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Legal Requirement For The
Protection Of Animal Rights In India

Need To Make Intellectual Property
Rights Laws Effective In India

History Of Indian
Journey From Dalit Entry
Movement In Temples
To Dalit Empowerment

India A Trillion-Dollar
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Digital India Bill

Disqualification of Members
Of Parliament And
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An Analysis

Justification Of The
SC's Decision Regarding
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For The EWS

Prelims Special 2023: Miscellaneous-02

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Vinay Kumar Singh
Founder
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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.

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Best wishes.



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Legal Requirement For The Protection Of Animal Rights In India

On 27 March, 2023 63 years after the enactment of the Prevention of Cruelty to Animals Act, 1960, the Central Government issued a new policy on procedures related to dehorning, sterilization, branding, or nose roping of animals. Processes involving dehorning, castration, branding, and nose roping of animals were not previously defined under section 11 and sub-section 3 of the Prevention of Cruelty to Animals Act, 1960, subjecting animals or cattle to inhumane treatment, torture, and exploitation. Section 11 defines the acts which constitute animal cruelty but sub-section 3 makes some exceptions for animal husbandry procedures which include dehorning, castration, branding, and nose roping of animals. Sub-section 3 also provides that any animal may be put down or eradicated under any law in force. Many animal rights protection organizations have considered this provision inhumane. This is the reason that now the Central Government has taken a big step at the policy level to bring clarity to this law and procedures, which is being considered an important step towards animal welfare and animal rights protection.

The new rules issued by the central government say that to reduce the stress level in animals, they should be blindfolded and they should be given post-surgical care. In the rules issued by the Central Government, arrangements have been made for the method of euthanasia for all sick animals to save animals from a painful death.

In the new rules, it has been emphasized that instead of dehorning animals, work should be done on the breeding of naturally hornless cattle. Also, humane procedures and face halters should be used in case of nose roping, as well as prevention of cold and hot branding on live tissue should be stopped. The new rule provides that all the above mentioned procedures related to animals or cattle should be done with the involvement of a registered Veterinary Practitioner and compulsory use of local anesthetics. It has been told in the new rules that the process of sterilization of bulls and horses is very painful and efforts will have to be made to reduce such suffering. Especially the castration method for these animals involves the process of destroying blood vessels and nerves, which is inhumane. That's why the central government has issued new rules with a humane approach to animals.

Supreme Court's new decision on declaring animals as legal entities:

➤ Animal sacrifice or entertainment events like Jallikattu and Kambala, the use of animals forcefully or their smuggling in circuses, the issue of stray animals or lack of food and water for animals, and the effect of pesticides on animals, all these cases have been observed as Animal rights violations. Central government and other agencies are active in stopping the inhumane treatment and attitude toward animals. Recently the Supreme Court of India dismissed a PIL filed by Allahabad-based NGO - People's Charioteer Organization (PCO). The PIL was filed with the aim to prevent animal cruelty by strengthening animal protection laws in the country and the petition stated that "some cases of cruelty to animals have come to the fore in the last few months which have raised the question whether the human mind has no respect for the lives of animals and how can they be completely devoid of empathy." Supreme Court bench of Justice BR Gavai and Justice Vikram Nath dismissed the PIL as it sought to declare the entire animal kingdom, including avian and aquatic species, as a "legal entity". The bench said that it cannot entertain the petition in its extraordinary jurisdiction under Article 32 of the Constitution of India.

➤ A section of environmental protection experts say that all animals should be treated as living human beings or legal entities. Such people believe that the principle of natural equality demands that all living beings in nature be considered equal. Many countries of the world have also made announcements to give more rights to animals. Last year, Ecuador became the first country in the world to provide legal rights to wildlife. In this matter, this South American country has set an example, whose Supreme Court gave a historic decision while hearing a case. A woolly monkey named Estrellita was taken out of its natural habitat by a librarian, Ana Provano, to make her a pet when this female monkey was only 1 month old. The woman had to keep it under her care for 18 years. Since it is illegal to house wild animals in South America, wildlife officials confiscated this female monkey from Ana Provano in 2019. Then instead of leaving her in her natural habitat i.e. forests, the female monkey was sent to the zoo where she died. On this, Ana Provano filed a habeas corpus (habeas corpus) and urged the Ecuadorian Supreme Court to decide if the

monkey's rights have been violated. The court while giving the verdict, had said that the rights of this monkey have been violated by the government. Along with this, the court also said that the owner of this monkey has also violated her rights by taking her out of her natural habitat at such a young age. The importance of this decision is that under the right of nature given in the constitution of Ecuador, the legal right to conserve wildlife will also become valid and many countries of the world will get a positive message from this.

The decision to consider wildlife as a legal entity in India:

- In India, decisions relating to the recognition of wildlife as a legal entity are made by the High Courts of the several states. This is reflected in the decisions of the Punjab and Haryana High Court in Karnail Singh and others Vs. State of Haryana. Apart from this, in the decision of Uttarakhand High Court in Narayan Dutt Bhatt vs. Union of India and others, wildlife has also been declared as a legal entity. These decisions recognized all animals in the animal kingdom as "legal entities" and declared all citizens of these states to be in loco parentis (in place of parents). A division bench of Uttarakhand High Court's senior judge Justice Rajeev Sharma and Justice Lokpal Singh, during the hearing of the PIL, had given the status of the juridical person to all the creatures living on air, water, and earth after the glaciers, the Himalayas and the river Ganga. While giving them the status of legal persons, giving them rights, duties, and responsibilities like human beings, the people of Uttarakhand were declared their guardians.

Role of the Animal Welfare Board of India:

- The Animal Welfare Board of India was constituted in the year 1962 under section 4 of the Prevention of Cruelty to Animals Act, 1960. This board ensures strict compliance with the laws related to animal welfare in the country, helps the organizations involved in this work and advises the Central and State Governments in this regard. The board consists of 28 members, including 6 MPs (4 from the Lok Sabha and 2 from the Rajya Sabha). The board aims to protect all living beings from pain and suffering – hence it has the slogan, protection of all from the ant to the elephant. The Board is paying special attention to controlling the dwindling number of pastures as animals suffer the most due to the lack of pasture land. Therefore, this board follows the guidelines of the Supreme Court in

this direction. The Supreme Court has ordered that all types of pastures should be protected and should be used only for animal welfare. The board has issued strict guidelines to all the states and union territories in this regard.

- The Animal Welfare Board of India along with the State Animal Welfare Board lays stress on the formation of committees for the prevention of cruelty to animals in compliance with the directions of the Supreme Court. In 2008, the Supreme Court ordered the formation of such three-tier boards and committees at the state and district levels. Along with this, the Animal Welfare Board of India has also issued instructions for setting up animal protection homes and hostels for animals in smart cities and metropolitan cities. As per the direction of the Supreme Court in the case of AWBI Vs. Nagaraj, 2014, the Board will take legal action against all those departments and institutions which do not follow the directions of the Court and the advice of the Board.

Aspects related to the protection of animal rights in India:

- In the case of Animal Welfare Board of India v. Nagaraj (2014), the Supreme Court ending the practice of Jallikattu (bull-wrestling) and bullock cart racing in the Indian states of Tamil Nadu and Maharashtra respectively, ruled that not only human beings but animals are also entitled to dignity and fair treatment enshrined in Article 21 of the Constitution of India.
- At the same time, according to the Indian Constitution, it is everyone's responsibility to take care of and protect the country's natural resources, such as forests, lakes, rivers, and animals. Although, many of these provisions are covered under Directive Principles of State Policy (DPSP) and Fundamental Duties, which cannot be implemented unless there is statutory backing.
- Article 48A states that the state shall endeavor to protect and improve the environment and safeguard the forests and wildlife of the country.
- Article 51A(g) states that it is the duty of every citizen of India to "protect and improve the natural environment including forests, lakes, rivers, and wildlife and to have compassion for living creatures."
- The following animal rights subjects have also been assigned to the State and Concurrent Lists:
 - » According to entry 14 of the State List, states are empowered to "preserve, maintain

and improve livestock and prevent animal diseases and to enforce veterinary training and practice”.

- » Laws included in the Concurrent List that can be passed by both the Center and the States are: “Prevention of cruelty to animals”, which is mentioned in entry 17, and “Protection of wild animals and birds” mentioned in entry 17B.

Important laws for the protection of animals in India:

- The Indian Penal Code (IPC) 1860 is the official criminal code of India which covers all the basic aspects of criminal law. Sections 428 and 429 of the IPC provide punishment for all acts of cruelty such as killing, poisoning, maiming, or rendering them unusable. The Prevention of Cruelty to Animals Act, 1960 aims to ‘prevent causing unnecessary pain or suffering to

animals, for which the act has made a provision for punishment for causing unnecessary cruelty and suffering to animals. The Act defines animal as any living creature other than a human being.

- The Wildlife Protection Act, 1972 aims to protect all plant and animal species in the country to ensure environmental and ecological security. The Act prohibits the hunting of endangered animals while providing for the establishment of wildlife sanctuaries, national parks, and zoos. Harming wild birds or reptiles, damaging their eggs, and destroying nests is an offense under Section 16 (c) of the Wildlife Protection Act 1972. A person found guilty of doing so can face imprisonment of 3 to 7 years and a fine of Rs 25,000.



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India Needs To Make Extradition Treaties Effective To Deal With Criminal Cases

Crime has a fatal impact on the peace, security, and stability of a country and society, and when it comes to cross-border organized crimes, the challenge increases even more. From the last decade, it has been observed that criminals who have committed crimes on Indian soil have been able to find safe haven in other countries and Indian law enforcement agencies have faced many difficulties in taking legal action against such criminals or terrorists. The delay in prosecuting and punishing such criminals in the country also boosts the morale of other criminal networks. Therefore, the countries with which India has signed an extradition treaty for cooperation must be made so effective that the other country should not think of delaying the repatriation of terrorists and criminals to India. For this, India needs to take such countries into confidence to empower the provisions of the extradition treaties that it has signed with the countries. The latest example can be taken of Amritpal an aspiring Khalistani, about whom security agencies say that like many other criminals, these people have also made the land of Nepal, their refuge. Criminals involved in human trafficking, arms smuggling, drugs, and cattle smuggling on the Indo-Nepal border also find safe havens in Nepal to escape the legal system of India. In such a situation, it becomes necessary that the Government of India talks to the Prime Minister of Nepal on the efficacy of the Indo-Nepal Extradition Treaty so that safe havens for criminals can be abolished. It is necessary to mention here that in the National Investigation Agency Amendment Act, 2019, the NIA has the right to investigate, file charge sheets, prosecute, and punish terrorist attacks outside India that affect the interests of Indians. Such empowerment of institutions will also have a positive impact on the effectiveness of measures such as extradition treaties.

Due to the activism of the Government of India, Abu Salem, and Monica Bedi were extradited from Portugal to India in 2005, while Chhota Rajan was extradited from Indonesia and Anup Chetia from Bangladesh in 2015. Also, Jagtar Singh Tara was brought to India from Thailand. Vijay Mallya, Nirav Modi, Mehul Choksi, Gupta Brothers of South Africa, and Zakir Naik to name a few who are accused of serious economic crimes and inciting communalism in the country and for whom extradition treaties are required to be effective. Merely having an extradition treaty with a country is not enough, the other country must be committed to providing legal assistance as per the provisions of the treaty.

Why it is easy to take refuge in Nepal after committing crimes in India:

- If pro-Khalistan fundamentalist leader Amritpal Singh has gone to hide in Nepal, then this is not

the first such incident. Before this, criminals who were involved in incidents ranging from robbery to murder and terrorism, have also been running away and hiding in Nepal. It is very easy for criminals from Uttar Pradesh and Bihar to flee to Nepal. Criminals from both these states go to Nepal on foot after committing the crime. Criminals from Delhi, Madhya Pradesh, and other states have also made Nepal a hideout several times. Criminals choose Nepal also because there is no need of a passport. Some criminals have even gone there and taken dual citizenship. The open international border between India and Nepal has also been responsible for this.



India has an extradition treaty with 47 countries

- Afghanistan 2016, Australia 2008, Azerbaijan 2013, Bangladesh 2013, Bahrain 2004, Belarus 2007, Belgium 1901, Bhutan 1996, Brazil 2008, Bulgaria 2003, Canada 1987, Chile 1897, Egypt 2008, France 2003, Germany 2001, Hong Kong 199, Indonesia 2011, Iran 2008, Israel 2012, Kuwait 2004, Lithuania 2017, Malaysia 2010, Mauritius 2003, Mexico 2007, Mongolia 2001, Nepal 1953, Netherlands 1898, Oman 2004, Philippines 2004, Poland 2003, Portugal 2009, Saudi Arabia 2007, Russia 2010, Africa 2003, Korea 2004, Spain 2002, Switzerland 1880, Tajikistan 2003, Thailand 2013, Tunisia 2000, Turkey 2001, UAE 1999, UK 1992, Ukraine 2002, USA 1997, Uzbekistan 2000, and Vietnam 2011.
- Antigua and Barbados 2001, Armenia 2019, Croatia 2011, Fiji 1979, Italy 2003, Papua New Guinea 1978, Peru 2011, Singapore 1972, Sri Lanka 1978, Sweden 1963, and Tanzania 1966. Apart from these bilateral treaties, India is also a participant in many treaties under the United Nations. Therefore, India can request even those countries with which it has no extradition treaty at the bilateral level. Since 2002, 62 fugitive criminals have been extradited to India from other countries.
- If the police of any state of India, by bypassing all the protocols, conducts an operation against fugitive criminals in Nepal, then the Indian police officers can even go to jail. But at times due to good relations with Nepal, in some cases the culprit has been caught and brought to India, bypassing all the protocols. In one such case, criminals involved in the murder of former Punjab CM Sardar Pratap Singh Kairon were brought from Nepal. This operation was led by DIG Ashwini Kumar. Nevertheless, if the local

people surrounded them then it could have been difficult. At the same time, if these officers were caught, their entire team could have been jailed for 6 months.

What is Extradition Treaty:

- Extradition offense means an offense that is punishable under the laws of both countries and carries a provision of imprisonment of one year or more severe punishment. When a demand is made for the extradition of a convicted person, the remaining period of the sentence must be at least 6 months. Unless India has an extradition treaty with any other country, it is difficult to bring any fugitive or criminal to India. Extradition treaty can be between two countries or more than two countries. Under this, both countries agree that if a person has committed a criminal offense at any place in these two countries, then they will hand him over to the country where he has committed the crime. Although, its legal process is a bit long. The process starts in the Indian court where an arrest warrant is issued against him. If he does not appear, the warrant is issued again. Later comes the role of the Ministry of External Affairs. The ministry, on its part, requests the country where the criminal is hiding.
- The Extradition Act, 1962 provides India's legislative basis for extradition. The Extradition Act of 1962 was passed by the Parliament of the country to consolidate and amend the law relating to the extradition of fugitive criminals and for matters connected therewith, or incidental thereto. It consolidated the law relating to the extradition of criminal fugitives from India to foreign states. The Indian Extradition Act, 1962 was also substantially amended in 1993 by Act 66 of 1993.
- The CPV Division, Ministry of External Affairs, Government of India is the Central/Nodal Authority for administering the Extradition Act and it handles incoming and outgoing extradition requests.
- A request for extradition on behalf of the Republic of India can only be made by the Ministry of External Affairs, Government of India. India can propose extradition to any country in the world. If India has made any kind of treaty with that country in this context, then all the rules will be determined based on that treaty only, but if India does not have a treaty with that country, then in this situation the entire process will be determined based on the domestic laws of that country. In the absence of a proper treaty, extradition will also depend on the relationship between India and that country. Similarly, any country can request extradition to India. The legal

basis for extradition to states with which India does not have extradition treaties is provided by section 3(4) of the Indian Extradition Act, 1962.

Mandatory grounds for inadmissibility of extradition:

If the nature of the offense is political, the offer of extradition may be refused. In addition, extradition may be refused if the extradition offense is a military offense or if a person is being punished because of his or her race, sex, religion, nationality, or political opinion. There may be a prohibition on extraditing a criminal even if the time limit for imposing the punishment has passed.

Three extraditions from India to Britain:

- Under the India-UK Extradition Treaty that came into force on 15 November 1993, there are three cases when a person is extradited from India to the UK.
- Maninder Pal Singh (Indian citizen): Extradited from India to the UK on 29 July 2017 in connection with the murder of British girl Hana Foster.
- Somaiya Ketan Surendra (Kenyan national): On 8 July 2009, deported to the UK in a case of cheating.
- Kulwinder Singh Uppal (Indian citizen): extradited to the UK on 14 November 2013 in a case of kidnapping and hostage-taking.

India's 16 extradition request cases pending in the UK:

- Sameer Bhai Vinu Bhai Patel was brought to India from the UK on 18 October 2016 in connection with the Gujarat riots. After that, in response to a question in the Lok Sabha, in 2019, the Central Government had accepted that only one fugitive criminal has been extradited from Britain in the last three years. India has 16 extradition requests pending with the UK government. India is trying to bring back some Indians who have settled in the UK, which notably include Lalit Modi, Nirav Modi, and Vijay Mallya. Apart from this, when talking about some other wanted criminals, Ravishankaran also has serious allegations. He is wanted in a case of leak of Indian Navy papers. Tiger Hanif is wanted for the 1993 Gujarat blast case. Raymond Worley, who has taken up UK citizenship, is facing a child abuse case in Goa.
- Measures like extradition treaties and mutual legal assistance agreements and treaties in criminal matters are considered very important in the bilateral relations between two countries. To deal with transnational organized crime, it becomes very important that the two countries help each other in breaking the network of criminals by helping each other at the legal level.

Need To Make Intellectual Property Rights Laws Effective In India

Intellectual property is an important means of strengthening the knowledge-based economy of any country. In the current era of globalization, liberalization, and privatization, there is a deep connection between intellectual property and business. Hence, it becomes crucial to pay attention to the protection of intellectual property rights. Furthermore, it is necessary to properly settle disputes related to intellectual property. In this context, an important decision of the Bombay High Court has come to the fore. This matter is related to Facebook. Before dwelling on this controversy, it is necessary to know that several groups have been created by different people and companies on the social networking site Facebook. The people who own such Facebook groups also consider the group to be their exclusive monopoly. Now, if there is a dispute regarding the ownership of lakhs of crores of groups on Facebook, then can it be considered a trademark or intellectual property dispute, and will this dispute be settled under the country's intellectual property laws?

In this direction, the Bombay High Court has recently said in its judgment that recovery and restoration of ownership of a group on Facebook cannot be termed as a dispute relating to trademark and intellectual property. The ownership of a Facebook group is not a trademark dispute. The Bombay High Court held that civil courts have jurisdiction to try suits seeking such declaration.

A petition was filed on behalf of an organization called 'The Himalayan Club' against the order of August 1, 2022, passed by the Civil Court, in which the hearing of its case was refused. The civil court had said that it did not have jurisdiction to hear the matter since the matter is related to trademarks and intellectual property.

The Himalayan Club, a registered society established in February 1928, maintains various publications and libraries and organizes several lectures and events. It reportedly asked one of its functionaries, Kanwar Singh, to create an internet-based chat group for better social media outreach. Kanwar Singh created a Facebook group by the name of the club. However, it has been alleged that Singh took undue advantage of his position and claimed that the club had no connection with the said Facebook group and tried to usurp control of the virtual group. The Bombay High Court has given its decision on this issue.

What is Intellectual Property:

➤ Intellectual property (IP) refers to creations by person's intelligence, such as inventions; literary and artistic works; designs; symbols, names, and images used in commerce. Patents, copyrights, and trademarks that enable people to earn recognition or financial gain from inventions or creations are protected under IP law. By striking the right balance between the interests of innovators and the wider public interest, the IP regime aims to foster an environment in which creativity and innovation can flourish.

Types of Intellectual Property Rights:

➤ **Patent:** A patent is an exclusive right granted for an invention. Generally speaking, a patent grants the patent owner the right to decide how or whether the invention can be used by others. In return for this right, the patent owner makes technical information about the invention in a published patent document publicly available.

➤ **Copyright:** Copyright is legally protected intellectual property which is used to inform and protect the rights of literary and artistic works of creators. Copyrights range from books, music, paintings, sculpture, and films to computer programs, databases, advertisements, maps, and technical drawings.

➤ **Trademark:** A trademark is a sign capable of distinguishing the goods or services of one enterprise from those of other enterprises. Trademarks date back to ancient times when artisans put their signatures or "marks" on their products. Trademarks are special and distinctive marks on the basis of which the company's products are identified. A design, picture, sign, etc. can be registered as a trademark under the Trademark Registry Rules. A registered trademark is valid for 10 years. Just one year before the validity is over, its renewal work starts.

➤ **Industrial Design:** Industrial design constitutes the decorative or aesthetic aspect of an object. A design may include three-dimensional features, such as the shape or surface of an object, or two-dimensional features, such as patterns, lines, or colors.

➤ **Geographical Indications:** Geographical Indicators are signs used on goods that have a specific geographical origin and have qualities, a reputation, or characteristics that are originally attributed to that place. Typically, a geographical

indication of the commodity or product includes the name of the place of origin.

- **Trade Secrets:** Trade secrets are IP rights on confidential information that can be sold or licensed. Unauthorized acquisition, use or disclosure of such confidential information by others is considered an unfair practice against honest commercial practices and a violation of trade secret protection.

National policy relating to Intellectual Property Rights Protection in India:

The National Intellectual Property Rights (IPR) Policy for IPR protection in India was adopted in 2016 as a vision document to guide the future development of Intellectual Property Rights in the country. Its clarion call is "Creative India; Innovative India". It sets up an institutional mechanism for implementation, monitoring, and review and aims to incorporate best global practices in the Indian scenario. India has benefitted in several aspects from the implementation of the National IPR Policy: It has achieved the following achievements: -

- Due to this policy, the institutional mechanism related to intellectual property rights has been strengthened. The administration of the Copyright Act, of 1957 and the Semiconductor Integrated Circuit Layout-Design Act, 2000 has been transferred to the Department of Industrial Policy and Promotion. This has enabled an integrated approach and coordination between various IP Offices and Acts. The Copyright Board has been merged with the Intellectual Property Appellate Board (IPAB) under the Finance Act 2017.
- With the adoption of the National Intellectual Property Rights Policy 2016, the trend of pendency of intellectual property applications has come down. Various steps taken by the Central Government, including augmentation of techno manpower, have resulted in a drastic reduction in the pendency of IP applications. Patent applications pending for examination have come down from 1,97,934 in 2016 to 1,39,274 in 2018. Although, if we look at the data till February 28, 2022, the number of pending patent applications has again increased to 208896.
- As far as trademarks are concerned, the pending applications have come down from 2,59,668 in 2016 to 32,619 in 2018. But in February 2022 again the number of pending applications increased to 641435. The increase in the number

of applications nevertheless is indicative of the increasing level of innovation, but at the same time speedy disposal of such applications is also necessary. With this, the government has also started automatically issuing electronically generated patent and trademark certificates.

- With a steady increase in patent filing and trademark filing, the IP Process Re-engineering Patents Rules, 2003 has also been amended to streamline the processes and make them more user-friendly. Expedited examination of patents is now permitted on certain grounds. Recently the shortest time taken for the grant of a patent has been just 81 days from the filing of the request for examination. Fully amended Trade Marks Rules, 2017 have been notified on 6th March 2017. In addition, about 200 International MoUs received from various Central/Ministries/Departments/Organizations have been examined from the IPR point of view in a time-bound manner.
- India has ratified the WIPO Copyright Treaty (WCT) and the WIPO Performance and Phonogram Treaty (WPPT), both of which aid in expanding the coverage of copyright in the Internet and digital environment.
- The Central Government has also worked towards creating IPR awareness. IPR awareness programs have been conducted in more than 200 educational institutions including rural schools and for industry, police, customs, and judiciary through satellite communication. The education of IPR in the school syllabus has also been given attention by the Government of India. The material relating to IPR has been included in the syllabus of the commerce section of NCERT. 6 Technology and Innovation Support Centres (TISCs) have been set up in different institutions in different states in coordination with WIPO.
- In the Global Innovation Index (GII) which is released by WIPO, India's rank has become 40th in 2022, which is a major global recognition of India's efforts in the field of intellectual property rights protection.
- IPR Enforcement Toolkit for Police: An IPR Enforcement Toolkit has been prepared to assist police officers in dealing with IP crimes, especially trademark counterfeiting and copyright piracy.
- Although, there is no specific plan to set up IP centres in all universities in India, state governments have been approached to set up

IPR cells in various educational institutions; IPR cells have been set up in 41 universities in different states. In addition, 'Institution Innovation Councils' (IICs) have been set up in more than 1000 Higher Education Institutions (HEIs) through the Innovation Cell in AICTE under the Ministry of HRD.

- Rajiv Gandhi National Institute of Intellectual Property Management (RGNIPM) has been established in Nagpur, under the Ministry of Commerce and Industry, by the central government for spreading awareness about Intellectual Property Rights. It has been established as a national training center of excellence for training, management, research, and education in various fields. The main objective of this institute is to provide training programs for Examiners, IP Professionals, and IP Managers related to Patents, Designs, Trade Marks, and Geographical Indications as well as for the user community, government officials/employees, who are interested in "Intellectual Property Rights". To provide basic education

in the field of intellectual property related to the commercialization, management, and creation of intellectual property. Apart from this, R.G.N.I.P.M. is also working to introduce government intellectual policy in universities and research institutes to raise awareness.

- The National Intellectual Property Awareness Mission launched in the year 2021 has achieved the target of providing intellectual property awareness and basic training to 10 lakh students. This target has been achieved before the deadline of August 15, 2022. The objective of this mission was to provide awareness about intellectual property and its rights to 10 lakh students, to develop the spirit of creativity and innovation among the students of higher education (Class 8 to 12) and to motivate the students of College/Universities to protect their innovation. The program is being implemented by the Intellectual Property Office, Office of the Controller General of Patents, Designs and Trade Marks (CGPDTM), and Ministry of Commerce and Industry.


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Economy

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History Of Indian Journey From Dalit Entry Movement In Temples To Dalit Empowerment

The Chief Ministers of two South Indian states Tamil Nadu and Kerala jointly inaugurated the centenary year celebrations to mark the completion of 100 years of the Vaikom Satyagraha Movement recently. The relevance of this centenary year celebration can be seen in its concerns related to social justice. By Vaikom Satyagraha in 1920-1930s, the temple entry movement for Dalits and untouchables was started in India and even today there are cases of caste violence and struggle against Dalits in India. 21st century India too has witnessed temple entry bans, and ban on dalit children in backward areas to get admission in schools and colleges. To address this, inspiration can be drawn from Vaikom Satyagraha. In today's democratic India, no one can be deprived of his/her basic or human rights in the name of a backward class.

According to the Ministry of Home Affairs, 53,886 cases were registered under the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act in the year 2020. In 2019, 49,608 cases were registered under the SC ST Act. On the other hand, if we talk about South Indian states, 3,831 cases of crimes against Dalits were registered in Tamil Nadu during these three years. During the same period, 2,591 such cases were registered in Kerala. NCRB's 2021 report states that crimes against Dalits have increased in 2021 as compared to the years 2019 and 2020. In the year 2021 as well, Uttar Pradesh remained in first place in terms of crimes against Dalits. The National Commission for Scheduled Castes and the National Commission for Scheduled Tribes has also talked about taking effective action to prevent such crimes.

History of Vaikom Satyagraha:

- The Vaikom Satyagraha was started on 30 March 1924 as a temple entry movement. The Vaikom Mahadeva temple in then Kerala had a board that denied entry to "low caste" people (avarnas). To protest against this, the satyagrahis formed a group of three and entered the temple. The police opposed and arrested them. Gandhiji, Chatampi Swamikal, and Sree Narayana Guru supported this movement.
- The movement gained prominence across India and received support from far and wide. The Akalis of Punjab supported the Satyagrahis by setting up kitchens to provide food. Even Christian and Muslim leaders were in support of the movement. Nevertheless, Gandhi ji did not fully agree with this as he wanted the movement to be an inter-Hindu affair and did not want the caste hatred to spread. The movement was temporarily called off in April 1924 on the advice

of Gandhiji. When the discussion with the people failed, the leaders started the movement again. Leaders TK Madhavan and KP Keshav Menon were arrested on the resumption of the Vaikom Satyagraha. Govind Panikkar (Nair), Bahuleyan (Ezhava), and Kunjappu (Pulayya) carried forward the Vaikom Satyagraha by defying prohibitory orders by wearing khadi clothes and khadi caps. On April 13, 1924, EV Ramaswamy Nayakar (Periyar) reached Vaikom and supported the movement, addressing the crowd, saying, "They argue that if the untouchables pass through the roads leading to the temple the roads will get impure. I want to ask them whether the deity of Vaikom or the Brahmin gets impure by the mere presence of untouchables! If they believe that the deity of Vaikom will become impure, then it cannot be a deity. It is merely a stone that can be only used to wash dirty clothes."

- On 1 October 1924, a group of Savarnas (upper castes) took out a procession and presented a petition to the Regent of Travancore, Maharani Sethu Lakshmi Bai, with about 25000 signatures to allow entry into the temple. Mahatma Gandhi also met the Regent Maharani. This procession of upper castes was led by Mannath Padmanabhan Nair. Beginning with around 500 people in Vaikom, the number grew to around 5000 by the time the procession reached Thiruvananthapuram in November 1924.
- On 23 November 1925, all the gates of the Vaikom Mahadev Temple were opened to Hindus except the eastern gate. In 1928, backward castes also got the right to walk on public roads leading to all the temples in Travancore. It was the first time that an organized movement for the basic rights of untouchables and other backward castes was being carried out on such a large scale in Kerala.

Role of K. Kelappan In Vaikom and Guruvayur Satyagraha:

- On October 24, 1889, a great social reformer was born in the land of Kerala, who later came to be known as Gandhi of Kerala and Gandhi of the South, and it was Kelappan who was the pioneer of social revolution in the land of South India. K Kelappan was a social renaissance leader of South India who fought two battles in his time. First, for social reforms, and second, against the British. The magic of Gandhian values was visible in his methodology. When Mahatma Gandhi did Salt Satyagraha, the person who led this Satyagraha in Calicut and Payyanur in Kerala was K Kelappan.
- K Kelappan's biggest role was related to the temple entry movement for Dalits. In the 1920s,

the entry of lower caste people was banned in the Guruvayur temple in Kerala, due to which the Vaikom Satyagraha was started for the entry of Dalits into Guruvayur and then Vaikom temple. In 1931 a Satyagraha started at the Guruvayur temple under the leadership of K. Kelappan. Along with Kelappan, many other leaders like Padmanabhan, A K Gopalan, and N P Damodaran also participated in it.

