

RACE IAS

Current Affairs

Extremely Useful for Union and State Civil Services & Other Competitive Exams.

- The Garba Dance Form- UNESCO'S Intangible Cultural Heritage
- Water Management in India
- Electoral Bonds
- Family Courts (Amendment) Bill, 2022
- Criminal Procedure (Identification) Act 2022
- India @ 75
- Electricity Act, 2003
- India to Host UNSC Meet on Counter Terrorism



September

2022

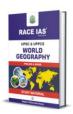




(Distance Learning Programme)

'Now Distance is no more Distant'

RACE IAS is pleased to introduce the revised and updated study material for UPSC Civil Services & Other State PCS Examination



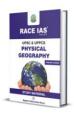






















ASPIRANTS MAY OPT FOR THE FOLLOWING MODULES =

GENERAL STUDIES (PRELIMS)	11 Booklets	Rs. 6,200/-
GENERAL STUDIES (MAINS)	7 Booklets	Rs. 4,300/-
GENERAL STUDIES (PRELIMS +MAINS)	18 Booklets	Rs. 10,500/-

Buy Now at



www.raceias.com >> **RACE Store**





RACE IAS Mobile App Available in HINDI & **ENGLISH**

Call 7388114444 or Visit our Centre

Also Available on Snapdeal







INDEX

GENERAL STUDIES PAPER -I

Page: 1 - 6

- The Garba Dance Form To Be Inscribed On UNESCO'S Intangible Cultural Heritage List
 -1
- Minerals Security Partnership (MSP) 2
- Water Management In India 4
- The Fragility Of The Northeast's Integration –

GENERAL STUDIES PAPER -II

Page: 7 - 35

- Prevention Of Money Laundering Act And Supreme Court - 7
- World Health Organization (WHO) 9
- New E-Wastes Rules Threaten Jobs, Collection Network 10
- National Geospatial Policy (NGP) -11
- Parliament Passes Bill To Ban Funding Of Weapons Of Mass Destruction – 13
- Drug Menace in India 14
- India to Host UNSC Meet On Counter Terrorism 16
- Electoral Bonds 17
- Family Courts (Amendment) Bill, 2022 19
- Us-China Conflict Over Taiwan -20
- Data Law Delay 22
- On Guardianship And Adoption Of Minors –
 23
- Rankings That Make No Sense 24
- The New Us Bill On Climate Action 26
- Criminal Procedure (Identification) Act 2022
 -28
- India @ 75 30
- Supreme Court's Contradictory Verdicts Reinforce The Need For A Bail Act - 31
- Project Smile 32
- Women's Empowerment Is About Land Ownership – 33
- Lok Adalat 33

GENERAL STUDIES PAPER-III

Page: 35 - 21

- Agriculture Census 35
- Armed Forces (Special Powers) Act 1958 (AFSPA), Insurgency in North-East India, Naga Insurgency, Peace Initiatives in North East - 36
- India's 'Wheat Waiver' WTO Demand 37
- Government's Own GIG Workers −39
- International Space Station 40
- Energy Conservation (Amendment) Bill, 2022 42
- Stablecoins 43
- Skylight Exercise -45
- India's Solar Power Dream 46
- Combined Maritime Forces-Bahrain (CMF-B)
 48
- Electricity Act 2003 49
- India's Big Problem Of Low-Quality Employment 50
- Global Employment Trends For Youth 2022
 51
- Understanding Ethanol Blending 52
- Arctic Warming 53

PRELIMS FACTS

Page: 55 - 80

CURRENT AFFAIRS

GENERAL STUDIES PAPER-I

THE GARBA DANCE FORM TO BE INSCRIBED ON UNESCO'S INTANGIBLE CULTURAL HERITAGE LIST

General Studies – Paper 1 (Art And Culture)

Why in News?

India has nominated **the Garba dance form** to be inscribed on UNESCO's intangible cultural heritage list. UNESCO (United Nations Educational, Scientific and Cultural Organization) Director **Eric Falt** said that after the inclusion of 'Durga Puja' on the UNESCO intangible cultural heritage representative last year, India has now nominated 'Garba' for 2022. A total of **14 elements from India** are inscribed on UNESCO'S list of Intangible Cultural Heritage and Humanity. These elements include music, dance,

theatre, festivals, rituals, and storytelling.

What is Garba?

Garba, a form of dance, as well as a religious and social event. It originated in the villages of Gujarat, where it was performed in communal gathering places in the center of the village which was attended by the entire community. In Gujarat, it is celebrated with nine nights of dance as a form of



worship and worship. Garba is also performed during social events like weddings and parties.

What is UNESCO'S list of Intangible Cultural Heritage and Humanity

The UNESCO'S list of Intangible Cultural Heritage was established in 2008 after the convention for the safeguarding of the Intangible Cultural Heritage,2003 came into effect. This list is made up of those intangible heritage elements that help to demonstrate the diversity of cultural heritage

List of Intangible Cultural Heritage of Humanity from India

Since 2008, 14 intangible cultural heritages from India have been listed by UNESCO. It includes-

- Sanskrit Theater of **Kudiyattam**, Kerala
- Mudiyet, a ritual theater and dance drama from Kerala
- Tradition of Vedic Mantras;
- 'Ram Leela' (traditional performance of Ramayana)
- 'Ramman' (a religious festival and ritual theater of Garhwal, Uttarakhand)
- Kalbelia Folk Songs and Dances of Rajasthan
- Chhau Dance (Classical dance of West Bengal and Odisha)
- Buddhist chanting of Ladakh
- Sankirtana (a ritual singing, drumming and dance of Manipur)

RACE IAS www.raceias.com Page 1 of 80

- Traditional brass and copper craft of pottery amidst the laughs of Jandiala Guru, Punjab
- Yoga
- Nowruz
- Kumbh Mela
- Durga Puja (represents the collective worship of the Hindu goddess Durga

About UNESCO

United Nations Educational, Scientific and Cultural Organization. The United Nations Educational, Scientific and Cultural Organization (UNESCO) was born on 16 November 1945. UNESCO has 195 Members and 8 Associate Members and is governed by the General Conference and the Executive Board.

MINERALS SECURITY PARTNERSHIP (MSP)

SYLLABUS: GS PAPER-I (DISTRIBUTION OF KEY NATURAL RESOURCES), GS PAPER-II (INTERNATIONAL TREATIES AND AGREEMENTS)

CONTEXT: There is growing concern in the Government over India not finding a place in the **Minerals Security Partnership.**

Minerals Security Partnership is an ambitious new US-led partnership to secure supply chains of critical minerals, aimed at reducing dependency on China.

Demand for critical minerals, which are **essential for clean energy** and other technologies, is projected to expand significantly in the coming decades.

ABOUT MINERALS SECURITY PARTNERSHIP

- The Minerals Security Partnership (MSP) is a new initiative to bolster critical mineral supply chains.
- The US and 10 partners-Australia, Canada, Finland, France, Germany, Japan, the Republic of Korea (South Korea), Sweden, the United Kingdom, and the European Commission have come together to form the MSP.
- The new grouping is aimed at catalyzing investment from governments and the private sector to develop strategic opportunities and for adhering to environmental, social, and governance standards.
- The new group could focus on the supply chains of minerals such as cobalt, nickel, lithium along with 17 rare earth minerals.
- This alliance is seen as primarily focused on evolving an alternative to China, which has
 created processing infrastructure in rare earth minerals and has acquired mines in Africa for
 elements such as Cobalt.

ABOUT CRITICAL/RARE MINERALS

- Critical minerals are elements that are the building blocks of essential modern-day technologies and are at risk of supply chain disruptions.
- These minerals are now used everywhere from making mobile phones, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.
- Graphite, Lithium and Cobalt are used for making EV batteries.

RACE IAS www.raceias.com Page 2 of 80

- Aerospace, communications, and defense industries also rely on several such minerals as they are used in manufacturing fighter jets, drones, radio sets and other critical equipment.
- While Cobalt, Nickel and Lithium are required for batteries used in electric vehicles, rare earth minerals are critical, in trace amounts, in semiconductors and high-end electronics manufacturing

SIGNIFICANCE

- As countries around the world scale up their transition towards clean energy and digital economy, these critical resources are key to the ecosystem that fuels this change.
- Any supply shock can severely imperil the economy and strategic autonomy of a country over-dependent on others to procure critical minerals.

WHY EXCLUSION FROM MSP IS A CONCERN FOR INDIA?

Supply of Critical Minerals:

- One of the key elements of India's growth strategy is powered by an ambitious shift in the mobility space through the conversion of a large part of public and private transport to electric vehicles.
- This, alongside a concerted electronics manufacturing push, underlines the need to secure the supply of critical minerals.

Dependency on Other Countries:

- Rare earth comprises seventeen elements and are classified as light RE elements (LREE) and heavy RE elements (HREE).
- Some RE are available in India such as Lanthanum, Cerium, Neodymium, Praseodymium and Samarium, while others such as Dysprosium, Terbium, Europium that are classified as HREE are not available in Indian deposits in extractable quantity.
- India would require supply support for such elements.

Technology Status:

- Industry watchers say that one reason India would not have found a place in the grouping is because the **country does not bring much expertise to the table.**
- In the group, countries like **Australia and Canada** have reserves and technology to extract them and countries like Japan have the technology to process them.

WHAT HAS INDIA DONE REGARDING CRITICAL MINERALS?

Lithium Agreement:

• In mid-2020, India, through a newly floated state-owned company, had signed an agreement with an Argentinian firm to jointly prospect lithium in the South American country that has the third largest reserves of the metal in the world.

India-Australia Critical Minerals Investment Partnership:

- India and Australia decided to strengthen their partnership in the field of projects and supply chains for critical minerals.
- Australia has the resources to help India fulfil its ambitions to lower emissions and meet the growing demand for critical minerals to help India's space and defense industries, and the manufacture of solar panels, batteries, and electric vehicles.

RACE IAS www.raceias.com Page 3 of 80

WATER MANAGEMENT IN INDIA

SYLLABUS: GS PAPER-I & III (ENVIRONMENTAL CONSERVATION/AGRICULTURE)

CONTEXT: India has just **4% of the world's water resource**, **supporting 1% of its population**. It is a key determinant of health security and economic growth in India. Over 50% of agriculture is still rain-fed.

EVOLUTION OF WATER MANAGEMENT IN INDIA

- **Till the 1980s:** Water management was confined to the **issue of irrigation projects**. Therefore, the focus was on building large dams and canals. However, the drought of the late 1980s, proved that these big projects were insufficient.
- Post-1980s Period: Focus was on decentralization: e.g., rainwater harvesting (building ponds, digging tanks, and setting up check-dams on streams); slogans like "Rain is decentralized, so is the demand for water. So, capture the rain when and where it falls".
- The mid-2000s: Focus remain on rainwater harvesting and 'ground water' was given importance. Therefore, MGNREGA was linked with the augmentation of groundwater, and rainwater harvesting efforts.
- Post-2010s: A series of urban droughts brought in focus the issues related to distribution bottleneck and lack of reuse and treatment of sewage water. So, the focus came on Piped drinking water (Jal Jeevan Mission) and treatment of used water (Swachh Bharath Mission).

WHAT SHOULD BE DONE?

- Reengineering of on-site local treatment systems: It means waste to be collected from each household, transported, and treated in that area.
- **Focus on Reuse**: The urban-industrial wastewater and sewage must be treated, recycled, and reused. If it is treated for reuse, then it will prevent water loss and pollution of our rivers. E.g., in Singapore, almost all the water is treated and reused.
- **Minimize wastages:** E.g., investing in water-efficient irrigation ('per drop more crop'), household appliances, and changes in our diets. Focus on traditional water storing structures: e.g., Baolis (Rajasthan, Gujarat), tanks, Ponds (Talabs), Check dams (called Bandha in the Mewar region), etc.
- 1. Paar system (western Rajasthan): It is a common place where the rainwater flows from the agar (catchment) and in the process percolates into the sandysoil.
- 2. **Pat System (Bundelkhand region):** This system was devised according to the peculiarities of the terrain to divert water from swift-flowing hill streams intoirrigation channels called pats.
- 3. **Sponge cities:** The treated sewage and wastewater must be diverted to sponges (wetlands, ponds, rain gardens) to recharge the groundwater in the cities and make us water-secure. E.g., done in Beijing (China).
- 4. **Jal Jeevan Mission success story:** Each of the 5,644 residents of Pimpalghar Ranjnoli village, situated in the industrial belt of Thane (Maharashtra) has to access to 55 litres of water every day. The villagers used funds under the Jal Jeevan Mission (JJM) to ensure that all 842 families in the village get tap water connections. The village has effectively ensured that residents pay the user charges for tap water.

• Maharashtra is one of the leading states in the country in implementing the JJM (71 percent of households in Maharashtra have access to a tap connection; the national average is just under 52 per cent).

THE FRAGILITY OF THE NORTHEAST'S INTEGRATION

SYLLABUS: GS PAPER-I (REGIONALISM)

CONTEXT: The integration of Northeast India into mainstream Indian life has been on the national agenda from the very start of India's journey as an independent nation.

HOW THE INTEGRATION OF NORTHEAST INDIA INTO MAINSTREAM INDIAN LIFE HAS BEEN ON THE NATIONAL AGENDA FROM INDEPENDENCE?

Sixth Schedule:

- It deals with the provisions for the administration of tribal areas in the states of Assam,
 Meghalaya, Tripura, and Mizoram, in accordance with Article 244 of the Indian Constitution.
- This schedule mandated for the formation of Autonomous District Councils wherein tribal customary laws were given legitimacy.

State Reorganization:

- Nagaland became a state in the year 1963. It was formed by merging the Naga Hill district with the adjacent Mon and Tuen sang subdivision of the North Eastern Frontier Agency (NEFA).
- **Tripura and Manipur,** which were made the **Part-C States** after the merger with India in 1949, were also upgraded to States in 1972.
- It was followed by Meghalaya becoming a State. On the other hand, Arunachal Pradesh and Mizoram were made Union Territories.
- In the year 1984, both Arunachal Pradesh and Mizoram were upgraded to statehood.

Inclusion by Accommodation:

- India gained confidence and shed its insecurities regarding balkanization after its traumatic Partition experience, leading to moderation in its outlook towards national identity and nationalism.
- There was an emphasis upon accommodating people, rather than requiring the latter to leave their streams to join the mainstream.
- For instance, **North East Council (NEC)** was amended to make it an infrastructure planning body including State Chief Ministers from an advisory body that comprised of State Governors as members. The state of Sikkim was brought into its ambit.
- Similarly, the **Department of North-East Region (DoNER)** was created by the Union Government in 2001 and was upgraded to a full-fledged Ministry in 2004.
- Likewise, **India's Look East Policy** was born in 1991 with the stated objective of linking the Northeast with the vibrant economies of South East Asia.
- In 2010, a protected area regime that had restricted visits to Nagaland, Manipur and Mizoram by foreigners was relaxed.
- A judicial commission was constituted in the year 2004 to recommend a way to repeal or else "humanize" AFSPA.

WHY NORTHEAST REMAINED ALIEN EVEN AFTER 75 YEARS OF INDEPENDENCE?

RACE IAS www.raceias.com Page 5 of 80

Historical Reasons:

- The British India Foreign Secretary Olaf Caroe coined the term "Mongolian Fringe" regarding the North-east region and suggested to leave this region from a Crown Colony.
- In the views of the **Governor of Assam, Robert Reid 1937**, "the people here, neither racially, historically, culturally, nor linguistically, had any affinity with the rest of India."
- These 'excluded' and 'partially excluded' areas as mentioned by Reid were supposed to be a combination of **hill regions of the Northeast and Upper Burma** (presently Myanmar).

Northeast people did not consider themselves as the part of Mainland India:

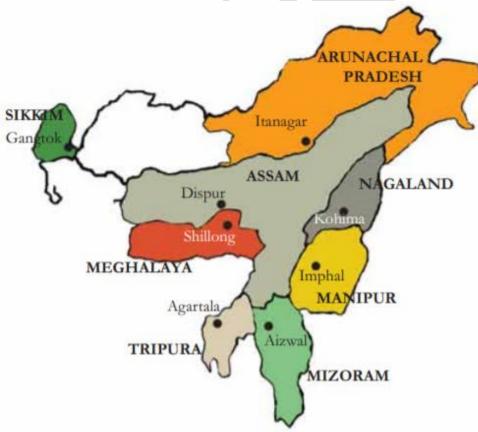
• The Naga Hills refused the Sixth Schedule as they wanted nothing less than sovereignty. This resulted in a powerful insurgency in the region.

The promulgation of Armed Forces (Special Powers) Act in 1958:

- In the wake of Naga Insurgency, the AFSPA Act was enforced thus, giving sweeping powers to the armed forces.
- A separate Nagaland State was created in 1963.
- The people of the Northeast are fearful of the threat of cultural and population deluge from mainstream India.

ABOUT NORTHEAST INDIA

 North-East India, fondly called the land of seven sisters, represents both a geographic and political



- administrative division of the country. The states of Assam, Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura comes under its fold.
- The North-eastern Indian States have been blessed with a wide range of physiographic and ecoclimatic conditions. They are the geographical 'gateway' for much of India's endemic flora and fauna.
- North-East is home to 3.8% of the national population and occupies about 8% of India's total geographical area.
- It is connected to the mainland India through Siliguri corridor, a narrow strip of land in West Bengal, popularly known as "chicken's neck."

SIGNIFICANCE OF NORTH-EAST FOR INDIA Tourism Potential: Northeast of India is home to many wildlife Strategic Location: sanctuaries like Kaziranga **National Park** Importance of Links with Southeast Asia:(India's Act East Policy) NorthEast region Cultural Significance: Tribes in NER have their own culture. Economic Significance(Sikkim is Popular festivals include Hornbill Festival of Nagaland, Pang Lhabsol of Sikkim, etc.

GENERAL STUDIES PAPER-II

PREVENTION OF MONEY LAUNDERING ACT AND SUPREME COURT

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS), GS PAPER-III (CAPITAL MARKET & MONEY LAUNDERING)

CONTEXT: In a recent hearing, the Supreme Court of India upheld the constitutional validity of the Prevention of Money Laundering Act, 2002.

The court underlined that the principle of innocence of the accused/offender is regarded as a human right but that presumption can be interdicted by a law made by the Parliament/Legislature.

SUPREME COURT RULING

Enforcement Case Information Report (ECIR):

- It cannot be equated with a FIR.
- Supplying an ECIR in every case to the person concerned is not mandatory and "it is enough if the Enforcement Directorate (ED), at the time of arrest, discloses the grounds of such arrest."
- The **ECIR** is an internal document of the ED and the fact that FIR in respect of scheduled offence has not been recorded, does not come in the way of ED authorities to commence inquiry/investigation.

Section 3 of PMLA Act:

- Section 3 of the PMLA Act 2002 has a wider reach and captures that offence of money laundering is
 an independent offence regarding the process or activity connected with the proceeds of crime
 which had been derived or obtained because of criminal activity relating to or in relation to a
 scheduled offence.
- The ruling also made it clear that:
- Offence under Section 3 "is dependent on illegal gain of property as a result of criminal activity relating to a scheduled offence".

The Authorities under the 2002 Act cannot prosecute any person on notional basis or on the
assumption that a scheduled offence has been committed unless it is so registered with the
jurisdictional police and pending enquiry including by way of criminal complaint before the
competent forum.

Enforcement Directorate:

- The bench upheld the ED's power under Section 5 of the Act (order provisional attachment of any proceeds of crime).
- The Court stated that Section 5 provides for a balancing arrangement to secure the interests of the person and ensures that the proceeds of crime remain available to be dealt with in the manner provided by the 2002 Act.
- It rejected the argument that ED authorities are police officers and, hence, a statement recorded by them under Section 50 of the Act would be hit by Article 20(3) of the Constitution which says no person accused of an offence shall be compelled to be a witness against himself.

ABOUT PREVENTION OF MONEY LAUNDERING ACT (PMLA), 2002

- It is a **criminal law enacted to prevent money laundering and to provide for confiscation of property** derived from, or involved in, money-laundering and related matters.
- It forms the core of the legal framework put in place by India to combat Money Laundering.
- The provisions of this act are applicable to all financial institutions, banks (Including RBI), mutual funds, insurance companies, and their financial intermediaries.

PMLA (AMENDMENT) ACT 2012

- Adds the concept of 'reporting entity' which would include a banking company, financial institution, intermediary etc.
- PMLA, 2002 levied a fine up to Rs 5 lakh, but the amendment act has removed this upper limit.
- It has provided for provisional attachment and confiscation of property of any person involved in such activities.

ABOUT ENFORCEMENT DIRECTORATE

- Directorate of Enforcement is a specialized financial investigation agency under the Department of Revenue, Ministry of Finance.
- In 1956, an 'Enforcement Unit' was formed, in the Department of Economic Affairs, for handling Exchange Control Laws violations under Foreign Exchange Regulation Act, 1947 (FERA '47).
- In 1957, this Unit was renamed as 'Enforcement Directorate'.
- ED enforces the following laws:
- 1. Foreign Exchange Management Act, 1999 (FEMA)
- 2. Prevention of Money Laundering Act, 2002 (PMLA)



WORLD HEALTH ORGANIZATION (WHO)

SYLLABUS: GS PAPER-II (HEALTH)

CONTEXT: The World Health Organization has declared the global monkeypox outbreak a public health emergency of international concern (PHEIC), one step below that of a pandemic.

ABOUT WORLD HEALTH ORGANIZATION

- At the 1945 United Nations Conference on International Organization (also known as the San Francisco Conference), Szeming Sze, a delegate from the Republic of China (modern-day Taiwan), proposed the creation of an international health organization under the auspices of the new United Nations. Alger Hiss, the Secretary-General of the conference, recommended using a declaration to establish such an organization.
- As a result of these proceedings, the **World Health Organization came to be established in 1948.** It became the first specialized agency of the United Nations to which every member subscribed.
- **Headquarter:** Geneva
- Members: 194 member countries.
- **Secretariat:** The Secretariat comprises of the Director-General and such technical and administrative staff as the Organization may require. The Director-General is appointed by the Health Assembly on the nomination of the Board on such terms as the Health Assembly may determine.
- Full membership of the WHO is only guaranteed with the ratifying of the treaty known as the Constitution of the World Health Organization.
- The member states of the WHO appoint delegates to the World Health Assembly, which is the supreme decision-making body. The World Health Assembly is attended by delegations from all Member States and determines the policies of the Organization.

