Celebrating the Guardians of Crop Diversity: Towards an Inclusive Post-2020 Global Biodiversity Framework."

Which of the above statements is/are correct?

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

Answer- C

2. Consider the following statements regarding hunger:

- 1. Hunger is defined as a condition where a person does not have the physical or financial ability to eat enough food or to meet basic nutritional needs for a sustained period of time.
- 2. 345 million people are presently experiencing acute hunger, a number that has more than doubled since 2019.

Which of the above statements is/are correct?

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

Answer- C

3. What is radio altimeter?

- A. Radio altimeter is an instrument that provides direct height above terrain information to various aircraft system.
- B. Radio altimeter is medical instrument that is used in pathology.
- C. Radio altimeter is instrument that used for mapping of water depth.
- D.None of the above.

Answer- A

4. Consider the following statements regarding governor?

1. Governor can not seek information from the Chief Minister about administrative and legislative matters of

the state.

- 2. Governor can reserve any bill for the consideration of the President.
- 3. Governor can make recommendations to the President for imposition of President's rule on failure of constitutional machinery.

Which of the above statements is/are correct?

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

Answer- B

5. Consider the following statements:

- 1. India is the largest producer of milk, pulses, and spices in the world.
- 2. India is the second-largest producer of fruit, vegetables, tea, farmed fish, cotton, sugarcane, wheat, rice, cotton, and sugar.

Which of the above statements is/are correct?

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

Answer- C

6. e-Sanchit is related to which of the following?

- A. It is a portal which makes the entire consignment clearance process paperless and faceless.
- B. It is a portal which used for data repository.
- C. It is technology developed by ISRO.
- D. None of the Above.

Answer- A

7. Consider the following statements:

- 1. India is today the second largest producer of tea in the world.
- 2. India is also the fourth largest exporter of tea after China, Sri Lanka and Kenya.

Which of the above statements is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2

D. Neither 1 nor 2

Answer- C

8. Who started the 'Puneet Sagar Abhiyan'?

- A. Indian army
- B. Indian air force
- C. Indian navy
- D. NCC

Answer- D

9. Consider the following statements regarding 'National Education Policy'?

- 1. Ensuring Universal Access at All Levels of schooling from pre-primary school to Grade 12;
- 2. Ensuring quality early childhood care and education for all children between 3-6 years;
- 3. New Curricular and Pedagogical Structure (5+3+3+4); Which of the above statements is/are correct?
 - A. 1 and 2 only
 - B. 2 and 3 only
 - C. 1 and 3 only
 - D. 1, 2 and 3

Answer- D

10. Consider the following statements regarding Varanasi?

- 1. Varanasi is a city situated on the Ganges River in northern India.
- 2. Varanasi has been nominated as the first-ever SCO Tourism and Cultural Capital for the period 2023-2024 at the 22nd Meeting of SCO

Which of the above statements is/are correct?

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

Answer- A

11. With reference to "World Tourism Day", consider the following statements:

- 1. This day is celebrated every year on 27th May.
- 2. The theme of the year 2022 is "Rethinking Tourism"
- 3. The day was first started by the United Nations World Tourism Organization (UNWTO) in 1980

Which of the above statements is/are correct?

A. 1 and 2 only

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

Answer: C

12. With reference to 'Ambedkar Circuit', consider the following statements:

- 1. It was first proposed by the Central Government in 2016.
- 2. Recently, Government of India has announced to run special AC train to promote this circuit.

Which of the above statements is/are correct?

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

Answer: C

13. With reference to the 'Cheetah Rehabilitation Project', consider the following statements:

- 1. Under this project, on September 17, 2022, 6 cheetahs have been released in the Kuno National Park in Madhya Pradesh for the enhancing the ecosystem.
- 2. In the year 1952, the Government of India officially declared the cheetahs to be extinct.

Which of the above statements is/are correct?

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

Answer: C

14. With reference to Hurricane Fiona, consider the following statements:

- 1. 'Hurricane Fiona' recently caused severe destruction in Puerto Rico and other areas of America.
- 2. When the maximum speed of a storm reaches 74 m/h, it is called Hurricane.

Which of the above statements is/are correct?

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

Answer: C

15. The Minister of Education and Skill Development



has launched 'Scale App' in Chennai on 20 September 2022. It deals with the skill development of which sector?

- A. The Leather Sector
- B. The textile sector
- C. The agriculture sector
- D. The field of education

Answer: A

16. With reference to the discovery of the cave of Rameses II, consider the following statements:

- 1. A team of archaeologists from Israel has recently discovered a very rare cave, of about 3,300 years old of Rameses-II era at Palmahim National Park located in Tel Aviv.
- 2. Rameses-II was the third pharaoh of the 19th dynasty of ancient Egypt.

Which of the above statements is/are correct?