- For about 10 months, the Kelappan Guruvayur satyagraha movement continued, but after this, when the lower castes were not allowed to enter this temple, on September 21, 1932, Kelappan sat on a fast till death in front of the temple. Leaders from all over the country pleaded him to break the fast after seeing the deteriorating condition of his health, but Kelappan did not listen to anyone. Finally, at the behest of Mahatma Gandhi, he broke his fast on October 2, 1932, on Gandhiji's birthday. K Kelappan's achievement was the Guruvayur referendum. All eyes were on it, that whether temple entry for lower castes would be recognized in the referendum. The number of participants in the referendum was historic. More than 77 percent of regular temple-goers voted in favor of universal temple entry. This created a strong atmosphere in favor of the temple entry movement in Kerala across the country and in 1946 the Guruvayur temple was finally opened to all castes. The Guruvayur referendum paved the way for the opening of many private temples owned by upper caste people to every section of the public at large, irrespective of their caste group.
- K Kelappan was also instrumental in making the Vaikom Movement or Vaikom Satyagraha, a success in Kerala. In this, he got full cooperation and support from many leaders of that era and Mahatma Gandhi himself. In 1923, at the Kakinada meeting of the Congress Party, TK Madhavan presented a report citing the discrimination faced by Dalit caste people in Kerala. A committee comprising people from different castes was formed to fight untouchability in Kerala. The committee, headed by K Kelappan, included TK Madhavan, Velayudha Menon, K Neelakantan Namboothiri, and TR Krishnaswamy Iyer. In February 1924, he decided to start a 'Keralparayatnam' to gain temple entry and the right to use public roads for every Hindu, irrespective of caste or creed.
- K. Kelappan made an immense contribution to the abolition of untouchability and the upliftment of Harijan. He also established many Harijan hostels and schools in Kerala. He remained dedicated throughout his life to the development

of Swadeshi, Khadi, and village industries. He was the president of almost all the Gandhian organizations in Kerala. He was also a founding member of the Nair Service Society.

TK Madhavan's role in the temple entry movement:

- South Indian freedom fighter TK Madhavan who is known for his temple entry movement for Dalits in Kerala is also known as Deshabhimani. He was born on 2 September 1885 at Karthikpally in the Alappuzha district. He was born in a low-caste Ezhava family. He was a staunch Gandhian and dedicated his life to the eradication of untouchability in Kerala. He met Gandhiji in Tirunelveli in 1921 and told him about the pathetic caste-ridden social condition in Kerala and the condition of the lower caste communities. He started a newspaper from Kollam in 1917 known as Deshabhimani and later became the editor of this newspaper. He demanded the abolition of evil practices like untouchability through this newspaper. Hence he is popularly known as Deshabhimani TK Madhavan. It was at this time that the Sri Moolam Praja Sabha was established in Travancore. It used to be the Legislative Council of Travancore. Madhavan was elected to this council in 1918. He was against the prohibition of temple entry and other casteist practices and used to run a newspaper named Deshabhimani to oppose this.
- He attended the Kakinada session of the Indian National Congress and moved a resolution for the abolition of untouchability in 1923 with the support of Jawaharlal Nehru. He became a prominent leader of the Sree Narayana Dharma Paripalana (SNDP) Yogam, which was formed for social reform. It also showed the way for the welfare of the Ezhava community. In 1924, he started the Vaikom Satyagraha in front of the Vaikom Mahadeva Temple for the rights of Dalits and lower caste people to walk on the road in front of the temple. In support of the Vaikom Satyagraha, Gandhiji visited Vaikom in 1925. This movement was well discussed in all parts of India and people from different and far-flung places also participated in this movement. Finally, an agreement was reached, between the Queen of Travancore and the supporters of the movement and all backward communities were allowed to walk in the streets in front of the temple. In this way, temple entry movements like Vaikom and Guruvayur initiated a social revolution in the establishment of an egalitarian society, whose legacy needs to be preserved even today.

India A Trillion-Dollar Digital Economy Through Digital India Bill

At the first public consultation on the framework for the proposed Digital India Bill (DIB), Rajeev Chandrasekhar, Union minister of state for electronics and information technology, said the Centre hoped to achieve the \$1 trillion digital economy landmark by 2025-2026 with the help of the Digital India Bill.

The first meeting of the Digital Economy Working Group of G-20 was held in Lucknow on February 13-15, 2023, in which Emphasis was placed on making important initiatives of Digital India such as DigiLocker, Aadhaar, Umang, E-Way Bill, E-Aushadhi, Aarogya Setu, Co-WIN, e-Rupee, and India Stack Global a success as this is the only way India can achieve its goal of a trillion dollar digital economy.

Spreading awareness about digital public goods, strengthening digital public infrastructure, from UPI to DigiLocker, Co-WIN to FASTag, DIKSHA (Digital Infrastructure for Knowledge Sharing App) to SWAYAM portals bridging the digital divide are means to strengthen the digital economy at every level.

India a 'Trillion-Dollar Digital Economy':

- India is poised to be a trillion dollar digital economy that could support 60 to 65 million digitally enabled jobs by 2025-26.
- With a strong foundation of digital infrastructure and expanded digital access through Digital India Programme of the Government, India can create tremendous economic value and empowerment of citizens as new digital applications permeate sector after sector.
- India could potentially see a five-fold increase in economic value from digital transformation by 2025, representing an attractive opportunity for global and local businesses, start-ups, and innovators to invest in emerging technologies (like AI, blockchain, or drones) in ways that are customized to India's needs.
- As the 'Team India' spirit of partnership and collaboration will be critical, across central and state governments, the private sector, industry associations and the social sector. The Digital India Bill will be key in working with all stakeholders, and regulate them to build a safe, secure, prosperous and equitable digital space that creates huge economic value and empower millions of people across all walks of life.

About Digital India Bill:

- The Digital India bill, 2023 is a broad overhaul of the decades-old Information Technology Act, 2000.
- It provides legal framework for regulating the country's online environment and digital data protection policies.

- It will fully replace the current Information Technology Act (IT Act) of 2000, which has faced criticisms for its outdated policies and inadequacies in dealing with modern-day technological issues.

Problem With The IT Act, 2000:

- Since IT Act was enacted, there have been many revisions and amendments (IT Act Amendment of 2008, IT Rules 2011) in attempts to define the digital space in which it regulates while trying to put more emphasis on the data handling policies.
- However, the IT Act was originally designed only to protect e-commerce transactions and define cybercrime offenses, it did not deal with the nuances of the current digital landscape adequately nor address data privacy rights.
- The Act has no mention of cybersecurity and is not adequate to regulate the relatively new industry.

Importance Of The Bill:

- It will potentially govern the entire country's digital laws for the next decade or two. With this new law, the country hopes to future-proof its digital laws and enable businesses to compete on a global scale.
- Additionally, the Indian government has attempted to involve and consult as many stakeholders (citizens) in the drafting of the Digital India bill to ensure that the rules and framework enable a comprehensive IT ecosystem within the country for at least the next decade.
- The bill is designed to stimulate the digital economy for Indian businesses and transform the nation into a worldwide digital powerhouse as the world's most populous nation. India can achieve a trillion dollar digital economy by 2026, centred around the Digital India Act.

Significant Points Of The Digital India Bill:

In addition to a brand new legislative framework surrounding data and information security, the Digital India bill focuses on the following areas:

Creating New Regulations Around Fifth Industrial Revolution Technologies-

- The Fifth industrial revolution technologies includes 5G, IoT devices, cloud computing, metaverse, blockchain, and cryptocurrency.
- The bill creates a new regulations for the newest and most relevant technology in today's society as India approaches the threshold of most-internet connected country in the world.
- With business-critical technologies like the cloud, IoT devices, and social media, the Digital India bill aims to address security and privacy concerns with new technology and not just

regulate it for responsible use.

Reclassifying Online Intermediaries-

- Intermediaries are any company or platform that facilitates information sharing or provides online services.
- Intermediaries was introduced as a new concept in the IT Rules of 2021, but was only defined for social media platforms.
- The other online platforms were classified as “pure intermediaries” and grouped together.
- However, the main problems with this was that digital intermediaries have been grouped by company size and user base rather than the features or services they provide. A single company can offer multiple services, making it hard to regulate as a whole.
- Therefore, the bill creates separate categories instead of one general intermediary label, each one with its own set of regulations.
- It will begin to categorize all online intermediaries into different buckets, such as cloud service providers (CSPs), social media platforms, internet service providers (ISPs), Metaverse, OTT providers, online gaming, and more.
- The bill also aims to appoint a regulating body to hand out penalties for violations of rules.

On “Safe Harbour” Immunity For Online Intermediaries-

- Safe harbour, a legal immunity provided to online intermediaries, such as social media platforms, that effectively protects them from legal dispute related to any third-party content posted on their respective platforms. It was so because the intermediaries had no control over it.
- The impact of this immunity ensured that, intermediaries loosely moderated third-party content on their platform. This was often in form of lack of fact-checking and non-removal of content violations.
- The Digital India bill proposes of removing “safe harbour” immunity for online intermediaries for purposeful misinformation or other content violations from third parties.
- Under the bill, each intermediary category will be subject to new regulations that has emphasis on fact-checking to prevent misinformation or misuse of data.
 - » Also, these platforms will now instead be held accountable for any content violations or cybercrimes that occur on their websites.
 - » Instead of relying on the government to flag any violations, the platforms has to moderate and remove disallowed content.
- This will have a major impact on tech giants like Google, Meta, Twitter which has repeatedly failed to moderate unlawful and false contents and information on their platform.



Digital Economy needs eradication of Digital divide:

- The economic and social inequality with respect to the use and influence of Internet and communication technologies is termed as the ‘digital divide’. In other words, the digital divide refers to the economic and social disparity with respect to the use and influence of the Internet and other digital technologies. In general, the ‘digital divide’ refers to the disparity in access to Internet and communications technologies between individuals of different social, economic levels or other demographic categories, households, businesses or geographic regions.
- NSO report on digital divide highlights that in India, only one in ten households has a computer (desktop, laptop or tablet). About a quarter of all households in India have Internet facilities, which are accessed through a fixed or mobile network.
- Most of these Internet-enabled homes in India are located in cities. While 42% of the total households in cities have internet access, only 15% of the total households in rural areas are connected to the internet. The national capital Delhi has the highest internet usage, with about 55% of households having internet access. Apart from Delhi, Himachal Pradesh and Kerala are the only states where more than half of the households have internet access. Odisha’s internet access situation is quite worrying, with only one in ten households having internet access. There are ten other states with less than 20% internet penetration, including software hubs like Karnataka and Tamil Nadu. The NSO has stated in the report that the most important factor in the digital divide in the country is the economic situation. At the national level, the state of Kerala shows the lowest digital divide while Assam has the highest. The NSO report suggests that 20% of Indians above the age of 5 have basic digital literacy, while it is 40% in the crucial age group of 15 to 29 years.

On Artificial Intelligence (AI) And Machine Learning (ML) Technology-

- With the AI and ML technology permeating through businesses, the Digital India bill aims focusing on enforcing accountability in the usage of these technologies.
- Though, AI has boundless opportunities to build and innovate, it also represents new avenues for misuse and harm.

- Therefore, the bill proposes Creating digital standards and laws regarding artificial intelligence (AI) and machine learning (ML) technology.
 - Protecting user safety and privacy will be at centre of the Digital India bill, and it proposes standards to monitor the use of AI in today's world.
- On Cybercrimes-**
- Under the Digital India bill, the Ministry of Electronics and IT (MeitY) plans to classify new forms cybercrime, such as cyberbullying, impersonation, identity theft, identify fraud, doxxing, and malicious unauthorized sharing of personal information without consent, as criminal offenses.
 - Under erstwhile IT Act these offenses were penalized through fines and were not criminalized.
 - Therefore, by protecting the user and criminalizing user harm, the Digital India bill can future-proof any innovation and technological developments that may come in the following years.
- On Content Creation & Ad-Tech Companies-**
- With Indian content creators facing difficulties in having control over monetization and revenue sharing of their own contents due to disproportionate position occupied by big tech companies like Amazon and Goggle and their domination over the ad space.
 - Therefore the Digital India Bill proposes to regulate monetization of content creation and its creators by advertising technology (ad-tech) companies
 - Also, content creators can be penalized for spreading false information, much like online intermediaries.
 - Also the bill aims to removing monopolies of the digital space enjoyed by few big tech companies and allow for fair competition among local start-ups and provide more choices for users.
 - » The bill supports Indian government endeavour to challenge big tech companies control over digital space and allow smaller businesses to begin building up the infrastructure and small e-commerce space.
 - » This also allows Indian citizens to choose the best service for them rather than defaulting to one or two options of the major companies.
 - The Digital India bill along with Digital Personal Data Protection Bill creates regulatory framework for India to achieve the target of \$1 trillion digital economy and address issues related to internet infrastructure, digital literacy, cybersecurity, and data privacy. There proper implementation will be a positive development for country's digital space that has the potential to drive long-term economic growth and prosperity for the country.



Disqualification Of Members Of Parliament And Parliamentary Privileges: An Analysis

Context:

Recently, Rahul Gandhi, MP, Wayanad constituency, Kerala, was disqualified as Member of Parliament after conviction by Court of Chief Judicial Magistrate, Surat on a criminal defamation charge. The Surat court had held him guilty in a 2019 defamation case for saying in an election rally that “all thieves have Modi as their surname”. Section 500 of the Indian Penal Code (IPC) prescribes for defamation a simple imprisonment for a “ term which may extend to two years, or with fine or with both.”

Introduction:

- “Democracy rests on a higher power than Parliament. It rests on an informed and cultivated and alert public opinion. The Members of Parliament are only representatives of the citizens. They can’t represent apathy and indifference. They can play the part allotted to them only if they represent intelligence and public spiritness.” - ERIC WILLIAMS
- In a Parliamentary Democracy, ultimate sovereign power rests with the people. Members of Parliament represent the will of the people. If any MP fails to perform his responsibility and behave in a way which is against the constitutional morality and rule of law, he must be subject to law of the land and constitutional provisions.
- Consequent upon the conviction by court, Lok Sabha Secretary General Utpal Kumar Singh issued a notification declaring his disqualification from the membership of the Lok Sabha from the date of his conviction in terms of the provisions of Article 102 (1) (e) of the Constitution of India read with Section 8 of the Representation of the People Act, 1951.
- However, later on Sessions Court of Surat granted bail to Rahul Gandhi and suspended his sentence till the disposal of his appeal seeking stay on his conviction.
- In a similar instance, Lakshadweep Member of Parliament Md Faizal of NCP was disqualified after he was sentenced to 10 years in jail in January 2023 by Kavaratti District and Sessions Court in connection with an attempt to murder case. However, Kerala High Court stayed the conviction and sentence. Subsequently, a notification by Lok Sabha secretariat reinstated his membership.

Constitutional Status of Member of Parliament and Parliamentary Privileges:

- Under Article 84, Constitution of India prescribes certain qualifications for the

members of Parliament. In addition to this, Representation of People Act 1951 laid down additional qualifications.

- Furthermore, Under Article 105, constitution mentioned two parliamentary privileges, i.e., Freedom of Speech in Parliament and Right of publication of its proceedings. Members of Parliament enjoy Individual privileges which are as follows:
 - » The can not be arrested during the session of the Parliament and 40 days before the beginning and 40 days after the end of the session. This privilege is available in civil cases only and not in criminal cases.
 - » They have freedom of speech in parliament. No member can be prosecuted for anything said in the parliament. However, this freedom is subject to rules and and procedures of the parliament.
 - » They can refuse to give evidence and appear as witness in a case pending in a court when parliament is in session.
- But despite such parliamentary privileges, no member of parliament is immune to Rule of Law and he can be prosecuted for any act of criminality done outside the parliament and anything spoken outside the parliament.

Constitutional Provisions related to disqualification of Members of Parliament and MLAs/MLCs:

Articles 102 (1) of the constitution deals with the disqualification of MPs from either House of Parliament. These are as follows-

- If he holds any office of profit under Government of India or Government of State (Except that of a minister or any other office exempted by Parliament by law.
- If he is of unsound mind and stands so declared by a court.
- If he is an undischarged insolvent
- If he is not a citizen of India or has voluntarily acquired the citizenship of a foreign state or is under any acknowledgement of allegiance to a foreign state.
- Further, Article 191 (1) is identically worded for disqualification of MLAs and MLCs. In Election Commission of India Versus Saka Venkata Rao (1953), the Supreme Court clarified that Article 191 lays down the same set of disqualifications.

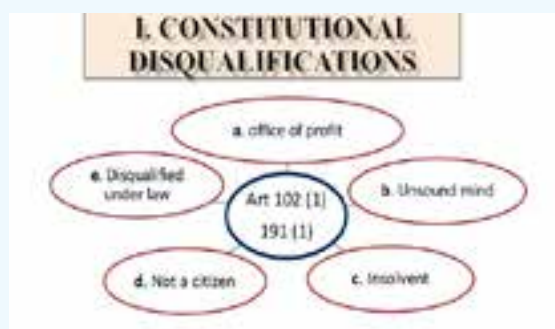
Article 103 of the Indian Constitution:

Article 103 of the Constitution deals with the decisions on questions as to the disqualifications of members. According to this provision:

- If any question arises as to whether a Member

of Parliament has become subject to any of the disqualifications mentioned in Art 102 (1), the question shall be referred to the President for his decision, which shall be final.

- Before giving any such decision, the President shall obtain the opinion of the Election Commission and act according to such opinion.
- In addition to these, an MP is also stand to be disqualified from the membership of the parliament under Anti Defection Law under 10th schedule added by 52nd Amendment, 1985. The main aim of this schedule was to prevent the political defections and to strengthen democracy and make members of parliament loyal to their parties. This schedule is applicable on both central and state legislature.



Statutory provision relating to the disqualification of MPs: Representation of People Act, 1951:

- In addition to the constitutional provisions, Representation of People Act 1951 was also enacted which inter-alia deals with the disqualification of Member of Parliament.
- Sections 8(1), 8(2), and 8(3) of the Representation of the People Act, 1951, deal with the question of disqualification of an elected representative.
- Section 8(1) includes specific offences such as promoting enmity between two groups, bribery and undue influence or personation at an election. Defamation does not fall in this list.
- Section 8(2) lists offence that deal with hoarding or profiteering, adulteration of food or drugs and for conviction and sentence of atleast six months for an offence under any provisions of the Dowry Prohibition Act.
- Section 8(3) of the Representation of the People Act 1951 states that “a person convicted of any offence and sentenced to imprisonment for not less than two years shall be disqualified from the date of such conviction and shall continue to be disqualified for a further period of six years since his release.” In a nutshell, a convicted MP can not contest elections at least for next eight

years.

- However, the disqualification can be reversed if a higher court grants a stay on the conviction or decides the appeal in favour of the convicted lawmaker.
- Under, Section 8(4) convicted MPs were to continue in their posts, provided they appealed against their conviction in higher court within 3 months of the date of judgement by the trial court
- Section 8(4) of the RPA, 1951, was struck down in 2013 by a Bench of Justices A.K. Patnaik and S.J. Mukhopadhyaya of the Supreme Court in a landmark verdict in Lily Thomas versus Union of India.
- The Supreme Court held that chargesheeted Members of Parliament on conviction for offences, will be immediately disqualified from holding membership of the House without being given three months’ time for appeal, as was the case before. The effect of this judgment is that there is an instant disqualification of a sitting legislator as soon as he is convicted.
- However, the Court made it clear that in the event of the appellate Court staying the conviction and sentence, the disqualification will be lifted and the membership will be restored to him.
- The Supreme Court in its ruling in Lok Prahari Versus Union of India (2018) clarified that a disqualification triggered by a conviction will be reversed if the conviction is stayed by a court.

Conclusion:

- The law on criminal defamation needs review as every elected political person faces the danger of saying something during election campaign which may go against any individual or Government.
- Disqualification of a Member of Parliament on the ground of criminal defamation raise some important constitutional and legal issues. The issue will anyway be dealt with by the appellate courts. But the issues relating to the disqualification need to be examined carefully.
- In a country that frequently experiences the instances of criminalisation of politics, corruption and hate speeches, priority to criminal defamation will not help democracy to thrive. A modern democracy should not treat defamation as a criminal offence at all. It is a legacy of British era in which questioning authority was considered a grave crime. But at the same time representative of the people must show some sense of maturity and responsibility while delivering political speeches.

Justification Of The SC's Decision Regarding The Right Of Reservation For The EWS

Reference:

Responding to the recent Supreme Court judgment on Economically Weaker Sections (EWS) reservation, Tamil Nadu Chief Minister MK Stalin said that the Supreme Court's upholding of Economically Weaker Sections (EWS) reservation among upper castes is a social blow to the century-long struggle for justice.

Introduction:

It may be noted that there has been a continuous controversy over the Economically Weaker Sections (EWS) reservation. In November 2022, the Hon'ble Supreme Court in its judgment upheld the constitutionality of the EWS reservation. Recently, Tamil Nadu Chief Minister MK Stalin has called the legality of EWS reservation a blow to social justice, while the Attorney General of India has supported the Supreme Court's decision, saying that EWS reservation does not affect any other reservation.

Economically Weaker Section Reservation:

The provision of reservation for economically weaker sections was made by the Government of India through the 103rd Constitutional Amendment Act 2019. Its main provisions are as follows-

- Article 15 (6) and Article 16 (6) were inserted into the Constitution, by amending Articles 15 and 16 of the Constitution.
- Through this, people belonging to economically weaker sections will be given the benefit of reservation in educational institutions and public employment.
- It will not be available to the classes who already get the benefits of reservation. That is, it will not be available to Scheduled Castes, Scheduled Tribes, or Other Backward Classes.
- It empowers both the Center and the State to make provisions in this regard.

Criteria for reservation:

The benefit of reservation will be given only to those people and the family whose-

- Annual income is less than eight lakh rupees.
- The cultivable land is less than five acres.
- The house is built in less than one thousand square feet. If the house is in a notified municipality then it should be less than 100 yards and 200 yards if it is in a non-notified municipal area.

Why the EWS reservation faces opposition?

The following are the reasons for opposing the Economically Weaker Section reservation-

- This amendment violates the limit of 50% reservation set by the Supreme Court in *Indira Sahni vs. Union of India-1992*.
- The limit of 50% reservation set by the Supreme

Court is part of the basic structure of the Constitution, so the Parliament cannot amend it.

- The provision of reservation only on an economic basis is contrary to the insight and action plan of the Indian Constitution.
- In the past, the basis of exploitation was caste, not economics. Therefore, there should be reservations on a caste basis only.

Supreme Court's Decision and Arguments:

The Supreme Court in its judgment has upheld the constitutionality of reservation on economic grounds. The constitutional bench of 5 judges with a majority of 3:2 has declared reservation on an economic basis as constitutional. Arguments of the judges supporting the decision (Justice Dinesh Maheshwari, Justice Bela Trivedi, and Justice JB Pardiwala):

- This reservation does not violate anyone's fundamental rights.
- This reservation is a separate category in the unreserved category of 50%, so it does not violate the rule of reservation limit of 50%.
- The Constitution of India also emphasizes the concept of economic justice, so this decision of the Parliament should be seen as a positive intervention.
- Any provision of the reservation is not permanent till eternity. Therefore, it is necessary to include the socially, educationally, and economically backward classes in the mainstream as soon as possible. This amendment of Parliament can play an important role. However, this provision should not be used for personal interests.

Arguments of the judges (former Chief Justice UU Lalit and Justice Ravindra Bhatt) opposing the decision:

- If this amendment provides for reservation on an economic basis, then why the Scheduled Castes, Scheduled Tribes, and other backward classes have not been included in it? All classes should get the benefit of reservation on an economic basis.

The stand of the government in this context:

- This provision does not affect the reservation rights of other classes. Even after this reservation, the reservation of Scheduled Castes, Scheduled Tribes, and Other Backward Classes will continue to be applicable.
- The Attorney General argued that the exclusion of other reserved categories from this category is positive discrimination as permitted by the Constitution.
- According to the Multidimensional Poverty

Index used by NITI Aayog, 18.2 percent of the general category population is economically backward, so it is necessary to bring them into the mainstream.

- The provision of the reservation is necessary for providing social, economic, and political justice, so it does not violate the basic structure of the Constitution.
- Along with this, some other Acts such as the Right to Education Act 2009 also had provisions to remove financial and psychological barriers, which were also validated by the Supreme Court. Therefore, positive discrimination can be done on economic grounds.

Justification of the decision of the Supreme Court:

The Supreme Court has upheld the validity of reservation on economic grounds by a majority of 3:2, which means that reservation on economic grounds will continue to be available, which is relevant because:

- **Supporter of the concept of justice:-** It addresses economic inequality and takes a step towards establishing social, economic, and political justice as mentioned in the preamble.
- **Positive discrimination:-** It is positive discrimination as it provides an opportunity for the economically weaker section to participate in higher education and public planning.
- **Safety mechanism against the commercialization of education:-** At present, due to the commercialization of education, preparation for various educational courses and government services is becoming quite expensive, and thus such provision is very necessary.
- **Connectivity to Mainstream:-** In addition to the reserved category received earlier, many such sections are cut off from the mainstream, it is also necessary to bring them into the mainstream, and this decision can provide help in this regard.
- **Increase in social harmony and unity:-** The decision of the Supreme Court will reduce the social stigma attached to reservation (that reservation is caste-based discrimination and many times it is seen from the point of view of the people who get the benefit of reservation), which is mentioned in the preamble. The feeling of unity among the citizens will be strengthened.

Areas Need Improvement:

Although reservation on economic grounds is a positive distinction, there are several concerns, without addressing which, the objectives of this provision cannot be achieved.

- **Non-availability of data:-** The Central Government

and the State Governments lack the data availability of the beneficiaries of reservation on an economic basis. The government does not have such a leader who can prove that the benefited class does not have adequate representation in public employment and educational institutions.

- **Corruption:-** The possibility of corruption in EWS certification also high.
- **Challenges in Eligibility Criteria:-** There are many problems with the eligibility criteria for EWS reservations. The Supreme Court had also asked the government whether the per capita GDP of all the states would be checked while giving reservations on an economic basis.
- **Preventing administrative system failure:-** In the Indira Sahni vs. Union of India case, the Supreme Court had expressed apprehension that excessive use of reservation can become a factor of administrative failure by affecting merit. In this situation, it is necessary to keep in mind how reservation on an economic basis affects the administration.

Case study

The chronology of events leading to the Supreme Court judgment on 10% reservation to people belonging to the economically weaker section (EWS) in admissions and government jobs.

- Jan. 8, 2022: Lok Sabha clears the 103rd Constitution Amendment Bill - Jan. 9: Rajya Sabha also clears the Bill - Jan. 12: Ministry of Law and Justice issues notice, saying President Ram Nath Kovind has given assent - Feb.: Law challenged in SC	 - Feb. 6: SC issues notice to govt. on pleas challenging amendment - Feb. 8: Declines to stay 10% EWS quota	- Sept. 8, 2022: Bench constituted to hear appeals - Sept. 13: SC starts hearing arguments - Sept. 27: SC reserves order - Nov. 7: SC, by majority of 3:2, upholds validity of 103rd Constitution amendment providing 10% quota to EWS in admissions, govt. jobs
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Conclusion:

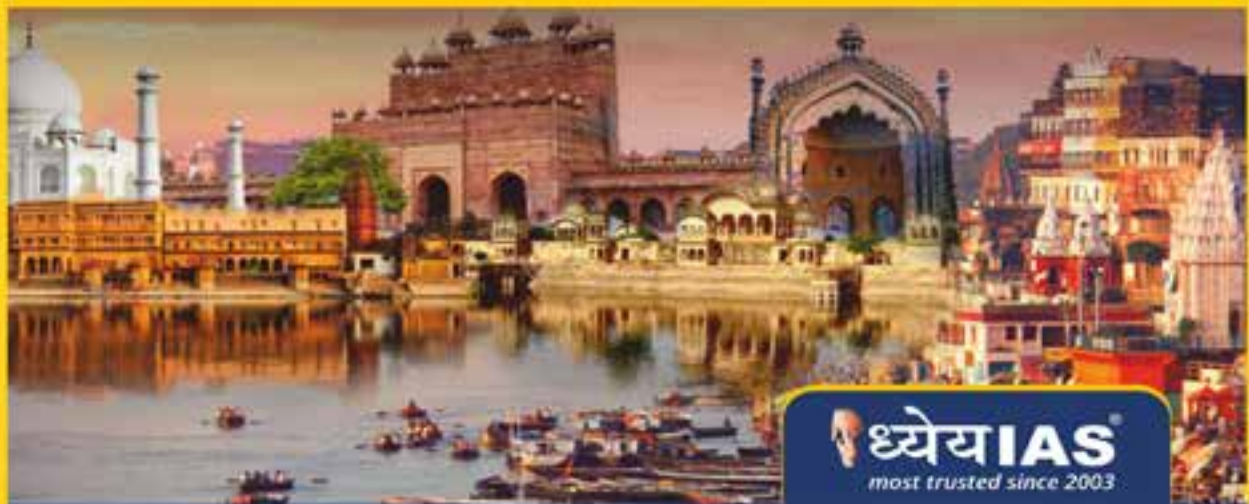
The government can take as many steps as possible to establish social, economic, and political justice as described in the Indian Constitution. Reservation given by the government on an economic basis will promote economic justice somewhere. But here it is necessary to keep in mind that reservation is not a permanent system but a temporary system whose goals need to be achieved as soon as possible. To achieve the goals of temporary arrangements like reservation, their implementation must be done very well, for this the government needs data governance, reduction in corruption, and to bring clarity in eligibility criteria in this context.

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National Issue

1 New India Literacy Programme

Why in News:

The Government of India has launched a new Centrally Sponsored Programme, namely New India Literacy Programme (NILP) for implementation during the financial year 2022-23 to 2026-27.

New India Literacy Programme (NILP):

- **Objective-** To provide literacy to 5 crore individuals in the age group of 15 years and above who are currently unable to read or write.
- The program will use the “Online Teaching, Learning and Assessment System (OTLAS)” in collaboration with National Informatics Centre, NCERT, and NIOS.
- The scheme seeks to align with the National Education Policy 2020 and to provide an inclusive and equitable education to all learners, including those in disadvantaged communities.
- 5 components of the scheme-
 1. Foundational Literacy and Numeracy
 2. Critical Life Skills
 3. Vocational Skills Development
 4. Basic Education
 5. Continuing Education
- **Beneficiaries-** Door-to-door survey on Mobile app will be done to identify; also non-literates can register directly through a mobile app.
- **Implementation-** The scheme will be implemented through volunteerism in online mode.
- School will be the unit for implementation of the scheme.
- The teaching and learning material and resources are available on DIKSHA platform of NCERT and can be accessed through mobile apps.

Need for NILP:

- Census 2011 reports that the absolute number of non-literates of the country in 15 years and above age group is 25.76 crore (male- 9.08 crore & female- 16.68 crore).
- In consideration of the progress of persons certified as literates being to the tune of 7.64 crore under the Sakshar Bharat programme implemented during 2009-10 to 2017-18, it is estimated that currently around 18.12 crore adults are still non-literate in India.

Foundational Literacy:

- It is a person's ability to read basic texts and solve basic numerical problems (like addition/subtraction).

- **Nipun Bharat-** It is a five-tier implementation program, launched to ensure universal literacy and numeracy for class 3 children by 2026-27.
- **NEP 2020-** The National Education Policy has the provision for National Mission of Foundational Literacy and Numeracy for attaining universal foundational literacy and numeracy in all primary schools.

Way Forward

The foundational literacy is a basic need for human capital which further can be improved using technology, decentralization of funds and making the community a participant in the process.

2 Affinity Test for Scheduled Tribes

Why in News:

The Supreme Court's bench of three judges held in its recent judgment that an affinity test can't be the only parameter to decide upon a caste claim. In its judgment, SC authored that an affinity test is not an essential part of the process for the determination of the correctness of a caste or tribe claim in every case.