OBJECTIVES OF WHO

- The WHO Constitution states that the organization's objective "is the attainment by all people of the highest possible level of health".
- The WHO fulfils this objective through the following functions:
- 1. By playing a role as the directing and coordinating authority on international health work.
- 2. Maintaining and establishing collaboration with the UN and any other appropriate bodies.
- 3. Assisting governments, upon request, in strengthening their health services.
- 4. Giving appropriate technical assistance and in case of emergencies, required aid upon the request or acceptance of governments.

MEANING OF PHEIC DECLARATION

- A PHEIC is declared for an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease.
- The PHEIC label by WHO is designed to trigger a coordinated international response and could unlock funding to collaborate on sharing vaccines and treatments.

NEW E-WASTES RULES THREATEN JOBS, COLLECTION NETWORK

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS), GS PAPER-III (ENVIRONMENTAL POLLUTION & DEGRADATION)

CONTEXT: Government has proposed a new framework for regulating e-waste in India that may upset informal sectors.

The draft notification on e-waste rules proposes to do away with Producer Responsibility Organization (PRO) and dismantlers with all responsibility of recycling vested with authorized recyclers.

ABOUT

Increase reliability: The current system managed by PRO is not always reliable as there have been several instances of double-counting **E-WASTE**

- E-Waste refers to all items of electronic and electrical equipment (EEE) and its parts that have been discarded by their owner as waste without the intent of re-use.
- India is the third-largest e-waste generator in the world after China and the USA (Global E-waste Monitor 2020).
- It is categorized into 21 types under two broad categories:
- 1. Information technology and communication equipment.
- 2. Consumer electrical and electronics.
- India's first e-waste clinic for segregating, processing, and disposal of waste from household and commercial units has been be set-up in **Bhopal**, **Madhya Pradesh**.

ABOUT THE ISSUE

- Under E-Waste Management Rules 2016, it is mandatory for the organization to comply with the Extended producer responsibility of recycling e-waste. Complying with that, most firms outsourced recycling to organizations called Producer Res ponsibility Organization (PRO) (CPCB has registered 74 PROs)
- In May this year, Environment Ministry issued a draft notification that does away with PRO and dismantlers and vests all responsibility of recycling with authorized recyclers, only a handful of whom exist in India.
- Now, Authorized Recyclers will source a quantity of waste, recycle it, and generate electronic certificates. Companies can buy these certificates equivalent to their annual committed target and thus do not have to be involved with engaging PROs and dismantlers.

BENEFITS

• Streamline and standardize the system.

RACE IAS www.raceias.com Page 10 of 80

- **Introduce an Electronic management system** that would track the material that went in for recycling.
- Make recycling remunerative: Currently, the entire system is not remunerative for recyclers, who do the job of recycling. (where the same articles recycled once for one company are credited into the account for multiple companies).

OBJECTIONS AGAINST THE MOVE

- **Job loss:** Several PROs have mailed their objections to the Environment Ministry arguing that dismantling a fledgling system was detrimental to the future of e-waste management in India and job loss.
- Loss of investment for established PROs.
- Loss of accountability: PROs provide check and balance against unauthorized recycling.

OTHER PROVISIONS OF THE DRAFT RULE

- **COVERAGE:** It covers manufacturer, producer, recycler, and refurbishers under Extended Producer Responsibility (EPR) Framework who shall register on centralized portal of Central Pollution Control Board.
- EPR is a policy approach under which **producers are given a significant responsibility**financial/physical-for treatment or disposal of post-consumer products.
- **TARGETS:** Consumer Goods Companies and makers are supposed to ensure at least 60% of e-waste generation as indicated in EPR plan by 2022-23, 70% by 2023-24, and 80% from 2024-25 onwards.
- **EPR CERTIFICATE GENERATION:** By CPCB through the portal for recycling and refurbishing.
- **TRADING:** Bring into effect a system of trading in certificates akin to carbon credits, that will allow companies to temporarily shore up shortfalls.

NATIONAL GEOSPATIAL POLICY (NGP)

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES &INTERVENTIONS), GS PAPER-III (SPACE TECHNOLOGY)

CONTEXT: Google launched a 360-degree interactive panorama feature for 10 Indian cities as part of its Street View Services, which is also known as **Project Gullify.**

This has been made possible by the new National Geospatial Policy 2021. The policy allows local companies to collect this type of data and license it to others, making it the first country where Street View is primarily enabled by partners.

ABOUT NATIONAL GEOSPATIAL POLICY

 NGP was launched by the Department of Science and Technology (DST), Ministry of Science and Technology.

RACE IAS www.raceias.com Page 11 of 80

- It provides a framework for the DST as well as its state and central partnering agencies (e.g., government departments, regulatory authorities, etc.) to enable access to and promote the use of geospatial data.
- It aims to boost geospatial entrepreneurship for socio-economic development of India.
- It also aims to promote the use of geospatial products and services, generate useful insights from geospatial data and strengthen India's geospatial infrastructure as well as capabilities.

SALIENT FEATURES OF THE POLICY

Geospatial Data Promotion and Development Committee (GDPDC):

- A multi-disciplinary expert committee to shape the geospatial data ecosystem in India, GDPDC will replace the existing National Spatial Data Committee.
- It will be tasked with working with the Survey of India to create a **High Resolution National Topographic Database and will create "Lead Agencies"** at the central and state level.

Functions of Lead Agencies:

- The Lead Agencies will facilitate the implementation of the NGP. These Lead Agencies will also provide sector specific knowledge.
- It will assist in the compilation of data themes under the National Foundation Geospatial Data Asset and the National Thematic Geospatial Data Asset.

National Data Registry (NDR) and Geo-Platform:

- NDR will be operated by the GDPDC, to enable access to and harnessing of geospatial data.
- State and Central level partnering agencies can provide data through Data Nodes.
- The geospatial data, metadata, and data from the State or Central level agencies will be available through a Geo-Platform.
- The GDPDC will designate a Partnering Agency to develop and operate the NDR as well as Geo-platform under its guidance and supervision.

Skilled Workforce:

- The NGP advocates for surveyors' registration to promote the profession of surveying, with professional standards and accreditation comparable to that of medical and legal professionals.
- Furthermore, it proposes that the National Skill Development Council and the geospatial industry collaborate to develop a National Skills Qualification Framework and, a Geospatial Sector Skill Council.

SIGNIFICANCE

- Street view, because of its integration with Google maps, is expected to have a greater impact, assisting users in better understanding road conditions, and discovering local businesses.
- Google maps has announced the addition of speed limit data for Bengaluru as well as Chandigarh along with congestion data for 9 cities.
- It is also developing the environmental insights explorer tool, which will allow planners to better understand how to reduce emissions in cities by measuring emissions based on traffic patterns. In a few cities, it will also begin to display localized street-level Air Quality Index (AQI) numbers.

RACE IAS www.raceias.com Page 12 of 80

This data will aid in infrastructure planning and will spark new use cases, such as the creation of base data for autonomous vehicles in India.

PARLIAMENT PASSES BILL TO BAN FUNDING OF WEAPONS OF MASS DESTRUCTION

SYLLABUS: GS PAPER-II (PARLIAMENT AND STATE LEGISTAURE, FUNCTIONING AND CONDUCT OF BUSINESS, WEAPONS OF MASS DESTRUCTION)

CONTEXT: Parliament passed a bill (The Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022) which seeks to ban funding of weapons of mass destruction and empowers the Centre to freeze, seize or attach financial assets and economic resources of people engaged in such activities.

The previous act, the Weapons of Mass Destruction, and their Delivery Systems (Prohibition of Unlawful Activities) Act, passed in 2005, only banned the manufacture of weapons of mass destruction.

KEY AMENDMENTS

- Section 12A: The amendment bill seeks to insert a new Section 12A in the existing law
 which states that "no person shall finance any activity which is prohibited under this
 Act, or under the United Nations (Security Council) Act, 1947 or any other relevant Act
 for the time being in force, or by an order issued under any such Act, in relation to weapons
 of mass destruction and their delivery systems."
- **Prevent financing of such activities:** To prevent persons from financing such activities, the central government may freeze, seize, or attach funds, financial assets, or economic resources (whether owned, held, or controlled directly or indirectly).
- Prevent finances or related services available: It may also prohibit persons from making finances or related services available for the benefit of other persons in relation to any activity which is prohibited.

WEAPONS OF MASS DESTRUCTION

- These are weapons with the capacity to inflict death and destruction on such a massive scale and so indiscriminately that its very presence in the hands of a hostile power can be considered a grievous threat.
- Modern weapons of mass destruction are either nuclear, biological, or chemical weapons—frequently referred to collectively as NBC weapons.
- The term weapons of mass destruction have been in currency since at least 1937, when it was used to describe massed formations of bomber aircraft.
- For example, nuclear bombs used in Hiroshima and Nagasaki attack in Japan.
- Efforts to control the spread of WMD are enshrined in international agreements such as:
- 1. Nuclear Non-Proliferation Treaty of 1968
- 2. Biological Weapons Convention of 1972
- 3. Chemical Weapons Convention of 1993

DRUG MENACE IN INDIA

SYLLABUS: GS PAPER-II (HEALTH, HUMAN RESOURCE)

CONTEXT: The Union Home Minister Amit Shah said that the Centre was effectively pursuing a decisive war against the drugs menace. He made these remarks while addressing the National Conference on '**Drug Trafficking and National Security**' in Chandigarh.

DRUG MENACE: STATISTICS

- India is caught in the vicious circle of drug abuse, and the number of drug addicts are increasing significantly.
- India is sandwiched between two largest Opium producing regions of the world that is the Golden triangle on one side and the Golden crescent on other.
- The golden triangle area comprises Thailand, Myanmar, Vietnam, and Laos.
- The golden crescent area includes Pakistan, Afghanistan, and Iran.

 According to the World Drug Report 2021, prescription drugs and their ingredients or 'precursors' are being increasingly diverted for recreational use in India--the largest

manufacturer of generic drugs in the world.

 India is also linked to shipment of drugs sold on the 19 major darknet markets analyzed over 2011-2020.

- As per the report Magnitude of Substance Use in India released by All India Institute of Medical Science (AIIMS) in 2019:
 - 1. Around 5 crore Indians reported to have used cannabis and opioids at the time of the survey (conducted in the year 2018).
- Pakistan
 Afghanistan
 Burma
 Laos
 Thailand
- 2. It has been estimated that there are about 8.5 lakh people who inject drugs.
- 3. Of the total cases estimated by the report, more than half of them are contributed by states like Punjab, Assam, Delhi, Haryana, Manipur, Mizoram, Sikkim, and Uttar Pradesh.
- According to the **National Survey on Extent and Pattern of Substance Use in India,** in 2019, about 2.1% of the country's population (2.26 crore individuals) use opioids.
- As per the survey, 2.8% of the Indians aged 10-75 years (3.1 crore individuals) were using cannabis as bhang, ganja and charas.

REASONS FOR WIDESPREAD DRUG ABUSE IN INDIA

- To escape from the hard realities of life: The disintegration of the joint family system, the decline of religious and moral values etc. has led to a rise in the number of drug addicts.
- Loosening of the traditional methods of social control thus making an individual vulnerable to the stresses and strains of modern life.
- **Peer pressure:** Many youths start using drug under the pressure from their friends, seniors at educational institutions, or by members of their informal groupings.

RACE IAS www.raceias.com Page 14 of 80

- Easy Availability: India is situated between the Golden Crescent on its west and the Golden Triangle on its east.
- **Economic Prosperity:** The agricultural reforms and other industrial activities have led to an increase in income in the regions of Punjab, Haryana, Maharashtra etc., which has led to an increase in its use.

STEPS TAKEN

Coordination with Various International Organizations:

- The **Narcotics Control Bureau (NCB)** coordinated with various international organizations for sharing information and intelligence to combat transnational drug trafficking.
- They included the SAARC, BRICS, Colombo Plan, ASEAN, BIMSTEC, United Nations Office on Drugs and Crime, and the International Narcotics Control Board.

Coordination among Various Central and State Agencies:

- For this, the Narco Coordination Centre (NCORD) mechanism was set up by the Ministry of Home Affairs (MHA) in 2016 for effective drug law enforcement.
- This NCORD system was restructured into a four-tier scheme up to district level in July 2019, for better coordination.
- A Joint Coordination Committee with the NCB Director General as its chairperson was set up in July 2019, to monitor the investigation into cases involving large seizures.

SIMS (Seizure Information Management System) Portal:

For digitization of pan-India drug seizure data, the MHA launched an e-portal called 'SIMS' in 2019 for all the drug law enforcement agencies under the mandate of Narcotics Drugs and Psychotropic Substances Act (NDPS).

National Fund for Control of Drug Abuse:

• It was constituted to meet the expenditure incurred in connection with combating illicit traffic in Narcotic Drugs; rehabilitating addicts, and educating the public against drug abuse, etc.

National Drug Abuse Survey:

• The government is also conducting the Survey to measure trends of drug abuse in India through the Ministry of Social Justice & Empowerment with the help of National Drug Dependence Treatment Centre of AlIMS.

Project Sunrise:

• It was launched by the **Ministry of Health and Family Welfare in 2016**, to tackle the rising HIV prevalence in north-eastern states in India, especially among people injecting drugs.

The Narcotic Drugs and Psychotropic Substances Act, (NDPS) 1985:

- It prohibits a person from producing, possessing, selling, purchasing, transporting, storing, and/or consuming any narcotic drug or psychotropic substance.
- The NDPS Act has since been amended thrice in 1988, 2001 and 2014.
- The Act extends to the whole of India and it applies also to all Indian citizens outside India and to all persons on ships and aircraft registered in India.

'Nasha Mukt Bharat,' or Drug-Free India Campaign:

It focuses on community outreach programs.

RACE IAS www.raceias.com Page 15 of 80

International Treaties and Conventions to Combat Drug Menace: India is signatory of the following international treaties and conventions to combat the menace of Drug Abuse:

- United Nations (UN) Convention on Narcotic Drugs (1961)
- UN Convention on Psychotropic Substances (1971).
- UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988)
- UN Convention against Transnational Organized Crime (UNTOC) 2000

INDIA TO HOST UNSC MEET ON COUNTER TERRORISM

SYLLABUS: GS PAPER-II (IMPORTANT INTERNATIONAL INSTITUTIONS)

CONTEXT: In a first, India will host diplomats and officials from all 15 countries of the United Nations Security Council, including China, Russia, and the United States, for a special meeting on terrorism, in Delhi and Mumbai in October.

The meeting of the Counter-Terrorism Committee (CTC), which India is chairing for 2022 as a member of the UNSC, will focus particularly on challenges such as terrorism financing, cyberthreats and the use of drones, said officials.

KEY HIGHLIGHTS

 Cross-border threats from Pakistan and Afghanistan: India is United Nations Security Council

Permanent members, veto rights (5)
China, France, Russia, UK, USA
Non-permanent members, two-year terms (10)
Africa (3)
Asia (2)
Latin America (2)
Western Europe and others (2)
Eastern Europe (1)

The Security Council has the primary responsibility within the UN of maintaining international peace and security
It is the only United Nations organ that has the power to make decisions that member states are obligated to implement

- expected to highlight cross-border threats from Pakistan and Afghanistan at the meeting, which will come two months before India completes its tenure as an elected member of the UNSC (2021-22).
- Comprehensive Convention on International Terrorism: In addition, India has been pushing for the UN members to adopt a Comprehensive Convention on International Terrorism (first proposed in 1996), which is likely to be raised during the meeting.
- **Victim of terrorism:** The event will highlight India's role as a victim of terrorism as well as a country at the forefront of global counter-terrorism efforts.
- India as President of UNSC: They said the CTC meeting in India could also pave the way for a visit to New York by the Prime Minister in December, where India will be the President of the UNSC for the entire month.
- **Focus on significant areas**: The special meeting will specifically focus on three significant areas:
- 1. Where emerging technologies are experiencing rapid development
- 2. Growing use by Member States (including for security and counter-terrorism purposes)
- 3. Increasing threat of abuse for terrorism purposes, namely:

RACE IAS www.raceias.com Page 16 of 80

- a. The Internet and social media
- b. Terrorism financing, and
- c. Unmanned aerial systems.

ELECTORAL BONDS

SYLLABUS: GS PAPER-II (TRANSPARENCY & ACCOUNTABILITY, GOVERNMENT POLICIES & INTERVENTIONS)

CONTEXT: Donations to political parties through electoral bonds (EBs) have crossed the Rs 10,000 crore mark.

ABOUT ELECTORAL BOND (EB)

An electoral bond is like a financial tool used for making donations to political parties. The public can also issue these bonds to fund eligible political parties.

These bonds play a similar role as banknotes that are payable to the bearer free of interest

and demand.

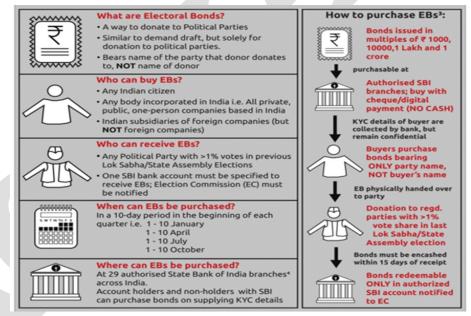
An individual party can purchase these bonds digitally or with the help of a DD or cheque.

The electoral bond scheme was launched by the Union government in 2018.

WORKING

These bonds are issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore

without any maximum limit.



- State Bank of India is authorized to issue and encash these bonds, which are valid for fifteen days from the date of issuance.
- These bonds are only redeemable in the designated account of a registered political party.
- The bonds are available for purchase by any citizen of India for a period of ten days each in the months of January, April, July, and October as may be specified by the Central Government.
- A person being an individual can buy bonds, either singly or jointly with other individuals.

RATIONALE BEHIND THE INTRODUCTION OF EB

- The central idea behind the electoral bonds scheme was to bring about transparency in electoral funding in India.
- In the opinion of the Central government the electoral bonds would keep a tab on the use of black money for funding elections.

RACE IAS Page 17 of 80 www.raceias.com

- The government had described the scheme as an "electoral reform" in a country moving towards a "cashless-digital economy."
- The donor's name is not mentioned on the bond.
- Donors who contribute less than Rs. 20,000 to political parties through purchase of electoral bonds need not provide their identity details such as PAN, etc.
- In the absence of electoral bonds, donors would have no option but to donate by cash after siphoning off money from their businesses, the government said.

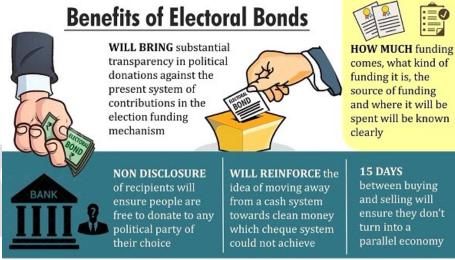
CRITICISM

Contradicting its Basic Idea:

- The central criticism of the electoral bonds scheme is that it does the exact opposite of what it was meant to do- bring transparency to election funding.
- For example, critics argue that the anonymity of electoral bonds is only for the broader public and opposition parties.

Possibility of Extortion:

- The fact that such bonds are sold via a government-owned bank (SBI) leaves the door open for the government to know exactly who is funding its opponents.
- This, in turn, allows the possibility for the government of the day to either extort



money, especially from the big companies, or victimize them for not funding the ruling party — either way providing an unfair advantage to the party in power.

A Blow to Democracy:

- Through an amendment to the Finance Act 2017, the Union government has exempted political parties from disclosing donations received through electoral bonds.
- This means the voters will not know which individual, company, or organization has funded which party, and to what extent.
- However, in a representative democracy, citizens cast their votes for the people who will represent them in Parliament.

Compromising Right to Know:

• The Indian Supreme Court has long held that the "**right to know**," especially in the context of elections, is an integral part of the right to freedom of expression (Article 19) under the Indian Constitution.

Against Free & Fair Elections:

- Electoral bonds provide no details to the citizens.
- The said **anonymity does not apply to the government of the day,** which can always access the donor details by demanding the data from the State Bank of India (SBI).
- This implies that the government in power can leverage this information and disrupt free and fair elections.

Crony Capitalism:

 The electoral bonds scheme removes all pre-existing limits on political donations and effectively allows well-resourced corporations to fund elections, subsequently paving the way for crony capitalism.

FAMILY COURTS (AMENDMENT) BILL, 2022

SYLLABUS: GS PAPER-II (FAMILY COURTS ACT)

CONTEXT: The Rajya Sabha passed the Family Courts (Amendment) Bill, 2022 by voice vote.

The Bill makes a provision to grant statutory cover to family courts set up in Himachal Pradesh and Nagaland.

KEY AMENDMENTS

- **Sub-section 3 of section 1:** The Bill seeks to insert a provision in sub-section 3 of section 1 to provide for the establishment of family courts in Himachal Pradesh with effect from February 15, 2019 and in Nagaland with effect from September 12, 2008.
- **Section 3A:** It also seeks to insert a new section 3A to retrospectively validate all actions under the act taken by the governments of Himachal Pradesh and Nagaland and the family courts of these states.
- Retrospective effect: The establishment of Family Courts in both states will be retrospectively valid from these dates.
- All actions taken under the Act in both the states, including the appointment of judges and orders and judgments passed by the Family Courts, will also be deemed to be valid from these dates retrospectively.

FAMILY COURTS ACT OF 1984

Establishment of Family Courts:

• The Family Courts Act, 1984 was enacted for the establishment of Family Courts with a view to promoting conciliation, and securing speedy settlement of disputes relating to marriage and family affairs and for related matters.

Appointment of Judges:

• The State Government may, with the concurrence of the High Court, appoint one or more people to be the Judges of a Family Court.

Association of Social Welfare Agencies:

- The State Government may provide a Family Court of:
- a. Institutions or organizations engaged in social welfare.

RACE IAS www.raceias.com Page 19 of 80

- b. People professionally engaged in promoting the welfare of the family.
- c. Persons working in the field of social welfare.
- d. Any other person whose association with a Family Court would enable it to exercise its jurisdiction more effectively in accordance with the purposes of this Act.

