



An Institute for Civil Services



1st - 15th AUGUST, 2021



www.iascore.in

IAS 2023-24

A TWO YEAR GS SELF STUDY COURSE
through TEST SERIES for UNDER GRADUATES

**GS INTEGRATED
LEARNING**

A COMPLETE GUIDE *for your* SELF STUDY



**11
SEPTEMBER**



CONCEPT CLASSES
TESTS SERIES
(PRELIMS & MAINS)
PERSONAL MENTORING
STUDY MATERIAL

OPTIONAL TEST SERIES 2022

**LAW OPTIONAL
TEST SERIES 2022**



**05
SEPTEMBER**

**ANTHROPOLOGY
TEST SERIES 2022**

By: Dr. SUDHIR KUMAR



**16
SEPTEMBER**

**HISTORY
TEST SERIES 2021**

By: PIYUSH KUMAR



**24
SEPTEMBER**

**POLITICAL SCIENCE
TEST SERIES 2022**

By: Dr. PIYUSH CHOUBEY



**25
SEPTEMBER**

**PUBLIC ADMINISTRATION
TEST SERIES 2022**

By: ASHUTOSH PANDEY



**25
SEPTEMBER**

**GEOGRAPHY
TEST SERIES 2022**

By: PRINCE MISHRA



**25
SEPTEMBER**

📍 1B, 2nd Floor, Pusa Road Karol Bagh, New Delhi-110005,
(Adjacent to Karol Bagh Metro Gate No. 8)

Visit: www.iasscore.in

8448496262

CONTENTS

PIB (1st to 15th AUGUST, 2021)

S. No.	Area		Topics	Page No.
1.	GS 2	POLITY	100th year of the Madras Legislative Council	01
2.		POLITY	"Muslim Women Rights Day"	01
3.	GS 3	ECONOMY	PM launches digital payment solution e-RUPI	03
4.		INFRASTRUCTURE	Inland Vessels Bill, 2021	05
5.		AGRICULTURE	Creating awareness among farmers for Nutri Cereals (Millets)	07
6.		ECONOMY/ INFRASTRUCTURE	National Industrial Corridor Programme (NICP)	08
7.		ECONOMY	Compliance Information Portal (CIP)	09
8.		SOCIAL JUSTICE	Online education to students	09
9.		AGRICULTURE	National Innovation on Climate Resilient Agriculture (NICRA)	10
10.		ENVIRONMENT	Pensilungpa Glacier	11
11.		SCIENCE & TECHNOLOGY	Hydrogen Fuel Cell-based Train	11
12.		ECONOMY	Ujjwala 2.0	13
13.		HEALTH	Global Youth Tobacco Survey (GYTS-4)	13
14.		ECONOMY	Quality of Life for Elderly Index	14
15.		SCIENCE & TECHNOLOGY	EOS-03	16
16.		ENVIRONMENT	World Elephant Day	17
17.	GS 2	POLITY	Vehicle Scrappage Policy	18
18.	GS 3	ENVIRONMENT	Plastic Waste Management Amendment Rules, 2021	19
19.		SCIENCE & TECHNOLOGY	IndiGau	20
20.		ENVIRONMENT & ECOLOGY	Four new Ramsar sites recognized in India	21



An Institute for Civil Services

OUR CLASSROOM & ONLINE COURSES

GS FOUNDATION

- ☑ 1 Year IAS Foundation
- ☑ 3 & 2 Year IAS Foundation
- ☑ GS Mains Foundation

OPTIONAL FOUNDATION

- ☑ Political Science
- ☑ History
- ☑ Geography
- ☑ Public Administration
- ☑ Anthropology

MAINS COURSES

- ☑ GS Mains Advance
- ☑ GS Mains QIP
- ☑ Ethics Integrity & Aptitude
- ☑ Essay Writing
- ☑ GS Paper 3

TEST SERIES

- ☑ Prelims Test Series
- ☑ GS Mains Test Series
- ☑ Essay Test Series
- ☑ Ethics Test Series
- ☑ Optional Test Series
 - Political Science
 - Geography
 - History
 - Public Administration
 - Anthropology

Visit:  www.iascore.in

1 100th year of the Madras Legislative Council

CONTEXT:

- Commemoration of the 100th year of the Madras Legislative Council.

ABOUT:

- The **Madras Legislative Council** was inaugurated on January 12th, 1921. It was set up under the **Government of India Act of 1919**.

- ▶ The first elected legislature in the State, originally called the Madras Legislative Council, was established in 1921 under the **Government of India Act, 1919**.
- ▶ The term of the Council was three years.
- ▶ It consisted of 132 members, of which 34 were nominated by the Governor and the rest were elected.
- ▶ The Council met for the first time on January 9, 1921, at **Fort St George**, and was later formally inaugurated by the **Duke of Connaught**, a paternal uncle of the King of England, on January 12, 1921, on the request of the **Governor, Lord Wellington**.

- Its origins can be traced back to the **Indian Councils Act, 1861** when it was set up as an advisory body through which the colonial administration obtained advice and assistance.
- The **Indian Councils Act of 1892** expanded the council.
- The **Morley-Minto reforms (Indian Councils Act 1909)** officially introduced the method of electing members to the Council, though it did not provide for direct elections.

Indian Council Act of 1909 is also known as Morley- Minto Reform. It was instituted to placate the Moderates (Congress) and introduces separate electorates on the basis of religion. Therefore, Lord Minto came to be known as Father of Communal Electorate in India.

- Based on the recommendations of the Montague-Chelmsford report, the Government of India Act of 1919 was enacted. The Act enlarged the provincial legislative councils and increased the strength of elected members to be greater than that of nominated and official members.
- In April 1921, the Madras Legislative Council adopted legislation to give voting rights to women.
- In 1968, the council's name was changed to Tamil Nadu Legislative Council when the Madras state was renamed Tamil Nadu.
- In 1986, the Legislative Council was abolished and from then on, Tamil Nadu has a unicameral legislature with only a Legislative Assembly.

2 "Muslim Women Rights Day"

CONTEXT:

- "Muslim Women Rights Day" was observed by different organizations across the country.