Affinity Test:

- An affinity test is used to relate a person to a tribe by shifting through anthropological and ethnological traits.
- An affinity test mandates the study and preparation of a report by authorities. The report acknowledges the caste/tribe claims on the basis of anthropological and ethnological traits, worshipping methods, rituals, customs, mode of marriage, death ceremonies, methods of burial of dead bodies, etc. of the particular caste or tribe.



Why it can't be the litmus test:

3

'Hue and Cry' Notice

Why in News:

The Amritsar Rural Police issued a "Hue and Cry notice" against the fugitive pro-Khalistan preacher Amritpal Singh. This move came after Punjab Police has not been able to arrest him despite consistent efforts.

Hue and Cry Notice:

- The term Hue and Cry rule refers that if a suspect or a criminal(s) was running down the street in front of some bystanders, then each of them had to yell to help the police identify and catch them. It is said that all able-bodied men, upon hearing the shouts, were obliged to assist in the pursuit of the criminal.

Colonial Legacy:

- The hue and cry term traces its origin to 1285 when England's King Edward I signed the "Statute of Winchester" to deal with security and peacekeeping on a local level by revamping the existing police system.
- This rule enabled the Community Policing system during the 13th and 14th centuries.
- Indian law system includes various provisions of colonial times in different arenas ranging from policing to the judicial system. Law and Order provisions in different states including Punjab have 'hue and cry notices' as a legal procedure.

When it is issued?

- Police issue a 'hue and cry notice' when it requires the help of the public in such cases as locating missing persons, identifying unclaimed bodies, and looking out for a suspect among others.
- In recent times, police have minimized the use of the term 'hue and cry' notice and it is mostly done in cases where it wants to stress the seriousness of the matter. It is also used as a legal procedure to alert the other states about the fugitive.

Setbacks for Punjab Police in Amritpal Singh case:

- Amritpal Singh, a follower of the Sikh militant Jarnail Singh Bhinderwale has been preaching the idea of the Khalistan Separatist Movement in Punjab for a few months. He is still out of Punjab Police's reach despite the consistent efforts to catch him.

Way Forward:

The hue and cry notice issued by Punjab Police shows the importance of community participation in policing. Indian Police System needs a revamp because it is often seen that whether it is a local

- The court held that the affinity test is a significant basis to determine the scheduled tribe but it can never be conclusive to prove a caste/tribe claim.
- It may be possible that the applicant can have good knowledge about the aforesaid traits of any particular caste/tribe without belonging to it.
- It can also be the case that due to the prolonged influence of urbanization and globalization, an applicant or even his parents may not have knowledge of the facts. This may happen if the applicant has stayed in bigger urban areas along with his family for decades.
- That is why SC said that it can only be used as means to corroborate the documentary evidence.

Status of Scheduled Tribe in India:

- As per Census-1931, scheduled tribes are termed "backward tribes" living in the "Excluded" and "Partially Excluded" areas. The Constitution does not define the criteria for the recognition of scheduled tribes.
- However, Article 366(25) only provides a process to define Scheduled Tribes: "Scheduled Tribes means such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be the Scheduled Tribes for the purpose of this constitution".
- Article 342 grants the power to the President of India to notify the tribes or tribal communities as Scheduled Tribes after consultation with the respective Governor.
- As per Census 2011, there are 705 ethnic groups notified as Scheduled Tribes.

Affinity Test and SC judgments:

- In 2009, SC bench held that the affinity test was an integral part of the verification process for caste certificates. However, in 2011 the Supreme Court indicated that the affinity test may have run its course. In the present ruling SC has decided to refer the question to a larger Bench for an authoritative decision.

Way Forward:

The present matter acknowledges the hurdles in the determination of Scheduled Tribes because their indigenous features are get intermingled with modern traits. So criteria should include appropriate measures like worshipping methods of their ancestors and their chain of linkages within the communities. Tribes have distinct ways of worship that must be considered by the officials.

offender or a terrorist, manages to escape Law and Order Agency or Armed Forces with the help of locals. Hence, effective changes are required in policing methods for tracking criminals to strengthen the criminal justice system in the country.

4 Competition (Amendment) Bill, 2023

Why in News:

Recently, The Rajya Sabha passed the Competition (Amendment) Bill, 2023, which aims to modernize the two-decade-old anti-trust statute to reflect economic developments. The Competition Amendment Bill, 2023 seeks to amend the 2002 Competition Act, which empowers the Competition Commission of India (CCI) to restrict acts that harm competition and consumer interests.

The Competition (Amendment) bill, 2023:

- In August 2022, the Bill was tabled in Parliament and referred to the Standing Committee on Finance for assessment. The committee issued its findings in December 2022, and the Bill was reintroduced in February 2023 with few changes. The Bill was approved by the Lok Sabha on March 29.
- The Competition Amendment Bill 2023 proposes several modifications to India's Competition Act of 2002, which governs antitrust and competition regulations.
- Under the new bill, mergers, and acquisitions exceeding Rs. 2,000 crores in value must be notified to the Competition Commission of India (CCI), provided that the party being acquired has substantial business operations in India.
- The bill also introduces a new settlements framework, which allows entities to propose settlements for alleged contraventions.



Competition Commission of India(CCI):

- The Competition Commission of India (CCI) is a statutory entity of the Government of India charged with executing the Competition Act of 2002. It was established in March 2009.

- The Act bans anti-competitive agreements, enterprise abuse of dominant position, and combinations that have a significant detrimental effect on competition inside India.
- The Commission is made up of one Chairperson and six Members who are chosen by the Central Government.
- The commission is a quasi-judicial entity that provides advice to statutory authorities and handles antitrust disputes.

Competition Act ,2002:

- The Competition Act, 2002, was passed by the Indian Parliament and oversees Indian competition law.
- The Competition Commission of India was established to prevent the activities that have an adverse effect on competition in India.
- It is a mechanism for implementing and enforcing competition policy, as well as preventing and punishing enterprises' anti-competitive business activities and needless government intervention in the market.
- The Act aims to prohibit monopolies as well as unwarranted government interference. The major goals of the Competition Act of 2002 are as follows:-
 1. To create the basis for the creation of the Competition Commission.
 2. To prevent monopolies and to encourage competition in the market.
 3. To safeguard trade freedom for market participants (individuals and businesses).
 4. To safeguard the consumer's interests.

Way Forward:

The Competition (Amendment) Bill, 2023, is the most major reform to the Competition Act in the last 20 years. It attempts to bring the competition regime to speed up with contemporary developments in corporate operations, particularly in digital marketplaces. Several of the amendments recommended by the Competition Law Review Committee are included. The Bill, on the other hand, does not include a comprehensive revision of the competition system, which has been left to the newly formed Digital Competition Law Committee to consider.

5 National Mission on Natural Farming

Why in News:

The Government of India has unveiled a separate scheme National Mission on Natural Farming (NMNF). This independent scheme is consistent with the government's efforts to promote chemical-

free and Climate Smart Agriculture.

About Mission:

- The National Mission on Natural Farming has been formulated by upscaling the Bhartiya Prakritik Krishi Paddhati (BPKP). This move lies under the ambit of Pradhanmantri Pramparagat Krishi Vikas Yojana (PPKVY).

Aims & Objectives:

- This mission aims to promote natural farming across the country. Natural Farming is a chemical-free farming method based on locally available resources. It promotes traditional indigenous agricultural practices.

Major initiatives under NMNF :

Expansion of Natural Farming Area:

- This mission will cover a 7.5 lakh hectare area by developing 15000 clusters. The farmers willing to implement natural farming in their fields will be registered as cluster members. Each of the clusters shall comprise 50 or more Farmers with 50-hectare land.

Training of Master-trainers:

- The agricultural ministry is undertaking large-scale training of Master trainers, 'champion' farmers, and practicing farmers in the techniques of natural farming through the National Institute of Agricultural Extension Management (MANAGE) and National Centre of Organic and Natural Farming (NCONF).

Digital Assistance via Web Portal:

- A web portal has also been launched for the promotion of natural farming with information on the implementation framework, farmers' registration, implementation progress, and so on.

Financial Assistance for inputs:

- The Financial assistance of Rs.15000 per hectare per year will be provided to farmers for 3 years. It will help them in the creation of on-farm input production infrastructure. The incentives will be provided to farmers only when they are committed to natural farming and have taken up. In the case of discontinuation of natural farming, financial assistance shall not be disbursed.

Set-up of BRCs:

- The centre will set up 15,000 Bhartiya Prakritik Khedi Bio-Inputs Resources Centers (BRCs) to provide easy access to bio-resources and readily available organic or biofertilizers (cow dung-urine formulation).

Assured Benefits:

- As the mission emphasizes the promotion of natural farming, it will certainly eliminate the negative impacts of chemicals on the crops and ultimately increase the nutritional security of the people. This will also make agriculture

a financially viable and productive sector for farmers. It will also restore soil fertility and in turn, flourish sustainable agriculture.

Challenges ahead:

- The adoption of traditional agricultural practices and the establishment of on-farm biomass recycling centers require a long gestational period for productive outcomes. Besides this, the lack of readily available natural inputs and lack of crop diversification with low coverage of irrigational facilities across the country pose challenges in front of the mission.

Way Forward:

Traditional Indian Farming methods require many changes in the present agricultural pattern but if this mission is implemented successfully it would overturn agriculture as a climate-smart and sustainable means for the future generation.

6

India Justice Report 2022

Why in News:

In the recently published India Justice Report (IJR) 2022, the state of Karnataka has secured the top rank among 18 large and medium-sized states with a population of more than 10 million. The report considers several parameters such as police, judiciary, prisons, and legal aid for assessing the overall performance of states in terms of justice delivery.

Key points of the report:

- As of December 2022, despite a sanctioned strength of 1,108 judges, the high courts were functioning with only 778 judges. Against the sanctioned strength of 24631 judges for the subordinate courts, 19288 judges are hearing the cases.
- **Lack of Infrastructure:** The number of court halls for judges at the national level is not sufficient. Delhi, West Bengal, and Uttarakhand had no court hall for 86, 82, and 35 serving judges respectively. If each state appoints its sanctioned judges, only four states and four union territories have enough court halls.
- **Case Pendency:** The pendency of cases per judge has increased in most states over the past five years, while the sanctioned number has remained more or less the same. At the High Court level, the average pendency is highest in Uttar Pradesh around 11.34 years and West Bengal 9.9 years. The lowest average pendency is in Tripura around 1 year, Sikkim 1.9 years, and Meghalaya 2.1 years.
- Among 18 large and medium-sized states with a population of more than 10 million, Karnataka ranked first in justice delivery, followed by Tamil

Nadu and Telangana respectively, and Uttar Pradesh ranked lowest at 18th position. Sikkim topped the list among the 7 small states with a population of less than 10 million, followed by Tripura and Arunachal Pradesh.

About India Justice Report (IJR):

- The India Justice Report (IJR) was launched in 2019 by Tata Trusts in association with the Centre for Social Justice, Common Cause, and Commonwealth Human Rights Initiative.
- The report is based on aggregate data on the 4 pillars of justice delivery namely Police, Judiciary, Prisons, and Legal Aid. In this third edition, the individual capacity of 25 State Human Rights Commissions of the country has also been assessed. Its second report was published in the year 2020.

Way Forward:

The lack of infrastructure in courts and the fewer required number of judges are significant concerns for the Indian judiciary, leading to an increase in the pendency of cases. The government should improve the efficiency of the judicial system by filling vacancies of judges and by developing adequate infrastructure.

7 Tiger Estimation Report 2022

Why in News:

The All India Tiger Estimation Report 2022 was recently released by Prime Minister N. Modi in the event held to commemorate 50 years of 'Project Tiger' in Mysore, Karnataka. The fifth cycle of the report states that the tiger population in India grew by 6.7% from 2018 to 2022. The number of tigers in India rose up to 3,167 in 2022, up from 2,967 in 2018. The PM has released the Census while inaugurating the International Big Cat Alliance (IBC).

Tiger Census:

- The government conducts a national tiger census every four years to estimate the tiger population. This census covered the forested habitats in 20 states of India. The methods for tiger census include the foot survey for carnivore signs, prey abundance estimation, and camera traps for photographs.

Project Tiger:

- Project Tiger is a centrally sponsored scheme of the Ministry of Environment, Forests and Climate Change (MoEFCC) launched in 1973. It establishes a legal framework for the protection of tiger reserves (at present- 53) and strengthens institutional safeguards for ecologically sensitive areas and endangered species.
- It ensures the maintenance of a viable population of tigers in India for scientific, economic,

aesthetic, cultural, and ecological values.

IBCA:

- International Big Cat Alliance is launched for the conservation of seven big cats namely Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar, and Puma harboring our planet. This 97-member body will engage in advocacy, partnerships, capacity, building, eco-tourism, and finance tapping.

Status of Tiger Population in India according to Report:

In North India:

- The increase in tiger population has been reported in the Shivalik Hills and Gangetic Plains. The Suhelwa Wildlife Sanctuary and northwest of Yamuna in Himachal Pradesh have recorded the new evidence of tigers. The report added that special attention is needed to protect the genetically divergent population in Bihar's Valmiki Tiger Reserve.

In Central and Eastern India:

- The highest number of tiger population is recorded in the Central Highlands and Eastern Ghats in 2022. While in Chhattisgarh, Odisha, Jharkhand, and Telangana the number of tigers declined. The least number (100) of tigers were recorded in Sundarbans. They are limited to the Mangrove habitats.

In Western and South India:

- The number of tigers in the Western Ghats also declined. The population inside the protected areas remained stable while occupancy outside the protected areas declined. Significant declines were observed in the Wayanad landscape and the Biligiriranga Hills.
- In northeastern hill, the tiger populations are genetically unique but limited to the protected areas of Brahmaputra Plains and North East Hills.
- The infra-development across protected areas leaves a congested and overpopulated corridor which leads to negative human-animal conflicts. Habitat destruction, habitat fragmentation, and poaching are the other concerning factors for the tiger population.

Way Forward:

Tigers are apex predators and hold ecological, cultural, and economic (tourism attraction) significance. The development of green infrastructure across protected areas and prey base management is essential for the survival of tigers. Conservation efforts, habitat restoration, and strict implementation of anti-poaching laws are required for the sustainable recovery of the tiger population in India.



International Issue

1 Comprehensive and Progressive Trans-Pacific Partnership

Why in News:

Recently UK agreed to join the comprehensive and progressive Trans-Pacific Partnership (TPP), a trade agreement based around the Pacific Rim. UK's entry needs to be ratified by the other member countries too. After leaving the European Union, the UK continues to enter into agreements with emerging economies.

About Comprehensive and Progressive Trans-Pacific Partnership (CPTPP):

- In 2005, 12 countries formed the Trans-Pacific Partnership (TPP) on the proposal of Pacific Rim countries such as Brunei, Chile, New Zealand, and Singapore. When Donald Trump became the President of America in 2017, he pulled America out of this agreement.
- Thereafter the remaining eleven signatories, known as TPP-11, continued negotiations and signed the Comprehensive and Progressive Trans-Pacific Partnership in Santiago (Chile) on 8th March 2018.
- It is a free trade agreement (FTA) between Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, New Zealand, Singapore and Vietnam. UK will soon be the 12th member country of this partnership.

Important points of the CPTPP:

- The agreement will mean zero tariffs on around 99% of UK exports including cheese, cars, chocolate, machinery, gin and whisky. This would benefit the UK economy by \$2.2 billion a year in the long term. New Zealand has the chairmanship of the CPTPP commission of the year 2023.
- It is a gateway to the Indo-Pacific region which will account for the majority (54%) of global economic growth in the future. The UK, as a CPTPP member, would also have a veto on whether China would join the treaty, as Beijing applied to become a member in September 2021.
- The total population of the member countries of this partnership is more than 500 million, while the total economy of the countries is about \$13.5 trillion. Once the UK joins, the GDP of the member states will be around 15% of the total global GDP.

Way Forward:

UK's entry into this partnership will boost trade in the Indo-Pacific region and will challenge any unilateral changes of one country. The UK will get a huge market for the export of its goods, which is likely to boost the country's sluggish economy.

2 United Nations Statistical Commission

Why in News:

Recently, India has been elected to the United Nations Statistical Commission for four years. During the voting process, India was supported by 46 out of 53 countries. India has been selected after two decades, and its tenure will start on January 01, 2024. As a second member, South Korea was selected for the second seat through a lottery after two inconclusive rounds of secret ballots.

About United Nations Statistical Commission:

- The United Nations Statistical Commission, established in 1947, is the apex body of the global statistical system that brings together leading statisticians from member countries around the world.
- It is the supreme decision-making body for international statistical activities, responsible for setting statistical standards and developing concepts and methods, including their implementation at national and international levels.
- The commission consists of 24 member states of the United Nations elected on the basis of equal geographical distribution by the United Nations Economic and Social Council. All these countries are elected for a term of 4 years.
- In July 1999 the Economic and Social Council decided that from the year 2000, the Commission would meet annually for four days in each session.

India's election in other UN bodies:

- India has been elected to the Narcotic Drugs Commission along with 21 other countries including Argentina, China, Kenya, Nigeria, and South Africa. In addition, India has been elected to the Program and Coordination Committee, which helps in the coordination and integration of UN work in the economic and social fields.
- India and Cambodia have also been elected to the Coordination Board of the United Nations Program on HIV/AIDS (UNAIDS) for the Asia-Pacific States. The board guides UNAIDS' work in the region and helps develop strategies to fight the HIV/AIDS epidemic.

Way Forward:

For the few years, India's stature at the global level is continuously increasing, whether it is the presidency of G-20 or SCO. The philosophy guiding India's contribution to various UN programs has been 'Vasudhaiva Kutumbakam' or 'The world is one family'. This philosophy emphasizes the interconnectedness of humanity and encourages

building relationships based on understanding and mutual respect.

3 India-Bhutan Relations

Why in News:

Recently the King of Bhutan Jigme Khesar Namgyel Wangchuck came to India on a three-day visit. The visit followed Prime Minister Lotay Tshering's comments on Bhutan's border dispute with China. Two aspects have attracted massive attention during the visit: first, the denial of Chinese incursions and establishment of infrastructure inside Bhutanese territories, while second, expressing that China is as much of a stakeholder as India and Bhutan are, in the Doklam issue.

India-Bhutan Relations:

- Diplomatic relations between India and Bhutan were established in 1968 with the establishment of a Special Office of India in Thimphu. The basic framework for India-Bhutan bilateral relations is the Treaty of Friendship and Cooperation signed between the two countries in 1949 and revised in February 2007. The golden jubilee of the establishment of formal diplomatic relations between India and Bhutan was celebrated in the year 2018.
- India has been providing economic assistance for the socio-economic development of Bhutan since the early 1960s when Bhutan started its Five Year Plans. For the 12th Five-Year Plan, India contributed Rs 4500 crore, which was 73% of Bhutan's total external grants.
- For Bhutan, hydropower development remains an important catalyst for socio-economic development. Four Hydro Electric Projects (HEP) totaling 2136 MW are already operational in Bhutan supplying electricity. The 720 MW Mangdechhu was commissioned in August 2019.
- Major exports from India to Bhutan are mineral products, machinery and mechanical equipment, electrical equipment, vehicles, and vegetable products. The major items exported from Bhutan to India include electricity, ferro-silicon, portland cement, dolomite, calcium carbide of silicon, cement clinker, etc.
- India is the most popular educational destination for Bhutanese students; with around 4000 Bhutanese students enrolled in many Indian universities. There is a vibrant cultural exchange between the two countries. Many Bhutanese pilgrims visit holy Buddhist sites in India.
- Both India and Bhutan are founding members of the South Asian Association for Regional Cooperation (SAARC) which deals with the economic, social, and cultural development of the South Asian region. Both these countries

are also members of BIMSTEC. The bilateral relationship between the two countries is about \$1 billion, with immense potential to grow.

Way Forward:

The security of the border with China is a matter of concern for both countries. Therefore, both sides need to work together on this issue. Being neighbors, both countries must recognize each other's values. India needs to continuously explore new areas of cooperation with Bhutan. The decision to set up ISRO's ground station in Bhutan is a welcome step, which will help Bhutan to provide meteorological messages from its remote areas.

4 UN Democracy Fund

Why in News:

Recently, Foreign Minister S. Jaishankar criticized the George Soros-led Foundation. A report showed that since 2015, 68 of the 276 projects funded by the UNDEF to strengthen governance were implemented by Civil Society Organisations connected to businessman George Soros's Open Society Foundation or its associates as a recipient or a partner.

About the UNDEF:

- The United Nations Democracy Fund is a General Trust Fund of the UN that was formed to support democratization efforts around the world.
- It was established in 2005 at the World Summit and was co-sponsored by the then Prime Minister of India, Manmohan Singh, and US President George Bush in the backdrop of their discussions over the Indo-US civil nuclear deal.
- The majority of UNDEF funds have been distributed to civil society organizations with the body aiming to financially support projects that strengthen civil society, human rights, and democratic participation.
- India, as a founding member, was the fourth largest contributor to the UNDEF contributing over \$32 million since 2005. In 2022, India contributed \$150,000, the fourth highest among all 45 donors behind the USA, Sweden, and Germany.
- The fund is overseen by an Advisory Board (19 members), which includes representatives from various countries (including India) and civil society organizations.

Funding by UNDEF:

- The UNDEF invites and receives around 3,000 proposals from NGOs around the world on an annual basis.
- The Advisory Board considers these proposals and recommends them to the Secretary-General for approval with around 30 - 50 organizations being selected for funding.

- Over the course of the 15 Annual Rounds of funding conducted by the UNDEF, it has supported over 880 two-year projects in more than 130 countries.

Conclusion:

Against the backdrop of Jaishankar's criticism of Soros, there was also a view that while India is taking a hard line in the country against Soros and OSF, it is not taking a similar stand on foundations that benefit from funding from UNDEF. In response, Ministry of External Affairs spokesperson Arindam Bagchi said that India's funding to the United Nations-Democracy Fund (UNDEF) would benefit the foundation headed by American businessman George Soros and External Affairs Minister S. Jaishankar's recent criticism of Soros is a different issues. They should not be clubbed together.

5 India-Ukraine Relationship

Why in News:

The First Deputy Minister of Foreign Affairs of Ukraine, H.E. Ms. Emine Dzhaparova made her official visit to New Delhi. This was her first official visit to India. During the visit, Ms. Dzhaparova held bilateral talks with Indian officials for bilateral agendas such as economic, defence, humanitarian assistance, and global issues of mutual interest. She also briefed them about the prevailing situation in Ukraine.

Key points of the meeting:

- On the issue of Indian medical students, the Deputy FM mentioned that Ukraine will allow foreign medical students to take the Unified State Qualification Exam in their country of domicile.
- Ukraine requested additional humanitarian supplies, including medicines and medical equipment from India.
- It was agreed that the next Inter-Governmental Commission between the two countries would be held in India on a mutually convenient date.

About India- Ukraine relationship:

- India was one of the first countries to recognize Ukraine. The government of India recognized the Republic of Ukraine as a sovereign country in December 1991. India and Ukraine established diplomatic relations in January 1992.
- India is Ukraine's largest export destination in the Asia-Pacific and the fifth-largest overall export destination. The main items of export from Ukraine to India are agricultural products, metallurgical products, plastics, polymers, etc. while, pharmaceuticals, machinery, chemicals, food products, etc. are the major Indian exports to Ukraine.
- In March 1992, the Treaty on Friendship and Co-operation was signed between India and Ukraine,

providing a major boost to India-Ukraine trade relations.

- India had friendly relations with Ukraine even when the latter was a republic part of the Soviet Union. Ukraine supports the resolution of the issue of Jammu & Kashmir on the basis of the Shimla agreement. Ukraine also supports reforms of the UN structure.
- Throughout the Russian invasion of Ukraine, India maintained a neutral stance and abstained from voting in support of several resolutions aimed at condemning Russia's actions in Ukraine, both at the United Nations General Assembly and at United Nations Security Council.

Conclusion:

The invasion of Ukraine by Russia has left India in a difficult position. Russia is a historical partner with which India has deep defence ties and there is no easy, immediate alternative here. Russia's aggression is a naked violation of Ukraine's sovereignty, territorial integrity, and international laws. The war has also made India's ties with its Western partners complicated as the trans-Atlantic powers, led by the United States, have launched an economic war against Russia, from which India and most of the Global South have stayed away. India's policy towards the conflict is rooted in its strategic neutrality. It should empathise more vocally with the victim, raise the voice and interests of the Global South, and call for upholding international laws and sovereignty of all states, while at the same time pushing for a pragmatic and permanent solution to the conflict.

6 China Practiced Blockade of Taiwan

Why in News:

- People's Liberation Army of China conducted the "Joint Sword" Drills from April 8 to April 10, in Taiwan's air defence identification zone. This was the first time that China simulated attacking Taiwan using an aircraft carrier. Air incursions and activity by Chinese navy vessels continued even after the end of the drills in an effort to simulate a blockade of Taiwan.
- The "Joint Sword" drills began by China as a stern warning to Taiwan after Taiwanese President Tsai Ing-wen visited the USA and subsequent meeting with the U.S. Speaker of the House Kevin McCarthy.

What is behind China Taiwan Tension:

- Taiwan considers itself a sovereign state with its own constitution. While Beijing views Taiwan as a breakaway province that must be unified with mainland China.
- China proposed the "one country, two systems"

option, which would allow Taiwan an autonomous status if it agrees to come under Beijing's control. However, Taiwan rejected the offer and Beijing declared Taiwan's government illegitimate.

- In 2018 Beijing stepped up pressure on international companies that if they failed to list Taiwan as a part of China on their websites, it will block them from doing business in China.

What does the US have to do with the China-Taiwan divide?

- US-Sino relations are based on the 'One China Policy', which acknowledges that there is only one Chinese Government. The US recognizes its formal ties with China. With Taiwan, the US shares independent strong "unofficial" relations.
- However, it has also pledged to supply Taiwan with defensive weapons and stressed that any attack by China would cause "grave concern".
- The issue of Taiwan has been a bone of contention between the US and China. Beijing has condemned any support from Washington for Taipei and has responded by stepping up incursions of military jets into Taiwan's air defence zone.

Strategic Importance of Taiwan:

- The Island of Taiwan is located just 100 miles from the coast of China. This positioning makes it crucial to the US foreign policy. Further, Taiwan's location prevents China from claiming complete control over the South China Sea and expanding its naval power eastward to compete against the United States.
- Taiwan is also a strong economic power. Most of the chips used in computers and automobiles are manufactured in Taiwan.

Way Forward:

Peace and stability in the Taiwan Strait are important not only for the security of the region but also for the stability of the international community as a whole. Any instability in the region will disturb global trade and it will further distress the global economy which is already slowing down.

7

EAM S. Jaishankar's visit to Uganda and Mozambique

Why in News:

India's Foreign Minister, S Jaishankar, visited Uganda and Mozambique from 10 - 15 April 2023. The visit highlights India's push for increased diplomatic engagement with major African partners.

Visit to Uganda:

- During the visit, Dr. Jaishankar held delegation-level talks with his counterpart Foreign Minister of Uganda General Jeje Odongo.
- He inaugurated the transit campus of the

National Forensic Science University (NFSU) in Jinja. A bilateral MoU between the Government of India and the Government of Uganda, on setting up the first-ever campus of NFSU outside India, was signed during the visit.

- He participated in the ground-breaking ceremony of a solar-powered water supply project in Uganda.
- He also addressed the trade and business community of Uganda and had an interaction with the Indian diaspora.
- Both countries have a history of high-level political visits. Prime Minister Narendra Modi visited Uganda in 2018 for a state visit, where he addressed Uganda's parliament. Uganda's President Yoweri Museveni made an official visit to the country during the third India-Africa Forum Summit in 2015.

Visit to Mozambique:

- Dr. S. Jaishankar visited Mozambique from 13 to 15 April. This was the first-ever visit by an External Affairs Minister of India to Mozambique.
- During the visit, he met Mozambican Foreign Minister Ms. Veronica Macamo.
- He also interacted with the Indian diaspora based in Mozambique.
- The Mozambique Channel is a key global shipping route that carries 30 percent of global tanker traffic, and is slowly turning into the next major security hotspot in the Indian Ocean.
- Apart from South Africa, Mozambique is the only second African country with whom India enjoys a strategic partnership. Mozambique has sought cooperation from India to deal with the growing menace of terrorism and radicalisation, to which India has responded favourably. Shri Rajnath Singh's visit to Maputo in 2019 was a historic first-ever visit by an Indian defence minister during which an MoU on sharing of white shipping information was signed.

Way Forward

Visits to Uganda and Mozambique are expected to further strengthen India's strong bilateral relations with these two countries. Since India is geographically connected with the African continent, and thus shares its security concerns as well. India considers the Indian Ocean rim countries of Africa critical to its Indo-Pacific strategy, and with many of them, India has signed defence and shipping agreements including joint exercises. In an order to counter increasing Chinese influence in the African continent, India through its investments of over \$11b, has focused on the overall development of the African continent.



Environmental Issue



1 Green Wall To Revive The Aravallis

Why In News:

The Haryana government launched an extensive afforestation and plantation project called the “green Wall” in 75 districts to revive the Aravallis that is under threat from rampant mining, dumping of waste and encroachments.

About Green Wall Project

- The Aravallis Green Wall Project is a part of Union Environment Ministry’s vision to create green corridors across the country to combat land degradation and desertification.
- The project is conceptualised on the lines of African Green Wall programme (2007), which was to restore degraded landscape in Sahel region of Africa.
- Aim: to revive the Aravallis that is under threat from rampant mining, dumping of waste and encroachments.
- It is an ambitious project to create a 1,400 km long and 5 km wide green belt buffer around the Aravalli range, which covers the states of Haryana, Rajasthan, Gujarat and Delhi.
- The project also includes rejuvenation of 75 water bodies in initial phase.

Objective Of The Project

- Improving the ecological health of Aravalli range.
- To prevent eastward expansion of Thar Desert and to reduce land degradation by creating green barriers that will prevent soil erosion, desertification and dust storms.
- This green wall will help in carbon sequestration and mitigating climate change to enhance the biodiversity and ecosystem services of the Aravalli range by planting native tree species, proving habitat for wildlife, improving water quality and quantity.
- Promote sustainable development and livelihood opportunities by involving local communities in afforestation, agro-forestry and water conservation activities that will generate income, employment, food security and social benefits.

About Aravalli Range

- It formed in a Precambrian event called the Aravalli-Delhi Orogen.
- The mountain range is one of the oldest ranges of the world and was formed by folding orogenic process.
- The Fold Mountains are formed by the movement

of convergent plate boundaries and subsequent folding.

- Aravallis range is divided into two main ranges-
 1. The Sambhar Sirohi Range,
 2. The Sambhar Khetri Range, in Rajasthan.
- The highest peak is guru Peak on Mount Abu.
- During monsoon, the Aravalli mountain range guides the monsoon clouds eastwards towards Shimla and Nainital, thus helping nurture the Sub-Himalayan rivers and feeding the north Indian plains.

Way Forward:

The Green Wall Initiative will contribute to India’s commitments under various International conventions such as UNCCD, Convention on Biological Diversity (CBD), and UNFCCC.

2 NGT Fines Kerala Government For Failing To Protect Ramsar Sites

Why in News:

Recently, the National Green Tribunal (NGT) imposed a fine of Rs 10 crore on the Kerala government for failing to protect the Vembanad and Ashtamudi lakes. Both these lakes are included in the Ramsar list of wetlands. The two wetland lakes have long been susceptible to large-scale encroachment, pollution, and ecosystem degradation.