US-CHINA CONFLICT OVER TAIWAN

SYLLABUS: GS PAPER-II (INDIA AND ITS NEIGHBORHOOD, EFFECTS OF POLICIES & POLITICS OF COUNTRIES ON INDIA'S INTEREST)

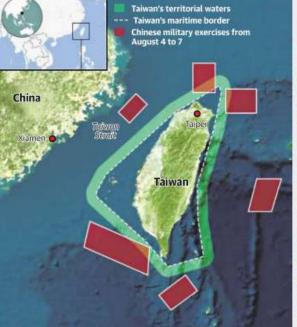
CONTEXT: The visit by **US speaker Nancy Pelosi to Taiwan** has not been well received by China. It has sparked intense tensions between the two powerful countries- China and US as **China sees Taiwan as a breakaway province.**

ABOUT ONE CHINA PRINCIPLE AND ONE CHINA POLICY

- It is important to distinguish between the One China Principle and the One China Policy to understand the cross-Taiwan Strait problems.
- The People's Republic of China follows the One China Principle, a core belief that sees Taiwan as an inalienable part of China, with sole legitimate government in Beijing.

China's swift response

As a warning to Taiwan, China has started live military drills in and around the island's claimed territorial waters. This map outlines Taiwan's maritime borders and how China is disregarding the same through its drills





Tit for tat: The Rocket Force of China's People's Liberation Army (PLA) conducts missile tests into the waters off the eastern coast of Taiwan on August 4. m REUTERS

- The US acknowledges this position but not necessarily its validity.
- The US instead follows the One China Policy, meaning that The People's Republic of China was and is the only China, with no recognition for the Republic of China (ROC, Taiwan) as a separate sovereign entity.
- At the same time, the US refuses to give in to the PRC's demands to recognize Chinese sovereignty over Taiwan.

ABOUT TAIWAN

 Taiwan, officially the Republic of China, is a country in East Asia, and is the largest land mass between Japan and the Philippines at the junction of the East and South China Sea in the northwestern Pacific Ocean.

- Earlier known as Formosa, Taiwan is a tiny island off the east coast of China, separated from mainland China by the Taiwan Strait. It is a part of the 'first island chain'- a string of island nations/territories, including Japan, South Korea and Philippines that are seen pro-US.
- Much of the world's global supply chain of semiconductors is reliant on Taiwan.
- Further, its contract manufacturers together accounted for more than 60% of total global semiconductor revenue in 2021.
- Currently, only 13 countries (plus the Vatican) recognize Taiwan as a sovereign country.

WHY ARE US-CHINA AT LOGGERHEADS OVER TAIWAN?

- While China sees Taiwan as a breakaway province, Taiwan, officially the Republic of China (RoC), sees itself as an independent state. It has stood firm against China's "reunification" goal.
- While US maintains ties with Taipei and sells weapons to it, it officially subscribes to PRC's
 One China policy-where Taiwan does not exist as a separate entity. This position is
 premised on Beijing not invading Taiwan. It is this delicate diplomatic balance that Pelosi's
 visit may have disturbed.
- On October 1, 2021, during the 72nd anniversary of PRC, China flew over 100 fighter jets into Taiwan's air defense identification zone, setting off alarm bells.

RELEVANCE OF TAIWAN TO CHINA

- China and Taiwan's economies are inextricably linked. China is Taiwan's biggest export
 partner, with an export value of 515 billion dollars from 2017 to 2022, more than double
 the US, which was the next biggest partner.
- Taiwan is much **closer to mainland China** than the other islands, and has been claimed by Beijing since Nationalists were driven there during the **Chinese revolution in 1949.**
- Some have seen Russia's invasion of Ukraine as a potential catalyst for a China-Taiwan conflict.

RELEVANCE OF TAIWAN TO US

- Taiwan anchors a chain of islands which includes a list of US-friendly territories that the US is planning to use as a place of leverage for countering China's expansionist plans.
- The United States does not have official diplomatic ties with Taiwan but is bound by **US law** (Taiwan Relations Act, 1979) to provide the island with the means to defend itself.
- It is by far the largest arms dealer for Taiwan and follows a 'strategic ambiguity' policy.

INDIA'S POSITION

- India-Taiwan Ties: As a part of India's Act East Foreign Policy, India has sought to
 cultivate extensive ties with Taiwan in trade and investment as well as developing cooperation in science & technology, environment issues and people-to-people exchange. For
 instance, the India-Taipei Association (ITA) and Taipei Economic and Cultural Centre
 (TECC) in New Delhi.
- India and Taiwan do not have formal diplomatic relations but since 1995, both sides have maintained representative offices in each other's capitals that function as de facto embassies.

RACE IAS www.raceias.com Page 21 of 80

- Since 1949, India has accepted the One China policy that accepts Taiwan and Tibet as part of China.
- However, India uses the policy to make a diplomatic point, i.e., if India believes in "One China" policy, China should also believe in a "One India" policy.

Even though India has stopped mentioning its adherence to One China policy in joint statements and official documents since 2010, its engagement with Taiwan is still restricted due to the framework of ties with China.

DATA LAW DELAY

SYLLABUS: GS PAPER-II (GOVERNANCE), GS PAPER-III (SECURITY ISSUES)

CONTEXT: The government has withdrawn the **Personal Data Protection Bill** from Parliament as it considers a "**comprehensive legal framework**" to regulate the online space, including bringing separate laws on data privacy, the overall Internet ecosystem, cybersecurity, telecom regulations, and harnessing non-personal data to boost innovation in the country.

ORIGIN OF THE BILL

- The Justice Srikrishna panel was set up in 2017 in the backdrop of the Supreme Court's verdict holding privacy is a fundamental right, and its direction to the government to draw up a data protection framework for the country. The Srikrishna Committee released a white paper that same year, outlining the areas it would be looking at.
- In July 2018, the committee submitted a draft data protection Bill to the Ministry of Electronics and IT, which said that it would draft a fresh Bill borrowing from the ideas presented in the Srikrishna Committee Bill.
- In December 2019, the Bill was referred to the Joint Parliamentary Committee (JPC), which was then headed by the BJP's Meenakshi Lekhi. As the committee started a clause-by-clause analysis of the Bill, it also sought and received extensions for presenting its report in September 2020 and March 2021.
- In July 2021, BJP MP PP Chaudhary was appointed chairperson of the JCP after Lekhi was made Minister of State for External Affairs. The JCP received yet another extension to submit its report after Chaudhary's appointment.
- In December 2021, the JCP tabled its report in Parliament, which Justice Srikrishna said was heavily in favor of the government. In a media interview, he said that the Bill could turn India into an "Orwellian state."

REASONS FOR WITHDRAWAL OF THE BILL

- The government has withdrawn the Bill citing the considerable number of amendments, recommendations, and corrections suggested by the JPC. The JPC's 542-page report has 93 recommendations, 81 amendments and members have suggested 97 corrections and improvements to the Bill.
- The Bill was also seen as being too "compliance intensive" by startups of the country. According to government sources, the revamped Bill will be much easier to comply with, especially for startups.

WHAT DOES THE BILL SAY ON DATA LOCALIZATION?

• Personal data was defined in the Bill as "any characteristic, trait, attribute or any other feature information" that can be used to identify a person.

RACE IAS www.raceias.com Page 22 of 80

- The Bill also identified a sub-category of **Sensitive Personal Data**, such as details on a person's finance, health, sexual orientation and practices, caste, political and religious beliefs, and biometric and genetic data.
- It also created a Critical Personal Data category, which was "personal data as may be notified by the Central government" in the future.
- The Bill stated that while Sensitive Personal Data can be transferred abroad for processing, a copy of it must be kept in India.
- Critical Personal Data can be stored and processed only in India.
- It also stipulates the conditions under which sensitive data can be sent abroad, such as government authorized contracts.
- Several countries have such localization provisions, considering the strategic and commercial implications of data, the "new oil." However, businesses both big and small, international, and domestic, have issues with such localization.

CONCERNS OF THE TECH INDUSTRY

- Indian start-ups have raised the issue that the infrastructure needed to comply with the localization stipulations will be a huge drain on their resources.
- Start-ups also often depend on international companies for services such as customer management, analytics, and marketing, which will require them to send data on their customers abroad.
- Data localization requirements would not only reduce their choices on such services but also burden them with compliance processes.
- The compliance requirements have implications for the larger U.S.-based tech companies as well, with reports indicating that umbrella organizations of U.S. businesses were lobbying against the Bill.

One of the JPC recommendations would also have been of particular concern for social media companies as it sought to move them from the category of online intermediaries to content publishers, thus making them responsible for the posts they host.

ON GUARDIANSHIP AND ADOPTION OF MINORS

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS)

CONTEXT: The Parliamentary Standing Committee on Law and Justice has tabled its report in both Houses of Parliament titled 'Review of Guardianship and Adoption Laws.'

KEY HIGHLIGHTS OF THE REPORT

- Equal Rights to mothers as guardians: Amend the Hindu Minority and Guardianship Act (HMGA),1956 and accord equal rights to mothers as guardians under this act instead of treating them as subordinates to their husband.
- Joint Custody of Child: In cases of a marital dispute, there is a need to relook at child
 custody which is typically restricted to just one parent where mothers tend to get preference.
 It says courts should be empowered to grant joint custody to both parents when such a
 decision is conducive to the welfare of the child.
- Adoption of Child: It has proposed allowing the LGBTQ community to adopt children as well.

RACE IAS www.raceias.com Page 23 of 80

 Omit the word Illegitimate Child: HMGA Act,1956 makes use of the term 'illegitimate' in reference to a child born out of wedlock. The committee recommended that the word 'Illegitimate' should be omitted as no child is illegitimate and the law should be the same for all children whether born within or out of wedlock.

WHAT DOES THE LAW SAY ON GUARDIANSHIP AND ADOPTION?

- Hindu Minority and Guardianship Act, (HMGA) 1956: Under this, the natural guardian of a
 Hindu minor in respect of the minor's person or property is the father and after him, the
 mother. Provided the custody of a minor who has not completed the age of five years shall
 ordinarily be with the mother.
- Muslim Personal Law (Shariat) Application Act, 1937: It says that the Shariat or the
 religious law will apply in the case of guardianship according to which the father is the
 natural guardian, but custody vests with the mother until the son reaches the age of seven
 and the daughter reaches puberty though the father's right to general supervision and control
 exists.
- Supreme Court Judgement: The Supreme Court's landmark judgement in Githa Hariharan
 v. The Reserve Bank of India in 1999 provided partial relief. In this case, the HMGA was
 challenged for violating the guarantee of equality of sexes under Article 14 of the Constitution
 of India.
- The court held that the term "after" should not be taken to mean "after the lifetime of the father ", but rather "in the absence of the father." But the court failed to recognize both parents as equal guardians, subordinating a mother's role to that of the father.
- Law Commission of India: The Law Commission in its 257th report on "Reforms in Guardianship and Custody Laws in India" in 2015 recommended that the superiority of one parent over the other should be removed. Both the mother and the father should be regarded, simultaneously, as the natural guardians of a minor.
- The current law on adoption of a child by LGBTQI: Adoption Regulations, 2017 is silent on adoption by LGBTQI people and neither bans nor allows them to adopt a child.

RANKINGS THAT MAKE NO SENSE

SYLLABUS: GS PAPER-II (ISSUES PERTAINING SOCIAL SECTOR RELATED TO EDUCATION, NEP, NIRF)

CONTEXT: The National Institutional Ranking Framework (NIRF)'s ranking of higher education institutions (HEIs), released in July, has received considerable flak.

HEIs are ranked overall, university-wise, college-wise and under disciplines such as law, medical, pharmacy, management, architecture, and engineering.

ABOUT NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF)

- Launched in: 2015 by the Ministry of Education.
- **Purpose:** To rank colleges, universities and research institutions and provides an overall ranking of all of them combined.
- Parameters: The framework judges' institutions under five broad groups of parameters of:

Teaching, Learning and Resources (TLR)

Research and Professional Practice (RP)

Graduation Outcomes (GO)

Outreach and Inclusivity (OI)

Perception (PR)

• Categories: The rankings have been announced for 11 categories. This includes overall, university, management, college, pharmacy, medical, engineering, architecture, ARIIA (Atal Ranking of Institutions on Innovation Achievements), law and research institutions.

KEY RANKINGS OF NIRF 2022

- Overall: IIT-Madras has retained its number one position in the overall educational institutes and engineering categories this year as well.
- Universities: Indian Institute of Science, Bengaluru tops the Universities Category for the seventh consecutive year. It stood first in the Research Institutions Category for the second consecutive year.
- Management: IIM Ahmedabad tops in Management subjects retaining its first position for the third consecutive year.
- Medical: All India Institute of Medical Sciences (AIIMS), New Delhi occupies the top slot in Medical for the fifth consecutive year.
- Colleges: Miranda House retains the 1st position amongst colleges for the sixth consecutive year.

ISSUES WITH THE DATA

Private institutions placed above NLUs:

- The NIRF places some private multi-discipline institutions higher than many prestigious national law universities (NLUs) and law departments.
- Generally, students who cannot secure a seat in NLUs are admitted to private institutions.

These institutions are not the first choice:

- NIRF ranking shows that a private law university scored 100% in perception.
- Considering this score, it should have been the most preferred place for students.
- But the Common Law Admission Test admission choices show different picture-this institution figures below 10 NLUs as a preferred place to study.

Lack of rigorous system:

• An analysis of the data submitted by some multi-discipline private universities participating in various disciplines under the NIRF provides evidence of data fudging.

Faculty-student ratio:

• Evidence suggests that some private multi-discipline universities have claimed the same faculty in more than one discipline.

Funding in research:

- Research funding for research projects and consultancy is an essential parameter for ranking.
- Data show that research grants and consultancy charges received in other disciplines appear to have been claimed as those in law.

RACE IAS www.raceias.com Page 25 of 80

No transparency:

- The NIRF requires the data submitted to it to be published by all the participating HEIs on their website so that such data can be scrutinized.
- Some private multi-discipline universities have not granted free access to such data on their website; instead, they require an online form to be filled along with the details of the person seeking access.

Discrepancy in data:

- For instance, the data uploaded on the websites omit details on the number, name, qualification, and experience of the faculty.
- Same parameters to all institutions: The NIRF apply the same parameters to all the institutions across varied disciplines in research and professional practice.

Publication data only from Scopus and web of science:

While the National Assessment and Accreditation Council gives due weightage to publications in UGC-Care listed journals, the NIRF uses publication data only from Scopus and Web of Science.

THE NEW US BILL ON CLIMATE ACTION

SYLLABUS: GS PAPER-II & III (CLIMATE CHANGE, LAWS TO GOVERN GLOBAL WARMING, REGIONAL & GLOBAL GROUPING FOR CLIMATE ACTION)

CONTEXT: The U.S. Senate approved a Bill titled the Inflation Reduction Act (IRA) 2022 with a focus on climate, healthcare, and tax provisions to address inflation.

The bill is a scaled-down version of **President Biden's Build Back Better Act (BBBA)**, which failed to get approval from the Senate.

CLIMATE CHANGE PROVISIONS

Package for the clean energy transition:

- The Bill marks the largest American investment aimed toward making the U.S. a leader in clean energy.
- It includes packages worth \$369 billion for the clean energy transition.
- The Bill provides significant investment in renewable energy through heavy tax credits for wind and solar energy projects and electric vehicles.

Tax deduction to low and middle-income households:

- It provides a tax deduction to low and middle-income households to go electric and seeks to lower the energy bills of American households.
- Bolster domestic production: It also aims to bolster the domestic production of heat pumps and critical minerals.
- Tax on large and profitable companies to meet the green investment.

Methane fee:

- It also imposes a fee on methane leaks from oil and gas drilling.
- At the same time, the Bill also aims at more investments in fossil fuels.

RACE IAS www.raceias.com Page 26 of 80

Expand oil and gas drilling:

It seeks to expand oil and gas drilling, with the federal government offering land for onshore and offshore drilling with the prerequisite that the entity will develop renewable energy.

Thus, it handcuffs the expansion of oil and gas with renewable energy development.

ISSUES WITH THE BILL

Issues of fossil industry:
 Fossil fuel supporters criticize the bill as it does not consider the

It will help the nation get According to an estimate closer to its climate target by the Rhodium Group, the investments in the Bill of reducing 50-52% emissions below 2005 could reduce greenhouse gas emissions by 31 to levels by 2030. 44% by 2030. How does the Bill help the U.S. achieve its climate targets? The Bill can help the U.S. compete with China in terms of renewable It can also facilitate the production as China is a creation of domestic jobs. leading producer of solar energy.

communities that are dependent on the fossil fuel industry for their income.

- Workers of coal plants: A protest by the workers of a coal plant in the state of West Virginia was recorded after their own Senator Joe Manchin agreed to back the bill.
- Provisions for fossil fuels: Climate advocates criticise the bill for coupling the development
 of renewable energy, which is the cause of global warming, with land leasing for oil and gas
 drilling.
- The Bill still contains giveaways to the fossil fuel sector.

HOW DOES THE BILL HELP THE U.S. ACHIEVE ITS CLIMATE TARGETS? SIMILAR CLIMATE PACKAGES ANNOUNCED BY OTHER COUNTRIES

Invest in Kisida by Japan:

- In May 2022, Japan announced its 'Invest in Kisida' plan which aims for a \$1.1 trillion investment to bolster the Japanese economy.
- As part of the plan, the country aims to transition to clean energy and achieve a 46% reduction in greenhouse gas emissions by 2030.

Fit for 55 by EU:

- In June 2021, the European Union (EU) proposed a similar 'Fit for 55' plan to reduce emissions by 55% by 2030.
- The plan is expected to become law soon.

CONCLUSION

- Turning point for global climate action: Thus, the Bill can prove to be a turning point for global climate action as the S. is one of the largest emitters of greenhouse gases globally.
- However, it does not address any issues of global climate finance which is a major impediment to global climate action.
- Achieving Paris Agreement: It is a mere step toward achieving the climate target agreed upon in the Paris Agreement, where Article 2 states global temperature should be limited to below 2°C.

• Benchmark for other emitters: Even though the Bill is not enough to address the climate crisis, such historic initiatives by global leaders in greenhouse gas emissions can be a benchmark for other large emitters to push their climate action programmes.

CRIMINAL PROCEDURE (IDENTIFICATION) ACT 2022

SYLLABUS: GS PAPER-II (JUDGEMENTS & CASES, FUNDAMENTAL RIGHTS)

CONTEXT: Recently, the Criminal Procedure (Identification) Act, 2022 has come into force after being passed by the Parliament in April 2022.

It replaces the Identification of Prisoners Act, 1920, a colonial era law, and authorises police officers to take measurements of people convicted, arrested, or facing trial in criminal cases.

ABOUT CRIMINAL PROCEDURE (IDENTIFICATION) ACT, 2022

- It provides Legal sanction to the police to take physical and biological samples of convicts as well as those accused of crimes.
- The police as per section 53 or section 53A of the Code of Criminal Procedure (CrPC), 1973, can collect Data.
- Data that can be collected: Finger-impressions, Palm-Print impressions, Footprint impressions, Photographs, Iris and Retina scan,



	Identification of Prisoners Act	Criminal Procedure Identification Act
Persons whose measurements can be taken	should be convicted of an offence punishable with rigorous imprisonment of one year or upwards	If convicted of an offence punishable under any law
	should be arrested for an offence punishable with rigorous imprisonment of one year or upwards	if arrested for an offence punishable under any law or if detained under preventive detention laws
	if directed by the Magistrate for measurements to be taken for the purposes of investigation of proceedings under the CPC, provided the person has been arrested in connection with such investigation previously	if directed by the Magistrate for measurements to be taken for the purposes of investigation of proceedings under the CPC or any other law in force, there is no requirement for the person to have been arrested in connection with suc proceedings previously
	ordered to give security for his good behaviour under CrPC	ordered to give security for his good behaviour under CrPC
Measurements that can be taken	finger impressions, foot impressions, measurements and photographs	finger-impressions, palm-print impressions, foot-print impressions, photographs; iris and retime scan; physical, biological samples and their analysis, behavioural attributes including signatures, handwriting or any other examination referred to in section 53 or section 53 a ferred to the CPC, 1973
Destruction of measurements	in case of acquittal, discharge or release, if not previously convicted of any offence punishable with rigorous imprisonment of one year or upwards	in case of acquittal, discharge or release, if not previously convicted of any offence punishable with rigorous imprisonment. For convicts, records are to be destroyed from 75 years of collection

A comparision between the two

Physical, Biological samples and their analysis, Behavioural Attributes including signatures, Handwriting, or any other examination

- CrPC is the primary legislation regarding the procedural aspects of criminal law.
- Any person convicted, arrested, or detained under any preventive detention law will be required to provide "measurements" to a police officer or a prison official.
- National Crime Records Bureau (NCRB) will store, preserve, share with any law enforcement agency, and destroy the record of measurements at national level. The records can be stored up to a period of 75 years.
- It aims to ensure the unique identification of those involved with crime and to help investigating agencies solve cases.

NEED TO REPLACE THE PREVIOUS ACT

- In 1980, the 87th Report of the Law Commission of India undertook a review of this legislation and recommended several amendments.
- This was done in the backdrop of the **State of UP vs Ram Babu Misra case**, where the Supreme Court had highlighted the need for amending this law.

RACE IAS www.raceias.com Page 28 of 80

- The first set of recommendations laid out the need to amend the Act to expand the scope of measurements to include "palm impressions," "specimen of signature or writing" and "specimen of voice."
- The second set of recommendations raised the need to allow measurements to be taken for proceedings other than those under the Code of Criminal Procedure (CrPC).
- The Law Commission Report also notes that the need for an amendment is reflected by the numerous amendments made to the Act by several States.
- It was felt that with advancements in forensics, there is a need to recognise more kinds of "measurements" that can be used by law enforcement agencies for investigation.

SIGNIFICANCE OF THE ACT

Modern Techniques:

- The Act makes provisions for the use of modern techniques to capture and record appropriate body measurements.
- The existing law allowed taking only fingerprint and footprint impressions of a limited category of convicted persons.

Help Investing Agencies:

• It seeks to expand the 'ambit of persons' whose measurements can be taken as this will help the investigating agencies to gather sufficient legally admissible evidence and establish the crime of the accused person.

Making Investigation More Efficient:

• It provides legal sanction for taking appropriate body measurements of persons who are required to give such measurements and will make the investigation of crime more efficient and expeditious and will also help in increasing the conviction rate.