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

Answer: C

- 17. In recent days, which country has announced the launch of "Innovation Road-Map of the Mission Integrated Bio-refineries" at the Global Clean Energy Action Forum-2022 held in Pittsburgh, USA.
 - A. India
 - B. Germany
 - C. France
 - D. Japan

Answer: A

18. With reference to the 'India Hypertension Control Initiative', consider the following statements:

- 1. India has recently won the United Nations Award for Hypertension Control Initiative.
- 2. It is a joint initiative of the Ministry of Health, Indian Council of Medical Research, State Governments and the World Health Organization.

Which of the above statements is/are correct?

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

D. Neither 1, nor 2

Answer: C

19. With reference to 'PM Pranam Yojana', consider the following statements:

- 1. To increase the use of chemical fertilizers, the Government of India will launch PM Pranam Yojana.
- 2. 'Promotion of Alternative Nutrients for Agricultural Management' is the broad name of the scheme.

Which of the above statements is/are correct?

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

Answer: B

20. With reference to the 'Wild Arctic Wolf', consider the following statements:

- 1. Recently, Cinogen Biotechnology, a gene firm in Beijing, has announced it successful cloning of the world's first wild arctic female wolf.
- 2. This female wolf has been named 'Maya'.

Which of the above statements is/are correct?

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

Answer: A

21. Which country holds the G20 Presidency in 2022?

- A. India
- B. USA
- C. UK
- D. Indonesia

Answer: D

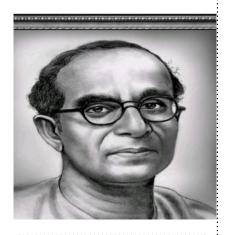
22. Which state launched the 'Indira Gandhi urban employment guarantee scheme'?

- A. Rajasthan
- B. Chhattisgarh
- C. Tamil Nadu
- D. Kerala

Answer: A



Personality



Yusuf Mehr Ali (1903-1950)

On the night of February 3, 1928, when the members of the Simon Commission disembarked from a ship at the Mole port in Bombay, a young man shouted aloud 'Simon go back'. Yusuf Meher Ali was the person who raised this slogan. Yusuf had shown his organizational ability by organizing public meetings in protest against the fee hike in college and police firing on students in Bangalore and in support of the striking mill workers.

Yusuf Meher Ali made a significant contribution in the freedom struggle of India. He was the one who gave the slogan of Quit India, which Gandhiji finally accepted and gave shape to the Quit India movement. Yusuf Meher Ali also played an important role in farmer organizations and trade unions. Yusuf Meher Ali was born on September 23, 1903, in an aristocratic family in Mumbai. He received his education from Calcutta and Mumbai.

In 1928, he also coined the slogan 'Simon go back'. He compelled the British government to feel moral pressure regarding indians.

Yusuf actively participated in civil disobedience and Dandi Satyagraha movement, due to which he was arrested in 1930 and sentenced to four months' rigorous imprisonment. Not only this, his advocacy profession was also banned. This was an unexpected thing as there were many lawyers who participated in the freedom struggle but no one was treated like this.

One of the great things about Yusuf Meher Ali is that he was one of the founding members of the Congress Socialist Party. Congress Socialist Party was formed in 1934 in which had leaders like Acharya Narendra Dev, Dr. Sampoornanand, Meenu Masani, JB Kriplani, Jai Prakash Narayan, Aruna Asaf Ali as founding members. The objective of this organization was to connect the Indian independence movement with socialist values and to fight a decisive battle against the British as well as the enemies of social equality and economic equality within the country i.e. capitalists, zamindars, vassals. He had formed the National Militia, Bombay Youth League.

Yusuf Meher Ali went to jail 8 times for his contribution in different phases of the freedom movement of India. In 1942, mere at the age of 39, he was the first socialist to be elected as mayor of Bombay and that time he was in Yerwada jail. He, along with his colleagues Ram Manohar Lohia, Aruna Asaf Ali and Achyut Patwardhan, tried to give direction to the Quit India Movement while underground. He was released from jail in 1946 and after that he became MLA.

The name of his important book is 'Leaders of India: The Price of Liberty and Underground Movement'. Yusuf Mehr Ali died on 2 July 1950 at the age of 47.

To mourn his death, the city's factories, schools-colleges, traffic, Bombay Stock exchange remained closed.

October 2022/Issue-01 Appointments



Country's new Chief of Defense Staff

The Central Government has appointed retired Lieutenant General Anil Chauhan as the new Chief of Defense Staff (CDS) of the country. After the death of General Bipin Rawat, he is the second person to hold the post.

Retired Lt Gen Anil Chauhan:

Retired Lieutenant General Anil Chauhan was born on 18 May 1961 in Pauri, Uttarakhand. In the year 1981, he joined the 11 Gorkha Rifles of the Indian Army. He has done excellent work during his service in eradicating terrorism in Jammu and Kashmir and Northeast areas.