About NGT:

- The National Green Tribunal is a specialized body established under the National Green Tribunal Act (2010). The purpose of which is to deal effectively and expeditiously with matters related to environmental protection, and the conservation of forests and other natural resources.

Important Points:

- Fines imposed as per the ‘polluter pays principle’ will be credited to the ring-fence account. The amount to be utilized under the authority of the Chief Secretary shall be employed for conservation or restoration measures.
- Additional Chief Secretary of the State filed an action taken report. The report depicted a “dismal state of affairs in meeting the mandated duty to protect wetlands”.
- The water quality here is very poor with oxygen-deficient levels.
- The water holding capacity of Vembanad Lake has decreased by 85 percent in the last 120 years due to massive encroachment and destruction of its ecology.
- A large amount of waste accumulation was reported during a visit to the lake and

surrounding areas including the Kollam KSRTC stop, Kuripuzha Effluent Treatment Plant, and Sambarnikodi.

- It has been suggested to classify the areas near the lake on the basis of water quality and publish the results monthly.
- Recommends immediate rules to control illegal demolition and dumping of boats in the lake.
- The committee directed the State Pollution Control Board to test the coliform bacteria and oxygen levels in the lake every three months.
- It also suggested a study to determine the impact of tourism here on the natural backwater ecosystem.

Way Forward:

Fisheries, biodiversity, and even tourism are closely linked with backwaters as they are in constant exchange with the sea. Remedial action to protect the statutory and administrative authorities affected by the illegal dumping of waste in the Vembanad and Ashtamudi lakes has failed. The action taken at the State level was also insufficient to rectify the situation. The state cannot plead helplessness to enforce the guaranteed rights of citizens and it must take stringent measures to protect the environment and public health, or the large parts of Vembanadu, Kerala's largest wetland ecosystem, may soon disappear. The state government should develop a master plan to address the challenges of pollution, flood, and drought in wetlands and associated ecosystems.

3 MISHTI to Protect India's Existing Mangroves

Why in News:

In the budget speech for the year 2023, the finance minister, Nirmala Sitharaman, unveiled a new plan to plant mangroves along India's coastlines and salt pans.

About the Initiative:

- The initiative is known as the Mangrove Initiative for Shoreline Habitats and Tangible Incomes (MISHTI).
- It was introduced following India's participation in the Mangrove Alliance for Climate, which was established during the 27th Conference of Parties to the United Nations Framework Convention on Climate Change held in Egypt in November 2022.

Mangroves:

- Mangroves are clusters of small trees and shrubs that grow in high levels of salt and are typically found along the coasts of tropical and subtropical regions.

- In India, the mangrove vegetation spans an area of 4,975 square kilometers, accounting for 0.15% of the entire landmass of the country.

Features:

- They survive in extremely hostile environments.
- The mangrove environment needs limited oxygen in the soil.
- The seeds of the tree start to grow while they are still connected to the main tree.

Importance:

- Mangroves play a crucial role in protecting against the destructive impacts of cyclones.
- They serve as the primary barrier to minimizing extensive damage to infrastructure, ecosystems, and the means of people's livelihoods.
- They are highly effective in capturing carbon dioxide from the air, providing shelter to essential creatures in the blue carbon ecosystem, and aiding in the prevention of coastal erosion.
- Mangroves enhance the quality of water by taking in nutrients from runoff, which could potentially result in damaging algal blooms in the sea.

Loss of Mangroves:

- The International Union for Conservation of Nature stated that 50% of the world's mangrove forests have vanished in the last fifty years.
- Commercialization of coastal areas is rapidly replacing these salt-tolerant trees and the ecosystems they support.
- The rise of shrimp farming has caused at least 35% of the overall loss.
- The severe deficiency of oxygen in the soil where mangroves grow presents a major obstacle for these plants.
- The advancement of human infrastructure has become an impediment that constrains the potential migration of mangrove forests.
- The coastal ecosystem relies heavily on the presence of mangroves, which play a critical role in maintaining and conserving it. It is important to undertake planting initiatives to replace any damaged vegetation resulting from natural or human activities.

Way Forward:

To effectively conserve mangroves, a holistic approach is needed that involves the local community and considers environmental security and natural disaster risk reduction. Instead of creating new islands or shorelines, restoring current mangrove habitats is a better approach. By protecting the existing mangrove coverage, there is a higher chance of maintaining carbon sequestration.

4 15 Rare Earth Elements Discovered in Andhra Pradesh

Why in News:

After lithium reserve in J&K, large deposits of 15 rare earth elements (REE) were found in Andhra Pradesh's Anantapur district. These elements were found by the Hyderabad-based National Geophysical Research Institute (NGRI). They were successfully identified from the non-traditional rocks like syenites. The major REE identified were allanite, cerite, thorite, columbite, tantalite, apatite, zircon, monazite, pyrochlore, euxenite and fluorite.

Rare-earth elements :

- Rare earth elements are a group of seventeen chemical elements that occur together in the periodic table. The group consists of yttrium, scandium and the 15 lanthanide elements.
- Scandium and yttrium are considered rare-earth elements because they tend to occur in the same ore deposits as the lanthanides and exhibit similar chemical properties, but have different electronic and magnetic properties.

Significance:

- They are strategically very important due to their use of emerging and diverse technologies which cater to the needs of current society.
- REEs are widely used in high technology owing to their luminescent and catalytic properties. eg- lasers, magnets, batteries, fibre-optic telecommunication cables.
- 3. These elements are crucial components, which are used in a variety of daily-use and industrial applications, from cell phones and Televisions to computers and automobiles. They are also used in clean energy, aerospace, defence, and in manufacturing permanent magnets.

Way Forward:

- The global demand for automobiles, consumer electronics, energy-efficient lighting, and catalysts is expected to rise rapidly over the next decade. REEs are critical raw material for future of these technologies/industries.
- Rare earth magnet demand is expected to increase due to the rise in demand for rechargeable batteries.
- New developments in medical technology are expected to increase the use of surgical lasers, magnetic resonance imaging, and positron emission tomography scintillation detectors.
- Future military and navy arsenals may utilize REEs for better efficiency and handling.

5 More than 90% of the world's salt marshes may soon succumb to sea level rise: Study

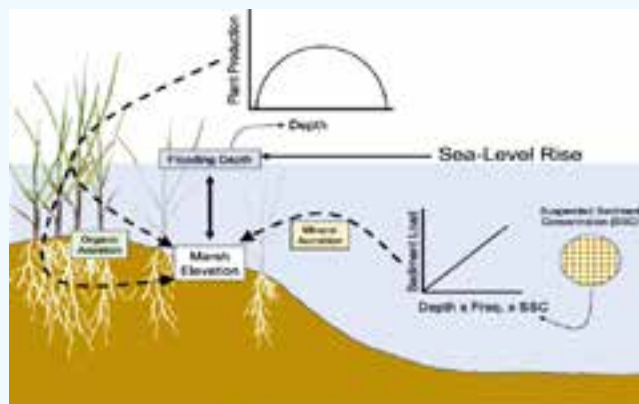
Why in News:

According to a study published in the journal Science of The Total Environment, more than 90% of the world's salt marshes may soon succumb to sea level rise. Due to global sea level rise, salt marshes will be submerged and diminished by end of the century.

Salt marshes all over the globe experience 'coastal squeeze', where their movement is obstructed by sea level rise, anthropogenic activities, and geographical factors.

Global Sea Level Rise:

- As per the 6th Assessment Report of IPCC, the Global sea level has been rising at an accelerating rate since 1970. It leads to substantial impacts on coastal communities, including a near-doubling in the frequency of coastal flooding since the 1960s around the world.



About Salt Marshes:

- Salt marshes are coastal wetlands that are flooded by salt water brought in by tides. They are marshy because their ground is composed of muddy sediment and decomposing plant matter. Salt marshes occur in middle to high latitudes.

Role in Ecosystem:

- Salt marshes play an important role in stabilizing the environment and providing the following essential ecosystem services.
- Protect shorelines from erosion by buffering wave action and trapping sediments.
- During storms, salt marshes absorb flood waters. One acre of salt marsh can absorb up to 1.5 million gallons of flood water.
- Protect water quality by filtering runoff and by metabolizing excess nutrients. For example, by filtering pollutants, marshes help oyster reefs and seagrass beds, which need clean water to survive.

- They sequester and store blue carbon (carbon captured by the world's ocean and coastal ecosystems). Salt marshes and coastal wetlands sequester and store carbon at a rate 10 times that of mature tropical forests. Thus, they are an essential piece of the solution to global climate change.

Salt Marshes in India:

- The total extent of salt marshes in India is estimated to be about 290 square km. A total of 14 salt marsh species are found along the Indian coast. The highest density of salt marshes was recorded in Lakshadweep followed by Tamil Nadu, West Bengal, Maharashtra, Andhra Pradesh, and Gujarat.

Way Forward:

Conservation of salt marshes is important to keep marine ecosystems healthy. In India, salt marshes are being protected under the UNDP program titled 'Enhancing climate resilience of India's coastal communities'. This is funded by the Green Climate Fund. The International Blue Carbon Initiative also focuses on mitigating climate change through the conservation and restoration of coastal and marine ecosystems.

6 State Energy Efficiency Index

Why in News:

Recently, The Union Minister of Power and New and Renewable Energy has issued the State Energy Efficiency Index 2021-22. The SEEI was released during the RPM (Review, Planning, and Monitoring) meeting of States and State Utilities in New Delhi.

State Energy Efficiency Index (SEEI) 2021-22:

- It was created in collaboration with the Alliance for an Energy-Efficient Economy (AEEE) by the Bureau of Energy Efficiency (BEE).
- SEEI 2021-22 has an updated framework of 50 indicators that are linked with national goals. This year, program-specific indicators have been added to track the outcomes and consequences of state-level energy efficiency programs.

State-wise performance:

- **Front Runner category:** In SEEI 2021-22, 5 states - Andhra Pradesh, Karnataka, Kerala, Rajasthan, and Telangana - are in the Front Runner category (>60 points).
- **Achiever category (50-60 points):** 4 states - Assam, Haryana, Maharashtra, and Punjab - are in the Achiever category (50-60 points).
- **Top-Performing States:** Karnataka, Andhra Pradesh, Assam, and Chandigarh are the top-performing states in their respective state groups. Telangana and Andhra Pradesh showed the most improvement since the last index.

Aim and Objective:

It presents the following proposals to assist governments in driving change in Energy efficiency that will contribute to the achievement of the SDGs and NDC:

- Providing monetary help for energy efficiency in priority industries.
- Increasing state and territorial institutional ability to handle rising requirements and problems in energy efficiency implementation.
- Improving cross-functional interactions among financial institutions, energy service firms, and energy specialists in state-wide energy efficiency implementation.
- Integrating energy data reporting and monitoring across industries.



Bureau of Energy Efficiency(BEE):

- Under the requirements of the Energy Conservation Act of 2001, BEE was founded on March 1, 2002.
- The purpose of BEE is to help in the development of energy efficiency policies and initiatives with the primary goal of lowering the energy intensity of the Indian economy.
- According to the Energy Conservation Act of 2001, BEE is in charge of regulatory and promotional tasks. To accomplish its tasks, it recognizes, identifies, and employs existing resources and infrastructure.
- BEE collaborates with state governments and utilities to improve the implementation of energy-saving measures.
- BEE's emphasis on energy efficiency helps India meet its climate pledges and ensure a sustainable future.

About Alliance for an Energy-Efficient Economy (AEEE):

- The Alliance for an Energy-Efficient Economy (AEEE) is a significant group in India that promotes energy efficiency as a resource.

- AEEE is a non-profit energy efficiency market facilitator that facilitates policy implementation.
- It advocates for evidence-based, data-driven energy efficiency policy and research.

Way Forward:

The index will aid in making progress in driving energy efficiency policies and programs at the state and local level, managing the energy footprint of states and India, and providing access to energy efficiency programs under BEE to consumers and enhancing energy efficiency of equipment without reducing services.

7 World Energy Transitions Outlook Report

Why in News:

Recently, The Global Energy Transition Outlook 2023 study issued by the International Renewable Energy Agency (IRENA), emphasized on the need for a more aggressive approach regarding transition to renewable energy sources. This paper describes the current level of renewable energy production and sheds light on the difficulties that must be overcome in order to meet the objectives set forth in the Paris Agreement.

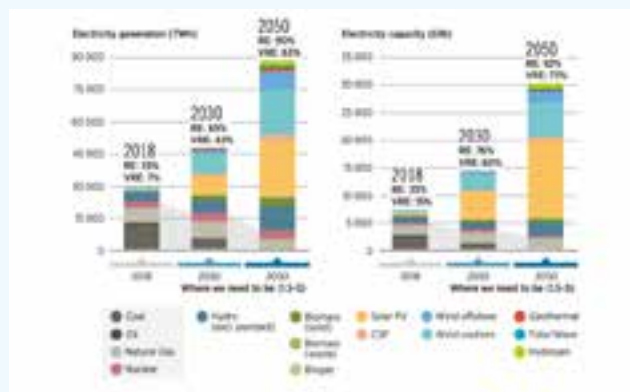
Purpose of the Report:

- The outlook sets out priority areas and actions based on available technologies that must be achieved by 2030 to achieve net zero emissions by mid-century.
- It also takes stock of the progress made in all energy use to date, showing that the current pace and scale of renewable energy-based change is insufficient.
- It provides an in-depth analysis of two areas particularly relevant to the decarbonization of end-use sectors: electrification and bioenergy.
- It also explores the socio-economic impacts of 1.5°C (under the Paris Agreement) and provides a path to progress towards universal access to clean energy.

About the Report:

- The global energy transformation remains “off track,” falling short of the 1.5 degrees Celsius target.
- To keep 1.5°C alive, deployment levels must increase from around 3,000 gigatonnes (GW) now to over 10,000 GW in 2030, at a rate of 1,000 GW per year.
- Public sector engagement is essential to more evenly route investments to nations.
- Global investment in energy transition technologies reached a new record of \$1.3 trillion in 2022, yearly investments must increase more than quadruple to over \$5 trillion to stay on the 1.5 degrees Celsius pathway.

- By 2030, cumulative investments must amount to USD 44 trillion, with transition technologies representing 80 per cent of the total, or \$35 trillion, “prioritizing efficiency, electrification, grid expansion and flexibility”.
- Current pledges and plans fall well short of IRENA’s 1.5°C pathway and will result in an emissions gap of 16 gigatonnes (Gt) in 2050.
- The report identifies two key developments that have compounded the challenges facing the energy transition and slowed progress towards achieving renewable energy targets both at the time of the COVID-19 pandemic and the Ukraine crisis. Additionally, the report highlights that Africa is expected to account for only 1% of additional renewable energy capacity in 2022, indicating the need for more investment in the sector.



About IRENA:

- The International Renewable Energy Agency (IRENA) is an international organisation that assists nations in their transition to a sustainable energy future.
- It was officially established on January 26, 2009, in Bonn, Germany.
- Its headquarters are in Abu Dhabi, United Arab Emirates, and its membership includes 167 nations as well as the European Union.
- India became the 77th Founder Member of this organization in 2009, and it is an official United Nations observer.

Way Forward:

Short-term initiatives to alleviate the present energy crisis must be supplemented with a firm emphasis on mid- and long-term energy transition goals. The government is dealing with a number of issues, including energy security, economic recovery, and the affordability of energy costs for people and companies. This is a comprehensive global policy framework that may bring countries together to facilitate the international movement of cash, capacity, and technology.



Science-Tech



1 Upward Lightning

Why in News:

Recently, the researchers in Brazil succeeded in taking pictures of upward lightening or upward flashes with high speed video camera at very high resolution.

The Phenomenon of Upward Lightning

- It is a phenomenon whereby a self-initiated lightning streak develops from a tall object that travels upward toward an overlaying electrified storm cloud.
- For this to happen, storm electrification and the resulting presence of a cloud charge region are enabling factors.
- The vertical elevation of a tall object accentuates the electric field locally on the ground, resulting in conditions favourable for the initiation of an upward streak (called a ladder) from a tall object.
- It can also develop in response to an electric field change created by a nearby preceding lightning flash.

Process: Stepped leader trigger

- This process is triggered by the development of the stepped leader (essentially a channel of negative charge that travels downward in a zigzag pattern from a cloud, nearly invisible to the human eye).
- The stepped leader travels to the ground in a millisecond, leading to an intensification of the positive charge on the ground.
- As the streaks of the stepped leader keep streaking towards the ground the electrical charges between the leader tips and the tops of tall objects on the ground keep on increasing.
- In due course, these forces cause the air above these tall buildings or towers to ionise and thereby turn more conductive.
- With the negative charge repeatedly moving toward the ground, the channel of air just above the tall objects turns positively charged, which starts streaking upwards and is called upward streamer.
- In due course, the negatively-charged, downward-moving stepped leader makes contact with one of the developing positively-charged upwards streamers.
- Upward lightning typically has a lower intensity and duration compared to downward lightning.
- It also has a higher frequency of occurrence during thunderstorms.

Risks Involved:

- Upward lightning can damage the structures such as building and towers.

- It can also pose a risk to aviation, specifically for planes that fly near tall structures during thunderstorms.
- This can also lead to electromagnetic interference affecting communication and navigation systems.

Safety Measures:

- Lightning rods and other grounding systems can be installed on tall structures to dissipate the electrical charge to protect against upward lightning.
- For downward lightning, it is recommended to take shelter indoors and avoid outdoor activities during thunderstorms.

Way Forward:

The current findings provide insights into the upward lightning phenomenon, which can be utilized for better preparation against potential damage.

2 ISRO's LVM-3 Completed OneWeb Constellation

Why in News:

Indian Space Research Organization's (ISRO) LVM-3, in its second commercial launch, placed 36 OneWeb satellites in orbit, completing the first-generation constellation of the UK-based company.

About LVM-3 Mission of ISRO:

- LVM-3 (Launch Vehicle Mark) is India's brawnier rocket, capable of delivering 17,600 pounds (8000 kgs) of payload to Lower Earth Orbit (LEO).
- NSIL (a central public sector enterprise under the Department of Space), the commercial arm of ISRO, had signed a contract with OneWeb to launch 72 satellites in 2 phases.
- The first phase with 36 satellites was launched in LVM3-M2/OneWeb India-1 Mission in October 2022.
- This is the second OneWeb fleet that India is launching which initiated its journey into commercial heavy lift-off space.

What is OneWeb Constellation?

- OneWeb is a global communications network, powered from space, enabling connectivity for governments, businesses, and communities.
- It is a collaboration between UK-based OneWeb and the ISRO, in partnership with New Space India Ltd. (NSIL).
- OneWeb Constellation operates in an LEO Polar Orbit, which consists of a network of 588 active satellites placed in 12 rings of 49 satellites, completing a full trip around the Earth in 109 minutes.
- The orbital planes are inclined to be near polar (87.00).

Significance:

- The network provides high-speed, low-latency connectivity, enabling the world to access the internet and connect with each other.
- The constellation will bring secured solutions not only to enterprises but also to towns, villages, municipalities, and schools, including the hardest-to-reach areas across the country.
- **Scalability**-The space-based broadband systems can be scaled quickly and easily to meet increasing demand, which is essential in areas experiencing rapid population growth or a sudden surge in demand due to disaster.
- This will also support the growing number of Internet of Things (IoT) devices and enable machine-to-machine communication.

Way Forward:

The OneWeb Constellation has the potential to transform the connection and communication manner of the globe. The need is to nurture the broadband systems which provide a promising solution for high-speed and reliable internet connectivity to users around the world.

3 Treatment of Drug - Resistant Kala-Azar Infection

Why in News:

Experimental work undertaken in mice by researchers at the Kolkata-based Indian Association for the Cultivation of Science (IACS) has shown a novel quinoline derivative to be effective in sharply reducing a load of *Leishmania donovani* (black fever) in both the spleen and liver of lab-grown mice. The work was published recently in the Journal of Medicinal Chemistry.

How does Quinoline work over this?

- The quinoline derivative is a potent inhibitor of an enzyme called topoisomerase 1 (LdTop1).
- This enzyme is essential for the maintenance of DNA architecture in parasites and is distinct from the one found in humans.
- Poisoning LdTop1 imparts significant cytotoxicity to both *Leishmania* parasites found in the gut of sandfly vectors (promastigotes) and those found in infected humans (amastigotes) of both the wild-type and the antimony-resistant isolates.
- This is done without inducing lethality in human and mice host cells.

About Kala Azar Disease- Leishmaniasis

- Kala-Azar is a vector-borne (sandfly) neglected tropical disease caused by the protozoan parasites of the genus *Leishmania*.
- It is transmitted by the bite of an infected female sandfly.
- In most cases, a person who is infected by the parasite has neither symptoms nor signs

of infection and is not considered to have leishmaniasis.

- Although there are some 20 different parasites that cause the disease, there are only three different types of leishmaniasis.
- Visceral leishmaniasis- It affects multiple organs and is the most serious form of the disease
- Cutaneous leishmaniasis- It causes skin sores and is the most common form
- Mucocutaneous leishmaniasis- It causes skin and mucosal lesions
- Visceral leishmaniasis, which is commonly known as Kala-azar in India, is fatal in over 95% of the cases if left untreated.
- It is one of the most neglected tropical diseases and around 95 % of cases are reported from Bangladesh, Brazil, China, Ethiopia, India, Kenya, Nepal, Somalia, South Sudan, and Sudan.

Way Forward:

Overcoming drug resistance in clinical leishmaniasis is a severe challenge in rural India. The current treatment regimens against kala-azar use formulations that are toxic and induce high levels of drug resistance. Novel inhibitors targeting *Leishmania* parasites were identified by screening them against recombinant *Leishmania* topoisomerase 1 enzymes that would degrade Kala-azar.

4 TEMPO by NASA

Why in News:

A SpaceX Falcon 9 rocket successfully launched a new NASA device that can track air pollution over North America.

About the TEMPO instrument

- TEMPO is a NASA device that can track air pollution over North America from space. It will allow scientists to monitor air pollutants and their emission sources down to the neighbourhood level.
- NASA's TEMPO is a hosted payload on the commercial Intelsat 40e communications satellite which will orbit the Earth in geostationary orbit above North America.
- It will be able to measure atmospheric pollution down to a spatial resolution of 4 square miles or neighbourhood level.
- TEMPO will have multiple applications from measuring levels of various pollutants to providing air quality forecasts and helping the development of emission-control strategies
- The data will be used by the US Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA)

and other agencies responsible for tackling atmospheric pollution.

About geostationary orbit:

- Geostationary orbit is a common orbit for weather satellites and communications satellites. It is a circular orbit 35,785 km (22,236 mi) above Earth's equator in which a satellite has an orbital period equal to Earth's rotational period of 23 hours and 56 minutes. A spacecraft in this orbit appears stationary in the sky to an observer on Earth. The TEMPO placed in this orbit means that it will match the rotation of the Earth, meaning it will stay over the same location at all times.

Way Forward:

The TEMPO mission is about more than just studying pollution – it's about improving life on Earth for all. By monitoring the effects of everything from rush-hour traffic to pollution from forest fires and volcanoes, NASA data will help improve air quality across North America and protect our planet. Among the pollutants tracked by TEMPO will be nitrogen dioxide, produced from the combustion of fossil fuels, formaldehyde, and ozone. The data will be made available online for members of the public to monitor air quality information in their local area.

5 Piezoelectric Effect In Liquids

Why in News:

In a recent study published in the Journal of Physical Chemistry Letters, scientists have discovered the piezoelectric effect in liquids for the first time. Until now this effect has been observed in solids only.

What is the piezoelectric effect?

- It is an effect due to which a body develops an electric current when it is squeezed. That is, when mechanical stress is applied to an object, the friction among its molecules produces a small amount of voltage.
- This effect has been known for 143 years and quartz is the most common crystal which exhibits this effect. Quartz is silicon dioxide (SiO₂) which is used in analog wristwatches, clocks, and other instruments where converting mechanical stress to electric current is useful.

Why it is not observed in liquids?

- Until now this effect has been observed in solids only. It is so because for a body to get squeezed, it needs a definite and organized structure. Liquids don't have a definite shape since they take the shape of the container.
- Till now this effect has been explained using Hooke's law and the properties of dielectric materials. Hooke's law states that the force

required to squeeze an object is linearly (non-exponentially) proportional to the amount of squeezing. However the law is not much clear when an object isn't very compressible.

What has been observed in the new study?

- The piezoelectric effect has been observed in pure 1-butyl-3-methyl imidazolium bisimide and 1-hexyl-3-methyl imidazolium bisimide. Both of them are ionic liquids at room temperature. These are liquids that are made up of ions instead of molecules.
- Observation of this effect in ionic liquids necessitates the presence of some kind of organization in ionic liquids that are not seen in normal liquids. Moreover, normal and ionic liquids of the kind tested in the study respond very differently when an electric charge is imposed on them.

Applications:

- The research opens the door to previously unanticipated applications in electronics and mechatronics. Also, ionic liquids are recyclable and have fewer environmental concerns as compared to present piezoelectric materials.
- In addition to this, these liquids displayed the inverse piezoelectric effect i.e. they became distorted when an electric charge was applied.

Way Forward:

This discovery necessitates a complete rethink of the science of piezoelectrics and the development of a theoretical framework to benefit mankind.

6 India's First Cloned Desi Gir Female Calf Ganga

Why in News:

The National Dairy Research Institute has produced the first-ever clone of a calf belonging to the indigenous Gir cow breed. The calf has been named Ganga. This development is part of the government's push to increase milk production.

About the development:

- Scientists of the institute have produced a female cloned calf from the somatic cell of the tail of the indigenous Gir cow breed, which is a native tract in Gujarat and is popular for its docile nature, disease-resistance, heat-tolerance, and high milk-producing qualities.
- They used three animals for producing this calf cow. The Oocyte was taken from the Sahiwal breed, a somatic cell from the Gir breed, and a surrogate was a crossbreed. The scientist used the reproductive cloning method for producing the calf Ganga.

About reproductive cloning method:

- In reproductive cloning, a mature somatic cell, such as a skin cell, from an animal that they wish to copy is taken. Then transfer the DNA of the donor animal's somatic cell into an egg cell, or oocyte, that has had its own DNA-containing nucleus removed.
- The DNA from the somatic cell can add to the empty egg in two different ways. In the first method, they remove the DNA-containing nucleus of the somatic cell with a needle and inject it into the empty egg. In the second approach, they use an electrical current to fuse the entire somatic cell with the empty egg.
- In both processes, the egg is allowed to develop into an early-stage embryo in the test tube and then is implanted into the womb of an adult female animal surrogate.
- Ultimately, the adult female gives birth to an animal that has the same genetic makeup as the animal that donated the somatic cell. This young animal is referred to as a clone.

About National Dairy Research Institute (NDRI):

- National Dairy Research Institute (NDRI), Karnal is a premier dairy research institute of India established in 1956, which was given the status of Deemed University in the year 1989.
- It has been working on a project to clone indigenous high-yield cow breeds such as Gir and Sahiwal since 2021.

Way Forward:

Gir, Sahiwal, Tharparkar, and Red Sindhi are among the Indian cattle breeds that are crucial for the Indian dairy industry's growth as well as milk production. The cloning of these breeds can help to produce healthy calf of these breeds which can increase the milk production in the country and provide a boom to Indian dairy industry.

7

RLV-LEX: The Cutting Edge Technology

Why in News:

The Indian Space Research Organization (ISRO) has successfully demonstrated a precise landing experiment for a Reusable Launch Vehicle (RLV) System at the Aeronautical Test Range (ATR), Chitradurga, Karnataka. This mission is carried out with the joint coordination of DRDO and the Indian Air Force.

RLV Project and RLV-LEX:

- ISRO has stated that the winged RLV-TD experiments are aimed at developing fundamental technologies required for creating a full-fledged reusable launch vehicle, which will make space access more affordable.
- The recent Reusable Launch Vehicle-

Autonomous Landing (RLV-LEX) is the second instance of such a test. The first test with the RLV, i.e. RLV-TD (HEX) mission was carried out by ISRO on May 23, 2016.

- The full-fledged RLV-TD mission would comprise the following stages:
 - » Hypersonic Flight (HEX)
 - » Autonomous Landing (LEX)
 - » Return Flight experiment (REX)
 - » Powered Cruise Flight
 - » Scramjet Propulsion Experiment (SPEX) to facilitate the development of these technologies.

RLV: What it means?

- Reusable Launch Vehicle System is that which allows for the reuse of some or all of the component stages. The vehicle returns to Earth intact after a mission. ISRO's RLV-TD looks like an aircraft. It consists of a fuselage, nose cap, double delta wings, and twin vertical tails.
- In the future, this vehicle will be scaled up to become the first stage of India's reusable Two-Stage Orbital (TSTO) Launch Vehicle.

Significance:

- This mission is aligned with ISRO's aim to develop essential technologies for a fully reusable launch vehicle to enable low-cost access to space. According to the Space Agency's data by using RLVs the cost of the launch can be reduced by nearly 80% of the present cost.
- It would also ensure the optimum utilization of resources and also paved the way for the development of an RLV-Orbital Re-entry (ORV) Vehicle. It would also benefit India's future space tourism program.
- This would also develop alternatives for ensuring the reduction of Space Debris.
- As RLV technology is one of the prominent cutting-edge technologies, it has bolstered Indian Space technology efficiency across the globe.
- Reusable Space Vehicles have been in existence for a long time with NASA space shuttles carrying out dozens of human space flight missions. SpaceX is also working on a fully RLV system called Starship.

Way Forward:

The successful test of RLV-LEX proves that the firm and persistent efforts of Indian Space agencies and other related bodies are in the right direction. This would help the ISRO to reduce the cost of its launches and will benefit further programs.



Economic Issues



1

Change in UPI Rules For PPI Transactions

Why in News:

Recently National Payment Corporation of India (NPCI), the retail payments and settlements body announced that an interchange charge has been introduced for PPI (prepaid payment instrument) merchant transactions- but customers will not be charged.

The latest NPCI circular:

- NPCI has issued a circular saying that there will be an interchange fee of 1.1 percent on UPI transactions made through PPI instruments like wallets or cards. This charge will be applicable for transactions above Rs 2,000.

Prepaid Payment Instrument:

- PPI includes online wallets (like Paytm Wallet, Amazon Pay Wallet, PhonePe Wallet, etc.) and preloaded gift cards. A PPI payment done via UPI refers to a transaction done via such a wallet through a UPI QR code.
- The recent interchange charges introduced by NPCI are only applicable for the PPI merchant transactions and there is no charge to customers, and it is further clarified that there are no charges for the bank account to bank account-based UPI payments (i.e. normal UPI payments).
- NPCI also reported that the preferred method of UPI transactions is linking the bank account in any UPI-enabled app for making payments, which makes up for over 99.9 percent of total UPI transactions. These bank accounts are going to be remaining free for customers and merchants.

Impact of this move:

- This move is made to reimburse the loss made by banks when a sizable amount of money is transferred to payment wallets from bank accounts. Only transactions more than Rs. 2,000 will be charged so small merchants like side road stalls or retail shops would not be affected by it. This will also increase the interoperability of PPI methods. This move came to make the digital UPI-based payment transaction faster and smooth.
- As it is vividly stated by NPCI that no charges would be applied to customers for normal UPI transactions.

National Payment Corporation of India:

- It is an umbrella organization incorporated

in 2008 as a “Not for Profit” Company under the Companies Act 1956 (now section 8 of the Companies Act 2013).