ISSUES WITH THE LAW

Violation of Privacy:

- Technical, the legislative proposal undermines the right to privacy of not only persons convicted of crime but also every ordinary Indian citizen.
- It has provisions to collect samples even from protestors engaged in political protests.

Ambiguous Provisions:

- Replacing the 1920 Identification of Prisoners Act, the proposed law expands its scope and reach.
- The phrase 'biological samples' is not described further, hence, it could involve bodily invasions such as drawing of blood and hair, collection of DNA samples.
- These are acts that currently require the written sanction of a magistrate.

Violation of Article 20:

- Enables coercive drawing of samples and involves a violation of Article 20(3), which protects the right against self-incrimination.
- The Bill implied use of force in collection of biological information, could also lead to narco analysis and brain mapping.

RACE IAS www.raceias.com Page 29 of 80

Handling Data:

- The records will be preserved for 75 years, the other concerns include how the data collected will be preserved, shared, disseminated, and destroyed.
- Collection can also result in mass surveillance, with the database under this law being combined with other databases such as those of the Crime and Criminal Tracking Network and Systems (CCTNS).
- Crime and Criminal Tracking Network & Systems (CCTNS) is a plan scheme conceived in the light of experience of a non-plan scheme namely - Common Integrated Police Application (CIPA).

Unawareness among Detainees:

• Although it provides that an arrested person (not accused of an offence against a woman or a child) may refuse the taking of samples, not all detainees may know that they can indeed decline to let biological samples be taken.

And it may be easy for the police to ignore such refusal and later claim that they did get the detainee's consent.

INDIA @ 75

SYLLABUS: GS PAPER-II (INDIAN CONSTITUTION)

CONTEXT: India celebrated its 75th year of Independence on and around August 15, 2022.

CONCERNS OF INDIAN DEMOCRACY

Nationalistic rhetoric: There are attempts to shrink the idea **of India as a nation into one community.** An exclusion and an overemphasis on community identity marks the rhetoric. Therefore, in the present narration, democracy is secondary to the nation.

A contradiction in the celebration of the Constitution of India: Although the document is being celebrated, the adoption of its spirit in social and political practice is half-hearted. For instance, the two most revolutionary elements of the Constitution, fundamental rights, and directive principles, are conveniently set aside from time to time for vested interest.

The Constitution has been undermined from time to time by our **legislative choices**, **executive practices**, **and judicial interpretations**.

Web of institutions: The Constitution has conferred upon us many institutions and several other institutions have been added by the Parliament. Most of these institutions have been created to control the citizens. There has been a serious erosion in the functioning of these institutions partly due to political interference.

Deep inequalities: marks the Indian politics. One can enter into Indian politics through the family route or by finding out family connections. This political inequality is exacerbated by and in turn, enhances various other inequalities.

No balance between the people as a collective and the individual in India's democratic life: The idea of the individual seldom carries weight. Within communities, individuals are secondary. Further, fundamental rights and freedoms of individuals such as freedom of expression, right to life and liberty are seen as unnecessary both by the public and rulers.

Thus, the best way to celebrate 75 years of our nationhood is to remind ourselves of the contradictoriness of our democracy.

RACE IAS www.raceias.com Page 30 of 80

SUPREME COURT'S CONTRADICTORY VERDICTS REINFORCE THE NEED FOR A BAIL ACT

SYLLABUS: GS PAPER-II (IMPORTANT PROVISIONS OF THE INDIAN CONSTITUTION)

CONTEXT: In Satender Kumar Antil v. CBI, the directions on undertrials and pre-trial detentions have been given by the Supreme Court. The SC has asserted mandatory compliance with the Sections 41 and 41A of the Criminal Procedure Code (CrPC).

CRIMINAL JUSTICE REFORMS

- The **Section 41 was modified and the Section 41A** was incorporated into the Code of Criminal Procedure (CrPC) in the first decade of the 21st century.
- The objective of this reform was to reduce the number of arrests by the police for offences punishable by up to 7 years of imprisonment.
- These initiatives not only had the potential to reduce custodial violence abut also lower the burden on courts.

THE RULINGS OF THE SUPREME COURT

- In Arnesh Kumar vs State of Bihar Case (2014), the Supreme Court directed the state
 governments to instruct their police officers to not arrest the accused automatically wherein
 the offence is punishable with imprisonment for a term which may be less than seven years.
- The Court iterated that investigating agencies are accountable for compliance with Section 41 and 41A of CrPC.
- Moreover, the importance of the "bail over jail" rule was reaffirmed and the court issued a slew of **step-by-step procedures** to prevent unnecessary arrest or remand.

ISSUES IN INDIAN CRIMINAL JUSTICE SYSTEM

- According to the Prison Statistics of India 2020, 76% of the prisoners are undertrials. The
 sizeable percentage of undertrials in prison as well as the pre-trial detentions are the
 result of not only unnecessary arrests by investigating agencies but also the unfair
 application of bail provisions by the court. This has led to the violation of the cardinal
 rule of the presumption of innocence.
- The investigating agencies do not judiciously apply Sections 41 and 41A of the CrPC and continue to take a mechanical approach wherein detentions are regarded as the only effective option to complete the investigation. Thus, there is a huge pendency of bail applications in various courts.

ABOUT BAIL

- Bail is the conditional release of a defendant with the promise to appear in court when required.
- The term also means the security that is deposited to secure the release of the accused.
- In India's legal world, the term offense has been categorized as **bailable offenses and non-bailable under the Code of Criminal Procedure**.

TYPES OF BAILS

Based on the sage of the criminal matter, there are commonly three types of bail in India:

- Regular bail: It is granted to a person who has been arrested or is in police custody. Such a bail application can be filed for regular bail under sections 437 and 439 of CrPC.
- **Interim bail:** This type of bail is **granted for a brief period** before the hearing for the grant of regular bail or anticipatory bail.

Anticipatory bail: It is granted under section 438 of CrPC either by a Session Court or High Court. An application for the grant of anticipatory bail can be filed by the person who discerns that he may be arrested by the police for a non-bailable offense.

PROJECT SMILE

SYLLABUS: GS PAPER-II (GOVERNMENT POLICIES & INTERVENTIONS), GS PAPER-III (INCLUSIVE GROWTH)

CONTEXT: The Union Government of India has formulated **SMILE** (**Support for Marginalized Individuals for Livelihood and Enterprise**) Scheme covering comprehensive measures for the welfare of beggars.

The government has prepared a list of 75 areas including Delhi, Tirupati, Guwahati, Patna, Ahmedabad, and Mumbai where Municipal Corporations will take on this challenge.

ABOUT SMILE PROJECT.

- The objective of this scheme is to extend welfare measures to the Transgender community along with the people engaged in the act of begging.
- The scheme strengthens and expands the reach of the rights that provide the targeted group with necessary legal protection as well as a promise to secured life.
- It focuses on the aspect of social security by emphasizing on medical care, education, occupational opportunities, and shelter.
- This will be done in collaboration with the State Governments/UTs/Local Urban Bodies, Voluntary Organizations, Community Based Organizations, and institutions.
- Budget: Rs. 365 crores
- Nodal Ministry: Ministry of Social Justice & Empowerment

SUB-SCHEMES UNDER SMILE INITIATIVE

Central Sector Scheme for Comprehensive Rehabilitation for Welfare of Transgender Persons:

- It provides Scholarships for Transgender Students studying in IX and till post-graduation to enable them to complete their education.
- It provides for the provision of **Transgender Protection Cell** in each state which will monitor cases of offences and ensure timely registration, investigation, and prosecution of offences.
- Through Composite Medical Health, the scheme will provide a comprehensive package in convergence with PM-JAY supporting Gender-Reaffirmation surgeries through selected hospitals.

Central Sector Scheme for Comprehensive Rehabilitation of engaged in the act of Begging: It will focus on Survey and identification, Mobilization, Rescue/ Shelter Home, and Comprehensive resettlement.

WOMEN'S EMPOWERMENT IS ABOUT LAND OWNERSHIP

SYLLABUS: GS PAPER-II (SOCIAL ISSUES-WOMEN & RELATED ISSUES)

CONTEXT: Very few Indian women have any legal title to property despite legislative efforts to fix a sharp gender imbalance in inheritance.

In his recent Independence Day speech, the Prime Minister asked for an attitudinal shift across the country in favor of 'Nari Shakti'—or women's power. According to PM, "Respect for women is an important pillar for India's growth."

The economist Hernando de Soto, in 'The Mystery of Capita' opined that the legal ownership of land can make all the difference between poverty and the ability to escape it. Thus, the empowerment of women too requires control over assets, other than income and job opportunities. The United Nations Sustainable Development Goals requires the countries to track the status of women's land rights.

SURVEY FINDINGS PERTAINING WOMEN EMPOWERMENT

The empowerment of women, especially in rural India, is constrained by weak command over the farmland they till. The findings of the 5th round of the National Family Health Survey 2020-21 are as follows:

- There has been a drop in the country's women aged 15-49 who owned a house or land (either solely or jointly) to less than a quarter from over a third back in 2015-16.
- About 98 million women engaged in agriculture and allied activities, with most working as labor rather than cultivators.
- Less than 13% of Indian farmland is under female ownership.

LAWS REGULATING INHERITANCE IN INDIA

- The Hindu Succession Act of 1956: It provides for equal distribution of property among all inheritors, irrespective of gender. The law was amended in the year 2005 to grant sons and daughters equal rights in joint-family property.
- As far as Muslims are concerned, sons get twice the share on an avowal to provide for their sisters if necessary.

REASONS BEHIND WOMEN LACKING LAND OWNERSHIP

- Fathers are concerned about losing control of their land if it is transferred to their married daughters.
- Daughters are afraid that claiming their inheritance would sever family ties.
- Land fragmentation is a concern for policymakers.

LOK ADALAT

SYLLABUS: GS PAPER-II (DISPUTE REDRESSAL MECHANISM)

CONTEXT: Approximately 81 lakh cases were resolved in the third National Lok Adalat held across India (except in Delhi) under the aegis of the National Legal Services Authority (NALSA) that was presided over by the Chief Justice of India- designate UU Lalit.

ABOUT LOK ADALAT

• The concept of 'Lok Adalat' which means 'People's Court' is based on Gandhian principles.

RACE IAS www.raceias.com Page 33 of 80

- It is one of the components of the **Alternative Dispute Resolution (ADR) system** that delivers informal, cheap, and expeditious justice to the common people.
- The first Lok Adalat camp was organized in **Gujarat in 1982** as a voluntary and conciliatory agency without any statutory backing for its decisions.
- It was given statutory status under the Legal Services Authorities Act, 1987 in lieu of its growing popularity.

ORGANIZATION OF LOK ADALAT

- The State/District Legal Services Authority or the Supreme Court/High Court/Taluk Legal Services Committee may organize Lok Adalats at such intervals and places as it deems fit.
- National Lok Adalats are held at regular intervals with Lok Adalats being held throughout the country on a single day, in all the courts across the country at all levels wherein cases are disposed of in large numbers.

COMPOSITION

- Every Lok Adalat organized for an area shall consist of such number of serving or retired judicial officers and other persons of the area as may be specified by the agency organizing.
- Usually, a Lok Adalat consists of a **judicial officer as the chairperson** and a lawyer (advocate) along with a social worker as members.

JURISDICTION OF LOK ADALAT

A Lok Adalat shall have jurisdiction to determine and to arrive at a compromise or settlement between the parties to a dispute in respect of:

- Any case pending before any court, or
- Any matter which falls within the jurisdiction of any court and is not brought before such court.

Any case pending before the court can be referred to the Lok Adalat for settlement if:

- Parties agree to settle the dispute in the Lok Adalat or one of the parties applies for referral
 of the case to the Lok Adalat or court is satisfied that the matter can be solved by a Lok
 Adalat.
- In the case of a pre-litigation dispute, the matter can be referred to the Lok Adalat on receipt of an application from any one of the parties to the dispute.

Matters such as matrimonial/family disputes, criminal (compoundable offenses) cases, land acquisition cases, labor disputes, workers' compensation cases, bank recovery cases, etc. are taken up in Lok Adalats as well.

However, the Lok Adalat shall have no jurisdiction in respect of any case or matter **relating to an offense not compoundable under any law**. It means that the offenses which are non-compoundable under any law fall outside the purview of the Lok Adalat.

POWERS OF THE LOK ADALAT

• The Lok Adalats have been vested with the same powers as are **vested in a Civil Court** under the Code of Civil Procedure (1908).

- Further, a Lok Adalat has the requisite powers to specify its own procedure for the determination of any dispute presented before it.
- All proceedings before a Lok Adalat are deemed to be judicial proceedings within the meaning of the Indian Penal Code (1860). Every Lok Adalat is deemed to be a Civil Court for the purpose of the Code of Criminal Procedure (1973).
- An award of a Lok Adalat is deemed to be a decree of a Civil Court or an order of any other court.
- Every award made by a Lok Adalat is **final and binding on all the parties to the dispute**. No appeal shall lie to any court against the award of the Lok Adalat.

BENEFITS

- There is **no court fee** and in case the court fee has already been paid, then the amount will be refunded if the dispute is settled at Lok Adalat.
- It provides with the procedural flexibility and speedy trial of the disputes.
- The parties to the dispute can **directly interact with the judge through their counsel** which is not possible in regular courts of law.
- The award by the Lok Adalat is binding on the parties.

It has the **status of a decree of a civil cour**t and is non-appealable, which does not cause delay in the settlement of disputes.

GENERAL STUDIES PAPER-III

AGRICULTURE CENSUS

SYLLABUS: GS PAPER-III (IRRIGATION, E-TECHNOLOGY IN THE AID OF FARMERS)

CONTEXT: Recently, the Ministry of Agriculture & Farmers' Welfare launched "The Eleventh Agricultural Census (2021-22)."

This computation will bring huge benefits in a vast and agricultural country like India.

ABOUT AGRICULTURE CENSUS

- Agriculture Census is conducted every 5 years, which is being undertaken now after delay due to the Covid - 19 Pandemic.
- Entire Census operation is conducted in three phases and operational holding is taken as a statistical unit at micro level for data collection.
- Based on the agriculture census data collected in three phases, the Department brings out three
 detailed reports analyzing trends on various parameters at All India and States/UTs level.
- District/Tehsil level reports are prepared by the respective States/UTs.
- Agricultural Census is the main source of information on a variety of agricultural parameters at a minute level, such as the number and area of operational holdings, their size, class-wise distribution, land use, tenancy and cropping pattern, etc.

ELEVENTH CENSUS

- The field work of the agricultural census will start in August 2022.
- This is the first time that data collection for agricultural **census will be conducted on smartphones** and tablets, so that data is available in time.

RACE IAS www.raceias.com Page 35 of 80

- It includes:
- 1. Use of digital land records like land title records and survey reports
- 2. Collection of data through app/software using smartphone/tablet.
- 3. Complete enumeration of all villages in states with non-land records during Phase-I as done in states having land records.
- 4. Real time monitoring of progress and processing.
- Most of the States have **digitized their land records and surveys**, which will further accelerate the collection of agricultural census data.
- The use of digitized land records and the use of mobile apps for data collection will enable the creation of a database of operational holdings in the country.

ABOUT DIGITAL AGRICULTURE

- Digital Agriculture is ICT (Information and Communication Technologies) and data ecosystems to support the development and delivery of timely, targeted information and services to make farming profitable and sustainable while delivering safe, nutritious, and affordable food for all.
- Example: Agricultural biotechnology is a range of tools, including traditional breeding techniques, that alter living organisms, or parts of organisms, to make or modify products, improve plants or animals, or develop microorganisms for specific agricultural uses.
- Benefits:
- 1. It allows **fine-tuning of inputs** and reduces demand for manual labor.
- 2. **Remote satellite data and in-situ sensors** improve the accuracy and reduce the cost of monitoring crop growth and quality of land or water.
- 3. Freely available and high-quality satellite imagery dramatically **reduces the cost of monitoring many agricultural activities**. This could allow governments to move towards more targeted policies which pay (or penalize) farmers based on observed environmental outcomes.
- 4. These services offer the **potential to streamline agri-food supply chains**, while also providing **trusted information for consumers**.
- 5. In addition to monitoring compliance with environmental policies, digital technologies enable automation of administrative processes for agriculture and the development of expanded government services, such as in relation to extension or advisory services.
- 6. Using the technology, the data related to a large number of landholdings can be appropriately tagged and digitized.

Armed Forces (Special Powers) Act 1958(AFSPA), Insurgency in North-East India, Naga insurgency, Peace Initiatives in North East

Syllabus - General Studies (Paper III) INTERNAL SECURITY

Why in news?

The Prime Minister of India while addressing a 'Peace, Unity and Development' rally in Assam's Karbi Anglong district announced earlier this year that the Government intends to withdraw the much-dreaded Armed Forces (Special Powers) Act 1958(AFSPA), completely from the north-east.

Background behind AFSPA

- The roots of AFSPA can be traced to British Rule during the freedom movement.
- The British government had promulgated the **Armed Forces Special Powers Ordinance to** suppress the Quit India movement in August 1942.

RACE IAS www.raceias.com Page 36 of 80

- Over the years various ordinances were promulgated for various reasons which include "Assam disturbed areas (1947)", "Assam Disturbed Areas Act of (1955)" etc.
- The Act was **replaced by the AFSPA** for wider application. A similar Act **specific to Jammu** and **Kashmir** was enacted in 1990.

About AFSPA

- AFSPA gives sweeping powers to the armed forces.
 - For example, it allows them to open fire, even causing death, against any person in contravention to the law or carrying arms and ammunition.
 - Also, it gives them powers to arrest individuals without warrants, on the basis
 of "reasonable suspicion", and search premises without warrants.
- It can be imposed by the Centre or the Governor of a state, on the state or parts of it, after these areas are declared "disturbed" under Section 3.
 - The Act was amended in 1972 and the powers to declare an area as "disturbed" were conferred concurrently upon the Central government along with the States.
 - Currently, the Union Home Ministry issues periodic "disturbed area" notification to extend AFSPA only for Nagaland and Arunachal Pradesh.
 - The notification for Manipur and Assam is issued by the State governments.

• Tripura revoked the Act in 2015 and Meghalaya was under AFSPA for 27 years, until it was revoked by the MHA from 1st April 2018.

Criticism

- It provides absolute powers to the security personnel without being accounted for.
 - This leads to various atrocities and human rights violations by security agencies.
- Critics say the undemocratic act has failed to contain terrorism and restore normalcy in disturbed areas, as the number of armed groups has gone up after the act was established.
- WHERE AFSPA IS OUT,
 WHERE IT REMAINS

 ASSAM

 Lifted fully from 23 districts and partially from
 1. Remains in force in 9. Withdrawal covers around 60% of state's area.

 Partially lifted

 Fully lifted

 Guwahati

 Kohima

 NAGALAND

 Withdrawn totally from 3 districts and partially from 3 districts and partially from 4. Withdrawn totally from 3 districts and partially from 5 valley districts. Remains in force in the hill districts.
- Many even hold it responsible for the spiralling violence in areas it is in force.
- The Justice Jeevan Reddy Committee was set up in 2005 to review Afspa and make recommendations.
 - It recommended that Afspa should be repealed and the Unlawful Activities Protection
 Act strengthened to fight militancy.
- It has been a controversial one, with human rights groups opposing it as being aggressive.
- Terming the AFSPA as a "draconian law", renowned human rights activist Irom Chanu Sharmila of Manipur had fought for 16 long years till mid-2016, demanding its repeal.

Way Forward

• AFSPA is required to counter insurgencies and lack of development in the Northeast region is also a major reason for the insurgency therefore the Government should take urgent steps to create new opportunities for growth and development.

INDIA'S 'WHEAT WAIVER' WTO DEMAND

SYLLABUS: GS PAPER-III (EFFECTS OF LIBERALIZATION ON THE ECONOMY)

CONTEXT: Recently, India demanded World Trade Organization (WTO) find a permanent solution to the issue of public stockholding (PSH) of food.

BACKGROUND

- India's MSP policy for procurement of produce (for supporting farmers' income as well as providing subsidized food for the poor) had fallen out of WTO rules.
- The PSH policy of India serves the twin objectives:
- 1. Offering remunerative prices to farmers
- 2. Providing subsidized food to the underprivileged.
- Under WTO law, such price support-based procurement from farmers is considered a trade-distorting subsidy.
- Currently, India has temporary relief due to a 'peace clause' that bars countries from raising legal challenges against these subsidies.
- WTO's peace clause (inserted in Bali Ministerial, 2013) protects India's food procurement programmes against action from WTO members in case the subsidy ceilings are breached.
- India's concern is that WTO should have the policy space to hold public food stocks using the MSP. However, there is no mention of price support in the **Geneva declaration**.

CAN THE COUNTRY EXPORT PUBLIC STOCK HOLDING FOOD GRAINS?

- WTO prohibits countries from exporting foodgrain procured at subsidized prices. This is because:
- a. Gives an **unfair advantage** in global agricultural trade.
- b. A country will sell foodgrain in the international market at a very low price. This will depress global prices and have an adverse impact on the agricultural trade of other countries.
- Accordingly, in paragraph 4 of the 2013 WTO decision on PSH for food security purposes, countries procuring food for food-security purposes shall ensure that such procured food does not "distort trade or adversely affect the food security of other Members".
- This is also reflected in paragraph 10 of the Geneva ministerial food security declaration. The declaration states that countries may release surplus food stocks into the international market in accordance with WTO law. The WTO may agree to a

RACE IAS www.raceias.com Page 38 of 80

temporary waiver to allow the export of wheat from public stockholdings given the ongoing food crisis in some countries.

STATUS OF PSH AT RECENT WTO MINISTERIAL MEETING

- India's demand for a permanent solution to the PSH policy has acquired a new dimension in the recent WTO meeting. The Russia-Ukraine war has unleashed a food crisis in many countries.
- India insists that it should also be allowed to export food, especially wheat, from the pool of foodgrain procured under the MSP.

WHAT CAN INDIA DO TO PROTECT ITS PSH POLICY?

- India should revisit its stand on asking for a waiver for wheat exports from its public stockholding. To help the food crisis in other countries, India can strengthen its commitment to the United Nations World Food Programme.
- India should focus on its core agenda of pushing for a permanent solution for its PSH programme to attain the goal of food security.
- India can lift the ban imposed on private traders to export wheat.