ABOUT:**Triple Talaq:**

- ▶ Triple Talaq is the process of divorce under Sharia Law (Islamic law) where a husband can divorce his wife by pronouncing 'Talaq' three times. This is also called oral talaq.
- ▶ There are three types of divorce under Islamic law, namely, Ahsan, Hasan and Talaq-e-Biddat (triple talaq).
- ▶ While the former two are revocable, the last one is irrevocable. It is mainly prevalent among India's Muslim communities that follow the Hanafi School of Islamic Law.
- ▶ Under this law, wives cannot divorce husbands by means of triple talaq. Women have to move a court for divorcing their husbands under the Muslim Personal Law (Shariat) Application Act 1937. (This Act was passed to make provisions for the application of Sharia or Islamic personal law to Muslims in India).

- The Law has made the social malpractice of **Triple Talaq** a criminal offence.
- It has strengthened the **"self-reliance, self-respect and self-confidence"** of the Muslim women of the country and protected their constitutional, fundamental and democratic rights by bringing the law against Triple Talaq.
- Muslim women have been immensely benefitted through schemes such as **"Mudra Yojana", "Jan Dhan Yojana", "Stand Up India", "Poshan Abhiyan"**.
- The law has ensured the dignity of Muslim women by bringing the law against Triple Talaq. Most of the major Muslim countries have also abolished Triple Talaq. He said that the Government's policy of **"Development without Discrimination"** has created an atmosphere of trust across the country.
- The law against Triple Talaq has proved to be a "big reform" to ensure the Constitutional rights of Muslim women which has shown "better results. There is a significant decline in Triple Talaq cases across the country after the law came into effect.

Key Points

- Provisions of the Muslim Women (Protection of Rights on Marriage) Act, 2019
- The Act makes all declarations of talaq, including in written or electronic form, to be void (i.e. not enforceable in law) and illegal.
- It also makes a declaration of talaq a cognizable offence (only if information relating to the offence is given by a married woman against whom talaq has been declared), attracting up to three years imprisonment with a fine.
- A cognizable offence is one for which a police officer may arrest an accused person without warrant.
- The Magistrate may grant bail to the accused. The bail may be granted only after hearing the woman (against whom talaq has been pronounced), and if the Magistrate is satisfied that there are reasonable grounds for granting bail.
- The offence may be compounded (i.e. the parties may arrive at a compromise) by the Magistrate upon the request of the woman (against whom talaq has been declared).
- A Muslim woman against whom talaq has been declared, is entitled to seek subsistence allowance from her husband for herself and for her dependent children.

Constitutional Provisions:

- The Triple Talaq was held to be violative of **Article 14** (the right to equality), which is held by the Supreme Court from **Shah Bano case (1986)** to Shayara Bano case in 2017.

- **Article 25** of the Constitution guarantees religious freedom as Freedom of Practice and Propagation of Religion. Like all other Fundamental Rights, it is subject to restrictions and does not protect religious practices that can negatively affect the welfare of citizens.
- Hence, **Article 25** is overridden by **Article 14**, which guarantees the Right to Equality as triple talaq denies a Muslim woman's equality before the law.
- **Article 25** is also subject to **Article 15 (1)** which states that the State "shall not discriminate against any citizen on grounds only of religion, race, caste, sex..." Since triple talaq does not work in the favour of women, it violates Article 15 (1) of the Constitution.

3 PM launches digital payment solution e-RUPI

CONTEXT:

- Prime Minister Narendra Modi launched an electronic voucher-based digital payment system "e-RUPI".

ABOUT:

- **What is e-RUPI?**
 - **E-RUPI is a cashless and contactless digital payment medium, which will be delivered to the mobile phones of beneficiaries in the form of an SMS string or a QR code.**
 - It has been developed by the National Payments Corporation of India (NPCI), the Department of Financial Services, the Ministry of Health and Family Welfare, and the National Health Authority.

Products of NPCI

Some of the current products that were launched under the National Payments Corporation of India are discussed below:

- ▶ **RuPay:** It is a domestic card scheme of India that has a magnetic stripe along with an EMV chip. The card is now accepted at all ATMs and has been issued by 300 cooperative banks and Regional Rural Banks (RRBs) in India. (Get the list of RRBs in India in the linked article.)
- ▶ **National Common Mobility Card:** Also known as Rupay Contactless card, it is a contactless payment technology that allows cardholders to use their card in the contactless payment terminals without the need to physically swipe or insert the card.
- ▶ **Bharat Interface for Money (BHIM):** Bharat Interface for Money (BHIM) is a mobile payments application based on NPCI's Unified Payments Interface (UPI). It provides the facility to easily send or receive money from other customers using the UPI. To know more in detail on BHIM, refer to the linked article.
- ▶ **Unified Payments Interface (UPI):** Unified Payments Interface (UPI) was introduced on 11th April 2016 as an instant inter-bank payment system. This payment system was developed to provide a mobile platform for the instant transfer of funds between two bank accounts. To know more about Unified Payments Interface, refer to the linked article.
- ▶ **Bharat Bill Payment System:** The Bharat Bill Payment System is an initiative taken by NPCI along with the Reserve Bank of India (RBI) for payment of all bills which will provide an interoperable and accessible bill payment service to its customers


What is e-RUPI?

A digital voucher developed by the National Payments Corporation of India (NPCI) will be transferred directly to the mobile phone as an SMS string or QR code. e-RUPI users will be able to redeem the vouchers at the merchants accepting UPI e-Prepaid Vouchers.

How does it work?

The beneficiary registered for direct benefit transfer (DBT), registered with the govt using Aadhar, gets an SMS/QR code. Let us say for vaccination purposes. The person can show the SMS/QR code at the vaccination centre. After

DIGITAL BOOST



Where can the e-RUPI be used?

For now, only for schemes related to the Ministry of Health. Soon, it should be used widely for other DBT schemes of the government. However, the private sector can also use it to sponsor welfare schemes.

Is it an alternative to UPI?

No, but it is derived from UPI and uses NPCI infrastructure to work. For now, e-RUPI is used for DBT schemes in a targeted manner, in order to stop misuse of funds. It is not a standalone payment system but UPI for a specific purpose.

the scan, the beneficiary gets a code on the same number where he/she received the original SMS or QR that need to be shared with the official at the health centre for redeeming the amount, and the beneficiary can go for the vaccination.