- It is an initiative of RBI and IBA (Indian Banks’ Association) under the provisions of the Payment and Settlement Systems Act, 2007, for creating infrastructure for the entire Banking System in India for Physical as well as electronic payment and settlement systems.

Way Forward:

The latest move would likely impact large PPI organizations, so spillover impact is expected on customers. But as it is expected that the inter-operability of PPI methods would hopefully compensate for the impact.

2

National Financial Reporting Authority

Why in News:

Recently the India’s most independent audit watchdog National Financial Reporting Authority has pulled up a section of India Inc, including ‘a large listed firm’ for not complying with Indian Accounting Standards (Ind AS) regarding measurements of revenue from contracts.

Issue of Non-Compliance:

- The authority recognized that these firms continue to account for revenues from contracts with customers and trade receivables at Fair Value while Ind AS requires them to be recognized at Transaction value.
- Indian Accounting Standard (Ind AS) is the accounting standard taken on by organizations in India and given under the oversight of the Accounting Standards Board (1977). Ind AS are notified under the section 133 of the Companies Act 2013.
- While fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at a given day.
- On the other hand the transaction value can differ from fair value as the actual transaction may take place later.
- The regulating body in its review report states that while many companies in their accounting policies erroneously state that the trade receivables are initially recognized at fair value, which is contrary to requirements of Ind AS.
- Trade receivables are financial assets within the scope of measurement requirements.

National Financial Reporting Authority:

- National Financial Reporting Authority (HQ- New Delhi) was constituted in 2018 by the Government of India under section 132(1) of the Companies Act, 2013. It is an audit regulator. This was constituted after the recognition of the role of auditors in alleged lapses in various corporate scams.
- It consists of a chairperson, who shall be a person of eminence and having expertise in accountancy, auditing, finance or law, appointed by the Central Government and the body composition should not exceed by the 15 members.
- This body recommends accounting and auditing policies and standards to be adopted by the companies for approval by the Central Government. It can also undertake investigations related to many class of companies and corporate bodies called Public Interest Entities.
- Its account is monitored by the Comptroller and Auditor-General (CAG) of India.

Way Forward:

This authority has undertaken the task for monitoring and enforcing strict compliance with accounting standards and auditing standards. So these actions are appropriate in order to maintain the quality of service of professionals and protect the public interest because private/corporate bodies are entrusted with the goal of profit maximization.

3

Foreign Trade Policy 2023

Why in News:

The Ministry of Commerce, Trade and Textiles launched a new Foreign Trade Policy.

About Foreign Trade Policy 2023:

- This will replace the extant policy that had been in place since 2015.
- The policy is based on 4 pillars-
 1. Incentive to Remission,
 2. Export promotion through collaboration-exporters, states, districts, Indian Missions,
 3. Ease of doing business, reduction in transaction cost, e-initiatives, and
 4. Emerging areas- e-commerce developing districts as export hubs and streamlining SCOMET policy.
- **Aim-** To almost triple India's goods and services export to 2 trillion dollars by 2030 from an estimated 760 billion dollars in 2022-23.

Significant Features of the policy:

- **Process Re-engineering and Automation-** The policy emphasises moving away from an incentive

regime to a new regime which is facilitating based on technology interface and principles of collaboration.

- It lowers a few costs for smaller firms and promises swifter clearances.
- Duty exemption schemes for export production will now be implemented through Regional offices in a rule-based IT system environment, eliminating the need for manual interface.
- Towns of Export Excellence (TEE) - four towns, namely Faridabad, Mirzapur, Moradabad and Varanasi have been designated as TEE in addition to existing 29 towns.
- All the textile firms under PM MITRA will be qualified for benefits as common service provider.
- No sunset date- the new policy will have no sunset date and can be tweaked based on emerging world trade scenario and industry feedback.



- **One time Amnesty-** The new policy is introducing a one-time Amnesty Scheme for exporters to close the old pending authorization and start afresh.
- **New Growth Areas-** the policy has included 'merchandise trade' within its ambit. The exporters in India can source goods from another country and send them to a third country without touching Indian shores.
- **Advance Authorization Scheme-** special scheme launched for the clothing and apparel sector.
- **Districts as Export Hubs (DEH) Initiative-** this would promote exports at the district level and

accelerate the development of the grassroots trade ecosystem.

Way Forward:

The new Foreign Trade Policy is a step in the right direction which encourages international trade and providing relief to exporters. The policy intends to make India the global export hub.

4 ASBA-like Facility For Secondary Trades

Why in News:

- The Securities and Exchange Board of India (SEBI) approved a framework for an Application Supported by a Blocked Amount (ASBA) like facility being made available to investors for secondary market trading.
- Sebi said the facility is based on the blocking of funds for trading in the secondary market through UPI (unified payments interface) and will be optional for investors as well as stock brokers.



About ASBA:

- ASBA is an application containing authorization to block the application money in the bank account, for subscribing to an initial public offering (IPO).
- ASBA is a facility provided by banks that allows investors to apply for an IPO or rights issue by blocking the application amount in their bank account instead of transferring the money to the issuer.
- Under ASBA, the investor's application money remains in their bank account, and only a block is created on the funds for the IPO application amount.
- This blocked amount remains in the investor's bank account until the allotment process is completed.
- Once the shares are allotted to the investor, the block is released, and only the amount for the allotted shares is deducted from the investor's

account.

- In public issues and rights issues, all investors have to mandatorily apply through ASBA.
- Application Supported by Blocked Amount (ASBA) was first introduced by SEBI in 2008.

What has SEBI done right now?

- Recently, SEBI gave its nod for an ASBA-like facility for secondary market trading.
- At present, ASBA is available only for the primary market.

Conclusion:

ASBA in secondary market trading will ensure that clients will continue to earn interest on the blocked funds in their savings account till the debit takes place. There will be a direct settlement with Clearing Corporation (CC), without passing through the pool accounts of the intermediaries. Hence, it will provide a client-level settlement visibility to CC, and help avoid the risk of co-mingling of clients' funds and securities. The facility will bring efficiency in the secondary market ecosystem by allowing usage of the same blocked amount towards margin and settlement obligations.

5 Direct Tax Collection

Why in News:

Maharashtra topped the list of states and Union Territories with the highest collection of direct taxes in 2021-22 followed by Delhi, Karnataka, Tamil Nadu, and Gujarat, as per data released by the tax department showed.

Key Findings:

- Data up to 2021-22, released by the Central Board of Direct Taxes (CBDT) showed India's gross direct tax collection rose 173% to Rs 19.7 lakh crore in 2022-23 from Rs 7.2 lakh crore in 2013-14.
- Net direct tax receipts rose over 160% to Rs 16.6 lakh crore in 2022-23 from Rs 6.4 lakh crore in 2013-14.
- The data also showed net direct tax collections increased by 121% from Rs 6.4 lakh crore in 2013-14 to Rs 14.1 lakh crore in 2021-22.
- Direct Tax buoyancy at 2.5 in 2021-22 is the highest recorded over the last 15 years. Direct-tax-to-GDP ratio has increased from 5.6% in 2013-14 to nearly 6% in 2021-22.
- The data also showed that the cost of collection has decreased from 0.57% of total collection in the 2013-14 to 0.53% in 2021-22.
- The contribution of direct taxes to total tax revenue in 2021-22 was 52.3%, higher than the 46.8% recorded in 2020-21. In 2000-01, it was

at 36.3%.

- The data showed that the tax growth rate in 2020-21 contracted by nearly 10% due to the impact of the pandemic on the economy. It recovered to post a growth of 49.1% in 2021-22.

About direct tax:

- A direct tax is a tax that an individual or organization pays directly to the entity that levied it. Examples include income tax, real property tax, personal property tax, and tax on properties, all of which are paid by an individual taxpayer directly to the government.

Type of direct tax:

Corporate Tax:

- Under the Indian Income Tax Act, 1961, both Indian as well as foreign organizations are liable to pay taxes to the government.

Minimum alternative tax:

- MAT is a provision in Direct tax laws to limit tax exemptions availed by companies so that they pay at least a minimum amount of corporate tax to the government. The key reason for the introduction of MAT is to ensure minimum levels of taxation for all domestic and foreign companies in India. The MAT is imposed by the Government on Zero Tax companies.

Capital Gains Tax:

- Any profit or gain that arises from the sale of a 'capital asset' is known as 'income from capital gains'. Such capital gains are taxable in the year in which the transfer of the capital asset takes place. This is called capital gains tax. There are two types of Capital Gains: short-term capital gains (STCG) and long-term capital gains (LTCG). Only those capital assets are liable to short-term gain, which are sold within 3 years of acquisition.

About Direct tax buoyancy:

- Direct tax buoyancy measures growth in the collection of personal income tax and corporation tax against the rise in GDP.

About tax elasticity:

- Tax elasticity refers to changes in tax revenue in response to changes in tax rates. Tax elasticity is the degree to which the increase in the tax rate causes a change in the tax base.

Conclusion:

An increase in direct tax collection and an increase in tax buoyancy has certified the good government measures adopted by the government to boost the Indian economy and at the same time it also shows that India's macro-economic fundamentals are strong.

6

Growth in Debt to Emerging Markets and Developing Economies from 2008-2022

Why in News:

According to a recent news report, the sovereign debt of emerging markets and developing economies (EMDEs) is set to increase by 178 percent from \$1.4 trillion to \$3.9 trillion between 2008-2021. This is reflecting the growing debt crisis in the Global South.

The reasons behind rising debt

- The Global South is grappling with a debt crisis.
- Weak economic growth due to a slow recovery from the COVID-19 pandemic as well as high food and energy prices due to Russia's war in Ukraine.
- Increasing climate impacts have increased the financial burden of countries. Countries most vulnerable to climate change are facing the most significant debt crisis.
- A strong US dollar and depreciating currencies have added to the problem for many EMDEs.
- High debt service payments require countries to spend a major portion of their foreign reserves to service debt.
- Providing immediate debt relief to EMDEs will help them reduce their debt burden and ensure a low-carbon and socially inclusive future.
- Flaws have been identified in the G20's "Common Framework" for providing debt relief, as it fails to bring all creditors on board, including private and commercial creditors, and to link debt relief to development and climate goals.
- Proposed suggestions to address the growing debt crisis
- The report proposes three pillars to address this issue with an emphasis on improving the Common Framework.
- The first pillar includes public creditors who make significant debt cuts to bring the troubled country back to debt stability and also help achieve development and climate goals.
- The second pillar includes private and commercial lenders who provide debt reductions equal to those of public creditors.
- The last pillar is for countries like India which are not at risk of the debt crisis. Since the cost of capital is high, international financial institutions can provide credit enhancement to these countries.

Way forward:

An emerging market economy is the economy of a developing nation that is growing in tandem with

global markets. Countries classified as emerging market economies include some of the characteristics of a developed market, such as India, Mexico, Russia, Pakistan, Saudi Arabia, China, and Brazil. Credit enhancement is a risk mitigation technique that provides protection in the form of financial support to cover losses under stressed scenarios. According to the report, 61 countries that are at high risk of debt crisis need to restructure their debt of US\$ 812 billion. Through debt restructuring, creditors can provide concessions to the debtor. The experts calculated that at least \$30 billion in debt should be suspended over the next five years for the 55 most indebted countries. Providing immediate debt relief to EMDEs could free them up fiscally and debt-free, allowing them to pursue a low-carbon, socially inclusive, and resilient future.

7

Blue Economy: Need of the Hour

Context:

India shares approx. 7,517 km long maritime boundary with its neighbouring nations. The location of India in the Indian Ocean provides an opportunity for the development of full-fledged maritime economy, i.e. Blue Economy. The development of a sound and sustainable fishing sector can provide a cornerstone for the blue economy.

Significance of the Fishing Sector:

- In the words of Soviet Admiral Gorshokov (in his book *Sea Power of the State*): “The fishing fleet is an important component of the sea power of the state. The role of this fleet has grown sharply, and its most important task consists in ensuring a solution to the acute food problem facing mankind.”
- In past, fishing vessels were used as part of the navy for combat tasks such as port defense and minesweeping.
- The fishing sector provides an affordable and rich source of animal protein. It is the healthiest option to mitigate hunger and malnutrition. In present times when the availability of farmland is reducing and the demand for food is surpassing the capacity, the development of the fishing sector as an alternative is essential.
- Furthermore, it is also an important commercial enterprise and the size of the global fishing market is US\$ 611 Billion in 2022 and expected to grow annually by 6.23% in future. It is also a significant source of foreign currency.
- Fisheries also provide a livelihood to almost 15 million fishers and fish farmers at the primary

level and generate jobs in the supply value chain.

- It also holds a prominent ground for negotiating bilateral relations with coastal neighboring countries. For example, the fishing sector is underdeveloped in Palk-Strait due to the absence of an extensive maritime border agreement between Sri Lanka and India.

Obstacles in the road to blue economy development in India:

- India's marine fishery has been dominated by the “artisanal sector”—poor, small-scale fishers who cannot afford mechanized and motorized craft. The artisanal fishers only contribute 2% of marine fish in the market.
- Indian EEZ' rich resources remain underexploited and better-equipped fishing fleets of Indo-Pacific countries carry away the fisheries in large numbers. China, the fishing superpower, owns the world's largest deep-water fishing fleet (DWF). Illegal, unregulated and unreported fishing (IUU) is another serious implication.
- The lack of processing units and low level of value addition in the fishing sector poses economic implications.

Suggestions for overhauling of the fishing sector:

India urgently needs a long-term vision policy for the development of the fishing industry to cater for the present needs, which should emphasize on following four areas:

- Mechanisation and Modernisation of fishing vessels by providing communication links and electronic fish-detection devices.
- Developing Deep-Water fishing fleets with bigger sea-going trawlers and sea-going trawlers equipped with refrigeration facilities
- DWF fleet on the basis of 'Mother Ship' (large vessel), which should consist of all facilities.
- Development of Modern fishing harbours with post-harvest facilities.

Way Forward:

The potential for the development of the fishing sector is huge in India but there is the presence of a number of hurdles in its path. The initiatives of the government like PM Matsya Sampada Yojana and the establishment of Indo-SriLankan Fishing Corporation would boost the strength of the blue economy in India. This would also encompass the objectives of Mission SAGAR altogether.

Miscellaneous Issues

1 European Commission grants GI tag for Kangra Tea

Why in News:

The European Commission (EC) has granted protected geographical indication (PGI) for India's unique Kangra tea, which is grown in Himachal Pradesh's Kangra district.

About Kangra Tea:

- History of Kangra tea dates back to 1849 when Dr. Jameson, then superintendent of the Botanical Tea Gardens, pronounced the region ideal for tea cultivation.
- Grown since the mid-19th century, Kangra tea is known for its unique flavour and taste.
- It is available as black and green teas.
- While the Black tea has a sweet lingering after-taste, the green tea has a delicate woody aroma.
- Kangra tea is a little milder than Darjeeling tea in terms of flavour and has more body and liquor.
- According to the Tea Board, Kangra tea is grown at-
 1. Elevation: 900 to 1,400 metres above sea level,
 2. Annual rainfall: 270-350 cm.
- It is made from leaves, buds, and tender stems of the *Camellia sinensis* species cultivated in the Kangra Valley.
- The climate, the characteristic terrain and soil conditions, and the coolness of the snow-clad mountains in the Kangra region all play a role in crafting a delightfully distinct cup of quality tea.
- It is produced in the slopes of Dhauladhar mountain ranges of Western Himalayas.
- In India, Kangra tea was granted GI Tag in 2005.

Protected GI Tag of European Commission:

- The Protected Geographical Indication (PGI) system was established to protect and promote the reputation of specific regional products, and to support the economic development of rural areas by encouraging the production of high-quality, distinctive products.
- European Commission is the executive branch of European Union (EU) and serves as its administrative body.
- Headquarter: Brussels, Belgium.

Way Forward:

The granting of PGI tag by the European Commission will help Kangra tea to get branding and an opportunity to enter the European market, thus enhancing agri-export of the country.

2 Kaushambi Festival-2023

Why in News:

Recently Union Home Minister and Cooperation Minister Shri Amit Shah inaugurated the Kaushambi Mahotsav-2023 in Kaushambi, Uttar Pradesh, and

honored the winners of the "Parliament Sports Competition". Along with this, he also unveiled and laid the foundation stone for various development projects. Many dignitaries including Chief Minister Yogi Adityanath were present on the occasion. Along with this, tribute was also paid to Durga Bhabhi, the great freedom fighter of Kaushambi.

Importance of Kaushambi:

- Kaushambi was the capital of the Vatsa district among the 16 districts during the time of Lord Buddha and Mahavira. At that time, despite the development of many big districts like Magadha, Kaushambi was considered the most prosperous.
- Lord Shri Ram and Kalinga Chakravarti came to this prosperous place after conquering major wars of their life.
- Durga Bhabhi played an important role in the independence of the country. Taking her 3-year-old son along with her, Bhagat Singh as her husband and Rajguru as a servant, sat on the train to Lucknow by throwing dust in the eyes of the British soldiers.

Important Points Related to Kaushambi Festival-2023:

- During the Kaushambi festival, 70 schemes worth Rs 405 crore and 24 projects worth Rs 24 crore of the Public Works Department were inaugurated.
- Rs 51 crore was allocated to 12 departments including youth welfare, sports, urban development, and vocational education.
- The festival also witnessed the laying of the foundation stones for 19 schemes worth Rs 151 crore under Pradhan Mantri Gram Sadak Yojana Phase-III and four schemes worth Rs 6 crore of the Health and Urban Development Department.
- The minister appreciated Prime Minister Shri Narendra Modi's plan to motivate every MP to organize a sports festival. Because taking this spirit forward, the Members of Parliament have provided a platform in the form of Kaushambi Mahotsav for the youth to play with great dedication and hard work. The basic mantra of Prime Minister Shri Narendra Modi's 'Khalo India' is to build a healthy body and a sharp mind.
- About 16000 youth applied online for participation in the 'Parliament Sports Meet' launched by the Members of Parliament, out of which 3324 players were awarded.
- Further, he appreciated the Uttar Pradesh government for changing the name of the current bridge in Kaushambi to Durga Bhabhi (freedom fighter) bridge. A museum will be built at Durga Bhabhi Sthal Shahzadpur worth five crores.
- Along with appreciating the big government schemes under Pradhan Mantri Awas Yojana, Swanidhi Yojana, etc. in UP, the minister explained how the benefits of these schemes have reached the grassroots level. Due to this, not only Uttar

Pradesh is on the path of development, but India has made a different identity for itself on the world stage.

Way Forward:

Today India is reaching new heights of development and the world is looking towards India. An international platform was provided for the traditional values of the region through the Kaushambi Festival. The youth of the country is getting inspired to participate in sports activities, lead a healthy life and contribute to the development of the country.

3 Drugs For Rare Diseases Get Customs Duty Relief

Why in News:

The Central Government has given full exemption from basic customs duty on all drugs and food for special medical purposes for treatment of all Rare Diseases listed under the National Policy for Rare Diseases 2021. The Government has also fully exempted Pembrolizumab used in the treatment of various cancers from basic customs duty. Drugs and Medicines generally attract basic customs duty of 10%, while some categories of lifesaving drugs/vaccines attract a concessional rate of 5%. To avail of this exemption, the individual importer has to produce a certificate from Central or State Director Health Services or District Medical Officer.

What are Rare Diseases?

A rare disease is a health condition that affects a small number of people compared with other prevalent diseases in the general population. WHO defines rare disease as debilitating lifelong disease with a prevalence of 1 or less, per 1000 population. Rare diseases include genetic diseases, rare cancers, infectious tropic diseases and degenerative diseases. 80% of rare diseases are genetic in origin, and thus are present throughout a person's life.

National Policy for Rare Diseases 2021:

The Government has launched National Policy for Rare Diseases in March 2021 for the treatment of rare disease patients. The salient features of NPRD, 2021 are as under:

- Provision for financial support of up to Rs. 50 lakhs to the patients suffering from any category of Rare Diseases and for treatment in any of the Centre of Excellence.
- Eight Centres of Excellence have been identified for the diagnosis, prevention, and treatment of rare diseases.
- Five Nidan Kendras have been set up for genetic testing and counselling services.
- It has provisions for the promotion of research and development for the diagnosis and treatment of rare diseases.
- Again, there is also a provision for the promotion of local development and manufacture of drugs and the creation of a conducive environment

for indigenous manufacturing of drugs for rare diseases at affordable prices.

Way Forward:

Drugs or Special Foods required for the treatment of these diseases are expensive and need to be imported. It is estimated that for a child weighing 10 kg, the annual cost of treatment for some rare diseases may vary from 10 lakh to more than 1 crore per year with treatment being lifelong and drug dose and cost, increasing with age and weight. This exemption of customs duty on drugs for the treatment of rare diseases will result in substantial cost savings and provide much needed relief to the patients.

4 Ladakh's Wood Carving gets GI Tag

Why in News:

Recently Ladakh got its first GI tag of wood carving. It is the importance, uniqueness, and unparalleled craftsmanship of this art that earned it recognition by being the first local art to be granted a Geographical Indication (GI) tag. Ladakh is known for its pristine glory as a secluded tourist attraction. It is, however, not just the location of this place that makes it unique, but also its art, culture, and craftsmanship that confers this place a unique identity.

About the wood carving:

- Wood carving, which is known as Shingkos in Ladakh, is a traditional form of art in the handicraft field and is part of the five major fields of knowledge in the traditional education system of Ladakh.
- The craft of woodcarving is an integral part of the social and religious spheres of life.
- From the architecture of buildings to the enhancement of the aesthetic value of places of worship like monasteries, mosques, and churches to home decor, wood carving holds immense importance in the aesthetics of the region.
- A very important aspect of the woodcarving industry is its religious importance, inclusion, and acceptance.
- Choktse table has woodcarving art engravings of lotus, jewels, dragons, and other Buddhist symbols believed to be the harbingers of long life. The woodcarving art of Ladakh is ubiquitous. Hotels, resorts, guest houses, and even homestays have demonstrations of this art that serve as an eye-catching attraction.

About GI Tag:

- A Geographical Indication (GI) is a name or sign given to products coming from a specific geographical location. GI tag ensures that only authorized users can use the name of the product. GI tag is valid for ten years.

Who grants and regulates Geographical Indications?

- Geographical Indications (GI) are a type of Intellectual Property Right (IPR) recognized and protected under the Paris Convention for the Protection of Industrial Property.
- The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) provides a framework for the protection of GIs at the international level.
- In India, the registration and protection of GI are governed by the Geographical Indications of Goods (Registration and Protection) Act, 1999, which came into effect in September 2003.
- The first product in India to receive the GI tag was Darjeeling tea, which was awarded the GI tag in the year 2004-05.

Conclusion:

The grant of the GI tag for wood carving in Ladakh is a significant achievement for the local artisans. This step will not only preserve the important traditional art of woodcarving but will also pave the way for boosting the local economy.

5 Karnataka's Bidri Art

Why in News:

Shah Rasheed Ahmed Quadri, a renowned Bidri craft artist from Karnataka, expressed his gratitude to Prime Minister Narendra Modi after receiving the Padma Shri award from President Droupadi Murmu on April 5th.

Key highlights of the news:

- Shah Rasheed Ahmed Quadri was honored with the prestigious Padma Shri Award in recognition of his significant contributions to the Bidri art form and his exceptional craftsmanship.
- He is renowned for innovating the 'phooljhadi' pattern and reviving the use of sheet work, a popular artistic technique from the Bahmani empire.
- Padma Shri Award is the fourth highest civilian accolade in India.

Bidri Art:

- Bidriware, a renowned form of handicraft from Hyderabad, India, is a popular export item and is named after Bidar taluka in Karnataka.
- The art form has obtained a Geographical Indications (GI) Tag.
- The process of creating Bidriware involves several steps, including casting, polishing, engraving, inlaying, and blackening alloy.
- The art form of Bidriware utilizes Damascene work, which entails encrusting gold or silver on iron items.
- Inlaid items are crafted using metals such as silver, gold, or brass, which are embedded into an alloy of zinc and copper in elaborate patterns.
- The production of Bidriware requires a unique type of soil that is essential in achieving the intricate and complex works of art that characterize this craft.

History of Bidri Art:

- Bidri is an ancient metal art form that has its roots in Persia and dates back nearly 500 years.
- It was originally developed during the Bahmani dynasty's reign.
- In the 14th century, Persian rulers who were governing Bidar in India introduced the art form to the region.
- Artisans in Bidar were trained by experts from Persia to produce exquisite creations for the royal families.

Recognitions and awards to Bidriware:

- Bidriware, known for its exceptional craftsmanship and cultural significance, has been honored with numerous awards and accolades.
- In 2006, it was granted the esteemed Geographical Indication status by the Indian government, acknowledging its distinct origin and traditional crafting methods.
- Bidriware has also been recognized by UNESCO as an Intangible Cultural Heritage of Humanity, further affirming its global cultural significance.

Way Forward:

More steps should be taken to preserve and revive such art forms. Giving awards to those arts and artists who patronize the traditional art forms is one such step. This leads to encouragement of other artists who will help in the preservation of art and literature.

6 IGNCA launches Vedic Heritage Portal

Why in News:

Recently, The Vedic Heritage Portal was inaugurated by Union Home Minister Amit Shah in New Delhi. The portal's major goal is to promote a greater understanding of the Vedic knowledge heritage.

Key Features:

- The Vedic legacy Portal is an endeavor to map India's Vedic legacy.
- The gateway provides in-depth information on oral traditions, textual traditions in the form of published books/manuscripts, and implements.
- The portal's goal is to collect information to make Vedas more accessible to people and to create a venue for further discussion.
- It is a digital platform that maintains and promotes the 'Vedas,' which according to the United Nations Educational, Scientific, and Cultural Organisation constitute an intangible legacy of mankind.
- This portal has over 18 thousand mantras of the four Vedas with a duration of over 550 hours.

The Four Vedas:

The Rig-Veda:

- Scholars believe this is the most significant and oldest of the Vedas.
- It is organized into ten volumes (known as mandalas) and contains 1028 hymns praising

various deities. These include Indra, Agni, Vishnu, Rudra, Varuna, and other “Vedic gods.”

- It also includes the well-known Gayatri mantra and the Purusha Shukta (Primal Man’s Tale) prayer.

The Yajur-Veda:

- A priestly manual for the performing of yajnas (sacrifices). It is separated into two sections: older “black” and later “white.”

Sama-Veda:

- This includes chants and tunes to be performed during worship and yajna performances.

Atharva-Veda:

- Contains hymns, mantras, and incantations that are mostly unrelated to yajna.

About IGNCA:

- The Indira Gandhi National Centre for the Arts, named after Smt Indira Gandhi, is envisioned as a center for the study and experience of all arts - each form with its integrity, yet within a dimension of mutual interdependence, interconnected with nature, social structure, and cosmology.
- The IGNCA is part of the Ministry of Culture.
- The IGNCA was completed in the late 1980s after the design of American architect Ralph Lerner was chosen by an international panel that included British architect James Sterling and India’s B V Doshi.
- It was dedicated by then-Prime Minister Rajiv Gandhi in November 1985.

Importance of Veda:

- It is commonly agreed that the Veda is humanity’s earliest extant literature.
- Veda, in the form of prose and poetry in Sanskrit, has been considered authoritative knowledge.
- The Veda is the source of Hindu religion and culture. It comprises the highest spiritual knowledge (para vidya) as well as world knowledge (apara vidya).
- It is unique in its purity and holiness.

Way Forward:

The portal aims to communicate a message enshrined in Vedic knowledge for universal well-being. The portal will be a one-stop solution for the user, who would like to search for any information regarding the Vedic heritage.

7

Impact of Expenditure on the Treatment of Mental Illness

Why in News:

As many as 20% of the Indian households became poor as a result of spending money on the treatment of mental illnesses, a new research paper has highlighted. Some 18.1% of a household’s monthly consumption expenditure was spent on healthcare due to the mental illness of a member, it found.

Expenditure on mental illness in different states

and UTs:

- States and Union territories like Daman and Diu (19.4%), Himachal Pradesh (18.0%), Sikkim (17.4%), Lakshadweep (14.6%), Maharashtra (13.7%), Telangana (13.3%), Punjab (12.7%) and Uttarakhand (12.5%) reported higher healthcare burden due to mental illness than the national average for India (10.4%).
- On the other hand, Mizoram (0.5%), Andaman and Nicobar Islands (1.2%), Puducherry (1.7%), Dadra and Nagar Haveli (2.0%), Arunachal Pradesh (3.0%), and Nagaland (3.5%) reported lower healthcare burden.

The burden of mental illness

- The majority of people in low- and middle-income countries with mental illness do not receive healthcare, leading to chronicity, suffering, and increased costs of care. This study estimated the out-of-pocket expenditure (OOPE), catastrophic health expenditure (CHE), and poverty impact due to mental illness in India.
- OOPE usually refers to expenses that one has to pay for with their own money rather than an alternative source. CHE is money spent on healthcare that exceeds some specified critical level of tolerance or threshold from the household’s total income in a given specified period.
- Most of the 20% of households that were forced into poverty due to expenses on mental illness treatment were rural (22.5%) as compared to urban (17%). More than 11.1% of the total disease burden is due to mental health disorders in low-and-middle-income countries (LMICs). Yet, they receive less than 1% of many of these countries’ health budgets, the study noted.
- The National Mental Health Policy 2014 and the Mental Healthcare Act, 2017 have proposed several steps to combat mental illnesses through promoting awareness, ending the stigma associated, and provision of good quality and affordable care for mental illnesses in the country.

Way Forward:

There is a critical need to accelerate on-ground measures for early diagnosis and management of mental illness in India to reduce its overall impact including poverty. Providing Affordable Services like health assurance schemes, including Ayushman Bharat should cover the widest possible range of mental health conditions. Further, there is a need for formulating and strengthening financial risk protection policies for those affected by mental illness in India. A whole-of-society approach for protecting, promoting, and caring for the mental health of our people will be needed to prevent them from getting seriously ill and also to save them from falling into poverty.

News Of National and International Importance

1. Bill to curb the powers of the Chief Justice in Pakistan

- Pakistan's National Assembly has passed a bill that aims to curtail the discretionary powers of the Chief Justice.
- The Bill has three important provisions:
 - » Instead of the Chief Justice, only a committee will decide which cases can be taken suo moto;
 - » Benches for hearing these cases will also be decided by the committee instead of the top judge;
 - » An appeal can be made on the decision made in such cases.
- The bill has raised concerns among legal experts about its implications for the independence of the judiciary in Pakistan.
- The bill has also attracted international attention and some human rights organizations and democratic governments have expressed concern about the rule of law in Pakistan and its implications for democratic governance.

2. \$15.6 billion aid package under Extended Fund Facility for Ukraine

- The International Monetary Fund (IMF) has approved a US\$15.6 billion support package to aid the economic recovery of conflict-torn Ukraine.
- The loan is part of a wider international support package of US\$ 115 billion to help meet the country's immediate funding needs.
- Of the total amount approved by the IMF, \$2.7 billion is being made available to Ukraine immediately and the remaining funds will be released over the next four years.

Extended Fund Facility:

- The Extended Fund Facility is the first major financing program approved by the IMF for a war-torn country. This support package is provided to countries facing serious problems. The EFF has been established to support the country's economic reform program and to provide funds for a longer duration than other IMF financing programs. EFF is a medium-term program that provides financial assistance for a period of three to four years and is typically repayable over a period of four to ten years. This program has been established to help a country implement economic policies that will help overcome their balance of payments problems and promote sustainable economic growth. To qualify for the EFF, a country must demonstrate that it has a sustainable economic reform program that addresses the underlying causes of balance of payments problems.