GOVERNMENT'S OWN GIG WORKERS

SYLLABUS: GS PAPER-III (EMPLOYMENT)

CONTEXT: Agnipath scheme has highlighted the approach of the government to outsource work to 'temporary workers.'

'Temporary' jobs have comprised most of the available government employment for quite some time. They may be classified into three categories:

- a. Permanent
- b. Contractual
- c. Daily wagers

STATUS

- Outsourcing has become the dominant mode of working in the government, from highly specialized tasks to the most routine ones. E.g., Safai karamchari (sanitation worker), a driver/conductor of your city bus service, a junior engineer, or a highly paid consultant.
- As per a survey, the number of contractual workers in central public sector enterprises increased to 4,98,807 in March 2020 from 2,67,929 in March 2016.

BENEFITS OF CONTRACT WORKERS

- For Government: costs and liabilities of the government entity are significantly reduced compared to a "permanent" position.
- Burden of responsibility is shifted to the contractor.
- No possibility of litigation seeking 'regularization.'

ISSUES

RACE IAS www.raceias.com Page 39 of 80

• Non-payment of salaries for extended periods, fudging of statutory deductions for the worker's welfare such as provident fund (PF), employees' state insurance (ESI), etc. by the labor contractor, and uneven distribution of work vis-à-vis "permanent" employees.

Long-term impact: Quality of public service that is sought to be provided including sanitation, public transport, health, etc.

WHAT CAN BE DONE?

- Need to augment the capacity of the government, particularly those wings of the state that
 cater various services to people, as well as to create a viable avenue of employment for
 India's burgeoning working-age population.
- Following Effective procedure: Local bodies, parastatals, special purpose vehicles and other public utilities stand to gain considerably if the modalities of contractual engagement are diligently worked out.
- The Ministry of Housing & Urban Affairs' **Urban Learning Internship Program (TULIP)**, enables city authorities to directly engage a young workforce for a fixed term.

CONCLUSION

- Even though a permanent government job remains highly coveted, it may be important to also recognize that not everyone may aspire to 'permanence' due to various reasons.
- Fixed-term contractual stints with the government with safeguards against sheer exploitation
 can be a major source of employment. However, such modes of recruitment will have to
 assimilate the principles of affirmative action, in line with the vision of social justice enshrined
 in our Constitution. This is key in order to avoid becoming a mechanism that will skirt
 provisions for reservation.

INTERNATIONAL SPACE STATION

SYLLABUS: GS PAPER-III (SPACE TECHNOLOGY), GS PAPER-II (EFFECTS OF POLICIES & POLITICS OF COUNTRIES ON INDIA)

CONTEXT: Russia will pull out of the ISS after 2024 and focus on building its own orbiting outpost.

ABOUT INTERNATIONAL SPACE STATION (ISS)

- The ISS is the **most complex international scientific and engineering project** in history and the largest structure humans have ever put into space.
- This high-flying satellite is a laboratory for new technologies and an observation platform for astronomical, environmental, and geological research.
- As a permanently occupied outpost in outer space, it serves as a stepping stone for further space exploration.
- The space station flies at an average altitude of 400 kilometers above Earth. It circles the globe every 90 min. at a speed of about 28,000 kph.
- In one day, the station travels about the distance it would take to go from Earth to the moon and back.
- The space station can rival the brilliant planet Venus in brightness and appears as a bright moving light across the night sky.
- It can be seen from Earth without the use of a telescope by night sky observers who know when and where to look.

RACE IAS www.raceias.com Page 40 of 80

- Five different space agencies representing 15 countries built the USD 100-billion International Space Station and continue to operate it today.
- The International Space Station was taken into space piece-by-piece and gradually built-in orbit.
- It consists of modules and connecting nodes that contain living quarters and laboratories, as well as exterior trusses that provide structural support, and solar panels that provide power.
- The first module, Russia's Zarya module, launched in 1998.

RUSSIA'S ROLE IN MAINTAINING ISS

- The ISS is built with the cooperation of scientists from five international space agencies —
 NASA of the US, Roscosmos of Russia, JAXA of Japan, Canadian Space Agency, and
 the European Space Agency.
- Each agency has a role to play and a share in the upkeep of the ISS. Both in terms of expense and effort, it is not a feat that a single country can support.
- Russia's part in the collaboration is the module responsible for making course corrections to the orbit of the ISS.
- Further, the Russian segment ensures that the space station's orbit is corrected to keep it away from space debris, roughly 11 times a year.
- It also ferries astronauts to the ISS from the Earth and back.

WHAT COULD BE THE IMPACT OF RUSSIA'S WITHDRAWL

- Due to its enormous weight and the ensuing drag, the ISS tends to sink from its orbit at a height of about 250 miles above the Earth.
- It has to be pushed up to its original line of motion every now and then.
- Russia's withdrawing from its segment of the ISS cooperation spacecraft could affect correcting the orbit of the ISS.
- This meant the ISS could fall into the sea or on land.
- ISS would likely crash down on some country, but most probably not Russia itself. The orbit
 of the ISS does not fly over Russian territory mostly.
- However, dropping of ISS poses a greater risk to regions that are closer to the equator. But this is only a probability, as it can move or disintegrate.
- In case of this eventuality, people in the ISS will be brought back, modules can be detached thereby making it much smaller which will ensure that it disintegrates before touching the earth.

REASONS FOR RUSSIA QUITTING ISS

- The relations between Russia and the West have been going from bad to worse. The US had accused the Kremlin of carrying out "solar winds" hack and interfering in the 2020 election.
- **Russian invasion in Ukraine** has attracted various sanctions on it from the Western nations thus, making it impossible for Russia to cooperate in space.
- Increased US-Russia space rivalry.

RACE IAS www.raceias.com Page 41 of 80

Russia plans to launch its own space station by 2030.

ENERGY CONSERVATION (AMENDMENT) BILL, 2022

SYLLABUS: GS PAPER-III (CONSERVATION)

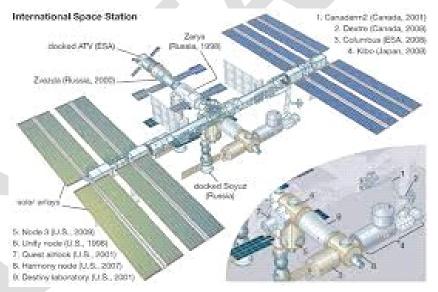
CONTEXT: To meet India's commitment to exceeding its Paris Agreement climate targets, the Government of India plans to table the Energy Conservation (Amendment) Bill 2022 in the ongoing Monsoon session of Parliament.

The Bill proposes to amend the Energy Conservation Act 2001 last amended in 2010.

ABOUT ENERGY CONSERVATION ACT 2001

Energy Conservation Act, 2001 was enacted to provide for efficient use of energy and its conservation and for matters connected therewith. The key provisions of the act are as follows:

- **Norms for energy efficiency**: The Act empowers the Centre to specify norms and standards of energy efficiency for appliances, industrial equipment, and buildings with a connected load over 100 kilowatts (kW) or a contractual demand of more than 15 kilovolt-amperes (kVA).
- **BEE:** The Act established **Bureau of Energy** Efficiency (BEE). The 2010 amendment extended the tenure of the Director General of the Bureau of Energy Efficiency from three to five years. This Bureau can specify qualifications required for energy auditors who monitor and review the power consumption various industries.



• Energy Saving

Certificates: The Centre can issue energy savings certificates to those industries which consume less than their maximum allotted energy. However, this certificate can be sold to customers who consume higher than their maximum allowed energy threshold – providing for a framework for energy trading.

- The Act allows the Centre to prohibit the manufacture, sale, purchase or import of any equipment unless it conforms to specified norms issued six months/ one year before.
- **Penalty:** In case of any violations under this Act, each offence shall attract a penalty of Rs ten lakh with an additional penalty of Rs 10,000 for each day the offence continues.
- **Appeals:** Any appeals against any such order passed by the Central or state government will be heard by the appellate tribunal already established under the Electricity Act, 2003.

PROPOSED AMENDMENTS TO THE ACT

- Defining the minimum share of renewable energy to be consumed by industrial units or any establishment. This consumption may be done directly from a renewable energy source or indirectly via the power grid.
- Incentivizing efforts to use clean energy by issuing carbon saving certificates.

RACE IAS www.raceias.com Page 42 of 80

- Strengthening institutions set up originally under the Act, such as the Bureau of Energy Efficiency.
- Facilitating the promotion of green Hydrogen as an alternative to the fossil fuels used by industries.
- Considering additional incentives like carbon credits for the use of clean energy to lure the private sector to climate action.
- Including larger residential buildings under energy conservation standards to promote sustainable habitats. Currently, only large industries and their buildings come under the ambit of the Act.

OBJECTIVES OF THE PROPOSED AMENDMENT

- To reduce India's power consumption via fossil fuels and thereby minimize the nation's carbon footprint.
- To develop India's carbon market and boost the adoption of clean technology.

To meet its Nationally Determined Contributions (NDCs) as mentioned in the Paris Climate Agreement before its 2030 target date.

STABLECOINS

SYLLABUS: GS PAPER-III (IT & COMPUTERS)

CONTEXT: In early July, **the Financial Stability Board (FSB),** a body which advises major economies on international finance, promised to push for stablecoin regulation, citing **"recent turmoil"** in the cryptocurrency market.

The group is slated to report in October to G20 Finance Ministers and Central bank governors on regulatory and supervisory approaches to stablecoins and other crypto assets.

ABOUT STABLECOINS

- A stablecoin is a digital currency whose value is pegged to a 'stable' asset, such as the U.S. dollar or gold.
- The best -known stablecoin in the crypto ecosystem today is arguably Tether (USDT), whose market cap is close to \$66 billion, putting it below Ethereum, the second largest cryptocurrency in existence.
- Other stablecoins such as **USD Coin (USDC) and Binance USD (BUSD)** are also pegged to the U.S. dollar and are known for their high market cap values.
- Tether also recently launched a stablecoin pegged to the British pound.
- Stablecoins are not authorized for use by country lawmakers or central banks, which means that investors take on considerable legal and financial risk to hold them.

TYPES OF STABLECOINS

Fiat-collateralized Stablecoins:

- They are collateralized by fiat money, such as the US dollar, euro, or the pound, on a 1:1 ratio
- Examples: Tether, Gemini Dollar, and TrueSD.

RACE IAS www.raceias.com Page 43 of 80

Stablecoins Backed by Other Assets:

- There are a few stablecoins, which are backed by a basket of multiple assets (commercial papers, bonds, real estate, precious metals, etc.).
- The value of these stablecoins can fluctuate over time subject to movement in commodity and precious metal prices.
- Example: Digix Gold, backed by physical gold.

Crypto-Collateralized Stablecoins:

- Crypto-collateralized stablecoins are more decentralized than their peers and are backed by cryptocurrencies.
- The flipside is price volatility and to address the risk of price volatility, these stablecoins are over-collateralized.
- Example: Dai.

Non-collateralized stablecoins:

- These stablecoins do not have any backing and are decentralized in the true sense and the supply of non-collateralized stablecoins is governed by algorithms.
- Example: Basis

ROLE OF STABLECOINS IN THE CRYPTO ECOSYSTEM

- For a cryptocurrency trader, tracking stablecoin flows can help them gauge the state of the market, or even make educated guesses about future cryptocurrency price movements.
- For example, when the stablecoin supply on crypto exchanges spikes, it might be a sign that investors are cashing in their stablecoins to buy cryptocurrencies such as Bitcoin (BTC), Ether (ETH), or even other alt coins.
- On the other hand, if the stablecoin supply on crypto exchanges suddenly drops, one might conclude that traders are buying steadier assets. This could mean traders want to hedge against future risk and volatility, or are driven by fear.

CONCERNS PERTAINING STABLECOINS

Related to Short term Debt:

 Many stablecoins are backed by types of short-term debt that are prone to periods of illiquidity, meaning that they can become hard or impossible to trade during times of trouble.

Not all Stablecoins are Stable:

 Not all stablecoins are really 100% price-stable. Their values are dependent on their underlying assets.

Asset Contagion Risk:

- There are potential asset contagion risks linked to the liquidation of stablecoin reserve holdings.
- Contagion is the spread of an economic crisis from one market or region to another and can occur at both a domestic or international level.

RACE IAS www.raceias.com Page 44 of 80

 The risks are primarily associated with collateralized stablecoins, varying based on the size, liquidity, and riskiness of their asset holdings, as well as the transparency and governance of the operator.

Risks to Financial Stability:

 While stablecoins have the potential to enhance the efficiency of the provision of financial services, they may also generate risks to financial stability, particularly if they are adopted at a significant scale.

Lack of Accountability:

 They are not transparent or auditable by everyone and are operated just like non-bank financial intermediaries that provide services like traditional commercial banks, but outside normal banking regulations.

Regulatory Challenge:

- International coordination of regulatory efforts across diverse economies, jurisdictions, legal systems, and distinct levels of economic development and needs is another regulatory challenge.
- There is not (yet) a uniform regulatory approach of regulators worldwide relating to stablecoins.

SKYLIGHT EXERCISE

SYLLABUS: GS PAPER-III (INTERNAL SECURITY)

CONTEXT: The Indian Army recently conducted "**Skylight Mega-Exercise**", to enhance its space domain capabilities. It was the first of its kind large-scale exercise.

ABOUT SKYLIGHT EXERCISE

- This exercise, conducted by the Indian Army, was the first of its kind large-scale exercise to boost its space domain capabilities.
- The aim of the exercise was to test operational readiness of satellite communication assets and training of personnel manning these.
- This was a pan-India exercise covering the **islands of Andaman and Lakshadweep** to the high reaches of the northern borders.
- All satellite communication assets of the Indian Army were activated during this exercise.

RATIONALE BEHIND THIS EXERCISE

- The idea was to validate and showcase the resilience of its communication capabilities in case terrestrial connectivity is disrupted in future conflicts. Space-based communications will prove to be decisive in a conflict as terrestrial systems are bound to get disrupted.
- India wants to leverage space capabilities for supporting a variety of military operations.
- Complex aerospace technology has begun impacting military operations and communications, in particular. Hence, it is important to build and refine technical competence in this field.
- The northern borders with China are a primary area of concern because of the challenges related to topography.

- This exercise also assumes significance against the backdrop of China's long standing thrust on "informatized" and "intelligentized" warfare.
- China is leagues ahead in space, cyberspace, robotics, lethal autonomous weapon systems, artificial intelligence warfare.
- Keeping this in mind, the Indian army is also pursuing "Quantum Computing and Communications" for much better and secure C4I2SR systems for wars of future. C4I2SR stands for command, control, communication, computers, intelligence, information, surveillance and reconnaissance.

SPACE COMMUNICATION BY INDIAN ARMY

- The Indian Army uses the services of a number of ISRO satellites that connect hundreds of communication terminals of various types.
- These include static terminals, transportable vehicle mounted terminals, man- portable and small form factor man-pack terminals.
- Unlike the Indian Air Force and the Navy, the Army currently does not have a dedicated satellite.

INDIAN ARMY SATELLITE BY 2025

- The army is on course to get its own satellite by December 2025.
- The Defense Acquisition Council, the top weapons procurement body of the government, gave the go ahead for the Indian Army's satellite GSAT-7B in March 2022. The GSAT-7 series of advanced satellites built by ISRO is designed to provide communication capabilities to users over vast expanses including oceans.
- The satellite has been designed as an **indigenous multiband satellite with advanced** security features.

It will support tactical communication requirements for not only troops deployed on the ground, but also for remotely piloted aircraft, air defense weapons and other mission-critical and fire support platforms.

INDIA'S SOLAR POWER DREAM

SYLLABUS: GS PAPER-III (INDIGENIZATION OF TECHNOLOGY)

CONTEXT: Government of India has set the target to expand India's renewable energy installed capacity to 500 GW by 2030.

India is also targeting to reduce India's total projected carbon emission by 1 billion tonnes by 2030, reduce the carbon intensity of the nation's economy by less than 45% by the end of the decade, achieve net-zero carbon emissions by 2070.

PRESENT STATUS OF RENEWABLE ENERGY IN INDIA

- The total installed capacity for renewable energy in India is 151.4 GW.
- The following is the breakup of total installed capacity for Renewables:

Wind power: 40.08 GW

Solar Power: 50 GW



Biopower: 10.61 GW

Small Hydro Power: 4.83 GW

Large Hydro: 46.51 GW

Present Solar Power capacity:

- 45 solar parks of aggregate capacity 37 GW have been approved in India.
- Solar Parks in Pavagada (2 GW), Kurnool (1 GW) and Bhadla-II (648 MW) are included in the top 5 operational solar parks of 7 GW capacity in the country.
- The world's largest renewable energy park of 30 GW capacity solar-wind hybrid project is under installation in Gujarat.

CHALLENGES

Heavily Dependent on Imports:

- India does not have enough module and PV cell manufacturing capacity.
- The current solar module manufacturing capacity is limited to 15 GW per year, whereas the domestic production is around 3.5 GW only.
- Further, out of the 15 GW of module manufacturing capacity, only 3-4 GW of modules are technologically competitive and worthy of deployment in grid-based projects.

Raw Material Supply:

- The silicon wafer, the most expensive raw material, is not manufactured in India.
- It currently imports 100% silicon wafers and around 80% cells.
- Further, other key raw materials, such as silver and aluminum metal pastes for making electrical contacts, are also almost 100% imported.

GOVERNMENT INITIATIVES

PLI scheme to Support Manufacturing:

 The Scheme has provisions for supporting the setting up of integrated manufacturing units of high-efficiency solar PV modules by providing Production Linked Incentive (PLI) on sales of such solar PV modules.

Domestic Content Requirement (DCR):

- Under some of the current schemes of the Ministry of New & Renewable Energy (MNRE), namely Central Public Sector Undertaking (CPSU) Scheme Phase-II, PM-KUSUM, and Grid-connected Rooftop Solar Programme Phase-II, wherein government subsidy is given, it has been mandated to source solar PV cells and modules from domestic sources.
- Further, the government made it mandatory to procure modules only from an **Approved List** of **Manufacturers (ALMM)** for projects that are connected to state/ central government grids.

Imposition of Basic Customs Duty on import of solar PV cells & modules:

- The Government has announced the imposition of Basic Customs Duty (BCD) on the import of solar PV cells and modules.
- Further, it has imposed a 40% duty on the import of modules and a 25% duty on the import of cells.
- Basic custom duty is the duty imposed on the value of the goods at a specific rate.

RACE IAS www.raceias.com Page 47 of 80

Modified Special Incentive Package Scheme (M-SIPS):

- It is a scheme of the Ministry of Electronics & Information Technology.
- The scheme provides a subsidy for capital expenditure on Pv cells and modules 20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZ.

COMBINED MARITIME FORCES-BAHRAIN (CMF-B)

SYLLABUS:

CONTEXT: India formally commenced cooperation with the **Bahrain-based multilateral** partnership, Combined Maritime Forces (CMF).

At the India-U.S. 2+2 April, India had announced that it would join the CMF as an Associate Partner.

ABOUT COMBINED MARITIME FORCES-BAHRAIN (CMF-B)

- It is the U.S. backed counterterrorism coalition aimed at protecting international waters. It was **established in 2002 with only 12 members**.
- The coalition was formed with like-minded partners to counter the threat of international terrorism and uphold the international rules-based order.
- The **United States Naval Forces Central Command (NAVCENT)** was tasked with leading the then CMF in 2001.
- The coalition is headquartered in Bahrain.

ROLE

- The CMF-B is primarily tasked with ensuring stability and security across 3.2 million square miles of international waters.
- It acts against illegal non-state actors operating in vital sea lines of communication.
- Its scope has expanded from just counterterrorism to counternarcotics, countersmuggling operations, and suppressing piracy.

MEMBERSHIP

- Participation in the C**MF-B is voluntary** it is mandated neither by a political agreement nor a military one.
- The coalition has 34 members from across the world.
- Recently, India became an associate member of the maritime partnership. Other Asian members include **Pakistan**, the **Philippines**, **Seychelles**, **Singapore**, and **Malaysia**.

WORKING

- The work of the CMF-B is divided into 4 combined task forces (CTF)-the CTF 150, CTF 151, CTF 152, and CTF 153.
- The CTF 150 focuses on ensuring maritime security in the **Gulf of Oman and the Indian Ocean.**
- The CTF 151 focuses on **counterpiracy**.
- The CTF 152 aims to ensure maritime security in the Persian Gulf.
- The CTF 153 which was established in April 2022, focuses on ensuring maritime security in the **Red Sea and Gulf of Aden.**

RACE IAS www.raceias.com Page 48 of 80

INDIA AND CMF-B

- So far, India was conducting similar anti-piracy mission on its own. India has two ships deployed round the clock between the Gulf of Aden and the Persian Gulf for anti-piracy and anti-smuggling operations.
- With India now joining this grouping, it will operate in coordination with the CMF-B members.
- As an associate member, India will reportedly not get command of the task forces and will also have a limited say in planning operations.

SIGNIFICANCE

- Increased maritime regional security: It will strengthen cooperation in regional security in the Western Indian Ocean. It is also in line with India's commitment to the collective responsibility of maritime security in the Indian ocean.
- India has already worked with the CMF in the past: The CMF's CTF 151 has coordinated with Indian and Chinese warships deployed on anti-piracy duties to patrol the Maritime Security Transit Corridor.

Widening military diplomacy: Joining the CMF is the latest in a series of multilateral engagements by the Indian Navy as part of India's widening military diplomacy.

ELECTRICITY ACT 2003

SYLLABUS: GS PAPER-III (INFRASTRUCTURE)

CONTEXT: The **All-India Power Engineers Federation** recently called for a strike in protest of the government's intention to introduce the **Electricity (Amendment) Bill 2022** in the Parliament.

The bill, which amends the Electricity Act of 2003, aims to bring competition and accountability to electricity distribution, which is the weakest link in the power sector.

ABOUT ELECTRICITY ACT 2003

Background:

- Electricity is on the Concurrent list (Centre and States have equal rights to frame law) of the Constitution.
- Before the Electricity Act 2003, the generation, distribution, and transmission of electricity was carried out by the State Electricity Boards in various states.
- Due to the politico-economic situation, the cross-subsidies reached an unsustainable level.
- The Electricity Regulatory Commission Act was enacted in 1998 to detach state governments from tariff determination.
- The Electricity Act was enacted in 2003in order to further reform the electricity sector through private sector participation and competition.