- This people-specific and purpose-specific payments system will essentially function like a prepaid gift voucher that will be redeemable at specific accepting centres without any credit or debit card, a mobile app or internet banking.
- e-RUPI will connect the sponsors of the services with the beneficiaries and service providers in a digital manner without any physical interface.
- According to the government, e-RUPI — built on NPCI's UPI system — would ensure leak-proof delivery of welfare services.
- It will initially be deployed alongside the National Digital Health Mission and to support the vaccine drive, but added that it can also be used for delivering services under schemes meant for providing drugs and nutritional support.



e-RUPI is a **cashless and contactless** instrument for **digital payment** developed by **National Payments Corporation of India**



Connects sponsors of the services with beneficiaries & service providers in a **digital manner without any physical interface**



Assures timely payment **without involvement of any intermediary.**



It can also be used for **delivering services** meant for **providing drugs & nutritional support under Mother & Child welfare schemes, TB eradication programmes, etc**

How does it work?

- e-RUPI coupons are electronic vouchers that will be provided to recipients in the style of a QR code and text message voucher, via which cash will be paid directly to their bank account.
- Any government agency or company can produce e-RUPI vouchers through their partner banks, which they can then distribute.
- To complete the transaction, the beneficiary will need to present a QR code or SMS message to the retailer, who will scan it and send a verification code to the beneficiary's mobile phone number.
- The latter will be required to share the code with the merchant in order for the transaction to be successful.

Significance of e-RUPI:

- The introduction of e-RUPI has the potential to effectively highlight the flaws in the digital payment's infrastructure, which is critical to the development of future digital currencies.
- Despite the fact that e-RUPI is still supported by the Indian rupee, its aim distinguishes it from a virtual digital currency and places it closer to a payment service system that is based on vouchers than a virtual digital currency.
- **It must be noted that this is not a cryptocurrency**, but a more digitized form of payment. It means consumers can complete entire transactions on their cellphones, without having to transfer "money" in the traditional sense.

4 Inland Vessels Bill, 2021

CONTEXT:

- Parliament passes landmark 'Inland Vessels Bill, 2021' to repeal and replace the existing Inland Vessels Act, 1917.

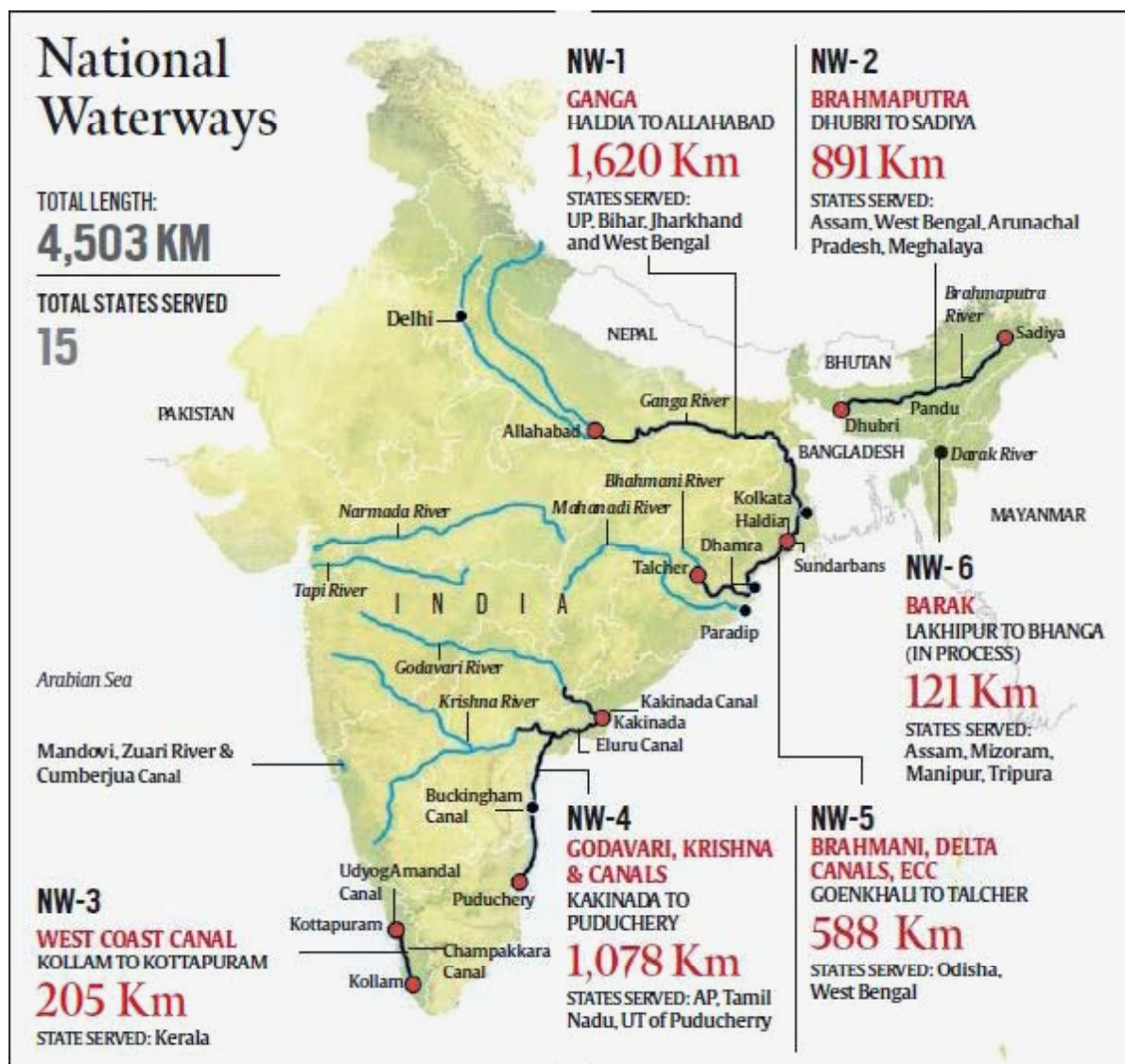
ABOUT:

- Parliament has passed the **Inland Vessels Bill, 2021**, which aims to replace over 100 years old **Inland Vessels Act, 1917 (1 of 1917)** and usher in a new era in the inland water transport sector and make the Legislative framework user friendly and promote ease of doing business. Now the bill will be sent for the assent of the President of India.
- The initiative taken is a part of the pro-active approach adopted by the Ministry by repealing colonial laws and replacing them with legislation catering to modern and contemporary needs and the development of the maritime sector.
- The uniform application of rules and regulations will ensure seamless, safe and economical trade and transportation by inland vessels using the inland waterways.