3. Book bank initiative for poor students

- Prime Minister Narendra Modi has appreciated the initiative of Lok Sabha member from Ranchi, Sanjay Seth, to set up a book bank.
- Argora provides students free access to books donated by various individuals and organizations in the book bank located at the office of the Lok Sabha member in Jharkhand.
- Students can borrow books and return them after finishing their studies, thereby ensuring sustainable use of resources.
- This initiative reflects the values of empathy, compassion, community participation, volunteerism, responsibility and duty.
- This book bank addresses the issue of inequality and empowers the underprivileged by making education accessible to underprivileged students. People's participation in donating books and supporting this initiative shows the sense of responsibility towards the education of the youth.

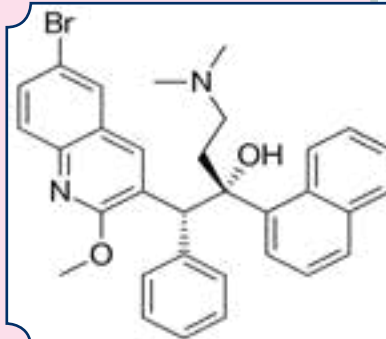


4. Bedaquiline

- The patent office in India rejected Johnson & Johnson's attempt to market the TB drug bedaquiline, which is used to treat people with drug-resistant infections.
- The decision barred this class of drug from being patented for another four years after its primary patent expired in July this year.
- The decision was welcomed by experts, health activists and others as generic versions are expected to lower drug costs and improve access.

Bedaquiline:

- Its first drug became available in India in 2015 under the government's TB programme. The drug bedaquiline is considered one of the most effective treatments available for tuberculosis.
- It has minimal side effects as compared to existing drugs like kanamycin which can cause kidney damage and permanent impairment. The drug also influenced the development of a shorter course of treatment for resistant TB, making it effective from nine months to a year. This short-course, all-oral medication increases the chances of people completing their treatment and preventing more cases of drug-resistant TB.



5. Yangli Festival

- Recently, Tiwa tribals have been seen participating in a dance to celebrate the Yangli festival in Gobha village of Morigaon district, Assam.
- Yangli is an important festival of Tiwas which is an occasion to celebrate a bountiful harvest and to protect crops from pests and calamities as agriculture is the mainstay of their economy.
- This festival is celebrated over a period of three days. People offer prayers and sacrifices to their ancestors and perform traditional dances and songs. Each day has its own importance and rituals.

About Tiwa Tribesman:

- The Tiwas are an indigenous tribe of people living in parts of Assam and Meghalaya in Northeast India.
- They are recognized as a Scheduled Tribe by the Government of India.
- The Tiwa people have their own language, also known as Tiwa.
- Traditionally the Tiwa people were animists, who worshiped various natural objects such as mountains, rivers and forests.
- The Tiwa society is matrilineal, meaning that lineage and inheritance is run through the mother. Women have a prominent role in Tiwa society and their opinion is given utmost importance in decision making.

6. Akash Weapon System

Recently Bharat Dynamics Limited (BDL) signed a contract worth Rs 8,161 crore with the Ministry of Defense for the production and supply of Akash Weapon System (AWS) for two regiments of the Indian Army. Akash Weapon System (AWS) is a mobile, surface-to-air missile system designed and developed by the Defense Research and Development Organization (DRDO). This missile can target aircraft up to 30 km away and can penetrate targets up to an altitude of 18 km. The system has advanced radar that can track multiple targets and can be launched from both tracked and wheeled platforms. The missile system has been inducted into the Indian Army and the Indian Air Force.



7. Mukupirna Fortidentata

- Recently, scientists from Flinders University have discovered the fossil of an ancient creature in Australia. This creature named Mukupirna fortidentata lived here about 25 million years ago. The newly discovered species is related to another fossil named Mukupirna nambensis. It is believed to have weighed up to 50 kg, making it one of the largest marsupials alive at the time. This wombat-like creature had a powerful dentition and is thought to have eaten hard fruits and nuts. According to the researchers, climate change caused the extinction of mukupirnids as ancient forest areas in Australia became increasingly dry. Mukupirnids appear to have gone extinct sometime before the end of the Oligocene, 23–25 million years ago.
- The discovery of Mukupirna fortidentata will prove important in shedding light on the evolution and extinction of ancient marsupial lineages. This will help scientists place living marsupial organisms, such as wombats and possums, into a wider evolutionary context.



8. Space Systems Design Lab

- Recently the Indian National Space Promotion and Authorization Center (IN-SPACe) has inaugurated the Space Systems Design Lab in Ahmedabad. The main focus of the lab is to enable start-ups to prototype with minimal iterations, thereby significantly reducing turnaround time and research and development costs.
- This will help non-governmental organizations to play a significant role in the development of cutting-edge space technologies. To achieve its objectives, the IN-SPACe Design Lab includes mission simulation, modeling, visualizing, payloads and high-end analysis and simulation software for spacecraft, ground station, and launch vehicle avionics. The lab also houses computing resources that can help start-ups validate and visualize their design ideas before starting the manufacturing process.



9. Caltoris Bromus Sadasiva

Recently a butterfly subspecies (*Caltoris bromus sadasiva*) has been discovered from the shores of Vembanad lakes in Kerala. It is the first registered subspecies of *Bromus swift* (*Caltoris bromus*) butterfly belonging to the skipper butterfly family of *Lepidoptera* (moths and butterflies) in the Western Ghats and peninsular India. This butterfly was first seen in Akkulam Lake in 2005 and later in Vembanad in 2009 by Dr. Sadasivan. *Caltoris*, an Indo-Australian genus with more than 15 species, is found in Southeast Asia. *Caltoris Bromus* is one of them and has two other subspecies *Caltoris bromus bromus* and *Caltoris bromus yanuca*.



10. Resident Mission in Vilnius

Recently India operationalized a new resident mission in Vilnius (Lithuania). The mission will help enable the growth of bilateral trade, investment and economic engagement and facilitate stronger people-to-people contacts and enable more sustained political outreach in multilateral form. The Indian Mission in Lithuania will also better assist the Indian community and safeguard their interests.

11. Lynx-U2 Fire Control System

- The Indian Defense Ministry has signed a contract with Bharat Electronics Limited (BEL) for the procurement of 13 indigenously developed Lynx-U2 fire control systems.
- The Lynx-U2 Fire Control System is a Gun Fire Control System (GFCS) that precisely monitors air/surface targets and enables the weapon to determine target locations and acquire information on air and surface targets with precision and then engage them. The system has been in operation for more than two decades and is meeting the tactical requirements of various types of ships such as destroyers, frigates, missile boats, corvettes etc. of the Indian Navy.
- It will enhance the Navy's ability to locate and engage targets with greater accuracy while minimizing collateral damage.
- The Lynx-U2 system is designed to track and engage targets amidst maritime clutter, which is a significant challenge in naval operations.
- The open and scalable architecture of the system allows easy integration with existing systems, enables seamless interoperability and minimizes operational complexities.
- Supporting the Government's 'Make in India' initiative, procurement of indigenously designed and developed systems will generate employment opportunities in the country.
- This will reduce dependence on foreign Original Equipment Manufacturers (OEMs), resulting in cost savings, technology transfer and skill development. The Lynx-U2 system has a good track record of reliability and performance.



12. South Asia Economic Focus Report

- Recently the World Bank has released its South Asia Economic Focus Report, which projects India's economic growth rate to be 6.3% for the current financial year ending March 31, 2024.
- According to the report, the services sector and the construction sector are the fastest growing industries in India while high borrowing costs and slow income growth have resulted in weak consumption and the government's tight fiscal spending has been the main reason for this decline. Investment growth remained strong, and business confidence remained strong.
- The World Bank has highlighted that India has fared better than the rest of the South Asian region, but there are still two major concerns.
- The female labour force participation rate has fallen below 20%.
- The informal sector has neither become more productive nor less so.



13. Idu Mishmi

Recently, the National Tiger Conservation Authority (NTCA) announced that the Dibang Wildlife Sanctuary in Arunachal Pradesh will soon be notified as a tiger reserve. The announcement has caused unrest among a tribe called the Idu Mishmi as they believe that the tiger reserve forest will hinder their access to the forest area.

Idu Mishmi:

The Idu Mishmi are a sub-tribe of the larger Mishmi group (the other two Mishmi groups are Digaru and Mizu) in Arunachal Pradesh and neighboring Tibet. Known for weaving and craftsmanship, the Idu Mishmi live mainly in the Mishmi hills bordering Tibet. According to the 2011 census, the population of this tribe is estimated to be around 12,000, whose language (also known as Idu Mishmi) is considered endangered by UNESCO.



Current Affairs at a Glance

1. PM, Narendra Modi addressed the World Bank Event titled 'Making it Personal: How Behavioral Change Can Tackle Climate Change'.
2. The Indian National Space Promotion and Authorization Center (IN-SPACE) has inaugurated the Space Systems Design Lab in Ahmedabad.
3. The Prime Minister flagged off Rajasthan's first Vande Bharat Express between Ajmer and Delhi Cantt.
4. The Shanghai Cooperation Organization (SCO) under its current chairmanship, Government of India hosted the Shanghai Cooperation Organization (SCO) Young Writers' Conference (YAC) in New Delhi on 12-13 April 2023 as part of the calendar of events prepared by the Ministry of External Affairs.
5. Union Home and Cooperation Minister Amit Shah launched the 'White Village Programme' at Kibit, a border village in Arunachal Pradesh.
6. Union Finance Minister Smt Nirmala Sitharaman left on an official visit to USA to attend the Spring Annual Meeting of the IMF World Bank.
7. Union Home and Cooperation Minister Amit Shah inaugurated and laid the foundation stone of Hariharpur Sangeet Vishwavidyalaya in Azamgarh, Uttar Pradesh and various development projects worth Rs 4583 crore.
8. Union Home and Cooperation Minister Amit Shah unveiled a 54-feet tall statue of Hanuman ji at Salangpur Dham in Gujarat and inaugurated Shri Kashtbhanjandev Bhojanalaya built at a cost of Rs 55 crore.
9. UIDAI joined hands with IIT Bombay to develop a touchless biometric capture system.
10. Himachal Pradesh launched Sanjivani project to support dairy farmers.
11. Iran's Islamic Revolution Guards Corps (IRGC) has successfully tested a kamikaze drone with a 50 kg warhead.
12. According to the National Securities Depository data, foreign capital inflows from Mauritius to Indian capital markets declined the fastest in FY23.
13. Bharat Biotech has won an award at the World Vaccine Congress.
14. Priyanshu Rajawat won the men's singles trophy at the Orleans Masters Super 300 tournament.
15. The Election Commission of India has granted national party status to the Aam Aadmi Party (AAP).
16. Gond painting of Madhya Pradesh got GI tag.
17. India's first semi-high speed regional rail service has been named "RAPIDX".
18. The 'Tulsi Ghat Restoration Project' was launched by EAM Jaishankar in Uganda.
19. Appasaheb Dharmadhikari will be given Maharashtra Bhushan.
20. National Mission for Clean Ganga signed an agreement with 49 universities.
21. SEBI unveiled its new people on its 35th Foundation Day.
22. Solar Energy Corporation of India got the status of 'Miniratna Category-I'.
23. Keshab Mahindra, former chairman of the Mahindra Group, passed away on April 12 at the age of 99.
24. According to Stanford University's annual AI Index report, India ranks 5th in the list of countries with the highest investment in AI.
25. Canara Bank and Bharat Billpay have partnered to enable cross border bill payments for Indians in Oman.
26. The Prime Minister addressed the Platinum Jubilee celebrations of the Gauhati High Court at Shrimat Sankardev Kalakshetra, Guwahati, Assam.

Why In Broadcast

The Plenary Session of the CIVIL20 India 2023 was inaugurated at Nagpur in March 2023. The motto for C20 India 2023 is #YouAreTheLight.

Conclusion

- B.R. Ambedkar once explained the importance of a liberal-secular civil society: "The roots of democracy lie not in the form of Government, Parliamentary or otherwise... The roots of Democracy are to be searched in the social relationship, in terms of associated life between the people who form a society."
- The role of civil society hence is major step stone that needs to be consolidated, promoted and should be made empowered and C20 is a crucial step towards this achievement.

Government Initiatives

- The government time and again has equally projected the enthusiasm for promotion of civil societies in India.
- Be it through, Panchayati Raj Institutions, or institutions like NABARD, promoting self help groups etc.
- India has around 1.2 SHGs in which 88% are all women SHGs which mirrors the notion of Sabka Sath Sabka Vikas.

About Civil20

- C20 India 2023 is one of the official Engagement Groups of the G20 that provides a platform for Civil Society Organizations (CSO) around the world to voice the people's aspirations to the world leaders in G20.
- It was inaugurated in the presence of spiritual leader Mata Amritanandamayi, Nobel laureate Kailash Satyarthi and Deputy Chief Minister of Maharashtra Devendra Fadnavis.

Role of Civil Societies in India

- As per the EU, civil society means "All types of social action carried out by individuals or groups who are not related to, or managed by, the state".
- They have a prominent role to play when it comes to the protection, prevention, promotion, and transformation of people, communities or democracy as a whole.

Civil Societies in History

- Societies like Brahmo Samaj, and Arya samaj envisioned socially transforming society towards progressiveness. Similarly, the trade unions like NTUF, AITUC etc. became the voice of the marginalized.

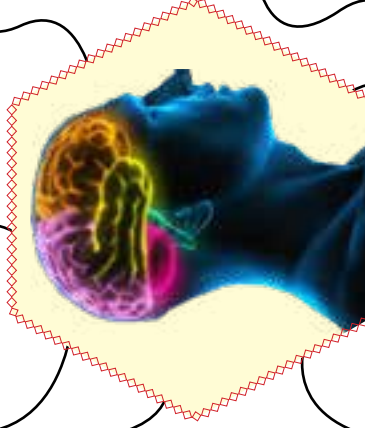
Civil Societies After Independence

- Although, the zeal of swadeshi can be attributed to the partition of Bengal, the love for swadeshi still is a very crucial part of the culture that is also reflected in the initiatives like Make in India and Atmanirbhar Bharat.
- The Bhoodan movement by Vinobha bhave, the Chipkoo movement or organizations like FICCI etc. are some of exemplary instances where necessary intervention was given by civil society groups that worked wonders for the society.

Civil Societies Around The World

- The organizations like World Wildlife Fund for Nature, Greenpeace, Amnesty International are some of instances that depict how civil societies can bring a change that benefits all.
- The civil societies fill the implementation gap and act as a check in legislation.

CIVIL20 India 2023

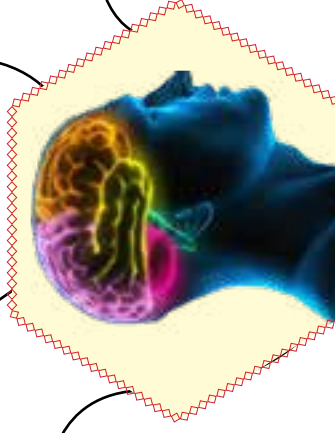


Why In Broadcast

- On March 29, Elon Musk and a group of AI experts signed an open letter calling for a moratorium on developing artificial intelligence (AI) systems that are more powerful than OpenAI's recently launched large language model (LLM), GPT-4.
- The letter had over 1,300 signatories and it called on all AI labs to immediately pause, for at least six months, training of any systems more powerful than GPT-4.

Concerns

- Such multi-modal advances give GPT-4 scale to get closer to artificial general intelligence (AGI). That means machine intelligence could be as good as human intelligence.
- The potential negative aspect of AGI could come with serious risks of misuse, drastic accidents, and societal disruption.
- According to some developers and tech entrepreneurs, GPT-5 could be indistinguishable from humans, and the language model could achieve AGI by the end of this year.
- Since there are no regulations in place to enforce a ban on developing AI nor the governments have any policy tools to halt work in AI development, this may lead to disastrous consequences.



Prohibition Call on ChatGPT's Successor

Similar Technologies

- The Alphabet-owned Google launched Bard, a version of its Lamda language model.
- In China, Internet giant Baidu has launched Ernie, an AI-powered chatbot that can summarise financial statements
- The Massachusetts Institute of Technology's media lab has developed ELSA, an AI bot that can act as a psychotherapy counsellor. It could potentially be deployed in cognitive behavioural therapy sessions.

More Info

- The Future of Life Institute (FLI) issued a letter citing one of the Asilomar AI principles on how advances in AI could profoundly impact people's lives.
- The Asilomar AI Principles are one of the earliest sets of AI governing principles laid out at the Beneficial AI 2017 conference hosted by FLI.
- FLI's open letter comes amid rapid development and deployment of AI technology in several industries since there has been a dramatic rise in the adoption of AI by many firms.

About GPT-4

- Generative Pre-trained Transformers (GPTs) are a series of models that are trained on the vast amount of data to act like human text. Chat GPT is one of its variants.
- On the other hand, GPT-4 is more advanced than its predecessors regarding visual comprehension, creativity and text.
- It can work with users on a variety of creative projects, such as music, scripts, technical writing, etc. and process up to 25,000 words of text facilitating extended conversations and also accepting images as inputs.
- It is more multilingual and outperforms GPT-3.5 and other LLMs by accurately answering thousands of multiple-choice across 26 languages.
- It handles English best with an 85.5% accuracy, along with Indian languages like Telugu with an accuracy of 71.4%.

Why In Broadcast

Recently, the United Nations General Assembly (UNGA) passed a resolution that asked the International Court of Justice (ICJ), to provide an opinion on what kind of obligations countries have towards climate change reduction, based on the promises they have made to the UN Framework Convention for Climate Change (UNFCCC).

Restoring Initiatives

UN recognizes 10 pioneering initiatives that are restoring the natural world:

1. Trinational Atlantic Forest Pact
2. Abu Dhabi Marine Restoration
3. Great Green Wall for Restoration and Peace
4. Ganges River Rejuvenation
5. Multi-Country Mountain Initiative
6. Small Island Developing States Restoration Drive
7. Altyn Dala Conservation Initiative
8. Central American Dry Corridor
9. Building with Nature in Indonesia
10. Shan-Shui Initiative in China

Small Island developing states (SIDS)

- Small Island Developing States (SIDS) are a distinct group of 38 UN Member States and 20 Non-UN Members/Associate Members of United Nations regional commissions that face unique social, economic and environmental vulnerabilities.
- They aim to restore the sensitive ecosystem of the SIDS countries and help them to safeguard wildlife, strengthen their economies and adapt to climate change.

More Info

- This resolution had been pushed through by one of the smallest country in the world, the Island of Vanuatu in Pacific.
- This island nation was devastated in 2015 by the effects of Cyclone Pam, which is believed to have been spurred by climate change.
- This cyclone wiped out 95% of its crops and affected two-thirds of its population.

Questions Put forth By The Resolution

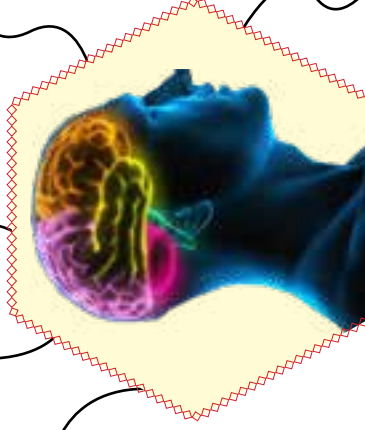
The draft resolution (A/77/L.58) invoked article 96 of the UN Charter to ask the ICJ to deliberate on two questions:

1. What are the obligations of states under international law to ensure the protection of the climate system for present and future generations?
2. What are the legal consequences under these obligations for states where they, by their acts and omissions, have caused significant harm to the climate system, particularly for Small Island Developing States (SIDS) and for people who are harmed?

The Possible Outcomes

- A legal opinion from the ICJ, the highest global court recognised by all 193 UN members is expected to bolster the efforts under the UNFCCC to ensure all countries work towards mitigating climate change and global warming to the suggested 1.5-2°C limit.
- Its opinion may prove vital about contentious issues such as climate reparations by the developed world, legal culpability for countries that don't achieve their NDC promises and climate support to the most vulnerable parts of the world battling the effects of global warming.
- Although the ICJ is being asked for an "advisory opinion", it would not be legally binding as an ICJ judgment.

ICJ Opinion on Climate Change



Why In Broadcast

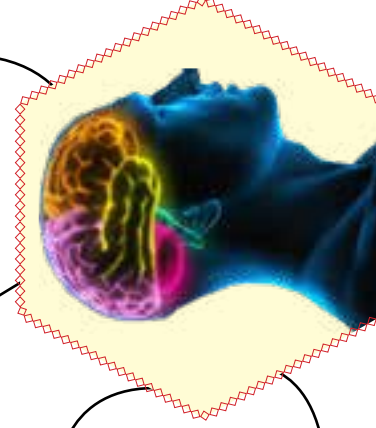
- The British PM Rishi Sunak recently rejected a call from the new First Minister of Scotland and leader of the governing Scottish National Party (SNP), Humza Yousaf, to hold a second referendum for Scotland's independence from the U.K.

Way Forward

Recent polls show that the support for a 'yes' vote on independence has dropped to 39% in the country, less than it was during the 2014 referendum, thus the first minister's priority is to first build support for independence among Scottish citizens.

The U.K's Stand

- The British government believes that the SNP has failed to give a clearer picture of how issues of pensions and healthcare would work in an independent Scotland.
- It has also warned Scotland that if it rejoins the EU, it would lead to the creation of a hard border between Scotland and Britain.



The Demand For Independent Scotland

Reasons For The Demand

- Scotland currently gets a bloc grant from the British government for a large part of its annual expenditure which it plans to substitute with oil revenues from the North Sea once its gets independence.
- The Scottish National Party says that instead of using the North Sea oil revenues to invest in future generations, the U.K. is using them to fund its current expenses, which undermines

- the interests of Scots.
- Further, the party also plans to rejoin the EU, expand its trade in the bloc, and receive other associated benefits.
- It plans to keep using the British pound Sterling as its currency after independence.
- It also believes that the U.K. could make other decisions like Brexit in the future that would undermine Scottish interests.

Background

1. Before The 18th Century:

- The independent Kingdom of Scotland was formed in the 9th century and had to fight several wars to remain independent from the Kingdom of England. In 1603, the two kingdoms entered a personal union as they were then ruled by the same monarchs.
- In 1707, the British and Scottish Parliaments passed the Acts of Union, entering into a political union under the name of Great Britain.
- While Scotland had retained some of its decision-making powers it did not get equal representation in the united Parliament, and longstanding cultural and political differences remained.

2. During 20th Century & Present Scenario:

- Demands for self-governance in Scotland began to sprout, eventually leading to two referendums in 1979 and 1997, resulting in the formation of a new devolved Parliament of Scotland in 1999.
- This Parliament was given the mandate to form legislation on devolved issues such as health, transport, education, and so on, while the power to legislate on defence, foreign policy, trade, immigration, and the currency was reserved.
- The last referendum for independence took place in 2014, where 55% of Scots voted to stay in the three-centuries-old union while 45% voted to walk out.

Why In Broadcast

The United Nations 2023 Water Conference (UN2023WC) held in New York on March 22-24. It was first such meeting on water after 46 years. The conference coincided with the mid-term comprehensive review of the International Decade for Action.

Outcome of the conference

➤ The complexity of today's water problems was reflected in the conference's proceedings where fragmented discussions lead to no binding commitments.

➤ Some commitments announced at the event are:

» **Technology** – There were specific innovations in wastewater treatment or solar treatment of water in remote areas, and a number of proposals for incubation platforms, focused on water management.

» **Data & Models** – Before every large investment, potential impact is anticipated. Simulations are often important to do this, and they need large amounts of input data. Cost-effective approaches to data-generation included sensors and satellite data.

» **Knowledge Sharing** – Solutions to most of these problems already exist, but each region and country often reinvents the wheel. We need to accelerate cross-learning.

» **Environmental, Social & Corporate Governance** – The conference

About Water Conference

➤ These types of international conferences serve to better align activities by governments, companies, NGOs, and funders around a few grand challenges.

➤ They also help countries learn from the experiences of others, transfer technology, and invest.

About last U.N. Water Conference

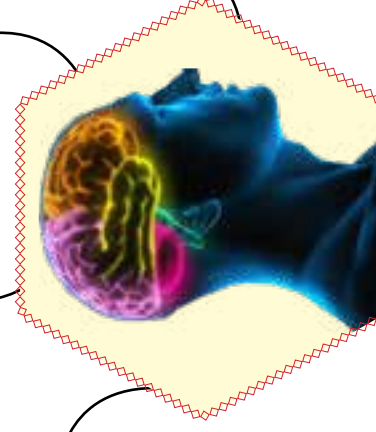
➤ The last U.N. Water Conference was held in 1977.

➤ It resulted in the first global 'Action Plan'.

➤ It recognised that "all peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs.

➤ This declaration led to several decades of global funding and concerted effort to provide drinking water and sanitation for all.

➤ These actions substantially reduced the population without access to safe drinking water in much of the developing world.



United Nations 2023 Water Conference

concluded that a big barrier to farmers and industries using water more efficiently is that they have no incentive. Specifically, farmers aren't becoming more efficient or going pesticide-free unless consumers are willing to pay a premium for more sustainably produced goods.

» **Civil Society** – There were several platforms for collective action by civil society groups lobbying for changes in regulations.

» **Capacity Building** – Many people lack access to basic services because they are unable to advocate for themselves and because infrastructure projects are designed for and by powerful actors in society. Efforts are being made to offer help marginalised

Why In Broadcast

Finland joined NATO on April 4, 2023, marking a definitive shift in Europe's post World War II alignment and isolating Russia further.

Significance of Finland joining NATO

- **Finland:** while the country is in a better position in terms of security, it is losing out on the significant trade and tourist revenue it was making from Russia, and from its position as the West's gateway to the East.
- **NATO:** The addition of Finland brings in a military trained to repel an attack from Russia, and, by doubling its border with the country, brings it in a better position to station weapons, including missile launchpads, closer to Russia.
- **Russia:** Finland's move has brought NATO closer to its doors, the very thing it most strenuously opposes, and the prevention of which it had cited as one of the reasons to invade Ukraine.

Finland-Russia Ties

- Finland remained non-aligned after the Winter War of 1939-40.
- The Soviets had invaded Finland to keep Leningrad (now Saint Petersburg), which was very close to the Finnish border, safe during World War II.
- The war ended with the Moscow Peace Treaty, where Finland was forced to cede territories to —the Soviet Union.
- But despite years of peace, Finland has kept itself prepared for an invasion.
- The country has compulsory military service and imparts regular disaster training.

The Big Change

- To join the US-led North Atlantic Treaty Organisation (NATO), the Nordic country, has ended more than 70 years of military non-alignment.
- Finland shares a 1,340-km border with Russia.
- In the Cold War years, a policy of neutrality between the Soviet Union and the West was known as 'Finlandisation',
- Finlandisation had been one of the options discussed for Ukraine before Russia invaded it.

About NATO

- NATO - The North Atlantic Treaty Organization - was formed in 1949 by 12 countries, including the US, UK, Canada and France.
- Finland is the 31st country to join.
- NATO members agree to help one another if they come under attack.
- The organisation's original goal was to challenge Soviet expansion in Europe after World War 2.
- Any new applicant has to be approved by all existing members of the alliance.

Reasons For Finland Joining NATO

Russia going to war against Ukraine has made its smaller neighbours crave the powerful military backing the NATO offers.

The Application

- Finland and its neighbour Sweden applied for NATO membership soon after the Russian invasion of Ukraine.
- Finland has now joined NATO but Sweden's bid has been held up by Turkey and Hungary.

Finland Joined NATO

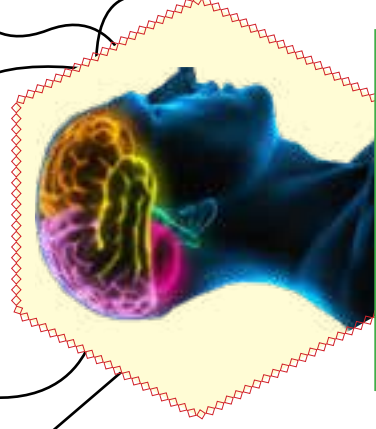


Why In Broadcast

The Supreme Court on April 10, 2023 dismissed petitions seeking the completion of recruitment drive to the armed forces which was interrupted by the launch of the Agnipath scheme in June last year.

Issues

- **Training**
Our present system of almost one year of training- and even more for the technical arms- was devised when the standard of education of recruits was low, with an even lower technical threshold.
- Nowadays, all our youth are technologically savvy.
- **Bonding and Esprit de corps**
Another aspect that has been much discussed is bonding and esprit de corps, and whether the Agniveers will be able to deliver when the time comes.
- **Lesser experience with young profile**
There is a concern of lesser experience with young aged-agniveer. Whether they will be able to deliver as per the requirements.



SC Ruling On Agnipath Scheme

Important Observation

- The court also rejected the submission that the Doctrine of Promissory Estoppel, which prevents a person from going back on a promise, would arise in the situation.

Doctrine of Promissory Estoppel

The doctrine of Promissory Estoppel means when an individual with an intention of forming a relationship which is lawful makes a clear promise to another individual and the latter individual acts on it, that promise becomes an obligation for the individual who made the promise.

About the Agnipath Recruitment Scheme

- Around 45,000 to 50,000 soldiers will be recruited annually, and most will leave the service in just four years.
- Of the total annual recruits, only 25 percent will be allowed to continue for another 15 years under permanent commission.
- Recruits under the scheme will be known as "Agniveers".

Eligibility criteria

- The entry age for all new recruits in the Armed Forces has been fixed as 17 ½ - 21 years of age.
- Recruitment will be done twice a year.

Advantages

- A transformative reform of recruitment policy of the Armed Forces.
- A unique opportunity to the youth to serve the country and contribute to Nation Building.
- Armed Forces profile to be youthful and dynamic.
- Attractive financial package for the Agniveers.
- Opportunity for Agniveers to train in the best institutions and enhance their skills & qualifications.
- Availability of well-disciplined and skilled youth with military ethos in civil society.
- Adequate re-employment opportunities for those returning to society and who could emerge as role models for the youth.

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Science

Artificial intelligence

- Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems. Artificial intelligence (AI) is the sub intelligence exhibited by machines or software, and the branch of computer science that develops machines and software with human-like intelligence. John McCarthy, who coined the term in 1956, defines it as “the study of making intelligent machines”.
- The central functions (or goals) of AI research include reasoning, knowledge, planning, learning, natural language processing (communication), perception and the ability to move and manipulate objects.

3D printing

- 3D printing, also known as additive manufacturing, has been posited by Jeremy Rifkin and others as part of the third industrial revolution.
- Combined with Internet technology, 3D printing would allow for digital blueprints of virtually any material product to be sent instantly to another person to be produced on the spot, making purchasing a product online almost instantaneous.

Gene therapy

- Gene therapy is a technique that modifies a person's genes to treat or cure disease. Gene therapies can work by several mechanisms: Replacing a disease-causing gene with a healthy copy of the gene. Gene therapy was first successfully demonstrated in late 1990/early 1991 for adenosine deaminase deficiency.