About the Act:

- It is an Act of the Parliament enacted to transform the power sector in India.
- The act aims at consolidating laws related to generation, transmission, distribution, trading, and the use of electricity and promoting competition in the industry.
- The Ministry of Power is responsible for enforcing the Electricity Act, 2003.

Main objectives of the Act:

RACE IAS www.raceias.com Page 49 of 80

- Supply of electricity to all users and protecting consumer interest.
- Rationalization of electric tariff.
- Transparency in policies regarding subsidies.
- Promotion of efficient and environmentally friendly policies constituted by Central Electricity Authority (CEA), Regulatory Commissions and establishment of Appellate tribunal.

CONCERNS RAISED BY THE UNION

- Previously, the Centre had informed that the bill would not be introduced until the provisions were discussed with the major stakeholders. However, these Unions were not consulted.
- The provisions for eliminating cross subsidies will harm farmers and consumers.
- As electricity is on the Concurrent list of the Constitution, the Bill in its current form encroaches on the State's powers and disadvantages utilities.
- It should be forwarded to the Ministry's standing committee for further consultation.

INDIA'S BIG PROBLEM OF LOW-QUALITY EMPLOYMENT

SYLLABUS: GS PAPER-III

CONTEXT: An interim report titled "Impact Assessment Study of the Labour Reforms undertaken by the States" by the V V Giri National Labour Institute provides insights into the impacts of the labour reforms conducted in Rajasthan, Maharashtra, Andhra Pradesh, Tamil Nadu, Jharkhand, and Uttar Pradesh during the period 2004-05 to 2018-19.

Labour laws cover many subjects — payment of wages, safety conditions, social security, terms of employment, and dispute resolution. The report has focused on the reform of the Industrial Disputes Act, which is to raise the limits of applicability of laws relating to terms of service and modes of dispute resolution (roles of unions) to 300 persons.

STATUS OF EMPLOYMENT CREATION IN INDIA

- Between 1980 and 1990, every one per cent of GDP growth generated two lakh new jobs
- Between 1990 to 2000, it decreased to one lakh jobs for every per cent growth.
- From 2000 to 2010, it fell to half a lakh only.

ABOUT LABOUR REFORMS IN RECENT DECADE

Before 2014: The government emphasized on administrative reforms through digitization and simplifying procedures.

Post-2014: The government focussed on reforming the content of the laws and designed a framework for labour law reforms.

KEY FINDINGS OF THE REPORT

- Reforms of labour laws have had insignificant effect on increasing employment in large enterprises.
- Rajasthan, the first state to implement the reforms, seems to have benefitted the least from them as the effects of labour reforms takes time.
- As per the report employment in formal enterprises is becoming more informal.

CAUSES OF PROBLEMS IN LABOUR REFORMS

RACE IAS www.raceias.com Page 50 of 80

- The primary objective of the reforms was to induce the creation of large enterprises which could not be achieved due to the conceptual flaw in the Industrial Disputes Act.
- Large investors are employing increasing numbers of people on short-term contracts, while perversely demanding more flexibility in laws.
- The labour laws are the **only one factor affecting business investment decisions.** In addition to labour reforms, an enterprise needs a **growing market for its products**, **and capital**, **machinery**, **materials**, **land**, etc. to produce for the market.

The reforms failed to serve the primary purpose of labour laws i.e., to protect workers and not promote the interests of investors.

GLOBAL EMPLOYMENT TRENDS FOR YOUTH 2022

SYLLABUS: GS PAPER-III (EMPLOYMENT, GROWTH & DEVELOPMENT, INCLUSIVE GROWTH)

CONTEXT: A report titled "Global Employment Trends for Youth 2022: Investing in transforming futures for young people" was released by the International Labor Organization (ILO).

KEY HIGHLIGHTS OF THE REPORT

- As per the report, unemployment rate among youth aged 15-24 has reached to 15.6% across the world. It is three times of the unemployment rate among adult.
- Young women exhibited a much **lower Employment-to-Population ratio (EPR)** in comparison to young men who are 1.5 times more likely than young women to be employed.
- The Covid-19 Pandemic has worsened the numerous labor market challenges facing those aged between 15 and 24 years, who have experienced a much higher percentage loss in employment than adults since early 2020.
- The recovery in youth unemployment has been projected to diverge between low- and middle-income countries on the one hand and high-income countries on the other.
- High income countries are the only ones **expected to achieve youth unemployment rates close to those of 2019** by the end of 2022.
- Meanwhile, in the other country income groups, the rates are projected to remain more than 1% above their pre-crisis values.
- Young people were well-placed to benefit from the expansion of the so-called green and blue economies, centered around the environment and sustainable ocean resources, respectively.
- Achieving universal broadband coverage by 2030 may lead to a net increase in employment of 24 million new jobs worldwide, of which 6.4 million would be taken by young people.

INDIA SPECIFIC FINDINGS

- The youth employment participation rate declined by **0.9** % over the first nine months of **2021 relative to its value in 2020**, while it increased by 2 % for adults over the same period.
- Indian young women experienced **larger relative employment losses** than young men in 2021 and 2022.
- School closures lasted 18 months and among the 24-crore school-going children, only 8% of such children in rural areas and 23% in urban areas had adequate access to online education.

www.raceias.com

- School closures not only prevented new learning, but also led to the phenomenon of "learning regression," that is, children forgetting what they had learned earlier.
- In India, 92% of children on average lost at least one foundational ability in language and 82% lost at least one foundational ability in mathematics.
- The study found out that teachers in **non-state schools are often paid significantly less** than those in state schools.
- Domestic work is **a highly informal sector in India**, and wages are extremely low and young women and girls are vulnerable to abuse.

RECOMMENDATIONS

- Investment in various sectors must be accompanied by the promotion of decent working conditions for all young workers.
- The fundamental rights and protections (including freedom of association, the right to collective bargaining, equal pay for work of equal value, and freedom from violence and harassment at work) of the young workers should be ensured.

Young people should not only be provided with well functioning labor markets with decent job opportunities for those already participating in the labor market, but also with quality education and training opportunities for those yet to enter it.

UNDERSTANDING ETHANOL BLENDING

SYLLABUS: GS PAPER-III (ENVIRONMENTAL POLLUTION & DEGRADATION)

CONTEXT: Prime Minister Narendra Modi announced that India has achieved its target of blending 10% sugarcane extracted ethanol in petrol, ahead of schedule.

Addressing the nation from the Red Fort on the 75th Independence Day, he rooted for energy independence stating that India needs to be self-sufficient in its energy sector.

ABOUT ETHANOL BLENDING

- Ethanol is an agricultural by-product which is obtained from the processing of sugar from sugarcane, but also from other sources such as rice husk or maize.
- Blending ethanol with petrol to burn less fossil fuel while running vehicles is called ethanol blending.
- Currently, 10% of the petrol that powers our vehicle is ethanol.
- India's aim is to increase this ratio to 20% originally by 2030 but in 2021, when NITI Aayog put out the ethanol roadmap, that deadline was advanced to 2025.

SIGNIFICANCE OF ETHANOL BLENDING

- Ethanol blending will help bring down India's share of oil imports (almost 85%) with considerable amount of our precious foreign exchange.
- More ethanol output would help increase farmers' incomes.
- Ethanol is a less polluting fuel and offers equivalent efficiency at a lower cost than petrol.

ABOUT FIRST-GENERATION AND SECOND-GENERATION ETHANOL

• The first-generation ethanol or 1G refers to the procurement of ethanol produced **molasses**.

• On the other hand, ethanol produced from other sources such as **rice straw**, **wheat straw**, **corn cobs**, **corn stover**, **bagasse**, **bamboo**, **and biomass**, is referred to as second-generation ethanol.

CHALLENGES INVOLVED

- The domestic production of ethanol is not sufficient to meet the demand for ethanol for blending with petrol. The sugar mills lack the financial stability to invest in biofuel plants.
- The report published by NITI Aayog points that the two-wheelers and passenger vehicles
 that are being made presently in the country "are designed optimally for E5 (5 percent
 ethanol blend with petrol) while rubber and plastic components are "compatible with
 E10 fuel".
- While India has become one of the top producers of ethanol, it lags the top producers- the USA and Brazil, in terms of water usage.
- The limited availability of sugarcane affects the ethanol blending in the country. To achieve a 20% blend rate, almost one-tenth of the existing net sown area will have to be diverted for sugarcane production. Any such land requirement is likely to put a stress on other crops and has the potential to increase food prices.
- The production ethanol from crop residue can be a suitable alternative but the annual capacity of biorefinery is not enough to meet the 5% petrol-ethanol blending requirement.

Moreover, ethanol, being a highly flammable liquid marks obligatory safety and risk assessment measures during all phases of production, storage, and transportation, thus increasing the cost and risk factor.

ARCTIC WARMING

SYLLABUS: GS PAPER-III (ENVIRONMENT POLLUTION & DEGRADATION)

CONTEXT: A recent study shows out that the Arctic is heating four times faster than the rest of the planet.

The warming is more concentrated in the Eurasian part of the Arctic, where the Barents Sea

north of Russia and Norway is warming at an alarming rate-seven times faster than the global average.

Recent studies show that the region is fast changing and that the best of the climate models may not be able to capture the rate of changes and predict it accurately.

ABOUT ARCTIC AMPLIFICATION

- Any change in the surface air temperature and the net radiation balance tend to produce larger changes at the north and south poles. This phenomenon is known as polar amplification.
- Such changes are more pronounced at the northern



latitudes and are known as the Arctic amplification.

CAUSES OF ARCTIC AMPLIFICATION

- **Global Warming:** The long-term heating of the earth's surface, expedited due to anthropogenic forces since pre-industrial times has increased the average temperature of the planet by 1.1 degrees Celsius.
- Ice Albedo Feedback: Sea ice and snow have high albedo (measure of reflectivity of the surface), implying that they can reflect most of the solar radiation as opposed to water and land. In the Arctic's case, global warming is resulting in diminishing sea ice. As the sea ice melts, the Arctic Ocean will be more capable of absorbing solar radiation, thereby driving the amplification.
- Lapse Rate Feedback: The lapse rate or the rate at which the temperature drops with elevation decreases with warming.
- Studies show that the ice albedo feedback and the lapse rate feedback are responsible for 40% and 15% of polar amplification, respectively.
- Water Vapor Feedback: The heat-trapping effect of water in the air validates the role of the gas as a critical component of climate change.
- Ocean Heat Transport: The ocean transports vast amounts of heat around the planet, helping to regulate regional climate. Enhanced ocean heat transport into the Arctic is linked to stronger future Arctic warming and polar amplification.

WHAT DO THE PREVIOUS STUDIES SAY?

- The earlier studies have shown that the Arctic was warming at twice the global rate prior to the beginning of the 21st century.
- The Inter-governmental Panel on Climate Change: released a 'Special Report on the Ocean and Cryosphere in a Changing Climate' in 2019, according to which the "Arctic surface air temperature has increased by more than double the global average over the last two decades."
- The Arctic Monitoring and Assessment Programme (AMAP): warned that the Arctic has warmed three times quicker than the planet, and the chance of the sea ice completely disappearing in summers is 10 times greater if the planet is warmer by two degrees Celsius above the pre-industrial levels.
- The report also said that the average annual temperature in the region increased by 3.1 degrees Celsius compared to the 1 degree Celsius for the planet.
- The recent studies have shown that the mean Arctic amplification saw steep changes in 1986 and 1999, when the ratio reached 4.0, implying four times faster heating than the rest of the planet.

CONSEQUENCES OF ARCTIC WARMING

- **Ice sheet is melting:** Greenlandic ice sheet holds the second largest amount of ice, after Antarctica. In 2019, this was the single biggest cause for the rise in the sea level i.e., about 1.5 meters.
- Changes in the nature of water: The acidification of water accompanied by changes in the salinity levels, is impacting the biodiversity, including the marine as well as the dependent species.
- **Increase in rainfall:** The warming has increased the incidence of rainfall which in turn is affecting the availability and accessibility of lichens to the reindeer.
- **Death of fauna:** The Arctic amplification has resulted in the widespread starvation and death among the Arctic fauna.

RACE IAS www.raceias.com Page 54 of 80

- **Permafrost thawing:** It release carbon and methane, the major greenhouse gases responsible for global warming.
- **Disease outbreak:** The melt will release long-dormant bacteria and viruses that were trapped in the permafrost giving rise to potential diseases. For instance, Permafrost thaw led to an **anthrax outbreak in Siberia in 2016**, whereby 2,00,000 reindeer succumbed.

IMPACT ON INDIA

- The link between the changing Arctic and Indian monsoons is growing in importance due to the extreme weather events the country faces, and the heavy reliance on rainfall for water and food security.
- A study titled 'A possible relation between Arctic Sea ice and late season Indian Summer Monsoon Rainfall Extremes' published in 2021 by a group of Indian and Norwegian scientists found that the reduced sea ice in the Barents-Kara Sea region can lead to extreme rainfall events in the latter half of the monsoons.
- The changes in the atmospheric circulation due to diminishing sea ice combined with the warm temperatures in the Arabian Sea contribute to enhanced moisture and drive extreme rainfall events.

According to **World Meteorological Organization's**, **'State of Global Climate in 2021'**, sea level along the Indian coast is rising faster than the global average rate due to melting of sea ice in polar regions, especially the Arctic.

PRELIMS FACTS

CRAFT VILLAGE

- Under the programme "Linking Textile with Tourism," eight craft villages have been taken up to promote craft and tourism at a single location.
- These villages are Raghu Rajpur (Odisha), Tirupati (Andhra Pradesh), Vadaj (Gujarat), Naini (Uttar Pradesh), Anegundi (Karnataka), Mahabalipuram (Tamil Nadu), Taj Ganj (Uttar Pradesh), and Amer (Rajasthan).
- **Aim:** It will develop handicrafts as a sustainable and remunerative livelihood option for artisans in the cluster.
- A Craft Village has been established to bridge the gap between rural and urban communities.
- The objective is to provide a platform for learning and sharing rare and exclusive crafts, which finally helps craftspeople and their communities.
- Through exclusive craft workshops, artisans get a chance to connect with consumers, industry, and patrons.

PARYUSHAN PARV

- It is a Jain festival in which Jain Monks and Nuns stay with the community and provide them instructions and guidance. It is also a festival of "Forgiveness."
- It is usually celebrated in August or September (rainy season).
- During Paryushan, Jains increase their **level of spiritual intensity often using fasting and prayer/meditation to help.**

RACE IAS www.raceias.com Page 55 of 80

- The five main vows are emphasized during this time Ahimsa (Non-violence), Satya (Truth), Asteya (Non-stealing), Brahmacharya (Chastity), Aparigraha (Non-possession).
- Pratikraman is also performed by many Jains during the festival. The word Pratikraman is made from the combination of two words, 'Pra' meaning return and 'atikraman' meaning violation.

PURPLE REVOLUTION

- The **Aroma Mission**, popularly referred to as **"Lavender or Purple Revolution,"** has started from J&K and transformed the lives of farmers who are able to grow lavender, make lucrative profit and improve their lives.
- The Aroma Mission is envisaged to bring transformative change in the aroma sector through desired interventions in the areas of agriculture, processing, and product development for fueling the growth of aroma industry and rural employment.
- Objectives:
- 1. To promote the cultivation of aromatic crops for essential oils.
- 2. To enable Indian farmers and the aroma industry to become global leaders.
- 3. To provide benefits to the farmers in achieving higher profits, utilization of waste lands and protection of their crops from wild and grazing animals.
- 4. Provided employment to women farmers.
- Nodal Agencies: CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow.
- Aromatic Plants include Lavender, Damask rose, Mushk Bala, etc.

MUNSHI PREMCHAND

- Munshi Premchand, Hindustani literature (Upanyas Samrat) and Indian writer (novel writer, story writer, and dramatist), was born in the year 1880 on the **31st of July in the Lamhi village (near Varanasi).**
- He is a famous writer of the early 20th century. He died on the 8th of October in 1936 after serving people his great writings.
- Premchand was the first Hindi author whose writings prominently featured realism, depicting rationalistic outlook.
- His work arouses the public awareness about various social issues. His works often depict the
 menace of corruption, child widowhood, prostitution, feudal system, poverty, colonialism, and
 freedom struggle. His novels describe the problems of the poor and the urban middle-class.
- Godaan (1936) was Munshi Premchand's last completed work and is accepted as his best novel.

ALPHA FOLD

- It is an artificial intelligence (AI) tool, developed by DeepMind Technologies (Google sister company), that has predicted and published the structures of nearly all proteins.
- Proteins are commonly referred to as building blocks of life, made up of a combination of amino acids.

RACE IAS www.raceias.com Page 56 of 80

• Researchers can use Alpha Fold to advance their work on critical issues including sustainability, food insecurity, and neglected diseases.

MOLECULAR MOTOR

- Scientists have built a molecular-scale motor using the DNA origami method (involves folding of DNA to create 2D and 3D objects at nanoscale).
- Molecular motors are a class of proteins that drive intracellular movement by converting chemical energy to mechanical work.
- Some examples of the role of molecular motors in our bodies are muscle contractions, mitosis cell division etc.

MILITARY EXERCISES

- AL NAJAH-IV: It is a joint military exercise between the Indian Army and Royal Army of Oman.
- Ex VINBAX: It is a bilateral army exercise between India and Vietnam.

INVASIVE SPECIES IN NEWS

VILAYATI KIKAR: Delhi is implementing ecological restoration of its central ridge that involves replacing invasive species Vilayati Kikar (Prosopis juliflora) with indigenous species.

A native of South and Central

America, it was introduced in India by Britishers to meet the fuel and wood requirement of the rural poor as well as to restore degraded lands.

It has weed like properties-growth in arid conditions, killing any competition, and water table depletion.

AMERICAN BULLFROF AND BROWN

TREE SNAKE: As per a recent study, these species cost the world an **estimated \$16 billion** between 1986



and 2020, by causing problems ranging from crop damage to power outages.

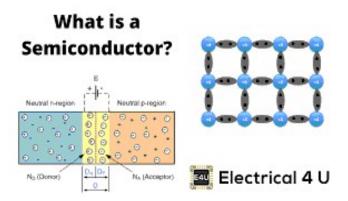


ORUNUDOI SCHEME

- Some 22 lakh beneficiaries of the Orunodoi scheme in Assam will get ₹18 extra for August to buy a National Flag or two.
- Launched in December 2020 by the Assam Government, Orunudoi scheme is one of the most popular schemes of the state.
- Under the scheme, a monthly assistance of Rs 1,000 is transferred to women members of marginalized families of Assam.
- On account of being a DBT, or a Direct Benefit Transfer scheme, the money is credited directly to the bank account of the woman head of a family because they are "primary caretakers of the household."
- The scheme gives "a choice to the poor and needy households on how they want to spend their money."

GUJARAT SEMICONDUCTOR POLICY 2022-2027

- Gujarat is the first state in India to release a dedicated semiconductor policy.
- The government has also proposed to develop a special 'Semicon City' as a part of the Dholera Special Investment region.
- Under the Gujarat Semiconductor Policy 2022-27, Gujarat Government will provide heavy subsidies on power, water and land tariffs for entrepreneurs who are interested in investing in semiconductors or display fabrication manufacturing in Gujarat.
- A semiconductor is a substance that has specific electrical properties that enable it to serve as a foundation for computers and other electronic devices. It is typically a solid chemical element or compound that conducts electricity under certain conditions but not others.



NAGAR VAN SCHEME

- On the occasion of World Environment Day (5th June), the government announced implementation of the Nagar van scheme in the year 2020, to develop 200 Urban Forests across the country in the next five years.
- The scheme enforces people's participation and collaboration between Forest Department,
 Municipal bodies, NGOs, Corporates, and local citizens.
- Under this scheme, a minimum of 20 hectares of forests will be created in the city.
- These forests will come up either on existing forest land or any other vacant land offered by urban local bodies.
- Van Udyan once established will be maintained by the State Government.
- This scheme is fully funded by CAMPA (Compensatory Afforestation Fund Act, 2016) funds.

ARCHAEOLOGICAL SURVEY OF INDIA (ASI)

- Regular monitoring is being done by ASI to assess damage by climate change to heritage sites by any atmospheric agents and natural causes.
- The Archaeological Survey of India or ASI is an attached agency of the Ministry of Culture of the Government of India.
- It engages in archaeological research and conservation, and protection and preservation of ancient monuments and archaeological sites in the country.
- ASI regulates all archaeological activities conducted in the country through the provisions of the Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act), 1958.
- It also regulates the Antiquities and Art Treasure Act, 1972.
- The ASI is headed by a Director-General and is headquartered in New Delhi.
- ASI has more than 3500 protected monuments and archaeological sites of National Importance that it protects and preserves.

LINGARAJ TEMPLE

- Lingaraj Temple, built in **11th century AD**, is **dedicated to Lord Shiva**, and is considered the largest temple of the city Bhubaneswar (Odisha).
- It is believed to have been built by the Somvanshi King Yayati I.
- It is built of red stone and is a classic example of Kalinga style of architecture.

RACE IAS www.raceias.com Page 59 of 80

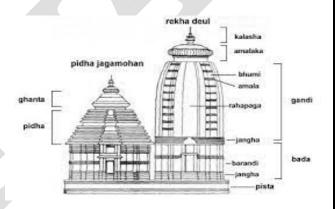
- The style used to build the Lingaraja temple is Deula style.
- There are 4 components to the architecture of Lingaraj temple bhoga-mandapa (hall of offerings), Nata mandira (festival hall), Jagamohana (assembly hall), and vimana (structure containing the sanctum).
- The deity of Lingaraja Temple is worshipped in the combined form of Shiva and Vishnu also known as **Harihara**.

PRESIDENT'S COLORS AWARD

- Vice-President presented the prestigious 'President's Colors' for the Tamil Nadu Police.
- It is the highest award bestowed on a military unit/State Police in India in recognition of its exceptional services to the nation.
- It acknowledges the spirit of bravery, courage, commitment, professionalism, integrity, and service to humanity.
- It is popularly called 'Rashtrapati ka Nishan.'