Inland Waterways:

- ▶ India has about **14,500 km of navigable waterways** which comprise of rivers, canals, backwaters, creeks, etc.
- ▶ As per the National Waterways Act 2016, **111 waterways** have been declared as National Waterways (NWs).

- ▶ **NW-1:** Ganga-Bhagirathi-Hooghly River System (Prayagraj-Haldia) with a length of 1620 km is the longest National Waterway in India.
- ▶ The **Inland Waterways Authority of India (IWAI)** is implementing the **Jal Marg Vikas Project (JMVP)** for capacity augmentation of navigation on the Haldia-Varanasi stretch of Ganga (part of NW-1) with the technical and financial assistance of the **World Bank**.



Key Points

• Features of the Bill:

A key feature of the Bill is a unified law for the entire country, instead of separate rules framed by the States.

- The certificate of registration granted under the proposed law will be deemed to be valid in all States and Union Territories, and there will be no need to seek separate permissions from the States.

- The Bill provides for a central database for recording the details of the vessel, vessel registration, crew on an electronic portal.
- All non-mechanically propelled vessels will also have to be enrolled at the district, taluk or panchayat or village level.
- It enlarges the definition of 'inland waters', by including tidal water limits and national waterways declared by the Central Government.
- It also deals with pollution control measures of Inland Vessels. This bill directs the Central Government to designate a list of chemicals, substances, etc. as pollutants.

5 Creating awareness among farmers for Nutri Cereals (Millets).

CONTEXT:

- The Government, under the Sub Mission on National Food Security Mission (NFSM)- Nutri Cereals is creating awareness among farmers for **Nutri Cereals (Millets)** such as ragi, sorghum, bajra and small millets through demonstration and training.

About The Sub Mission on Nfsm – Nutri Cereals:

- **NFSM** – Nutri Cereals is one of the major components of the National Food Security Mission.
- **The National Food Security Mission (NFSM)** is a centrally sponsored scheme launched in 2007.
- The chief objective of the mission was to increase the annual production of rice, wheat and pulses.
- **NFSM** was launched to increase the production of rice, wheat and pulses through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy.

National Food Security Mission

Ministry of Agriculture & Farmers Welfare
Government of India

National Food Security Mission

New Initiatives of Nutri-Cereals

- ➔ Breeder seed Production of Nutri-Cereals.
- ➔ Certified seed production.
- ➔ Seed distribution of HYVs.
- ➔ Seed minikits allocation free of cost to the farmers.
- ➔ Frontline demonstrations by ICAR / SAUS.
- ➔ Cluster demonstrations by State Governments.
- ➔ Created centres of Excellence on Sorghum, Pearl Millet and Small Millets.
- ➔ Publicity of Nutri-Cereals.

f AgriGoi | AgriGoi | agricoop.gov.in

The sub-components of the NFSM are:

- NFSM-Rice
- NFSM-Wheat
- NFSM-Pulses
- NFSM-Coarse Cereals
- NFSM-NFSM-Nutri-Cereals
- NFSM-Commercial Crops
- Under the Mission, seed distribution of **HYVs**, farm machinery/resources conservation machinery/tools, efficient water application tools, plant protection, nutrient management, cropping system-based training to the farmers, etc. are provided.
- From 2020-21, primary processing units/small storage bins/flexibility interventions have been added as per local requirements with the aim of increasing the income of the farmers.
- Under **NFSM–Nutri Cereals**, incentives are provided to the farmers, through the state governments, on crop production and protection technologies, cropping system based demonstrations, production & distribution of seeds of newly released varieties/hybrids, Integrated Nutrient and Pest Management techniques, improved farm implements/tools/resource conservation machinery, water-saving devices, capacity building of farmers through training during the cropping season, organizing events/workshops, distribution of seed mini-kits, publicity through print and electronic media, etc.
- The States can promote Nutri Cereals (Millets) under Rashtriya Krishi Vikas Yojana (RKVY), Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER).

6**National Industrial Corridor Programme (NICP)****CONTEXT:**

- 11 Industrial Corridors with 32 Projects to be developed in 4 phases in the country as part of the National Industrial Corridor Programme (NICP).

About the National Industrial Corridor Programme (NICP):

- The National Industrial Corridor Programme (NICP) has been conceived to promote world-class manufacturing facilities and develop futuristic industrial cities in India.
- It is under the Department for Promotion of Industry and Internal Trade (DPIIT).
- The broad objective of NICP is to provide plug and play infrastructural facilities for setting up large scale manufacturing units.
- The National Industrial Corridor Development and Implementation Trust (NICDIT) under the DPIIT is the overarching institutional framework to implement the programme.
- Under the programme, land parcels are developed for immediate allotment to manufacturing units.
- The programme aims to develop new industrial cities as "Smart Cities" and converging next-generation technologies across infrastructure sectors.

The 11 Industrial Corridors being developed are:

- Delhi Mumbai Industrial Corridor (DMIC)
- Chennai Bengaluru Industrial Corridor (CBIC)
- Amritsar Kolkata Industrial Corridor (AKIC)
- East Coast Industrial Corridor (ECIC) with Vizag Chennai Industrial Corridor (VCIC) as Phase 1

- Bengaluru Mumbai Industrial Corridor (BMIC)
- Extension of CBIC to Kochi via Coimbatore
- Hyderabad Nagpur Industrial Corridor (HNIC)
- Hyderabad Warangal Industrial Corridor (HWIC)
- Hyderabad Bengaluru Industrial Corridor (HBIC)
- Odisha Economic Corridor (OEC)
- Delhi Nagpur Industrial Corridor (DNIC)

Need for such a programme:

- Industrial corridors are conceived to foster global manufacturing, investment destination hubs and smart cities with the best-in-class infrastructure.
- The broad objective of NICP is to provide **plug and play infrastructural facilities** for setting up large scale manufacturing units.
- They have the potential to unleash the manufacturing potential in the country and raise its contribution to GDP by creating quality infrastructure ahead of demand.