He has also held the charge of Director General Military Operations. For his distinguished

and distinguished service in the Army, he has been awarded Param Vishisht Seva Medal, Uttam Yudh Seva Medal. Ati Vishisht Seva Medal, Sena Medal and Vishisht Seva Medal.

After serving 40 years in the army, he retired last year on 31 May 2021. Even after his retirement, he had been working to decide the security and strategy of the country.

CDS Post:

The post of CDS in the country was announced on August 15, 2019. It is the chief and highestranking officer of the Indian Armed Forces. The CDS primarily serves as the Principal Military Adviser to the Defense Minister



on all tri-service matters as well as the head of the Department of Military Affairs in the Ministry of Defence. The country's first CDS, General Bipin Rawat who assumed office on January 1, 2020 died in a helicopter crash last year.

New Attorney General of India



Recently, Senior Advocate R. Venkataramani has been appointed as the new Attorney General of India. His tenure as Attorney General of India will be three years. He will succeed KK Venugopal, whose term ends on September 30.

R Venkataramani:

R. Venkataramani was born on 13 April 1950 in Pondicherry. He is a Supreme Court lawyer with 42 years of experience. R Venkataramani has served as a member of the Law Commission of India in 2010 and 2013. He has represented the central government, several state governments, universities and public sector undertakings before the Supreme Court and High Courts.

Attorney General Post:

The Attorney General of India is a part of the federal executive. He is the highest law officer of the country.

The Attorney General of India is appointed by the President of India under Article-76 of the Constitution.

Appointment & Eligibility:

He should be a citizen of

India, having five years' experience of serving as a Judge of a High Court or 10 years' experience of practicing in a High Court or a person capable of judicial matters at the discretion of the President.

The duration of its work is not fixed by the constitution. Procedure for removal of Attorney General is not mentioned in the Constitution. He holds office during the pleasure of the President.

Work:

To advise the Government of India on legal matters referred by the President. To perform the duties assigned by the President. Appear in the Supreme Court or any High Court in respect of all matters of the Government of India.

Demise

Hilary Mantel, one of Britain's most decorated novelists, whose trilogy of books on the life of Thomas Cromwell "Wolf Hall," "Bring Up the Bodies" and "The Mirror and the Light" received both critical acclaim and commercial success, landing on best-seller lists around the world, died on September 30, 2022 at a hospital in Exeter, England. She was 70.

Ms. Mantel, the author of 17 books, twice won Britain's Booker Prize, for "Wolf Hall" and "Bring Up the Bodies," both of which sold millions of copies. She was longlisted for the same prize, for "The Mirror and the Light," in 2020. The novels led to popular stage and screen adaptations.

But it was a long and arduous road to reach those heights, beginning with a tough childhood. "I was unsuited to being a child," Ms. Mantel wrote in a 2003 memoir, "Giving Up the Ghost." She endured numerous health problems, leading one doctor to call her "Little Miss Neverwell." The doctor was the first of many to fail to properly treat her.

Her illnesses later proved so debilitating that she could not hold down regular jobs, steering her to writing. But even then it was a writer's life of fits and starts. Mainstream success did not come to her until she was well into her 50s.

Her Cromwell books were the turning point. Enraptured critics said she had presented the historical novel as high literature, portraying her subjects not as cardboard characters from centuries past but as real people of contradictions and psychological complexity, relatable in any age. And readers were carried along by her storytelling power.

The critic Parul Sehgal wrote in a 2020 review of "The Mirror and the Light" that Ms. Mantel's writing envelops the reader "in the sweep of a story rich with conquest, conspiracy and mazy human psychology." Ms. Mantel was not just a writer of historical fiction, Ms. Sehgal said, but an expert in showing "what power reveals and conceals in human character."

Ms. Mantel was born as Hilary Mary Thompson on July 6, 1952, to Henry and Margaret Thompson in Glossop, a village in Derbyshire, and grew up in an Irish Catholic family. Her mother was a school secretary. After her mother left her husband

Hilary Mantel



and moved the family in with Jack Mantel, an engineer, Ms. Mantel took her stepfather's surname.

Hilary Mantel's Most Influential Work

'Wolf Hall' (2009): This fictional portrait of Henry VIII's scheming aide Thomas Cromwell — the first volume of Mantel's celebrated trilogy — won the Booker Prize in 2009. "'Wolf Hall' has epic scale but lyric texture.

'Bring Up the Bodies' (2012): The second installment in the trilogy, this book finds Cromwell coping with Henry VIII's tumultuous marriage to Anne Boleyn as Jane Seymour rises in the king's estimation.

'The Mirror and the Light' (2020): The "triumphant capstone" to the series, as our former critic Parul Sehgal called it, begins in 1536, with the 50-year-old Cromwell "rich beyond all his imagining and very much alone."

'Giving Up the Ghost' (2003): In the book Mantel, the eldest child of poor Irish Catholic parents, described suffering from recurring fevers, her tough times in Catholic primary school, and being separated from her father at a young age.



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