Cultured meat

- Cultivated meat, also known as cultured meat, is genuine animal meat (including seafood and organ meats) that is produced by cultivating animal cells directly. This production method eliminates the need to raise and farm animals for food.
- In the 21st century, several research projects have worked on in vitro meat in the laboratory. The first in vitro beefburger, created by a Dutch team, was eaten at a demonstration for the press in London in August 2013. Cultured meat is prohibitively expensive, but it is expected that the cost could be reduced to compete with that of conventionally obtained meat as technology improves.

Nanotechnology

- Nanotechnology refers to the branch of

science and engineering devoted to designing, producing, and using structures, devices, and systems by manipulating atoms and molecules at nanoscale.

- Nanotechnology (sometimes shortened to nanotech) is the manipulation of matter on an atomic, molecular, and supramolecular scale. The earliest widespread description of nanotechnology referred to the particular technological goal of precisely manipulating atoms and molecules for fabrication of macroscale products, also now referred to as molecular nanotechnology.
- Nanotechnology also lowers costs, produces stronger and lighter wind turbines, improves fuel efficiency and, thanks to the thermal insulation of some nanocomponents, can save energy.

Robotics

- Robotics is a branch of engineering that involves the conception, design, manufacture and operation of robots. The objective of the robotics field is to create intelligent machines that can assist humans in a variety of ways. Robotics can take on a number of forms.
- Robotics is the branch of technology that deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing. These technologies deal with automated machines that can take the place of humans in dangerous environments or manufacturing processes, or resemble humans in appearance, behavior, and/or cognition. A good example of a robot that resembles humans is Sophia, a social humanoid robot developed by Hong Kong-based company Hanson Robotics which was activated on April 19, 2015.

Stem-cell therapy

- Stem cell therapy is an intervention strategy that introduces new adult stem cells into damaged tissue in order to treat disease or injury. Many medical researchers believe that stem cell treatments have the potential to change the face of human disease and alleviate suffering. The ability of stem cells to self-renew and give rise to subsequent generations with variable degrees of differentiation capacities offers significant potential for generation of tissues that can potentially replace diseased and damaged areas in the body, with minimal risk of rejection and side effects.

CAR T-cell therapy

- A type of treatment in which a patient's T cells

(a type of immune cell) are changed in the laboratory so they will bind to cancer cells and kill them. The CAR T cells are able to bind to an antigen on the cancer cells and kill them.

Distributed ledger technology

- Distributed ledger technology (DLT) is a digital system for recording the transaction of assets in which the transactions and their details are recorded in multiple places at the same time. Unlike traditional databases, distributed ledgers have no central data store or administration functionality.
- Distributed ledger or blockchain technology provides a transparent and immutable list of transactions. A wide range of uses has been proposed for where an open, decentralised database is required, ranging from supply chains to cryptocurrencies.

Closed ecological systems (CES)

- Closed ecological systems (CES) are ecosystems that do not rely on matter exchange with any part outside the system. The term is most often used to describe small, manmade ecosystems. Such systems are scientifically interesting and can potentially serve as a life-support system during space flights, in space stations or space habitats.

Seawater greenhouse

- A seawater greenhouse is a greenhouse structure that enables the growth of crops and the production of fresh water in arid regions which constitute about one third of the earth's land area. This is in response to the global water scarcity and peak water and the salt-infecting soil.

Technological singularity

- The technological singularity—or simply the singularity—is a hypothetical point in time at which technological growth becomes uncontrollable and irreversible, leading to unforeseeable changes to human civilization.

Exascale computing

- Exascale computing is a new level of supercomputing capable of at least one exaflop floating point calculations per second to support the expansive workloads of converged modeling, simulation, AI, and analytics.
- They can quickly analyze massive volumes of data and realistically simulate many of the extremely complex processes and relationships behind the fundamental forces of the universe—in a way that's never been done before.

LiFi

- LiFi is a Visible Light Communications system transmitting wireless internet communications

at very high speeds. The technology makes a LED light bulb emit pulses of light that are undetectable to the human eye and within those emitted pulses, data can travel to and from receivers. Then, the receivers collect information and interpret the transmitted data. LiFi transmission speeds can go over 100 Gbps, 14 times faster than WiGig, also known as the world's fastest WiFi.

Radio Frequency Identification (RFID)

- Radio Frequency Identification (RFID) refers to a wireless system comprised of two components: tags and readers. The reader is a device that has one or more antennas that emit radio waves and receive signals back from the RFID tag.
- It is used in several commercial and industrial applications, from tracking items along a supply chain to keeping track of items checked out of a library.

Quantum computing

- Quantum computing is an area of computer science that uses the principles of quantum theory. Quantum theory explains the behavior of energy and material on the atomic and subatomic levels. Quantum computing uses subatomic particles, such as electrons or photons. Quantum bits, or qubits, allow these particles to exist in more than one state (i.e., 1 and 0) at the same time.
- Quantum computing could contribute greatly to the fields of security, finance, military affairs and intelligence, drug design and discovery, aerospace designing, utilities (nuclear fusion), polymer design, machine learning, artificial intelligence (AI), Big Data search, and digital manufacturing.

Quantum cryptography

- Quantum cryptography is a method of encryption that uses the naturally occurring properties of quantum mechanics to secure and transmit data in a way that cannot be hacked. Cryptography is the process of encrypting and protecting data so that only the person who has the right secret key can decrypt it.

Immersive virtual reality

- Immersive virtual reality is a technology that aims to completely immerse the user inside the computer generated world, giving the impression to the user that they have “stepped inside” the synthetic world. This is achieved by either using the technologies of Head-Mounted Display(HMD) or multiple projections.

Augmented reality

- Augmented reality is an enhanced, interactive version of a real-world environment achieved

through digital visual elements, sounds, and other sensory stimuli via holographic technology. Augmented reality uses the existing real-world environment and puts virtual information—or even a virtual world—on top of it to enhance the experience. For example, think of Pokémon Go, where users are searching in their real-life neighborhoods for animated characters that pop up on their phone or tablet.

Virtual reality

- Virtual reality or VR is a technology that creates a virtual environment. People interact in those environments using, for example, VR goggles or other mobile devices. It is a computer-generated simulation of an environment or 3-dimensional image where people can interact in a seemingly real or physical way.

Difference between virtual reality and augmented reality

- VR creates an immersive virtual environment, while AR augments a real-world scene.
- VR is 75 percent virtual, while AR is only 25 percent virtual.
- VR requires a headset device, while AR does not.
- VR users move in a completely fictional world, while AR users are in contact with the real world.
- AR requires higher bandwidth than VR.

The lithium-air battery

- The lithium-air battery is a metal-air electrochemical cell or battery chemistry that uses oxidation of lithium at the anode and reduction of oxygen at the cathode to induce a current flow. Pairing lithium and ambient oxygen can theoretically lead to electrochemical cells with the highest possible specific energy.
- Lithium-air batteries are believed to have the capacity to hold up to five times more energy than the same lithium-ion batteries powering today's phones, laptops, and electric vehicles

Lithium iron phosphate battery

- The lithium iron phosphate battery or LFP battery is a type of lithium-ion battery using lithium iron phosphate as the cathode material, and a graphitic carbon electrode with a metallic backing as the anode.
- The LiFePO₄ battery has the edge over lithium ion, both in terms of cycle life (it lasts 4-5x longer), and safety. This is a key advantage because lithium ion batteries can overheat and even catch fire, while LiFePO₄ does not.

4D printing

- 4D printing is the process through which a 3D printed object transforms itself into another structure over the influence of external energy input as temperature, light or other

environmental stimuli.

Potential Application:

- Self-repair piping system
- Self-assembly furniture

Cryogenic Treatment

- A cryogenic treatment is the process of treating workpieces to cryogenic temperatures (i.e. below -190 °C (-310 °F)) in order to remove residual stresses and improve wear resistance in steels and other metal alloys, such as aluminum. Cryogenic treatment is applicable for many of materials such as alloys, metals, carbides, polymers, composites and ceramics.

Carbon nanotubes

- Carbon nanotubes are large molecules of pure carbon that are long and thin and shaped like tubes, about 1-3 nanometers (1 nm = 1 billionth of a meter) in diameter, and hundreds to thousands of nanometers long. As individual molecules, nanotubes are 100 times stronger-than-steel and one-sixth its weight.
- These advantages make CNTs ideal candidate for many applications: electronic devices including transistors, electron-field emitters, chemical/electrochemical sensors, biosensors, lithium-ion batteries, hydrogen storage cells, supercapacitors, and electrical shielding devices.

Graphene

- Graphene is an allotrope of carbon consisting of a single layer of atoms arranged in a hexagonal lattice nanostructure. The name is derived from "graphite" and the suffix -ene, reflecting the fact that the graphite allotrope of carbon contains numerous double bonds.
- Graphene has a wide range of potential applications and uses due to its exceptional mechanical, electrical, and thermal properties. It is used in electronics, energy storage, sensors, coatings, composites, biomedical devices and many others.

Magnetic nanoparticles

- Magnetic nanoparticles are a class of nanoparticle that can be manipulated using magnetic fields. Such particles commonly consist of two components, a magnetic material, often iron, nickel and cobalt, and a chemical component that has functionality.
- Magnetic nanoparticles are used as magnetic carriers in separation processes, biosensors for detecting molecular recognition events, and contrast agents for magnetic resonance imaging.

Quantum dots (QDs)

- Quantum dots (QDs) are man-made nanoscale crystals that exhibit unique optical and

electronic properties, including the ability to transport electrons and emit light of various colors when exposed to UV light. These artificially synthesized semiconductor nanoparticles have a wide range of potential applications, including use in composites, solar cells, fluorescent biological labeling, displays, lighting, and medical imaging.

Silicene

- Silicene is a two-dimensional allotrope of silicon, with a hexagonal honeycomb structure similar to that of graphene. Silicene has been used to design many electronic devices, from transistors to photodetectors.

Genetic pollution

- Genetic pollution is a term for uncontrolled gene flow into wild populations. It is defined as “the dispersal of contaminated altered genes from genetically engineered organisms to natural organisms. It could also change ecosystems by affecting nontarget organisms.

Nanomedicine

- Nanomedicine is the medical application of nanotechnology. Nanomedicine ranges from the medical applications of nanomaterials and biological devices, to nanoelectronic biosensors, and even possible future applications of molecular nanotechnology such as biological machines.

Bridgetown Initiative

- The Bridgetown Initiative is a proposal to reform the world of development finance, particularly how rich countries help poor countries cope with and adapt to climate change.

Electronic textiles

- Electronic textiles combine traditional fabrics and fibers with electronics. E-textiles enable the transfer of data, including sensor data on heat, light, movement, and other local conditions. Electronically integrated textiles are designed primarily with wearable computing in mind, but there are many other applications.

Smart textile

- Smart textile, or smart fabric, as a textile that reacts to outside stimuli (heat, chemicals, magnetism or mechanical stimuli) but doesn't necessarily have an electronic component. One example of a smart textile that doesn't meet the definition of “e-textile” is thermochromic fabric. This is fabric that changes its color according to temperature. A smart textile made of the right materials could even change its structure and adjust airflow to keep the wearer comfortable as they move in and out of different conditions.

BrahMos-II

- BrahMos-II or BrahMos-2 or is a hypersonic cruise missile currently under joint development by India's Defence Research and Development Organisation and Russia's NPO Mashinostroyeniya, which have together formed BrahMos Aerospace Private Limited.
- The BrahMos-II is expected to have a range of 1,000 kilometres (620 mi; 540 nmi) and a speed of Mach 8. During the cruise stage of flight the missile will be propelled by a scramjet airbreathing jet engine.

Agriculture

Kharif crops

- Kharif crops, also known as monsoon crops or autumn crops, are domesticated plants that are cultivated and harvested in India, Pakistan and Bangladesh during the Indian subcontinent's monsoon season, which lasts from June to November depending on the area. Monsoon rains may begin as early as May in some parts of the Indian subcontinent, and crops are generally harvested from the third week of September to October. Rice, maize, and cotton are some of the major Kharif crops in India.

Examples of Kharif Crops

- Rice
- Maize
- Sorghum
- Bajra
- Soybean
- Cotton

Rabi crops

- Rabi crops or rabi harvest, also known as winter crops, are agricultural crops that are sown in winter and harvested in the spring in India, Pakistan and Bangladesh.
- The rabi crops are sown around mid-November, preferably after the monsoon rains are over, and harvesting begins in April / May. The crops are grown either with rainwater that has percolated into the ground or using irrigation. Good rain in winter spoils the rabi crops but is good for kharif crops.

Following are some of the examples of rabi crops:

- Wheat
- Barley
- Oats
- Pulses
- Mustard
- Linseed

Oilseeds

- India is the largest producer of oilseeds in the world. Groundnut, mustard, coconut, sesame,

sunflower, soybean, and castor seeds are some main oil seeds produced in India.

- Oilseed crops are the second most important determinant of the agricultural economy, next only to cereals within the segment of field crops.
- The self-sufficiency in oilseeds attained through the “Yellow Revolution” during early 1990’s, could not be sustained beyond a short period.
- India can produce a huge amount of oilseeds because of the favourable environmental conditions.
- Castor seed, sesamum, rapeseed, groundnut, mustard, soyabean, linseed, niger seed, sunflower and safflower are some of the important oilseeds India is known to produce.
- Despite being the fifth largest oilseed crop producing country in the world, India is also one of the largest importers of vegetable oils.
- India buys more than two-thirds of its total edible oil imports as palm oil.
- After China, India is the second largest producer of groundnut and is third in position in the production of Rapeseed after China and Canada.
- Major Oilseeds Producing Areas in India are: Rajasthan, Gujarat, Tamil Nadu, Madhya Pradesh, Haryana, Maharashtra, Karnataka, Andhra Pradesh.

Pulses

- Pulses are annual leguminous crops yielding between one and 12 grains or seeds of variable size, shape and colour within a pod, used for both food and feed.
- Pulse crops are cultivated in Kharif, Rabi and Zaid seasons of the Agricultural year.
- Rabi crops require mild cold climate during sowing period, during vegetative to pod development cold climate and during maturity / harvesting warm climate.
- Similarly, Kharif pulse crops require warm climate throughout their life from sowing to harvesting. Summer pulses are habitants of warm climate.

Modern farming techniques in India

Primitive Farming

- In this type of farming, a farmer cultivates land with the help of his family members using simple tools and natural fertility of soil. Primitive subsistence farming is also called slash and burn agriculture or shifting cultivation.

Subsistence Farming

- Subsistence Farming is a form of agriculture where almost all the produce goes to feed and support the household. It is a type of agriculture in which a farmer produces crops and rears

animals to fulfil the needs or requirements of his family and not for the market.

Commercial Farming

- This technique is a modern day farming method where the farmers use a variety of new-age tools for surplus profits. Insecticides and fertilizers are also used because the crops grown are spread across large patches of land. It contributes a great percentage to the country’s GDP. While farmers in Haryana, Punjab and West Bengal practice commercial farming techniques, farmers of Orissa continue to prefer subsistence farming for large productions.

Plantation Farming

- It is another subset of commercial farming. It makes use of both labor and technology to ensure the process is sustainable as plantations are spread across huge patches of land. It includes both agriculture and industry because of the nature of the crops grown.

Aeroponics System

- Aeroponics is the process where plants are grown in the air or mist environment without the use of soil. It is the subset of hydroponics, and suspends the plant root in the air to work. This differs from hydroponics, where plant roots are submerged in a solution of water and nutrients.

Aquaponics

- Aquaponics is a cooperation between plants and fish, the plants are grown in the grow bed, and fish are placed in the fish tank. The nutrient-rich water from the fish tank that contains fish waste is fed to the grow bed.

Hydroponics

- Hydroponics is the technique of growing plants using a water-based nutrient solution rather than soil. The process involves growing healthy plants without the inclusion of solid medium using nutrients including water solution which is mineral-rich. Hydroponic farming is the subset of hydroculture, and the nutrients used in hydroponic farming systems have different sources.

SRI method

- The System of Rice Intensification involves cultivating rice with as much organic manure as possible, starting with young seedlings planted singly at wider spacing in a square pattern; and with intermittent irrigation that keeps the soil moist but not inundated, and frequent inter cultivation with weeder that actively aerates the soil.

Zero-Budget Natural Farming (ZBNF)

- India introduced ZBNF in its Budget 2019-20.

It was first propagated by Subhash Palekar (who was conferred with Padma Shri in 2016) as a movement for farmers who were in debt due to the Green Revolution. ZBNF is neither chemical-loaded nor organic. It seeks to reduce input costs to ZERO by avoiding chemical and manufactured inputs and encouraging farmers to rely upon natural products available locally.

Mixed cropping

- In mixed cropping or diverse cropping two or more crops are grown all at the same time in a field. If by chance one crop fails, the other crops cover the risk of total crop failure.
- Usually a long-duration crop is grown with a short-duration one, so both get sufficient nutrition at the time of maturity. Generally, a leguminous crop is grown along with the main crop (intercropping).

The various plans followed in diverse or mixed cropping practices are:

- polyvarietal cultivation where several genetic varieties of the same crop are planted.
- intercropping is where two or more different crops are grown simultaneously, like carbohydrate-rich cereal that uses soil nitrogen and nitrogen-fixing legume that puts the nitrogen back in the soil.
- polyculture, in which different plants maturing at various times are planted together.

Mixed Farming

- Mixed farming is a type of farming which involves both the growing of crops and the raising of livestock. It has several advantages: Optimum diversity may be obtained by integrating crops and livestock in the same farming operation.

Factory farming:

- Factory farming is a method of mass food production in which animals are kept in very confined areas in order to get the best possible profit.
- This farming is particularly concentrated in Developed countries like USA, European nations, Australia etc.

Mycorrhizal technology in agriculture

- Arbuscular Mycorrhiza (AM) is the most common mycorrhizal type involved in agricultural systems, and the most widespread plant root symbiosis. The fungi involved (Glomales) are known to promote plant growth and health by acting as biofertilizers, bioprotectors and bioregulators.

Precision agriculture (PA)

- Precision agriculture (PA) is a farming management concept based on observing, measuring and responding to inter- and intra-

field variability in crops. PA is also sometimes referred to as precision farming, satellite agriculture, as-needed farming and site-specific crop management (SSCM).

Vertical farming

- Vertical farming is the practice of growing crops in vertically stacked layers. It often incorporates controlled-environment agriculture, which aims to optimize plant growth, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics. Some common choices of structures to house vertical farming systems include buildings, shipping containers, tunnels, and abandoned mine shafts.

International Seed Treaty

- International Seed Treaty is a comprehensive international agreement in harmony with the Convention on Biological Diversity, which aims at guaranteeing food security through the conservation, exchange and sustainable use of the world's plant genetic resources for food and agriculture (PGRFA), the fair and equitable benefit sharing arising from its use, as well as the recognition of farmers' rights. It was signed in 2001 in Madrid, and entered into force on 29 June 2004.

Seed Village Programme

- It was launched by the Ministry of Agriculture and Farmers Welfare in 2014-15. The programme is a key component of the Sub-Mission on Seeds & Planting Materials.
- Aim: To upgrade the quality of farmer's saved seeds.
- Under this programme, financial assistance for distribution of foundation/certified seeds at 50% of seed cost for cereal crops and 60% for pulses, oilseeds, fodder and green manure crops is available for up to one acre per farmer.

MSP

- The MSP is the rate at which the government purchases crops from farmers, and is based on a calculation of at least one-and-a-half times the cost of production incurred by the farmers. Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices.

Crops under MSP:

- The Commission for Agricultural Costs & Prices (CACP) recommends MSPs for 22 mandated crops and fair and remunerative price (FRP) for sugarcane.
- CACP is an attached office of the Ministry of Agriculture and Farmers Welfare.
- The mandated crops include 14 crops of

the kharif season, 6 rabi crops and 2 other commercial crops.

- MSP for toria and de-husked coconut is also fixed on the basis of MSPs of rapeseed & mustard and copra respectively.

Factors for Recommending the MSP:

- The CACP considers various factors while recommending the MSP for a commodity, including cost of cultivation.
- It takes into account the supply and demand situation for the commodity, market price trends (domestic and global) and parity vis-à-vis other crops, and implications for consumers (inflation), environment (soil and water use) and terms of trade between agriculture and non-agriculture sectors.

Three Kinds of Production Cost:

- The CACP projects three kinds of production cost for every crop, both at state and all-India average levels.
- **'A2':** Covers all paid-out costs directly incurred by the farmer in cash and kind on seeds, fertilisers, pesticides, hired labour, leased-in land, fuel, irrigation, etc.
- **'A2+FL':** Includes A2 plus an imputed value of unpaid family labour.
- **'C2':** It is a more comprehensive cost that factors in rentals and interest forgone on owned land and fixed capital assets, on top of A2+FL.
- CACP considers both A2+FL and C2 costs while recommending MSP.

Commission for Agricultural Costs and Prices (CACP)

- Commission for Agricultural Costs and Prices (CACP) is a decentralised agency of the Government of India. It was established in 1965 as the Agricultural Prices Commission, and was given its present name in 1985. It is an advisory body, not statutory, attached to the Ministry of Agriculture & Farmers Welfare, Government of India.
- The commission was established to recommend Minimum Support Prices (MSPs), to motivate cultivators and farmers to adopt the latest technology in order to optimise the use of resources and increase productivity.

Food Corporation of India

- The Food Corporation of India was set up in 1965 under the Food Corporation's Act of 1964.
- FCI is a statutory body and Public Sector Undertaking (PSU) under the Ministry of Consumer Affairs, Food and Public Distribution.

FCI was set up to fulfil the objectives of the National Food Policy:

- Effective price support operations for

safeguarding the interests of the farmers.

- Distribution of food grains throughout the country for the public distribution system.
- Maintaining a satisfactory level of operational and buffer stocks of food grains to ensure National Food Security
- FCI has its Headquarters in New Delhi with five Zonal Offices, twenty-five Regional Offices, and 170 District Offices under its control.

Vision & Mission of FCI

- The vision of FCI is Ensuring Food Security for citizens of the country. The mission is:
- Efficient procurement at Minimum Support Price (MSP), storage, and distribution of food grains.
- Ensuring availability of food grains and sugar through appropriate policy instruments; including maintenance of buffer stocks of food grains.
- Making food grains accessible at reasonable prices, especially to the weak errand vulnerable sections of the society under PDS.

Procurement:

- The Central Government extends price support for the procurement of wheat, paddy, and coarse grains through the FCI and State Agencies.
- All the food grains conforming to the prescribed specifications are procured by the public procurement agencies at the Minimum Support Price (MSP) plus the incentive bonus announced.
- FCI has also been nominated as an additional nodal Agency for the procurement of Pulses and Oilseeds.

Distribution:

- FCI meets the requirements of TPDS through grains procured which are issued at a Central Issue Price fixed by Government.
- FCI delivers food grains to State Agencies from its base depots for distribution through Fair Price Shops.
- The role of FCI is important as the National Food Security Act, 2013 commits to distributing grains through TPDS and other welfare schemes at highly subsidized prices.

Public distribution system:

- Public Distribution System (PDS) evolved as a system for the distribution of food grains at affordable prices and management of emergencies.
- PDS is operated under the joint responsibility of the Central and State Governments. The Central Government, through FCI, has assumed the responsibility for procurement, storage, transportation, and bulk allocation of food grains to the State Governments.

AGMARK:

- AGMARK is a certification mark for agricultural produce, assuring that they conform to a grade standard notified by Directorate of Marketing & Inspection (DMI) under Agricultural Produce (Grading Marking) Act, 1937

Food Safety and Standards Authority of India (FSSAI):

- The Food Safety and Standards Authority of India (FSSAI) was established in September 2008 under the provisions of the Food Safety and Standards (FSS) Act, 2006 as the apex authority on all matters of food safety and to ensure safe and wholesome food to consumers.
- Food Safety and Standards (FSS) Act, 2006 was enacted with the objectives:
 - » To consolidate the laws relating to food and for laying down science-based standards for articles of food.
 - » To regulate their manufacture, storage, distribution, sale, and import to ensure the availability of safe and wholesome food for human consumption.
- The FSSAI consists of a chairperson and 22 members.
- The FSSAI is in charge of establishing food standards so that consumers, traders, manufacturers, and investors only have to deal with one organization.
- The following are the statutory powers granted to FSSAI:
 - » Framing of Regulations to lay down food safety standards
 - » Laying down guidelines for accreditation of laboratories for food testing
 - » Providing scientific advice and technical support to the Central Government
 - » Contributing to the development of international technical standards in food
 - » Collecting and collating data regarding food consumption, contamination, emerging risks, etc.
 - » Disseminating information and promoting awareness about food safety and nutrition in India.
- operational holders belonged to Uttar Pradesh (23.82 million) followed by Bihar (16.41 million), Maharashtra (15.29 million), Madhya Pradesh (10.00 million), Karnataka (8.68 million), Andhra Pradesh (8.52 million), Tamil Nadu (7.94 million), Rajasthan (7.66 million), Kerala (7.58 million) etc. As regards operated area, out of a total of 157.82 million ha, the highest operated area was contributed by Rajasthan (20.87 million ha), followed by Maharashtra (20.51 million ha.), Uttar Pradesh (17.45 million ha.), Madhya Pradesh (15.67 million ha.), Karnataka (11.81 million ha.) etc.
- The percentage increase in number of operational holdings in 2015-16 as compared to Agriculture Census 2010-11 worked out to 5.86%. Among states, the highest increase in holdings was observed in the case of Madhya Pradesh (12.74%) followed by Andhra Pradesh (11.85%), Maharashtra (11.58%), Rajasthan (11.12%), Kerala (11.02%), Meghalaya (10.90%), Karnataka (10.83%) and Nagaland (10.16%) etc.
- 14 out of 36 States/UTs in the country accounted for about 91.01% of the total number of operational holdings and about 88.19% of the total area operated in the country. These States were Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamilnadu, Telangana, Uttar Pradesh and West Bengal.
- The average size of operational holding has declined to 1.08 ha in 2015-16 as compared to 1.15 in 2010-11.
- The percentage share of female operational holders has increased from 12.79% in 2010-11 to 13.96% in 2015-16 with the corresponding figures of 10.36% and 11.72% in the operated area. This shows that more and more females are participating in the management and operation of agricultural lands.
- The small and marginal holdings taken together (0.00-2.00 ha.) constituted 86.08% of the total holdings in 2015-16 against 85.01% in 2010-11 while their share in the operated area stood at 46.94% in the current census as against 44.58% in 2010-11.
- The Semi-medium and Medium operational holdings (2.00-10.00 ha.) in 2015-16 were only 13.35% with 43.99% operated area. The corresponding figures for 2010-11 census were 14.29% and 44.82%.
- The large holdings (10.00 ha & above) were merely 0.57% of total number of holdings in 2015-16 and had a share of 9.07% in the operated area as against 0.70% and 10.59%

Agriculture Census 2015-16.

- The total number of operational holdings in the country has increased from 138.35 million in 2010-11 to 146.45 million in 2015-16 showing an increase of 5.86%.
- The total operated area in the country has decreased from 159.59 million ha in 2010-11 to 157.82 million ha in 2015-16 showing a decrease of 1.11%.
- In a total of 146.45 million operational holdings in the country, the highest number of

respectively for 2010-11 census.

Golden Rice

- Golden Rice is a new type of rice that contains beta carotene (provitamin A, a plant pigment that the body converts into vitamin A as needed). Golden Rice is developed through genetic engineering. While ordinary rice does produce beta carotene, it is not found in the grain. Thus, scientists used genetic engineering to add the compound to the grain - a minor tweak that improved the grain's nutritive value. The beta carotene in Golden Rice, which was made possible by the addition of two new enzymes, is identical to the beta-carotene found in green leafy and yellow-colored vegetables, orange-colored fruit, and even in many vitamin supplements and food ingredients.

Food fortification

- Fortification has been identified as one of the most cost-effective nutrition interventions available, particularly for low- and middle-income countries. Fortification of commonly used food vehicles provides an opportunity for increasing nutrient intake during infancy and for populations at risk of deficiencies without any side effects for the general population.
- The most widely used vehicles for fortification are among the most commonly consumed foods, including oils and fats, milk, sugar, salt, rice, wheat, or maize flour. Some factors related to food fortification such as level of fortification; bioavailability of fortificants; and amount of fortified food consumed have a significant effect on health.

Dhara Mustard Hybrid (DMH-11)

- Dhara Mustard Hybrid-11 (DMH-11) was developed in 2002 by Deepak Pental of Delhi University through transgenic technology.
- It is a genetically modified form of herbicide-tolerant (HT) mustard. It contains two alien genes (barnase and barstar) isolated from a soil bacterium called *Bacillus amyloliquefaciens* which helps develop high-yielding commercial mustard hybrids.
- GEAC approved the commercial cultivation proposal of DMH-11 in 2017, but it was rejected by the environment ministry.
- The ministry suggested that GEAC should conduct more studies on GM crop.

GM crops in India

Cotton:

- In 2002, GEAC approved Bt cotton for commercial cultivation in 6 states namely Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Tamil Nadu. Bt

cotton is the first and only transgenic crop approved by GEAC.

Brinjal:

- Mahyco jointly developed Bt brinjal with Dharwad University of Agricultural Sciences and Tamil Nadu Agricultural University.
- GEAC recommended a commercial release of Bt brinjal in 2007, but this initiative was put on hold in 2010.

Sandalwood spike disease:

- It is an infectious disease which is caused by phytoplasma.
- Phytoplasmas are bacterial parasites of plant tissues—which are transmitted by insect vectors and involved in plant-to-plant transmission.
- There is no cure as of now for the infection.
- Presently, there is no option but to cut down and remove the infected tree to prevent the spread of the disease.
- The disease was first reported in Kodagu, Karnataka in 1899.

Lumpy skin disease

- Lumpy skin disease is a viral disease that affects cattle. It is transmitted by blood-feeding insects, such as certain species of flies and mosquitoes, or ticks.
- It causes fever, nodules on the skin and can also lead to death, especially in animals that have not previously been exposed to the virus. Control options include vaccinations and culling of infected animals.

Pesticides in India:

- India is among the largest producers of pesticides in the world.
- Insecticides, fungicides and herbicides are used in India, with insecticides forming the highest share.
- Total pesticide consumption is the highest in Maharashtra, followed by Uttar Pradesh, Punjab and Haryana.
- On the other hand, per hectare consumption of pesticides was the highest in Punjab (0.74 kg), followed by Haryana (0.62 kg) and Maharashtra (0.57 kg) during 2016-17.

Agreements

India joins Growth Triangle Joint Business Council

- India has signed a Memorandum of Understanding (MoU) with Indonesia-Malaysia-Thailand Growth Triangle Joint Business Council (IMT-GT JBC), Malaysia to further promote the adoption of energy efficiency and

sustainable practices in the region.

MoU between Ministry of External Affairs of India and Republic of Congo

- Ambassador of the Republic of Congo, Raymond Sergibel signed the International Solar Alliance Framework Agreement in New Delhi in February 2023.
- The International Solar Alliance initiative was launched by the Prime Minister of India and the President of France on 30 November 2015 at the Conference of the Parties (COP-21) of the UNFCCC with 121 solar resource rich countries in France (Paris).

Brazil has become a full member of the International Solar Alliance.

- MoU between Ministry of Electronics and Information Technology and META
- Meta has tied up with the Ministry of Electronics and Information Technology for the G20 Stay Safe Online campaign on 7 February 2023.
- Under this agreement, Meta will spread awareness about online safety measures through various channels through video messages in multiple Indian languages.