7 Compliance Information Portal (CIP).

CONTEXT:

- Recently, the Central Board for Indirect Taxes & Customs (CBIC) has launched the Indian Customs Compliance Information Portal (CIP).

About Indian Customs Compliance Information Portal (CIP):

- This portal gives information on Customs procedures and compliance requirements for imports and exports, contact details and web links of the Regulatory Agencies involved for each commodity, Customs Tariff Item wise. It also gives information on applicable Duties and Taxes on each commodity.
- The CBIC launched the CIP to provide free access to information on all customs procedures and regulatory compliance for nearly 12,000 Customs Tariff Items.
- The portal would also have information related to partner government agencies like FSSAI, drug controllers, etc., to carry out imports and exports.
- CIP can be used by entering either the Customs Tariff Heading (CTH) or the description of the goods in question to get information to step-by-step procedures, regulatory compliances requirements like licence, certificates, etc., for imports as well as exports.
- This includes import and export through posts and couriers, import of samples, reimport and re-export of goods, self-sealing facility for exporters and project imports.
- Another important feature of CIP is a pan-India map showing all the customs seaports, airports, and land customs stations, etc. It also contains addresses of the regulatory agencies and their websites.

8 Online education to students

CONTEXT:

- Steps taken by the government to provide online education to students – information provided by the Union Minister for Education.

Details:

- **PM eVIDYA:** Facilitating digital/online learning and teaching materials of various types among teachers and students.

Objectives Of PM eVIDYA Program

- ▶ The main objective of the PM eVIDYA program is to educate students through digital platforms so that the education of students does not suffer due to nationwide lockdown

- **DIKSHA:** Digital infrastructure for providing quality e-content for school education in states/UTs and QR coded Energized Textbooks for all grades are available on it. Know more about DIKSHA at the link.
- **Swayam Prabha:** TV channel for classes 1 to 12 (one channel per class). Swayam Prabha DTH channel will launch for all classes so that the student who does not have access to the internet can study
- **Shiksha Vani:** Extensive use of Radio, Community radio and CBSE Podcast.
- Special e-content for the visually and hearing impaired developed on Digitally Accessible Information System (DAISY) and in sign language on NIOS website/YouTube.
- All these schemes/programmes are free of cost and available to all the students across the nation.
- Also, to reach out to those students who lack access to technology various innovative activities are being done at the national, state or district level such as **Gali-GaliSim-Sim, Tili-Mili programme, Motor Eskool, Roving Teacher, Project SMILE** (*social media Interface for Learning Engagement*), **e-Kaksha**, formation of WhatsApp and other social media groups, Work Book Distribution at home, Teacher calling to maintain connects with students.

9**National Innovation on Climate Resilient Agriculture (NICRA)****CONTEXT:**

- A network project '**National Innovation on Climate Resilient Agriculture (NICRA)** was launched by the *Indian Council of Agricultural Research (ICAR)* in 2011.

About National Innovation on Climate Resilient Agriculture:

- The project aims at strategic research on adaptation and mitigation, demonstration of technologies on farmers' fields and creating awareness among farmers and other stakeholders to minimize the climatic change impacts on agriculture.

Thrust areas of the programme:

- Identifying most vulnerable districts/regions
- Evolving crop varieties and management practices for adaptation and mitigation
- Assessing climate change impacts on livestock, fisheries and poultry and identifying adaptation strategies

Components of NICRA:

- Strategic Research

- Technology Demonstration
- Capacity Building
- Sponsored/Competitive Grants

Objectives of NICRA:

- To enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through the development and application of improved production and risk management technologies.
- To demonstrate site-specific technology packages on farmers' fields for adapting to current climate risks.
- To enhance the capacity building of scientists and other stakeholders in climate-resilient agricultural research and its application.

10 Pensilungpa Glacier

CONTEXT:

- **Pensilungpa Glacier** in Zaskar region of Ladakh retreating. Increasing Temperature and Low Winter Precipitation are Causing Retreat of Glaciers in Zaskar Valley, Ladakh

Details:

- The study was conducted by scientists from the **Wadia Institute of Himalayan Geology (WIHG)**, Dehradun.
- Their field observations over four years (2015-19) showed that the glacier is now retreating at an average rate of 6.7 metres per annum.
- The study has attributed this to an increase in the temperature and decrease in precipitation during winter.
- The study also points at the significant influence of debris cover on the mass balance and retreat of the glacier's endpoint, especially in summer.
- The study also suggests that due to continuous rise in the air temperature in line with the global trend, the melting would increase, and the precipitation of summer periods at higher altitudes may change from snow to rain, and that may influence the summer and winter patterns.

11 Hydrogen Fuel Cell-based Train

CONTEXT:

- Indian Railways Organization of Alternative Fuels (IROAF) invited bids for Hydrogen Fuel Cell-based Train on the Indian Railways Network.

Details:

- The project is expected to kick off the concept of Hydrogen Mobility in the country.
- Initially, the bids are invited for 89km of the Sonipat-Jind section of the Northern Railway.
- The project is expected to bring in annual savings of Rs.2.3 crores.

BACKGROUND:

- “Advanced Chemistry Cell (ACC) Batteries” and “National Hydrogen Mission” are two flagship programs of the Government of India to help meet the targets of reducing Green House Gas (GHG) emission under the Paris Climate Agreement 2015 and “Mission Net Zero Carbon Emission Railway” by 2030.

Green Hydrogen Mobility Project –

India's first National Hydrogen Mobility project to be set up in Ladakh.

- NTPC REL signed a Memorandum of Understanding with the Union Territory of Ladakh to set up the country's first National Hydrogen Mobility Project in the region.
- The signing of the MoU was also marked with the inauguration of NTPC's first solar installations in Leh in the form of solar trees and a solar carport.
- NTPC Renewable Energy Ltd. (NTPC REL) is a 100 per cent subsidiary of NTPC Maharatna PSU.

What is Green Hydrogen?