DROUGHT

- It refers to a period of unusually dry weather, crop damage and water supply shortages.
- The State Government is the final authority when it comes to declaring a region as drought affected.
- The Ministry of Agriculture published a manual in 2016 in respect of managing drought. It suggests a three-step approach:



- 1. The first step is to look at two mandatory indicators: Rainfall **deviation and dry spell.**Depending on the extent of the deviation, and whether there is a dry spell, the manual specifies various situations that may or may not be considered a drought trigger.
- 2. The second step is to look at four impact indicators agriculture, vegetation indices based on remote sensing, soil moisture, and hydrology. Each impact can be assessed based on various indices.
- 3. The third step comes in after both previous triggers have been set off. In that event, States will conduct sample survey for ground in order to make a final determination of drought. The finding of field verification exercise will be the final basis for judging the intensity of drought as 'severe' or 'moderate.'
- Once a drought is determined, the state government needs to issue a notification specifying the geographical extent. The notification is valid for **six months unless de-notified earlier**.

CHANDLER WOBBLE

- On July 29, the Earth broke its record for the shortest day as it completed a **full spin in 1.59** milliseconds less than its standard 24-hour rotation.
- While scientists are yet to conclude reasons behind the downtrend in Earth's rotational speed, it is being attributed to Chandler Wobble.
- Chandler wobble refers to the change in the spin of Earth on its axis.



UDYAM PORTAL

- The registrations on Udyam Portal of the Ministry of Micro, Small and Medium Enterprises reached the landmark of 1 crore.
- It was launched in 2020 for the voluntary registration of MSMEs to avail benefits of the Ministry of MSME schemes and for Priority Sector Lending.
- This new portal assists the government in aggregating the data on the number of MSMEs in the country.
- The MSMEs are identified on the composite criteria of investment and annual turnover.
- It is fully digitalized and the registered MSME is issued an Udyam Registration Certificate.



FINANCIAL INCLUSION INDEX

- The Reserve Bank of India has released the Composite Financial Inclusion Index (FI-Index) for the year ended 31st March 2022.
- It is a comprehensive index incorporating details of banking, investments, insurance, postal as well as the pension sector in consultation with the government and respective sectoral regulators.
- It was developed by the RBI in 2021, without any 'base year', and is published in July every year.
- India's Financial Inclusion Index has improved to 56.4 from 53.9 in the previous year 2021.
- The improvement has been seen across all its sub-indices (Access, Usage and Equality).

HELLFIRE R9X MISSILE

- The US military used its 'secret weapon' the Hellfire R9X missile ('Ninja missile')— to kill Al Qaeda chief Ayman al-Zawahiri on the balcony of a safe house in Kabul.
- Better known in military circles as the **AGM-114 R9X**, **the Hellfire R9X is a US origin** missile known to cause minimum collateral damage while engaging individual targets.
- It weighs about 45 kg and the missile can also be launched from helicopters, aircraft and Humvees.
- The range of these missiles varies from 500 meters to 11 km.
- Hellfire means Heliborne, Laser, Fire and Forget Missile Al-Zawahiri, an Egyptian surgeon who had a \$25 million bounty on his head, had helped coordinate September 11, 2001, attacks that had killed 3,000 people.

ASTROBEE

• Astrobee is NASA's new free-flying robotic system.

RACE IAS www.raceias.com Page 61 of 80

- Astrobee also consists of a system that serves as a research platform that can be outfitted and programmed to conduct microgravity experiments. Thus, it will help to learn more about how robotics can benefit astronauts in space.
- The three free-flying robots are named Honey, Queen, and Bumble. The robots are shaped like cubes 12.5 inches wide.
- The Astrobee system consists of three cube-shaped robots, some software and a docking charging station used for recharging. They are about 32 centimeters wide.



- The three robots propel themselves using electric fans that allow them to fly through the microgravity environment of the International Space Station.
- The Astrobee robots are built on the **knowledge acquired from operating SPHERES** (Synchronized Position Hold, Engage, Reorient, Experimental Satellite) robots which have been operating on the International Space Station for over a decade.

PINGALI VENKAYYA

- Nation paid homage to Pingali Venkayya, the architect of India's National Flag.
- Born in **Krishna district of Andhra Pradesh**, he was a freedom fighter and a Gandhian who went on to become synonymous with the spirit of free and Independent India.
- He designed the new flag for **the National Congress Meeting in 1921**. It was officially adopted by the Indian National Congress in 1931.
- It served as a template on which the present national flag evolved.

BIOMINING

- According to a report, at Ghazipur dumpsite (Delhi), legacy waste that is bio-mined is only 6.86% of the total.
- Biomining is the process of using microorganisms (microbes) to extract metals of economic interest from rock ores or mine waste.
- Biomining techniques may also be used to clean up sites that have been polluted with metals.
- Metals extracted through bioleaching include: Gold, Copper, Silver, Cobalt, Uranium, Zinc, Nickel etc.

FORMATION OF FARMER PRODUCER ORGANIZATIONS (FPOs)

 The Government of India has launched the Central Sector Scheme for "Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)" in the year 2020 with a total budgetary outlay of Rs.6865 Crores which will leverage economies of scale, reduction of cost of production and enhance farmers' incomes thus playing a key role towards increasing the income of farmers.

- FPOs are **voluntary organizations** controlled by their farmer-members who actively participate in setting their policies and making decisions.
- They are open to all people able to use their services and willing to accept the responsibilities of membership, without gender, social, racial, political, or religious discrimination.
- FPOs operatives provide education and training for their farmer-members, elected representatives, managers, and employees so that they can contribute effectively to the development of their FPOs.
- FPOs in Gujarat, Maharashtra and Madhya Pradesh, Rajasthan and some other states
 have shown encouraging results and have been able to realize higher returns for their
 produce.

INDIA ADDS 10 MORE WETLANDS DESIGNATED AS RAMSAR SITES

- India is one of the contracting parties to Ramsar Convention, signed in Ramsar, Iran, in 1971.
- So far, 64 wetlands have been designated as Ramsar sites of international importance from India.

List of 10 new wetlands of India added to the Ramsar Sites list	
Koonthankulam Bird Sanctuary	
Gulf of Mannar Biosphere Reserve	Tamil Nadu
Vembannur Wetland Complex	
Vellode Bird Sanctuary	
Vedanthangal Bird Sanctuary	
Udhayamarthandapuram Bird Sanctuary	
Nanda Lake	Goa
Ranganathittu Bird Sanctuary	Karnataka
Sirpur Wetland	Madhya Pradesh
Satkosia Gorge	Odisha

HAR GHAR TIRANGA CAMPAIGN

- 'Har Ghar Tiranga' is a campaign under the aegis of Azadi Ka Amrit Mahotsav to encourage people to bring the Tiranga home and to hoist it to mark the 75th year of India's independence.
- Bringing the flag home collectively as a nation in the 75th year of independence thus becomes symbolic of not only an act of personal connection to the Tiranga but also an embodiment of our commitment to nation-building.

www.raceias.com

 The idea behind the initiative is to invoke the feeling of patriotism in the hearts of the people and to promote awareness about the Indian National Flag.

COMMONWEALTH GAMES

- Tejaswin clinched bronze after he cleared 2.22m in his first try.
- Tejaswin Shankar's Bronze in High Jump is also India's first in Track and Field at Commonwealth Games, 2022.
- It is a member-based organization that receives no funding from the government and exists to administer, control, and coordinate the participation of

turbine electricity generator transmission cable water vapor fresh condenser evaporator water drain drain water warm surface seawater cold deep 25 - 35°C seawater 3 - 7°C

sports events and the athletes, along with the officials of the commonwealth game.

- The 2022 Commonwealth Games are officially known as XXII Commonwealth Games and are known as Birmingham 2022.
- In 1881, a new idea of having multiple games at one sports event was introduced by Astley Cooper.
- The Commonwealth Games is also known as the Friendly Games.
- The Commonwealth Games are quadrennial which means it is held for four years.
- The Indian team for the Commonwealth Games consists of **322 members which include 72 team officials, 26 extra officials, nine contingent staff,** and three general managers.

OCEAN THERMAL ENERGY CONVERSION PLANT (OTEC) IN LAKSHADWEEP

- The National Institute of Ocean Technology is establishing an Ocean Thermal Energy Conversion (OTEC) plant with a capacity of 65 kilowatts (kW) in Kavaratti, the capital of Lakshadweep.
- Ocean thermal energy conversion (OTEC) is a process or technology for producing energy by harnessing the temperature differences (thermal gradients) between ocean surface waters and deep ocean waters.
- Energy from the sun heats the surface water of the ocean.
- In tropical regions, surface water can be much warmer than deep water.
- This temperature difference can be used to produce electricity and to desalinate ocean water.

CENTRAL DEPOSITORY SERVICES LIMITED (CDSL)

- The number of active demat accounts on CDSL crossed 7-crore mark.
- CDSL was founded in 1999 to fulfil the **goal of convenient**, **dependable**, **and secure depository services at affordable cost to all market participants**.

RACE IAS www.raceias.com Page 64 of 80

- Depository facilitates holding of securities in electronic form.
- A demat account helps investors hold shares and securities in an electronic format.
- CDSL was promoted by BSE Ltd. jointly with leading banks such as State Bank of India, Bank of India, Bank of Baroda, HDFC Bank, Standard Chartered Bank and Union Bank of India.

FLOORE TO THE PROPERTY OF THE





INDIAN VIRTUAL HERBARIUM

- Developed by scientists of the Botanical Survey of
 - India (BSI), the herbarium was inaugurated by Union Minister of Environment Forest and Climate Change Bhupendra Yadav in Kolkata on July 1. Since then, the portal ivh.bsi.gov.in has had nearly two lakh hits from 55 countries.
- Each record in the digital herbarium includes an image of the preserved plant specimen, scientific name, collection locality, and collection date, collector name, and barcode number.
- The digital herbarium includes features to extract the data State-wise, and users can search
 plants of their own States, which will help them identify regional plants and in building
 regional checklists.

PASMANDA MUSLIMS

- Recently, Pasmanda Community has gained the attention of many political parties for inclusive growth and eradication of intra caste discrimination.
- 'Pasmanda,' a Persian term meaning "those who have fallen behind" refers to Muslims belonging to the shudra (backward) and ati-shudra (Dalit) castes.
- It was adopted as an oppositional identity to that of the dominant **Ashraf Muslims (forward castes) in 1998 by the Pasmanda Muslim Mahaz,** a group which worked in Bihar.
- Pasmandas encompass those who are socially, educationally, and economically backward and make up most of the Muslim community in the country.
- The term "Pasmanda" is majorly used by Muslim associations in Uttar Pradesh, Bihar, and other parts of India to define themselves as Muslim communities historically and socially oppressed by caste.
- Backward, Dalit and tribal Muslim communities are now organizing under the identity of Pasmanda. These communities include: Kunjre (Raeen), Julahe (Ansari), Dhunia (Mansuri), Kasai (Qureishi), Fakir (Alvi), Hajjam (Salmani), Mehtar (Halalkhor), Gwala (Ghosi), Dhobi (Hawari), Lohar-Badhai (Saifi), Manihar (Siddiqui), Darzi (Idrisi), Vangujjar, etc.

KONDAPALLI TOYS

• Location: Kondapalli Toys are the toys made of wood in Kondapalli village of Krishna district, Andhra Pradesh. Bommala Colony translates to Toys Colony in Kondapalli is the place where the art of crafting takes place.

RACE IAS www.raceias.com Page 65 of 80

- Recognition: It was registered as one of the geographical indication handicrafts from Andhra Pradesh as per Geographical Indications of Goods (Registration and Protection) Act, 1999.
- Depiction: The artisans mainly work on producing figures of mythology, animals, birds, bullock carts, rural life etc., and the most notable one is Dasavataram, dancing dolls etc.
- Aryakhastriyas: The artisans who make the toys
 are referred to as Aryakhastriyas (also known as Nakarshalu), who have their mention in the
 Brahmanda Purana.
- **Toy crafting:** The Kondapalli toys are made from soft wood known as Tella Poniki which are found in nearby Kondapalli Hills.
- The wood is first carved out and then the edges are smooth finished.

The later step involves coloring with either oil and water-colours or vegetable.

INSIDER TRADING

- SEBI has come up with a new framework that will prevent company insiders from dealing in shares during the closure of the trading window.
- Insider trading is defined as a malpractice wherein trade of a company's securities is undertaken by people who by virtue of their work have access to the otherwise nonpublic information which can be crucial for making investment decisions.

BORRA CAVES

- The Borra Caves, also known as Borra Guhalu, are in the Visakhapatnam district of Andhra Pradesh, among the Anantha Giri hills of the Araku Valley.
- These caves are thought to be more than **150 million years old**. The cave's name is derived from a hole in the roof above its middle area.
- William King George of the Geological Survey of India found the caverns in 1807.
- There are various legends surrounding the caverns' discovery, which the tribals Jatapu,
 Porja, Kondadora, Nookadora, Valmiki, etc. who live in the communities surrounding the caves tell.
- The Gosthani River flows through the caves.
- Shiva-Parvathi, Rishi's Beard, Mother-Child, Crocodile, Human Brain, Tiger, and Cow's Udder are some of the stalactite and stalagmite formations found in these caves.
- There is also a naturally formed Shivalinga deep inside the cave, and tribal people from the surrounding areas (Jatapu, Porja, Kondadora, and Nookadora) flock to the caves every Shivaratri to pray to the Linga.

THE GREAT BARRIER REEF

• The highest levels of coral cover, within the past 36 years, has been recorded in the northern and central parts of Australia's Great Barrier Reef (GBR), according to the annual long-term monitoring report by the Australian Institute of Marine Science (AIMS).

RACE IAS www.raceias.com Page 66 of 80

- It is the world's most extensive and spectacular coral reef ecosystem composed of over 2,900 individual reefs and 900 islands.
- The reef is located in the Coral Sea (North-East Coast), off the coast of Queensland,
 Australia.
- It can be seen from outer space and is the world's biggest single structure made by living organisms.

• This reef structure is composed of and built by billions of tiny organisms, known as coral

polyps.

- They are made up of genetically identical organisms called polyps, which are tiny, softbodied organisms. At their base is a hard, protective limestone skeleton called a calicle, which forms the structure of coral reefs.
- These polyps have microscopic algae called zooxanthellae living within their tissues. The corals and algae have a mutualistic (symbiotic) relationship.

• It was selected as a World Heritage Site in 1981.



PORTULACA OLERACEA

Scientists integrated two metabolic pathways to produce a novel

type of photosynthesis that enables the weed to withstand drought while remaining highly productive.

 A common weed and succulent—Portulaca oleracea, commonly known

as purslane, offers important clues about creating drought-tolerant crops in a world beset by climate change.

 Purslane has the evolutionary adaptations that help it to be both highlyproductive and drought tolerant, an unlikely combination for a plant.

 Other uses: Portulaca oleracea has been used as a folk medicine in many countries, acting as a febrifuge, antiseptic, and

vermifuge.

TETRAPOD BASED SEA WALL FOR REDUCING COASTAL EROSION

- Under the government's Coastal conservation project, a tetrapod-based seawall has been implemented in Kerela's Ernakulam district.
- Benefits: The conventional seawall of Chellanam failed to check sea ingress which



PURSLAME

A delicious "weed" packed with vitamins & omega 3's!



resulted in massive ruin and destruction. Now, due to the tetrapod-based seawall, stretches that were most vulnerable to sea erosion have remained by and large safe.

• Other solution: Beach nourishment (reducing the depth of the sea along the shore) offers a permanent solution.

PARVAZ MARKET LINKAGE SCHEME

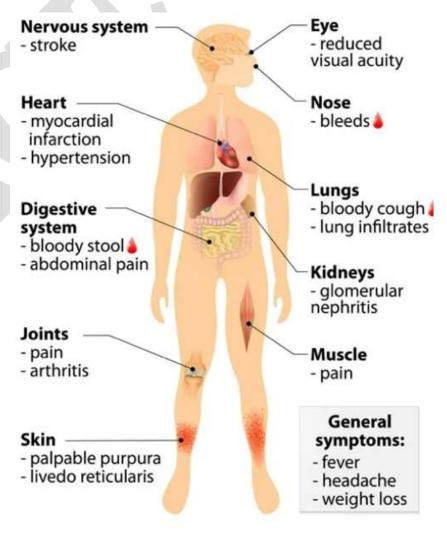
- The government of Jammu & Kashmir launched the "PARVAZ Market
- · Linkage Scheme".
- This is an innovative Market Linkage scheme, that has tremendous potential to uplift the economic conditions of farmers across Jammu and Kashmir.
- Under the scheme, the government will provide a subsidy of 25% on freight charges, in a bid to carry perishable fruits through Air Cargo. The subsidy will be provided to farmers through the Direct Benefit Transfer mode.

INDIA KI UDAAN INITIATIVE

- This initiative seeks to celebrate the unwavering & undying spirit of India and its achievements in the last 75 years.
- It aims to take citizens to the rich culture & heritage of India, by means of its rich archives and featuring artistic illustrations.
- It is being implemented by Google Arts and Culture, in association with the Ministry of Culture.

WORLD TRIBAL DAY

- World Tribal Day or International Day of the World's Indigenous Peoples is observed on 9th August every year.
- It is aimed at promoting and protecting the rights of the world's indigenous population and to acknowledge the contributions that indigenous people make towards world issues such as environmental protection.
- The day recognizes the first meeting of the United Nations Working Group on Indigenous Populations in Geneva in 1982.
- It has been celebrated every year since 1994,



RACE IAS www.raceias.com Page 68 of 80

in accordance with the declaration by the United Nations.

 To date, numerous indigenous peoples experience extreme poverty, marginalization, and other human rights violations.

• The theme for 2022 is "The Role of Indigenous Women in the Preservation and Transmission of Traditional Knowledge".

VASCULITIS

 Vasculitis involves inflammation of the blood vessels. The inflammation can cause the walls of the blood vessels to thicken, which reduces the width of the passageway through the vessel. If blood flow is restricted, it can result in organ and tissue damage.



- There are many types of vasculitis, and most of them are rare. Vasculitis might affect just one organ, or several. The condition can be short term or long lasting.
- Symptoms: Fever, Headache, Fatigue, Weight loss, General aches, and pains.
- The exact cause of vasculitis is not fully understood. Some types are related to a person's genetic makeup. Others result from the immune system attacking blood vessel cells by mistake. Possible triggers for this immune system reaction include: Infections, such as hepatitis B and hepatitis C; Blood cancers; Immune system diseases, such as rheumatoid arthritis, lupus, and scleroderma; Reactions to certain drugs.

LANGYA HENIPAVIRUS (LayV)

- A new virus that can jump from animals to humans has been detected in China with 35 people already infected. It has been called Langya henipavirus (LayV) and has been found across two provinces in eastern China.
- LayV is an example of a Zoonotic Henipavirus. The virus is in the Henipavirus family. Two
 species have been identified before; the Hendra virus first detected in the Brisbane
 suburb of the same name and Nipah virus, both cause severe infections and are
 sometimes fatal.
- The World Health Organization classifies **Henipavirus as a biosafety Level 4 threat. Case fatality rates** range between **40 and 75 per cent**, data suggests.
- Test results from more than two dozen wild animals suggests the shrew a small mole-like mammals - might be a natural reservoir of LayV.
- Existing patients had a history of contact with animals.
- Symptoms of LayV include: fever, fatigue, a cough, loss of appetite, muscle pain, nausea, headache, and vomiting.

NALLATHAMBY KALAISELVI

 The first woman to head the Council for Scientific and Industrial Research (CSIR), Dr Nallathamby Kalaiselvi, is credited with developing novel materials to be used as electrodes in lithium-ion batteries that improve their storage capacities.

CHESS OLYMPIAD 2022

RACE IAS www.raceias.com Page 69 of 80

- Koneru Humpy, Harika Dronavalli, Tania Sachdev, R Vaishali and Bhakti Kulkarni a delightful mix of long-serving mould breakers and young prodigies were the top players in the women's section.
- Harika Dronavalli played Chess Olympiad Medal While Being 9 Months Pregnant. They still
 made history as the first-ever Indian women's team to win a medal at an Olympiad.

TECHNO-NATIONALISM

- Report "Internet in India" by the Internet and Mobile Association of India (IAMAI) has recently highlighted this word.
- Definition: Techno-nationalism is a way of understanding how technology affects the society and culture of a nation.
- **Aim:** It is aimed at the use of technology to advance nationalist agendas, with the goal of promoting connectedness and a stronger national identity.
- Examples:

Use of social media in election campaign: The 2014 elections where the first-time internet streaming played a significant role in disintermediating broadcast media. The 2019 elections were marked by the extensive role played by social media platforms such as Facebook and WhatsApp.

Indonesia is not just controlling online gaming apps and services but also actively promoting indigenously developed gaming apps.

From Kenya to Brazil the countries are witnessing pre-emptive actions to insulate the electoral processes of their respective democracies from the spread of viral fake news and disinformation on WhatsApp.

China: created digital surveillance; restricted online gaming for children. From securing semiconductor supply chains to regulating data flows, techno-nationalism is on the political agenda of western democracies and eastern nations alike.

EKLAVYA MODEL RESIDENTIAL SCHOOLS (EMRS)

- Samvaad' (a virtual interaction) with the students of EMRS was organized by the Ministry
 of Tribal Affairs.
- It was started in 1997-98, to provide quality education (middle and high-level education) to scheduled tribe (ST) students in remote areas (with high tribal population), in form of residential schools.
- Every block with more than 50% ST population and at least 20,000 tribal persons will have an EMRS.
- Provision: Set up by grants provided under Article 275(1) of the Constitution. Set up as an autonomous society under the ministry of tribal affairs similar to Navodaya Vidyalaya Samiti to run the EMRSs.

INTERNATIONAL YOUTH DAY

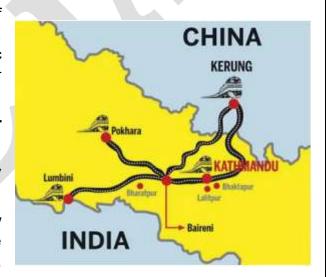
- National Youth Day (NYD) is held every year on 12th January to observe the birth anniversary of Swami Vivekananda.
- In 1999, the United Nations decided to commemorate International Youth Day every year on 12th August.

RACE IAS www.raceias.com Page 70 of 80

- In 1984, the Indian Government first declared to celebrate the birthday of Swami Vivekananda as National Youth Day. Since then, the day has been celebrated as National Youth Day all over the country.
- The day is celebrated to highlight the youths who are the future of our country and to commemorate the birth anniversary of Swami Vivekananda who always motivated the youth of the country and spoke about the right use of the youth in the development of the country.
- Theme 2022: It is all in the mind.