Agreement between India and Finland

- India and Finland signed a Joint Declaration on Migration and Mobility on 13 December 2022 to jointly work towards developing a common framework of arrangements and cooperation to facilitate greater mobility and combat irregular migration.

Meta-Airtel partnership for undersea cable system named 'Africa Pearls'

- Bharti Airtel and Meta have decided to jointly invest in global connectivity infrastructure project that would extend the 2Africa Pearls (a subsea cable) to India.
- 2Africa Pearls is one of the world's largest undersea cable systems. It aims to provide fast internet

Important days

World Pangolin Day

- World Pangolin Day is observed annually on the third Saturday in February, and this year it falls on February 18. It is a day to remember and celebrate pangolins, raise awareness, and fight against global pangolin capture in Africa and Asia.

World day of social justice

- World Day of Social Justice is observed every year on February 20 with the objective to raise a voice against social injustice.

- Theme for 2023: Overcoming Obstacles and Unleashing Opportunities for Social Justice.

International Mother Language Day

- It is celebrated on 21 February to spread awareness of linguistic, and cultural diversity, and to promote multilingualism. UNESCO declared 21st February as International Mother Language Day in 1999 and the World has been celebrating the same since 2000.

National Productivity Day

- India celebrates National Productivity Day every year on February 12 to mark the foundation day of the National Productivity Council (NPC). The NPC's mission is to promote awareness towards increasing the productivity of the country.
- The day commemorates the establishment of the NPC, which was established in 1958 to promote a productivity culture in India.

World leprosy day

- In 2023, World Leprosy Day was observed 29 January. This international day is an opportunity to celebrate people who have experienced leprosy, raise awareness of the disease, and call for an end to leprosy-related stigma and discrimination. The theme of World Leprosy Day 2023 is "Act Now."
- In India, World Leprosy Day is observed on January 30, on Mahatma Gandhi's death anniversary.
- The country has set a target of completely eliminating the disease by 2027.

National tourism day

- National Tourism Day is celebrated every year on January 25 to recognize India's natural beauty and raise awareness about the importance of tourism for the Indian economy. India is one of the top tourist attractions for visitors from all around the globe.
- Government of India is celebrating National Tourism Day on 25 January this year at Pochampally in Telangana
- In 2021, the United Nations World Tourism Organization selected the village as one of the best tourism villages.

National Voters Day

- India will celebrate its 13th National Voters' Day on 25 January. The first NVD was celebrated in 2011.
- Since 2011, National Voters' Day has been celebrated on January 25 every year, all across the country to mark the foundation day of the Election Commission of India, i.e. 25th January 1950.

National startup day

- January 16 is celebrated as National Startup Day every year in the country to recognize and promote the country's vibrant startup ecosystem.

World Soil Day

- World Soil Day (WSD) is held annually on 5 December as a means to focus attention on the importance of healthy soil and to advocate for the sustainable management of soil resources.
- A report titled "Global Status of Black Soil" was released by the Food and Agriculture Organization on the occasion of World Soil Day.

International Day of Persons with Disabilities

- The day is observed every year on 3rd December to raise global awareness about the issues and challenges faced by people with disabilities

Tribal pride day

- Celebrated on 15 November
- The Central government has declared the day as Tribal Pride Day to commemorate the contribution of tribal communities to the history and culture of the nation.

Uttar Pradesh Foundation Day

- January 24, 1950

International Women's Day

- International Women's Day was celebrated March 8 as a focal point in the women's rights movement, bringing attention to issues such as gender equality, reproductive rights, and violence and abuse against women.
- Theme: "embrace Equality"

World Forestry Day

- The United Nations General Assembly proclaimed 21 March the International Day of Forests in 2012 to celebrate and raise awareness of the importance of all types of forests.
- This year theme is "Forest and Health"

World No Tobacco Day

- World No Tobacco Day is observed around the world every year on 31 May.

World Environment Day

- World Environment Day is celebrated annually on 5 June and encourages awareness and action for the protection of the environment.
- This year theme Solutions to Plastic Pollution

World Ozone Day

- Held on 16 September
- Theme: "Montreal Protocol @ 35: Global Cooperation to Protect Life on Earth"

National Dolphin Day

- The National Mission for Clean Ganga celebrates 5th October as National Ganga River Dolphin Day.

World Mental Health Day

- Observed on 10 October; Theme: "Make mental health and well-being a global priority for all".

Tribes in India

Bhils Tribe

- The Bhil are living in Chhattisgarh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Andhra Pradesh and Rajasthan.
- The Bhils are the largest tribes in India. They speak the Bhili language. Their celebrations are the Ghoomar dance, Than Gair-a dance drama and the Baneshwar Fair.

Gonds Tribe

- The Gonds are India's second largest tribe, living in the Madhya Pradesh district of Chhindwara as well as parts of Maharashtra, Orissa, and Andhra Pradesh.

Munda Tribe

- This tribe inhabits Jharkhand as well as areas of Chattisgarh, Bihar, Odisha, and West Bengal.
- They practise the Sarna faith and worship a God named Singbonga. Killi is their primary language, while Nupur dance is their major form of entertainment.
- The Munda tribes commemorate the festivals of Mage, Karam, Sarhaul, and Phagu.

Santhal Tribe

- The Santhal tribes are a significant group in West Bengal. They may also be found in Bihar, Odisha, and Assam, and they are the biggest tribe in Jharkhand.
- Santhali dance and music, in addition to traditional festivals such as Karam and Sahrai, are key for these peoples .

Toto Tribe

- The Toto tribe lives in Totapara village in West Bengal's Alipurdoar district.

Bodo Tribe

- The Bodo tribe lives in Assam, West Bengal, and Nagaland.
- In the spring, they celebrate the Baishagu festival, which is devoted to Lord Shiva.

Angami Tribe

- The Angami Nagas are a significant tribe found in Nagaland's Kohima region.
- The tribe is well known for the renowned Hornbill Festival, which draws visitors from all over the world.
- Their unique art, woodwork, and bamboo and cane craftsmanship are stunning. They speak many dialects such as Gnamei, Ngami, and

Tsoghami.

Bhutia Tribe

- The Bhutias are mostly found in Sikkim, West Bengal, and Tripura.
- The festivals commemorated by this tribe are Losar and Loosong.

Khasi Tribe

- The Nongkrem celebration, which lasts five days, features ladies dressed in Jainsem and men dressed in Jymphong.
- This tribe is mostly found in Meghalaya's Khasi Hills, as well as areas of Assam, Manipur, Arunachal Pradesh, and West Bengal.
- The tribe performs a variety of songs and musical instruments such as drums, guitars, flutes, cymbals, and so on.

Garo Tribe

- Garo tribes are mainly found in the hills of Meghalaya and parts of Assam, Nagaland and West Bengal.
- The tribe is one of the few matrilineal societies in the world. Garo architecture is quite unique. Nokmong, Nokpante, Jamadaal and Jamsireng are some of them.
- The festival of Wangala is their celebration.

Nyishi Tribe

- This tribe is found in Arunachal Pradesh's mountains, with the bulk of them living in the districts of Kurung Kumey, Papum Pare, Upper and Lower Subansiri.
- They celebrate Nyokum festival, held in February, is devoted to the goddess Nyokum.

Warli Tribe

- The tribe is found in the Indian states of Maharashtra and Gujarat. This tribe is highly recognized for their Warli Art, which is created with a mixture of cow dung and soil, rice paste, bamboo stick, and red ochre.
- They organize the Tarpa dance during the harvest season and the Warli Folk Art Dancing People Festival in March.

Chenchu Tribe

- This tribe is native to Andhra Pradesh and lives in the jungles of the Nallamala Hills.
- They may also be found in Kurnool, Nalgonda, and Guntur.

Siddis Tribe

- According to legend, the Portuguese brought the people in as slaves. They may be found across Karnataka.
- The bulk of them are Christians, although some practise Hinduism and Islam. They like ritualistic practises, dancing, and music.

Soliga Tribe

- The Soligas live in deep forests in Karnataka and Tamil Nadu.
- This indigenous group is made up of five distinct groups: Male Soliga, Kadu, Burude, Pujari, and Urali Soliga.
- The Soligas speak the Sholaga language, which is influenced by Kannada and Tamil.

Kodava Tribe

- The tribe is a patrilineal tribe from Kodagu or Coorg, and they are well known for their courage.
- They are primarily agriculturalists. The tribe's members, including men and women, are ardent hockey fans.
- Every year, in addition to the traditional festivals of Kailpodhu, Puttari, and Kaveri Sankraman, the Kodava Hockey festival is held.

Toda Tribe

- The Todas may be found in areas of Tamil Nadu's Nilgiris mountain range.
- Their livelihood is dependent on cow farming and dairy production. Their architectural expertise is evident in the oval and tent-shaped bamboo dwellings with thatched roofs.
- Pukhoor's Toda embroidered work is highly known. Modhweth is their most significant festival.

Irular Tribe

- The tribe lives in the Nilgiri mountain ranges of Tamil Nadu and Kerala.
- They are Kerala's second-largest tribe and are largely located in the Palakkad area.

Kurumba Tribe

- This is a large clan located in Kerala and Tamil Nadu. They were among the first settlers in the Western Ghats.
- They live a simple existence based on agriculture and honey and wax harvesting.
- They are skilled in creating traditional herbal medications. They are well-known in the area for their witchcraft and magic abilities.

Indigeneous People of South Andaman:

- Great Andamanese
- Onges
- Jarwas
- Sentinalese

MCQs based on Preliminary Exam

1. Consider the following statements:
 1. In the food grains deficit areas and among the poorer strata of society food grains are distributed at a price lower than the market price known as Issue Price
 2. The MSP is declared by the government every year after the sowing season
 Which of the statement/s given above is/are correct?

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

2. *Organic Farming:*
 1. Offers a means to substitute/replace costlier agricultural inputs
 2. Generates income through exports
 3. Has more nutritional value than chemical farming
 Select the correct answer using the code given below:

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

3. *We may be tempted to treat higher level of GDP of a country as an index of greater well being of the people of that country. Why this approach may **not** be correct? Consider the following reasons:*
 1. Distribution of GDP - how uniform is it?
 2. Non-monetary exchanges
 3. Externalities
 Select the correct answer using the code given below:

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

4. With reference to '*Capital Budget*', consider the following statements:
 1. The Capital Budget is an account of the assets as well as liabilities of the Central Government.
 2. It takes into consideration changes in capital.
 3. It consists of capital receipts and capital expenditure of the government.
 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

5. Consider the following statements regarding *Economists of Macro Economy*:
 1. If the buyers and sellers in each market take their decisions following their own self-interest, economists will not need to think of the wealth and welfare of the country as a whole separately.
 2. Economists have to look further for macroeconomics solutions & problems.
 Which of the above statement/s is/are **incorrect**?

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

6. With reference to '*Statutory Liquidity Ratio (SLR)*', consider the following statements:
 1. The Statutory Liquidity Ratio is a requirement on banks to hold a certain share of their resources in liquid assets such as cash, government bonds and gold.
 2. Any unexpected demand from depositors can be quickly met by liquidating SLR assets.
 3. In practice, the SLR has become a means of financing a bulk of the government's fiscal deficit.
 4. The SLR is a form of financial repression where the government pre-empts domestic savings at the expense of the private sector.
 Which of the statement/s given above is/are correct?

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

7. *RBI has defined "wilful defaulter" as :*
 - (a) A borrower who intentionally defaults on its repayment obligation, despite adequate cash flows
 - (b) Borrower not utilized the funds for the purpose for which it was taken but has diverted the funds for other purposes
 - (c) Borrower has defaulted in meeting its repayment obligations and has also removed the movable fixed assets or immovable property given by him for the purpose of securing a term loan without the knowledge of the bank/lender
 - (d) All of the above

8. Consider the following statements regarding *Inflationary Effect on Tax* :
 1. Burden of the tax-payers also increases as tax-payer's gross income moves to the upward slabs of official tax brackets.
 2. In the case of a government incurring high fiscal deficit, inflation functions as an inflation tax.
 Which of the statement/s given above is/are

correct ?

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

9. Which of the following factor is *non-economic factor of the economic development*?

- (a) Capital formation
(b) Marketable surplus of agriculture
(c) Human resources
(d) Conditions in foreign trade

10. Consider the following statements in regard with *Regional Rural Banks (RRB)*:

- RRBs can issue shares in capital market to get more funds from private investors.
- Combined shareholding of Union, state and sponsor banks should not fall below 51% in RRB.
- State government's shareholding is fixed to 15 percent.

Which of the statement/s given above are correct ?

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

11. Consider the following statements in the context of *Payment Banks*:

- Payment banks take deposit only for current account and saving account.
- Payment banks can give loans.
- Payment banks can invest depositor's money in Government Securities only.
- MFI and NBFC can apply for payment banks.

Which of the statements given above are correct?

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

12. Match the following :

List-I	List-II
A. Financial Inclusion	1. Urjit Patel
B. Monetary Policy related Reforms	2. P. J. Nayak
C. Governance in Bank Boards	3. Bimal Jalan
D. Private Bank Licenses	4. Nachiket Mor

Codes:

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

13. Consider the following statements in regard with *Consolidated Fund of India* :

- This fund is filled by all the cash from direct and indirect taxes.
- This fund is filled by all the loans taken by Government of India.
- Government of India does not need Parliament's approval to spend money from this fund.

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

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

14. Arrange the following *sectors according to their share in employment in descending order*.

- (a) Services > Agriculture > Industries
(b) Agriculture > Industries > Services
(c) Industries > Services > Agriculture
(d) Agriculture > Services > Industries

15. Consider the following problems :

- Long term factors like steeper decline in per capita land availability and shrinking of farm size.
- Slow reduction in share of employment.
- Decline in yield growth.
- Low labour productivity in agriculture and the gap between agriculture and non-agriculture sector is widening.

Which of the *problems given above are correct with regard to Indian agriculture*?

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

16. *External debt consists of* :

- NRI deposits
- Commercial borrowings
- Bilateral loans
- Trade credit
- Long-term external debt

Select the correct answer using the codes given below:

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

17. Which of the following *should be included in the inclusive growth*?

- Providing livelihood
- Increasing purchasing power
- Creating opportunities for skill development
- Increasing agro-based industries

Select the correct answer using the codes given below:

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

18. Consider the following statements in regard with *Indian Economy*:

1. On an average, the contribution of the primary sector (agriculture) in the GDP is falling down regularly.
2. The share of its tertiary sector (services) has increased to more than half in its GDP.
3. India has jumped the stage of being a fully developed industrial economy.

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

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

19. *Why public sector was chosen for industrialization in India?*

1. To create significant ability to produce capital goods.
2. To achieve self-reliance in core areas.
3. To facilitate import substitution.
4. To compete with private sectors.

Select the correct answer using the codes given below:

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

20. Consider the following expenditures :

1. Interest payments
2. Subsidies
3. Establishment expenses of defence
4. Loans to state governments/UTs
5. Pensions to retired personnel

Which of the *expenditures given above are non-planned capital expenditures?*

- (a) 1, 2 and 4 only
(b) 3 and 5 only
(c) 1, 2, 3, 4 and 5
(d) None of the above

21. The *El Nino event* :

1. Is closely associated with the pressure changes in the Central Pacific Ocean and Australia
2. Is cold event in the Pacific Ocean

Select the correct answer using the code given below:

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

22. '*Ecological balance*' :

- (a) Is a state of dynamic equilibrium within a community of organisms in a habitat
- (b) May be disturbed due to the introduction of new species, natural hazards or human causes
- (c) Occurs through competition and cooperation between different organisms where population remains stable
- (d) All of the above

23. Consider the following statements :

1. The best means of measuring time is by the movement of the Earth, the Moon and the Planets.
2. When the Prime Meridian of Greenwich has the Sun at the highest point in the sky, all the places along this meridian will have mid-day or noon.
3. The earth has been divided into 12 time zones.

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

24. Which one of the following is **not** a characteristic of minerals?

- (a) They are created by natural process
- (b) They have a definite chemical composition
- (c) They are inexhaustible
- (d) Their distribution is uneven

25. Which one of the following is **not** the *part of the definition of a town as per the census of India?*

- (a) Population density of 400 persons per sq km.
- (b) Presence of Municipality, Municipal corporation, etc.
- (c) More than 75% of the population engaged in Primary sector.
- (d) Population size of more than 5000 persons.

26. Which of the following is the *main reason due to which share of forest has shown an increase in the last forty years?*

- (a) Extensive and efficient efforts of afforestation.
- (b) Increase in community forest land.
- (c) Increase in notified area allocated for forest growth.
- (d) Better peoples participation in managing forest area.

27. *Regional planning is related to:*

- (a) Development of various sectors of economy

- (b) Area specific approach of development
(c) Area wise differences in transportation network
(d) Development of rural areas
- 28.** Consider the following statements :
1. The division of population into rural and urban is not based on the residence.
 2. Rural and Urban life styles are common with each other in terms of their livelihood and social conditions.
 3. The age-sex-occupational structure, density of population and level of development vary between rural and urban areas.
- Which of the statement/s given above is / are correct?
- (a) 1 and 2 only (b) 2 only
(c) 3 only (d) 1, 2 and 3
- 29.** With reference to *Collective Farming*, consider the following statements :
1. This types of farming is based on social ownership of the means of production and collective labour.
 2. Collective farming was introduced to boost agricultural production for self-sufficiency.
 3. Collective farming was given a name 'Kolkhoz' in Soviet Union.
- Which of the statement/s given above is / are correct?
- (a) 1 only
(b) 1 and 2 only
(c) 1, 2 and 3
(d) None of the above
- 30.** Which one of the following is *suitable for Koeppen's "A" type of climate*?
- (a) High rainfall in all the months
(b) Mean monthly temperature of the coldest month more than freezing point
(c) Mean monthly temperature of all the months more than 18°C
(d) Average temperature for all the months below 10°C
- 31.** Consider the following statements :
1. A long summer night with clear skies and still air is ideal situation for inversion of temperature.
 2. Surface inversion of temperature promotes stability in the lower layers of the atmosphere.
- Which of the statement/s given above is/are correct ?
- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2
- 32.** Consider the following statements :
1. The fog contains more moisture than the mist.
 2. Fogs are prevalent where warm currents of air come in the contact with cold currents.
 3. Fogs are mini clouds in which dust, smoke and the salt particles are found.
- Which of the statement/s given above is/are correct ?
- (a) 1 and 3 only (b) 2 only
(c) 2 and 3 only (d) 1, 2 and 3
- 33.** Consider the following *Ice Ages* :
1. Riss
 2. Wurm
 3. Mindel
 4. Gunj
- Select the correct order using the codes given below -
- (a) 4-3-1-2 (b) 4-3-2-1
(c) 2-3-4-1 (d) 1-2-3-4
- 34.** Consider the following statements :
1. Gravity besides being a directional force activating all downslope movements of matter also causes stresses on the earth's materials.
 2. Indirect gravitational stresses activate wave and tide induced currents and winds.
 3. Without gravity and slope gradients there would be no mobility and hence no erosion, transportation and deposition are possible.
- Which of the statement/s given above is/are correct ?
- (a) 1 and 2 only
(b) 1 and 3 only
(c) 1, 2 and 3
(d) None of the above
- 35.** *Important active factor of soil formation is :*
- (a) Moisture in terms of its intensity, frequency and duration of precipitation, evaporation and humidity
(b) Temperature in terms of seasonal and diurnal variations
(c) Both (a) and (b)
(d) Neither (a) nor (b)
- 36.** With reference to '*Evaporation*', consider the

following statements :

1. Evaporation is a process by which water is transformed from liquid to gaseous state
2. The amount of water vapour in the atmosphere is added or withdrawn due to evaporation and condensation respectively.
3. The temperature at which the water starts evaporating is referred to as the latent heat of vapourisation.
4. The greater the movement of air, the greater is the evaporation.

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

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

37. Consider the following statements about *Energy flow in Biosphere* :

1. The transfer of energy in an Ecosystem is a cyclic process.
2. There is a gradual increase of energy at each trophic level.

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

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

38. Consider the following statements about '*Mixed farming*':

1. It is the combination of two independent enterprises on the same farm.
2. Here the farmers practice both agriculture and live stock farming.
3. Both activities support each other.

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

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

39. Consider the following statements about *Nitrate*:

1. Excess of nitrate is responsible for blue baby syndrome.
 2. It is a form of haemoglobin.
 3. High level of nitrate causes death of infants.
- Which of the statement/s given above is/are correct ?

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

40. *Pseudonymous* is:

- (a) A Rotavirus.
- (b) A genetically engineered species of

Bacterium.

- (c) A fungi.
- (d) A toxic waste decomposer robot.

41. Consider the following statements regarding the *Rig Vedic Period*:

1. During the Rig Vedic period only copper metal was used.
2. The sea is mentioned in the context of trade and ocean wealth.
3. The Rig Veda ignored the importance of agriculture.
4. The plough was drawn by the oxen.

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

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

42. Which of the following *methods* was **not** adopted during '*Indigo Rebellion*'?

- (a) Those who worked for the planters were socially boycotted.
- (b) Ryots swore they would no longer take advances to sow indigo.
- (c) Passive resistance and non-cooperation strategies were adopted against British Government.
- (d) The indigo peasants fought against Planters in the leadership of Zamindars and village headmen.

43. Consider the following statements regarding '*Aihole City*':

1. Aihole was an important trading centre and the capital of the Chalukyas.
2. It was developed as a religious centre, with a number of temples.

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

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

44. Consider the following statements:

1. Ravindra Nath Tagore was of the view that creative learning could be encouraged only within a natural environment.
2. Gandhiji was highly critical of Western civilization while Tagore wanted to combine elements of modern Western civilization with Indian tradition.

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

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

45. With reference to *Chola temples*, consider the

following statements:

1. Chola temples often became the nuclei of settlements which grew around them.
2. These temples were centres of 'craft production'.
3. The produce of land endowed to temples went to maintain all the working specialists at the temple.
4. Temples were only the hub of economic, social and cultural life and no religious worship took place there.

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

46. Which of the following statements is correct regarding 'Rowlatt Satyagraha'?

- (a) The Rowlatt Satyagraha turned out to be the first all-India struggle against the British government
(b) It was largely restricted to cities
(c) 'Satyagraha Sabhas' were set up to launch the movement against 'Rowlatt Satyagraha'
(d) All of the above

47. *Mongol attacks on the Delhi Sultanate increased during the reign of Alauddin Khalji and in the early years of Muhammad-Bin-Tughluq's rule. Consider the following statements in this regard:*

1. The two rulers mobilised a large standing army in Delhi which posed a huge administrative challenge
2. For the first time in the history of the Sultanate, Muhammad Tughluq planned a campaign to capture Mongol territory
3. Alauddin Khalji adopted defensive measures against Mangols

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

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

48. Which of the following statements is **incorrect** about *Kabir*?

- (a) His teachings openly ridiculed all forms of external worship of both Brahmanical Hinduism and Islam.
(b) Kabir believed in a formless Supreme God.
(c) He preached that the only path to salvation was through bhakti or devotion.
(d) None of these

49. Assertion (A) : Mughals did not like to be called Mughal or Mongol.

Reason (R) : Genghis Khan's memory was associated with the massacre of innumerable people.

Select the correct answers using the codes given below:

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
(b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
(c) (A) is true but (R) is false
(d) (A) is false but (R) is true

50. With reference to '*Kandariya Mahadeva temple*', consider the following statements:

1. Kandariya Mahadeva temple was constructed by the king Dhangadeva of the Chandela dynasty.
2. In Mahamandapa the deity of the chief God was kept and ritual worship took place.
3. In garbhagriha dances were performed.

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

ANSWER

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

MCQs Based on Current Affairs

1. Consider the following statements regarding Zero Budget Natural Farming (ZBNF).
1. It is a method of chemical free agriculture.
 2. Intensive irrigation and deep plowing is used in this method.
 3. It promotes soil aeration, intercropping, ridges and topsoil mulching.
- 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 – C

2. With reference to the Intellectual Property Rights Policy 2016, consider the following statements.
1. It is in line with the WTO Agreement on TRIPS
 2. It aims to remove the compulsory licensing clause from the Patent Act of India.
- 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

3. Consider the following statements regarding India-Ukraine relation.
1. The Government of India recognized the Republic of Ukraine as a sovereign country in December 1991.
 2. India and Ukraine established diplomatic relations in January 1992.
 3. India is Ukraine's fourth largest export destination and fifth largest overall export destination in the Asia-Pacific region.
- 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- A

4. With reference to United Nations Democracy Fund, consider the following statements
1. It was established in 2005 at the World Summit
 2. India, as a founding member, was the fourth largest contributor to UNDEF since 2005, contributing over \$32 million.
 3. The Fund is overseen by an Advisory Board (19 members), which includes representatives from various countries (including India) and civil society organizations.
- 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

5. Which of the following statements is correct regarding tax elasticity?
1. Tax elasticity measures the increase in the collection of personal income tax and corporation tax against the increase in GDP.
 2. Tax elasticity refers to the change in tax revenue in response to changes in tax rates.
- 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 – B

6. Consider the following statements regarding New India Literacy Program (NILP).
1. NILP is being implemented in collaboration with National Informatics Centre, NCERT and NIOS.
 2. The primary objective is to provide literacy to 5 crore persons in the age group of 15 years and above who are currently unable to read or write.
- Which of the given statements is/are correct?
- A. 1 only B. 2 only
C. Both 1 and 2 D. Neither 1 nor 2

Answer – C

7. Consider the following statements regarding Aravalli Green Wall Project.
1. The Aravalli Green Wall Project was initiated by the Indian state of Rajasthan.
 2. The Aravalli ranges are the oldest fold mountains, formed by the movement and subsequent folding of convergent plate boundaries.
 3. The highest peak of Aravalli is Guru sikhari peak on Mount Abu.
- Which of the statements given above is/are correct?
- A. 1, 2 B. 1, 2, 3
C. 2, 3 D. 1, 3

Answer – C

8. Which of the following group of countries is a part of NATO?
- A. Albania, Belgium, Austria and Canada.
B. Croatia, Czech Republic, Denmark and Belarus.
C. France, Germany, Greece and Hungary.
D. Iceland, Ireland, Latvia and Lithuania.

Answer: C

9. Consider the following statements regarding the

recently launched Foreign Trade Policy (FTP) 2023

1. FTP aims to triple India's exports of goods and services to about \$2 trillion by 2030.
2. Two major cities in each state have been designated as Cities of Export Excellence (TEEs), which will have priority access to export promotion funds.

Which of the statements given above is/are true?

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

Answer- A

- 10.** Consider the following statements regarding the phenomenon of upward lightning.

1. It is a phenomenon in which a self-initiated lightning streak develops from a tall object that travels upwards towards an electrified storm cloud.
2. Upward lightning flashes are usually of lesser intensity and duration than downward lightning strikes.

Which of the statements given above is/are true?

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

Answer – C

- 11.** Consider the following statements with respect to the OneWeb Planetarium project.

1. It is a collaboration between NASA and ISRO in partnership with New Space India Limited (NSIL).
2. The OneWeb constellation operates in a LEO polar orbit, consisting of a network of 588 active satellites located in 12 rings.
3. The network provides high-speed, low-latency connectivity, enabling the world to access the Internet and connect with each other.

Which of the statements given above is/are correct?

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

Answer – B

- 12.** Consider the following statements regarding Kangra tea.

1. Kangra tea is made from the leaves, buds and tender stems of the Camellia sinensis species cultivated in the Kangra Valley of Himachal Pradesh.
2. It is produced in the slopes of the Dhauladhar mountain range of the Western Himalayas.

- 3.** European Commission (EC) has granted Protected Geographical Indication (PGI) for Kangra tea in 1999.

Which of the above statements is/are correct?

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

Answer- A

- 13.** Consider the following statements regarding the India Justice Report.

1. India Justice Report 2022 published by Tata Trusts.
2. Among 18 large and medium-sized states with a population of more than one crore, Karnataka has topped the list in delivery of justice.

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

- 14.** Consider the following statements regarding National Financial Reporting Authority (NFRA).

1. It was constituted in 2018 by the Government of India under sub-section (1) of section 132 of the Companies Act, 2013.
2. It is an accounting/audit regulatory body.
3. Its main function is to recommend accounting and auditing policies and standards to be followed by companies for approval by the Central Government.

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

- 15.** Consider the following statements about tempo instruments

1. TEMPO is a NASA instrument that will track air pollution in North America from space.
2. It is a hosted payload on the commercial Intelsat 40e communications satellite that will orbit the Earth in geostationary orbit over North America.

Which of the above statements is/are not correct?

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

Answer – D

Personality



Pandita Ramabai

The period from 1850 to 1900 is considered to be a period of social and cultural renaissance in Indian history. At this time many intellectuals raised their strong voice against the religious and social evils spread in India. One of those intellectuals was Pandita Ramabai, who is also called India's first feminist.

Pandita Ramabai was born on 23 April 1858 in Maharashtra. Her father's name was Anant Shastri Dongre and her mother's name was Lakshmibai. Ramabai's childhood name was Rama Dongre. Impressed by her knowledge, Keshav Chandra Sen gave her the title of Pandita. Once there was a severe famine in Maharashtra due to which Rama's parents and younger sister died. After this, she moved to Kolkata with her brother. Here the fame of his knowledge spread greatly, due to which the University of Kolkata gave him the titles of Pandita and Saraswati.

Later, Pandita Ramabai married a lawyer, Vipin Bihari Medhavi. A few days later her husband died. After which she devoted her life to women's education, child marriage and the welfare of widows. Pandita Ramabai founded the Arya Mahila Samaj in Pune and became involved in missionary activities.

She started criticizing the traditions and beliefs of the masculine and Brahminical society with arguments and started questioning the low status of women. In the year 1882, the British Government constituted a commission for modern education in India, in which Pandita Ramabai took an active role and presented a report. In this report, she stressed the need for women teachers, women doctors and women engineers. Accepting her recommendations, the British government honoured her with the title of 'Kaiser-e-Hind'. During her stay in Britain, Pandita Ramabai wrote the book 'The High Caste Hindu Women' in which she discussed in detail the ill effects of being a Hindu woman.

It is said that when Swami Vivekananda gave his lecture at the World Conference of Religions in Chicago, many women led by Ramabai protested against him, raising the question that if Hinduism is so great, why is the condition of Indian women so pathetic? Along with this, the absence of women issues in Swami Vivekananda's speech was also raised by Pandita Ramabai. Swami Vivekananda and Pandita Ramabai had differences of opinion on many points. However, both were very clear about their views on the immediate issues. While Swami Vivekananda was giving a logical explanation of religion, Pandita Ramabai was advocating for women's rights.

As a result of the efforts of Pandita Ramabai, the 'Ramabai Association' was established in America, whose purpose was to collect resources for the widow ashram running in India. Later she returned to India and established 'Sharda Sadan' dedicated to widows. Along with this, she established a women's ashram named 'Kripa Sadan' to support women. This great woman, who raised her voice against women's rights and the social evils of India throughout her life, died on April 5, 1922.

In view of the struggle of her life, a crater of the planet Venus was named Ramabai Medhavi. Along with this, Feast Day is celebrated by the European Church on 5 April in her memory. A postage stamp in the memory of Ramabai was also issued by the Government of India in 1989.

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RANK 15 (SDM)



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RANK 18 (SDM)



PRATIKSHA TRIPATHI
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