- Hydrogen, when produced by electrolysis using renewable energy, is known as Green Hydrogen. Check out the difference between Renewable and Non-renewable Sources on the linked page.
- Green hydrogen gas is produced by splitting water into hydrogen and oxygen using an electrolyser that may be powered by electricity generated from renewable energy sources.
- Green Hydrogen has no carbon footprint. Hydrogen that is in use these days is the primary source.
- Organic materials such as fossil fuels and biomass are used for releasing hydrogen through chemical processes. Application of Green Hydrogen is in sectors such as chemicals, iron, steel, fertilizer and refining, transport, heating, and power.

Green Hydrogen Benefits

- Green hydrogen can be generated without any harmful emissions If renewable energy (e.g. from Solar panels) is used to generate electricity for the electrolysis of water.
- It is a clean-burning molecule, which can decarbonize a range of sectors including iron and steel, chemicals, and transportation.
- To meet intermittencies (of renewable energy) in the future Green Hydrogen acts as an energy storage option.
- Renewable energy that cannot be stored or used by the grid can be channelled to produce hydrogen.
- Hydrogen is a clean energy source that only emits water vapour and leaves no residue in the air, unlike coal and oil.
- Green Hydrogen can be used for long-distance mobilisation such as in railways, large ships, buses or trucks, etc.

12 Ujjwala 2.0

CONTEXT:

Ujjwala 2.0 launched from Mahoba, Uttar Pradesh.

Details:

- Recently, the Prime Minister launched the second phase of Pradhan Mantri Ujjwala Yojana (PMUY) or **Ujjwala 2.0 Scheme**.
- He mentioned plans to promote “**gobar Dhan**” – tapping cow dung for energy on the occasion of **World Bio-Fuel Day (10th August)**.
- Ujjwala is part of the ambitious agenda for behavioural change that will help India transit to a **\$5 trillion economy by 2024**.

In May 2016, the **Ministry of Petroleum and Natural Gas (MOPNG)**, introduced the ‘**Pradhan Mantri Ujjwala Yojana**’ (PMUY) as a flagship scheme with an objective to make clean cooking fuel such as LPG available to the rural and deprived households which were otherwise using traditional cooking fuels such as firewood, coal, cow-dung cakes etc. Usage of traditional cooking fuels had detrimental impacts on the health of rural women as well as on the environment. The scheme was launched on 1st May 2016 in Ballia, Uttar Pradesh by the Hon'ble Prime Minister of India, Shri. Narendra Modi.

Eligibility criteria to avail connection under Ujjwala 2.0

- Applicant (woman only) must have attained 18 years of age.
- There should not be any other LPG connection from any OMC in the same household.
- An adult woman belonging to any of the following categories – SC, ST, Pradhan Mantri Awas Yojana (Gramin), Most Backward Classes (MBC), Antyodaya Anna Yojana (AAY), Tea and Ex- Tea Garden tribes, Forest Dwellers, People residing in Islands and River Islands, enlisted under SECC Households (AHL TIN) or any Poor Household as per 14-point declaration.

PMUY-I:

- Launched in May 2016 to provide LPG (liquefied petroleum gas) connections to poor households.

PMUY-II:

- It is aimed to provide maximum benefit to the migrants who live in other states and find it difficult to submit address proof.
- Now they will only have to give “**Self-Declaration**” to avail the benefit.

13 Global Youth Tobacco Survey (GYTS-4)

CONTEXT:

- Global Youth Tobacco Survey (GYTS-4) India 2019 released.

ABOUT GLOBAL YOUTH TOBACCO SURVEY:

- The fourth round of the Global Youth Tobacco Survey (GYTS-4) was conducted in 2019 by the International Institute for Population Sciences (IIPS) under the Ministry of Health and Family Welfare (MoHFW).
- The survey was designed to produce national estimates of tobacco use among school-going children aged 13-15 years at the state level and Union Territory (UT) by sex, location of school (rural-urban), and management of a school (public-private).
- The first three rounds of GYTS were conducted in 2003, 2006 and 2009.

Key Findings:

- Nearly one-fifth of the students aged 13-15 used any form of tobacco product (smoking, smokeless, and any other form) in their life. Between the last two surveys, the current use declined by 42% (2009-2019).
- The prevalence of tobacco use among boys was 9.6% and among girls was 7.4%. Use of any form of tobacco was higher among boys than girls.
- The prevalence of smoking tobacco was 7.3%. In the case of smokeless tobacco products, the prevalence was 4.1%.
- The use of e-cigarette among the students was 2.8%.
- The current use of tobacco among students across the States/UTs ranged from the highest in Arunachal Pradesh and Mizoram (58% each) to the lowest in Himachal Pradesh (1.1%) and Karnataka (1.2%).
- The median age at initiation of cigarette and bidi smoking, and smokeless tobacco use were 11.5 years, 10.5 years and 9.9 years respectively.
- 69% of current cigarette smokers and 78% of current bidi smokers bought cigarettes/bidis from a store, paan shop, street vendor or vending machine. Among the current smokers who bought cigarettes/bidi, 45% of cigarette smokers and 47% of bidi smokers were not refused because of their age. This points out to the easy availability of tobacco products.

14	Quality of Life for Elderly Index
-----------	--

CONTEXT:

Recently, the Economic Advisory Council to the Prime Minister (EAC-PM) released the Quality of Life for Elderly Index.

Details:

- The Quality of Life for Elderly Index has been created by the Institute for Competitiveness at the request of the Economic Advisory Council to the Prime Minister (EAC-PM).
- The report identifies the regional patterns of ageing across the Indian States and assesses the overall ageing situation in India.
- The report presents a deeper insight into how well India is doing to support the well-being of its ageing population.
- **The Index framework includes four pillars:** Financial Well-being, Social Well-being, Health System and Income Security, and
- **Eight sub-pillars:** Economic Empowerment, Educational Attainment & Employment, Social Status, Physical Security, Basic Health, Psychological Wellbeing, Social Security and Enabling Environment.

- The index highlights that the best way to improve the lives of the current and future generations of older people is by investing in health, education and employment for young people today.
- It goes far beyond the adequacy of pensions and other forms of income support.

Major Findings:

• State-wise Rankings:

- Rajasthan and Himachal Pradesh are top-scoring regions in Aged and the Relatively Aged States, respectively.
- The Aged States refer to States with an elderly population of more than 5 million, whereas the Relatively Aged States refer to States with an Elderly population of less than 5 million.
- Chandigarh and Mizoram are top-scoring regions in Union Territory and North-East States category.