SMILE-75 INITIATIVE

- The Ministry of Social Justice & Empowerment has launched the "SMILE-75 Initiative".
- SMILE (Support for Marginalized Individuals for Livelihood and Enterprise Scheme) is aimed at making cities/towns and municipal areas begging-free and comprehensive rehabilitation of the persons engaged in the act of begging.
- Under the initiative, seventy-five (75) Municipal Corporations in collaboration with NGOs and other stakeholders will cover several comprehensive welfare measures for persons who are engaged in the act of begging.
- Measures taken: rehabilitation, provision of medical facilities, counselling, awareness, education, skill development, economic linkages, and convergence with other Government welfare programmes etc.
- According to the Census 2011 total number of beggars in India is over 4 lakhs.
- West Bengal tops the chart followed by Uttar Pradesh and Bihar.
- Legal Status: Though there is no central law on begging, some states have adopted the Bombay Prevention of Begging Act, 1959, which penalises beggary.



TRANS-HIMALAYAN NETWORK

- China and Nepal have agreed to build the so-called Trans-Himalayan Multidimensional Connectivity Network.
- The network, under China's Belt and Road initiative, will involve the building of railways and communication networks.
- Other networks: The BCIM economic corridor aims to connect Kolkata with Kunming, the capital of the Yunnan province through Myanmar and Bangladesh.
- It envisages the formation of a thriving economic belt, focusing on cross-border transport, energy, and telecommunication networks.

BUTTERFLY MINE

• The UK Ministry of Defence, in its intelligence assessment of the ongoing war in Ukraine, has and sounded an alarm on the possible use of PFM-1 series 'Butterfly Mines' by the Russian military in Donetsk and Kramatorsk.

- These mines have the potential to inflict widespread casualties amongst both the military and the local civilian population.
- PFM-1s were used to devastating effect in the Soviet-Afghan War where they allegedly maimed high numbers of children who "mistook them for toys."
- The PFM-1 and PFM-1S are two kinds of anti-personnel landmines that are commonly referred to as 'Butterfly mines' or 'Green Parrots'. These names are derived from the shape and colour of the mines.



- The main difference between the PFM-1 and PFM-1S mine is that the latter comes with a self-destruction mechanism which gets activated within one to 40 hours.
- It is extremely sensitive to touch and just the act of picking it up can set it off. Because of the
 lesser explosive packed in this small mine, it often injures and maims the handler rather than
 killing them. These mines are also difficult to detect because they are made of plastic
 and can evade metal detectors.
- These mines can be deployed in the field of action through several means, which include being dropped from helicopters or through ballistic dispersion using artillery and mortar shells.

PARTITION HORRORS REMEMBRANCE DAY

- India commemorated Sunday, August 14, as Partition Horrors Remembrance Day. The commemoration was announced by Prime Minister Narendra Modi on this date last year.
- This date also marks Pakistan's Independence Day.
- The partition of India into India and Pakistan led to grave violence and communal riots, loss
 of property, and extreme upheaval in the weeks and months around August 15, 1947. The
 Partition is acknowledged as one of the most violent and abrupt displacements in the recent
 history of the world.
- Estimates of the numbers of those killed vary; according to the official document, it could be between 500,000 to over a million, but "the generally accepted figure stands at around 500,000".
- The basic idea of remembering events such as the Partition, or other days that relate to a
 genocide or mass violence such as the Holocaust Remembrance Day, is usually to reflect
 and learn the lessons from them and not let them be repeated in the future; and to
 honour the memory of victims.

UDARSHAKTI

- It is a bilateral air exercise between India and Malaysia at Kuantan (Malaysia).
- Other exercises: Joint military exercises "Harimau Shakti" are held annually between the two countries.

ADVANCED TOWED ARTILLERY GUN SYSTEM (ATAG)

- An indigenously developed howitzer gun, ATAG, became part of the 21-gun salute during the Independence Day ceremony for the first time.
- The ATAGS is an indigenous 155 mm x 52 calibre howitzer gun developed by the Defence Research and Development Organisation (DRDO) with its Pune-based facility Armament Research and



Development Establishment (ARDE) being the nodal agency.

CHRONIC FATIGUE SYNDROME

- Also known as myalgic encephalomyelitis (ME/CFS), chronic fatigue syndrome, is a serious and debilitating disease that affects the nervous system, the immune system and the body's production of energy.
- Its causes are still unknown. However, the potential triggers would include viral or bacterial infection, hormonal imbalances and genetic predispositions.
- There is no specific test for the disease, and doctors rely on medical examinations, blood, and urine tests.
- The biggest tell-tale symptom is a significantly lowered ability to do activities that were performed before the illness. This is accompanied by at least 6 months (or longer) of debilitating fatigue that is more severe than everyday feelings of tiredness.



- Other symptoms include trouble sleeping, difficulty in thinking, memory retention and concentration, dizziness/light-headedness, headaches, muscle pain, joint ache, flu-like symptoms, tender lymph nodes and digestive issues.
- There is no specific cure or approved treatment. Instead, doctors recommend ways to deal with the symptoms of the disease.

AGASTHYAMALAI ELEPHANT RESERVE

- The proposal to designate 1,197.48 sq.km in Kanyakumari and Tirunelveli as the Agasthya Malai Elephant Reserve was approved by the Union Environment Ministry.
- Tamil Nadu will oversee this Agasthya Malai Elephant Reserve, which is the fifth elephant reserve.
- It will help connect the populations to other areas in the Srivilliputhur Meghamalai tiger reserve and with the Periyar landscapes.
- Agasthya Malai Biosphere Reserve is situated at the southern-most end of the Western Ghats and spread over two southern states Kerala and Tamil Nadu.

RACE IAS www.raceias.com Page 73 of 80

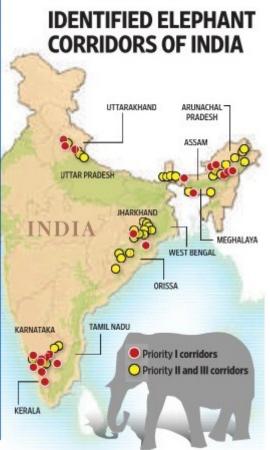
- It is named after the Agastya Mala peak that rises up to almost 1868 metres above sea level, in Thiruvananthapuram, Kerala.
- In March 2016, it was included in the World Network of Biosphere Reserves of UNESCO.
- It covers Peppara and Shendurney wildlife sanctuaries and parts of the Neyyar sanctuary in Kerala and the Kalakad Mundanthurai Tiger Reserve of Tamil Nadu.
- It is home to the Kanikaran tribe, one of the oldest surviving ancient tribes in the world.

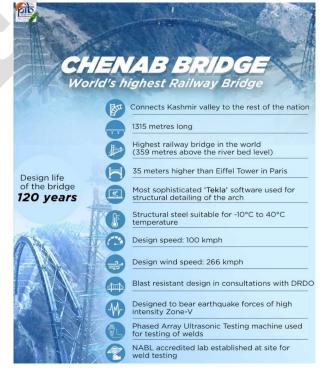
WORLD'S HIGHEST RAILWAY BRIDGE

- Coinciding with Azadi Ka Amrit
 Mahotsav, the 'golden joint'
 connecting two ends of the overarch deck
 of the world's highest railway bridge over
 Chenab River was inaugurated in Reasi
 district of Jammu and Kashmir.
- Constructed at a cost of Rs. 1,250 crore, the
 1.3-km-long bridge is located 359 meters above the Chenab riverbed and it is 30 meters higher than Eiffel Tower in Paris.
- It will provide all-weather rail connectivity to Kashmir.
- The highest single-arch railway bridge in the world is a unique example in modern engineering, constructed by Mumbaibased infrastructure major Afcons and it is part of the ambitious Udhampur-Srinagar-Baramulla rail link (USBRL) project carried out by Northern Railways.

	released to	
_	nments unde illy sponsore	
	ne 'Project El	
111 201	0-11	

	(in ₹ lakhs)
Andhra Pradesh	15.00
Arunachal Prades	h 10.00
Assam	139.55
Chhattisgarh	75.00
Haryana	100.00
Jharkhand	80.00
Karnataka	300.76
Kerala	265.39
Maharashtra	29.00
Meghalaya	103.838
Nagaland	41.30
Orissa	113.50
Tamil Nadu	226.879
Tripura	
Uttarakhand	206.82
Uttar Pradesh	80.15
West Bengal	410.406
TOTAL 2,	197.593





NATURE INDEX

- The Nature Index provides a database of high-quality research output in natural as well as physical sciences at the institutional, national, and regional level of institutions from different countries.
- This index is compiled by **Nature Portfolio**, part of an academic publishing company called Springer Nature.
- The index records contributions to research articles, published across 82 high-quality natural science journals. These journals are selected by an independent group of researchers.

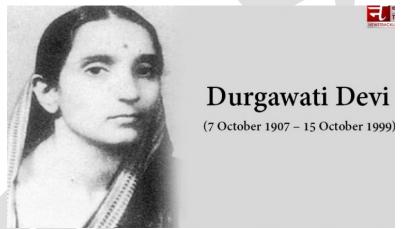
 As per the index, University of Hyderabad has secured first position among Indian Universities while it has been placed at 16th position among all institutions in academic sector.

DURGAWATI DEVI

- Durgawati Devi or Durga Bhabhi, also known as the **'The Agni of India'**, is remembered to this day as a threat to the British police.
- Born in October 1907, Devi was born in a well-to-do family of the modern-day district of Kushambi near Prayag raj in UP. She was married to Shri Bhagwati Charan Vohra of Lahore at the age of 11. Vohra belonged to a well-off family as well.
- Devi passed away on October 15, 1999, in Ghaziabad at the age of 92.

 She had tremendous influence on revolutionaries such as Bhagat Singh, Ashafaqullah and Chandra Shekhar Azad.

- Durgawati Devi was an active member of the Nau jawan Bharat Sabha, and she assisted in the escape of Bhagat Singh from Lahore after the Saunders killing (1928).
- Devi took it upon herself to assassinate Punjab's governor Malcolm Hailey following the arrest of some of the Indian revolutionaries. Devi was,



however, arrested after the failed attempt. Later upon release, she once again attempted to assassinate him but was again arrested and imprisoned for three years.

NAWROZ FESTIVAL

- Nowruz, or the Parsi New Year, is a religious festival commemorating the first day of Farvardin i.e., the first month of the Iranian solar/Zoroastrianism calendar.
- Various ethnolinguistic communities across the world celebrate this day which occurs each year around **March at the Spring Equinox**.
- This festival arrives 200 days later in India. It is **celebrated in the month of August as the Parsis here follow the Shahenshahi calendar** which does not consider leap years.
- It was included in the UNESCO's Representative List of Intangible Cultural Heritage of Humanity in 2016.

NAGORNO-KARABAKH

- The breakaway region of Nagorno-Karabakh in the South Caucasus has been at the centre of three wars and multiple clashes between Azerbaijan and Armenia.
- It comprises of modern-day Armenia, Azerbaijan, and Georgia.
- It is a is a landlocked, mountainous, and forested region that falls within the boundaries of Azerbaijan.
- Referred to as Artsakh in Armenian, this region hosts an ethnic Armenian population with an Azeri minority.
- The years of clashes followed between Azerbaijan forces and Armenian separatists ended in 1994 when Russia brokered a ceasefire (by this time ethnic Armenians had taken control of the region).

RACE IAS www.raceias.com Page 75 of 80

• While the area remains in Azerbaijan, it is today governed by separatist Armenians who have declared it a republic called the "Nagorno-Karabakh Autonomous Oblast."

TALAQ-E-HASAN

- The Supreme Court prima facie observed that the Muslim personal law practice of talaq-e-Hasan is "not so improper."
- Talaq-e-Hasan is a form of divorce whereby a Muslim man can divorce his wife by pronouncing talaq once every month over a three-month period.
- By the end of the three months, if the partners do not start cohabiting, then the talaq is deemed valid and the marriage ends. If within the three-month period, the spouses start cohabiting, the divorce is suspended and the first two utterances of 'talaq' deemed invalid. It is assumed that the spouses have reconciled.
- The practice is unilateral, that is, divorce can only be given by men.
- Unlike **instant triple talaq** (wherein a man pronounces multiple divorce in one go), the Quran clearly mentions the process of Talaq-e-Hasan.

PAALAN 1000 NATIONAL CAMPAIGN AND PARENTING APP

- The Union Minister of State for Health Dr. Bharati Pravin Pawar, virtually launched the Early Childhood Development Conclave, Paalan 1000 National Campaign and Parenting App in Mumbai.
- India has taken rapid strides in reducing child mortality since 2014 from **45 per 1000 live** births to **35 per 1000 live births in 2019**.
- Paalan 1000 campaign focuses on the cognitive development of children in the first two years of their life.
- It combines early years coaching for parents, families and other caregivers with services designed to meet families' basic needs.
- The campaign is aligned with the mission of the Rashtriya Bal Swasthya Karyakram (RBSK) which emphasizes responsive care and focused interventions during the first 1,000 days of a child.

SUPER VASUKI

- The Railways conducted a test run of its **longest freight train, Super Vasuki**, with 295 loaded wagons carrying over 27,000 tonnes of coal as part of Azadi Ka Amrit Mahotsav celebrations.
- The 3.5 -km -long freight train covered the distance of about 267 km between **Korba in Chhattisgarh and Rajnandgaon in Nagpur.**
- It was run by the South East Central Railway (SECR).
- This is the longest and heaviest freight train ever run by the Railways.
- The Railways plans to use this arrangement (longer freight trains) more frequently, especially to transport coal in peak demand season to prevent fuel season shortages of power stations.

THUCYDIDES TRAP

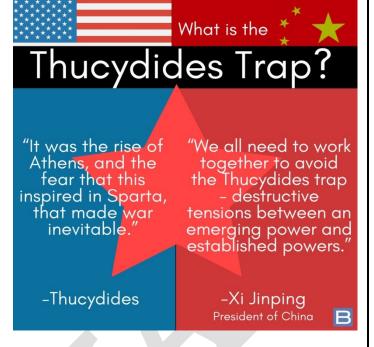
• The Thucydides Trap is named after the ancient Greek historian Thucydides, a fifth-century BCE Athenian who authored "The History of the Peloponnesian War," which reports on the conflict between Athens and Sparta.

RACE IAS www.raceias.com Page 76 of 80

- The Thucydides Trap refers to the tendency of conflict to erupt when a dominant power is challenged by a growing power.
- Thucydides Trap, or Thucydides' Trap, is a term popularized by American political scientist Graham T. Allison.
- It is primarily used to describe a potential conflict between the United States and the People's Republic of China.

MANTHAN PLATFORM

 The Office of the Principal Scientific Adviser (PSA) to the Government of India announced the launch of the Manthan platform.



- While commemorating India's 75 years of independence, the Manthan Platform presents an opportunity to bring national and global communities closer to India's technology revolution.
- This platform will provide the necessary fulcrum for transforming the nation through innovative ideas, inventive minds, and public-private-academia collaboration to achieve the sustainability goals in alignment with the UN defined Sustainable Development Goals (SDG) charter.
- Manthan Platform is powered by NSEIT Limited which is its trusted knowledge and technology partner.

BARA IMAMBARA

- The dome of Bara Imam Bara in Lucknow collapsed following heavy rain.
- Bara Imam Bara or Asafi Imam Bara was constructed in 1784 by Nawab AsafudDaulah, the fourth nawab of Awadh.
- Shia Muslims come here to mourn during the month of Muharram to commemorate the
 - martyrdom of Imam Husain, the grandson of Prophet Muhammad, in the battle of Karbala held in 680AD.
- The main feature of this monument is that **no pillars or beams were used to support the**
- Kifayatullah was the architect and designer of the monument who came from Delhi.
 Around 20,000 people were employed to construct the building.

KAMAKHYA TEMPLE

 The Northeast Frontier Railway (NFR) is planning to construct a ropeway from the Kamakhya railway station to the Kamakhya



- temple in Guwahati.
- If given the nod, this ropeway would be the second in the city after the 1,820-metre one connecting Guwahati and North Guwahati across the Brahmaputra.
- The KamrupKamakhya Temple, or the Kamakhya Temple, is one of the oldest Hindu temples in Guwahati, Assam. The temple is situated on **Nilachal hills.**
- It is one of the oldest of the **51 Shakti Pithas**that is famous for tantric worship.
- It is the main temple in a complex of individual temples dedicated to 10 Goddesses: Kali, Tara, Sodashi, Bhuvaneshwari, Bhairavi, Chhinnamasta, Dhumavati, Bagalamukhi, Matangi and Kamalatmika.
- The current structural temple and the rock-cut sculpture strewn in the vicinity indicate that the temple has been built and renovated many times in the period 8th–9th, 11th–12th, 13th–14th centuries and even later.
- The current form, from the 16th century has given rise to a hybrid indigenous style that is sometimes called the Nilachal type: a temple with a hemispherical dome on a cruciform base.
- The temple consists of four chambers: garbhagriha and three mandapas called calanta, pancharatna and Nata mandira aligned from east to west.

LAKE GARDA

- Italy's worst drought in decades has reduced Lake Garda (also known as Benaco), the country's largest lake, to near its lowest level ever recorded.
- The drought has exposed the swaths of previously underwater rocks and warmed the water to temperatures approaching the average in the Caribbean Sea.
- Significantly lower rainfall for months in Northern Italy accompanied by 70% lower snowfall has dried up important rivers like the Po, which flows across Italy's agricultural and industrial heartland.
- The parched condition of the Po (Italy's longest river) caused losses of billions of euros to farmers who normally rely on it to irrigate the fields and rice paddies.
- To compensate for the loss, the authorities allowed more water from Lake Garda to flow out to local rivers. But in late July 2022, they reduced the amount to protect the lake and hence, the financially important tourism tied to it.

ATAL BHUJAL YOJANA (ABY)

- The Ministry of Science & Technology has announced financial support to the Start-up Company incubated at IIT Kanpur to develop smart water management technologies benefitting Atal Bhujal Yojana.
- ABL is a central sector scheme of the Ministry of Jal Shakti aimed at facilitating sustainable groundwater management.



• It emphasizes on **community participation along with demand side interventions for sustainable groundwater management** in identified water stressed areas in the States of Haryana, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh.

ARANMULA VALLASADYA

- It is a celebration in the Hindu temple of Aranmula Sree Parthasarthi at Aranmula.
- During the festival, the village conducts a snake boat race in the Pampa River.
- The rowers offer Nira Para to the presiding deity at the Nadappanthal in front of the gold-plated temple mast and go around the temple chanting **Krishna bhajans (Vanchi Pattu)**.
- It is one of the largest vegetarian mass feasts wherein each meal consists of 10 to 20 dishes served on banana or plantain leaves, and up to 64 dishes on Ashtami Rohini Day, the birthday of Krishna.

GREAT INDIAN BUSTARD

- The perceived beliefs and recorded observations of egg laying habit of the Great Indian Bustard (GIB) have changed after the recent excessive rains in western Rajasthan.
- The bird species has adopted an altogether new behaviour of giving clutch of two eggs at a time after getting additional protein diet during the monsoon season.
- The Great Indian Bustard (GIB), the State bird of Rajasthan, is considered as critically endangered as per the IUCN Red List.
- It is a flagship grassland species, representing the health of the grassland ecology.
- Height 3.3ft tall THE GREAT 2011 INDIAN B**USTARD** The year the species was enlisted in GIB has been put in the Red List of the International Union for Conservation of Nature 18 kg the critically The Great Indian Bustard was proposed as a candid for the National Bird of India and was under 150 The bird is hunted for its meat in Pakistan PAKISTAN It migrates from THREATS TO THE BIRD Annual and perennia non-timber crops RESTRICTED TO POCKETS IN Renewable energy 0 0 1. Andhra Pradesh Transportation and power lines 2. Gularat 3. Karnataka 4. Maharashtra Human intrusions and disturb
- The population of this bird is confined to **Rajasthan and Gujarat**. It occurs in small populations in Maharashtra, Karnataka, and Andhra Pradesh.
- This bird is under constant threats due to collision/electrocution with power transmission lines, hunting (still prevalent in Pakistan), habitat loss and alteration because of widespread agricultural expansion, etc.

SUNDARA SASTRI SATYAMURTI

- Sundara Sastri Satyamurti (19 August 1887 28 March 1943) was an Indian independence
 activist and politician. He was acclaimed for his rhetoric and was one of the leading
 politicians of the Indian National Congress from the Madras Presidency, alongside S.
 Srinivasa Iyengar, C. Rajagopalachari, and T. Prakasam.
- Born in 1887 in Thir Umayam in the princely state of **Pudukkottai**, Satyamurti studied at the Maharajah's College, Madras Christian College, and the Madras Law College.

RACE IAS www.raceias.com Page 79 of 80

- In 1919, Satyamurti was sent as a delegate in the Joint Parliamentary Committee of the United Kingdom to protest the Rowlatt Act and the Montagu-Chelmsford reforms.
- Satyamurti was a patron of the arts and was instrumental in the establishment of the Music Academy of Madras.
- He took an active part in the Swadeshi movement and was arrested for participating in the individual Satyagraha during the Quit India movement in 1942.
- After the trial, he was deported to the Nagpur jail wherein during the journey he suffered a spinal injury. He succumbed to his injury on 28 March 1943.



WORLD HUMANITARIAN DAY

- The World Humanitarian Day is **observed on August 19** every year to honor the humanitarian pursuits across the globe and to promote human welfare.
- It is a campaign by the United Nations Office for the Coordination of Humanitarian Efforts (OCHA).
- THEME 2022: 'It takes a village.'
- According to the United Nations, the 2022 campaign sheds a light on "thousands of volunteers, professionals and crisis-affected people who deliver urgent health care, shelter, food, protection, water and much more."
- HISTORY: On 19 August 2003, a bomb attack on the Canal Hotel in Baghdad, Iraq, killed 22 humanitarian aid workers, including the UN Special Representative of the Secretary-General for Iraq, Sergio Vieira de Mello. Five years later, the United Nations General Assembly adopted a resolution designating 19 August as World Humanitarian Day (WHD).
- The United Nations will use digital art to narrate the stories of people in need and those who help them.