Pillar-wise Performance:

- The Health System pillar observes the highest national average, 66.97 at an all-India level, followed by 62.34 in Social Well-being.
- Financial Well-being observes a score of 44.7, which is powered by the low performance of 21 States across the Education Attainment & Employment pillar, which showcases scope for improvement.
- States have performed particularly worse in the Income Security pillar because over half of the States have a score below the national average in Income Security, which is the lowest across all pillars.

Other Initiatives:

- **SAGE (Seniorcare Aging Growth Engine):** It is a "one-stop access" of elderly care products and services by credible start-ups.
- **Integrated Programme for Older Persons (IPOP):** To improve the quality of life of older persons by providing basic amenities like shelter, food, medical care and entertainment opportunities, etc.
- **Rashtriya Vayoshri Yojana (RVY):** Aids and assistive living devices are provided to senior citizens belonging to the Below Poverty Line (BPL) category who suffer from age-related disabilities such as low vision, hearing impairment, loss of teeth and locomotor disabilities.
- **Indira Gandhi National Old Age Pension Scheme (IGNOAPS):** Financial assistance is provided to persons of 60 years and above and belonging to families living BPL as per the criteria prescribed by the Government of India. Central assistance of Rs 200 per month is provided to persons in the age group of 60-79 years and Rs 500 per month to persons of 80 years and above.
- **The Pradhan Mantri Vaya Vandana Yojana:** It is a pension scheme for senior citizens that comes with guaranteed returns on monthly, quarterly, half-yearly or on an annual basis for a period of 10 years. It is exclusively available to those who are 60 years of age and above.
- **Vayoshreshtha Samman:** Conferred as a National award, and given to eminent senior citizens & institutions under various categories for their contributions on international day of older persons on 1st October.
- **Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act, 2007:** To ensure need-based maintenance for Parents and Senior Citizens and their welfare.

15 EOS-03**CONTEXT:**

- Recently, the Indian Space Research Organisation (ISRO) suffered the loss of an important earth observation satellite (EOS-03) during launch when the GSLV rocket carrying it malfunctioned about five minutes from the lift-off.

About EOS-03:

- The EOS-03, formerly known as the Geo Imaging Satellite-1 or GISAT-1, is a geo imaging or Earth observation satellite.
- The EOS-3 satellite was among a new generation of earth observation satellites with the capability of monitoring natural disasters such as cyclones and floods, apart from real-time monitoring of crops, forest cover and water bodies.

Earth Observation Satellites

- ▶ Earth observation satellites are satellites equipped with remote sensing technology. Earth observation is the gathering of information about Earth's physical, chemical and biological systems.
- ▶ Many earth observation satellites have been employed on sun-synchronous orbit.
- ▶ Other earth observation satellites launched by ISRO include RESOURCESAT-2, 2A, CARTOSAT-1, 2, 2A, 2B, RISAT-1 and 2, OCEANSAT-2, Megha-Tropiques, SARAL and SCATSAT-1, INSAT-3DR, 3D, etc.

Why did the mission fail?

- However, India's **geosynchronous satellite launch vehicle (GSLV) failed** to put the EOS-3 earth observation satellite into orbit due to a "technical anomaly" in the cryogenic upper stage, five minutes into the launch of the rocket.

Geosynchronous Satellite Launch Vehicle (GSLV)

- ▶ GSLV is a space launch vehicle designed, developed, and operated by the ISRO to launch satellites and other space objects into Geosynchronous Transfer Orbits.
- ▶ Geosynchronous satellites are launched into orbit in the same direction the Earth is spinning and can have any inclination.
- ▶ GSLV has the capability to put a heavier payload in orbit than the Polar Satellite Launch Vehicle (PSLV).
- ▶ It is a three-stage launcher with strap-on motors.

- The cryogenic upper stage ignition did not happen, although the performance of the first and second stages was normal. Hence, the mission failed.
- The cryogenic upper stage has an indigenously developed cryogenic engine fuelled by liquid hydrogen and liquid oxygen at very low temperatures.
- The cryogenic stage is supposed to be more efficient and provides greater thrust to propel heavier rockets like GSLV that are designed to carry bigger payloads into space.

- But these are also more complex than conventional liquid and solid propellants, because of the extremely low temperatures, hundreds of degrees Celsius below zero, that has to be maintained.
- ISRO has had a few difficulties with the cryogenic stage earlier as well, though several launches have been completed successfully as well.
- This is the first launch failure for ISRO since 2017 after a run of 14 consecutive successful launches.

16 World Elephant Day

CONTEXT:

- August 12 is observed as 'World Elephant Day.

ABOUT WORLD ELEPHANT DAY:

- World Elephant Day was launched in 2012 to bring attention to the urgent plight of Asian and African elephants.
- On the occasion of World Elephant Day (12th August), the Union Environment Minister made public the population estimation protocol to be adopted in the all-India elephant and tiger population estimation in 2022.
- The purpose of this day is to raise awareness about the issues threatening elephants.
- Shrinking habitats and illegal poaching for the trade of elephant ivory are just two of the most serious issues that the elephant population faces today.
- World Elephant Day is a way to raise awareness and rally support for these issues – and it does so through partnering up with elephant conservation organisations.
- The World Elephant Society also urges individuals and organisations to mark this day with their own events across the globe.

Key Points:

- **Current Data on Elephants in India:**
 - According to the last count in 2017, there were 29,964 elephants in India. Which is a slight increase from 2012's mean of 29,576 elephants.

About African Elephants:

- There are two subspecies of African elephants, the Savanna (or bush) elephant and the Forest elephant.
- **Global Population:** Around 4,00,000.
- Earlier in July 2020, Botswana (Africa) witnessed the death of hundreds of elephants.

Protection Status:

IUCN Red List Status:

- **African Savanna Elephant:** Endangered.
- **African Forest Elephant:** Critically Endangered
- **CITES:** Appendix II

17 Vehicle Scrappage Policy**CONTEXT:**

- Recently, the Prime Minister while addressing the Investor Summit in Gujarat via video conferencing launched the Vehicle Scrapping Policy/**National Automobile Scrappage Policy**.

Key Points:

- Reducing the population of old and defective vehicles, bringing down vehicular air pollutants, improving road and vehicular safety.
- The policy is estimated to cover 51 lakh Light Motor Vehicles (LMVs) that are above 20 years of age and another 34 lakh LMVs above 15 years of age.

Provisions:**• Fitness Test:**

- Old vehicles will have to pass a fitness test before re-registration and as per the policy government commercial vehicles more than 15 years old and private vehicles which are over 20 years old will be scrapped.
- Old vehicles will be tested at the authorized Automated Fitness Center and will not be scrapped merely based on age.
- Emission test, braking system, safety components will be tested and the vehicles which fail in the fitness test will be scrapped.
- If the old vehicle passes the test, the owner can continue to use it, but the charges for reregistration will be much steeper.
- The Union Road and Transport Ministry has also issued rules for the registration procedure for scrapping facilities, their powers, and the scrapping procedure to be followed.

Road Tax Rebate:

- The state governments may be advised to offer a road-tax rebate of up to 25% for personal vehicles and up to 15% for commercial vehicles to provide an incentive to owners of old vehicles to scrap old and unfit vehicles.

Vehicle Discount:

- Vehicle manufacturers will also give a discount of 5% to people who will produce the 'Scrapping Certificate' and registration fees will be waived off on the purchase of a new vehicle.

Disincentive:

- As a disincentive, increased re-registration fees would be applicable for vehicles 15 years or older from the initial date of registration.

SIGNIFICANCE:**• Creation of Scrap yards:**

- It will lead to the creation of more scrap yards in the country and the effective recovery of waste from old vehicles.
- India had to import 23,000 crore worth of scrap steel during the last year as India's scrapping is not productive and India is not able to recover energy and rare earth metals.

Employment:

- In the new fitness centres, 35 thousand people will get employment and an investment of Rs 10,000 crores will be pumped in.

Improved Revenue:

- This will boost sales of heavy and medium commercial vehicles that had been in the contraction zone as a result of the economic slowdown triggered by the bankruptcy of IL&FS (Infrastructure Leasing & Financial Services) and the Covid-19 pandemic.
- The government treasury is expected to get around Rs 30,000 to 40,000 crores of money through Goods and Services Tax (GST) from this policy.

Reduction in Prices:

- Prices of auto components would fall substantially with the recycling of metal and plastic parts.
- As scrapped materials will get cheaper the production cost of the vehicle manufacturers will also reduce.

Reduce Pollution:

- It will play a major role in modernising the vehicular population as it will help in phasing out the unfit and polluting vehicles across the country and promote a circular economy and waste to wealth campaign.
- As older vehicles pollute the environment 10 to 12 times more and estimated that 17 lakh medium and heavy commercial vehicles are more than 15 years old.

18

Plastic Waste Management Amendment Rules, 2021

CONTEXT:

- Recently, the Ministry Of Environment Forest And Climate Change has notified the Plastic Waste Management Amendment Rules, 2021.

Details:

- The Plastic Waste Management Amendment Rules, 2021, prohibits identified single-use plastic items which have low utility and high littering potential by 2022.

Cleaning up

Plastic items completely banned from July 1, 2022

Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, polystyrene (thermocool) for decoration, plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films, cigarette packets

Plastic bags to be thicker

From September 30 this year, thickness of plastic carry bags has been increased from 50 microns to 75. From December 31, 2022, the thickness will increase to 100 microns

BACKGROUND:

- Pollution due to single-use plastic items has become an important environmental challenge confronting all countries.
- India is committed to taking action for the mitigation of pollution caused by littered Single-Use Plastics.
- In the 4th United Nations Environment Assembly held in 2019, India had piloted a resolution on addressing single-use plastic products pollution, recognizing the urgent need for the global community to focus on this very important issue.
- The adoption of this resolution at UNEA 4 was a significant step.

What do the notified Rules entail?

- The manufacture, import, stocking, distribution, sale and use of the following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from 1st July 2022:
- earbuds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration;
- plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.
- From 30 September 2021, the thickness of plastic carry bags will be increased from 50 microns to 75 microns and 120 microns, the statement said adding that this will also allow the reuse of plastic carry bags.
- The plastic packaging waste, which is not covered under the phase-out of identified single-use plastic items, shall be collected and managed in an environmentally sustainable way through the Extended Producer Responsibility (EPR) of the Producer, importer and Brand owner (PIBO), as per Plastic Waste Management Rules, 2016.
- For the effective implementation of the EPR, the guidelines for the same have been given legal force through the amendment Rules.

The following steps have also been taken to strengthen the implementation of Plastic Waste Management Rules, 2016 and also to reduce the use of identified single-use plastic items:

- States/UTs have been requested to constitute a Special Task Force for the elimination of single-use plastics and effective implementation of Plastic Waste Management Rules, 2016.
- A National Level Taskforce has also been constituted by the Ministry for taking coordinated efforts to eliminate identified single-use plastic items and effective implementation of Plastic Waste Management Rules, 2016.

1**IndiGau****CONTEXT:**

- Recently, the National Institute of Animal Biotechnology (NIAB), Hyderabad has launched a chip called IndiGau.

ABOUT INDIGAU:

- IndiGau is India's first Cattle Genomic Chip for the conservation of pure varieties of indigenous cattle breeds like Gir, Kankrej, Sahiwal, Ongole, etc.

- This indigenous chip was developed by the concerted efforts of scientists of the National Institute of Animal Biotechnology (NAIB), Hyderabad, an autonomous institution under the aegis of the Department of Biotechnology.
- According to the statement released, IndiGau is the largest cattle chip in the world.
- It has 11,496 markers (SNPs) more than that placed on 777K Illumina chip of US & UK breeds.
- IndiGau will have practical utility in the government schemes to achieve the goal of conservation of the indigenous breeds with better characteristics.



What is an SNP chip?

- It is a small sliver of glass, about the size of a fingernail, into which are etched a very large number of very small pits. Each of these holds a tiny amount of DNA, which has been extracted from the tissue sample of an animal or plant and can be 'read' by a DNA sequence-reading machine.
- If cattle owners/breeders want to get DNA or genomic information on an animal, they simply take a hair or other tissue sample (probably using a blood card) and send it off to be read.
- The information the chip conveys can include pedigree testing, test for horn/poll status, and/or traits like growth rate or eating quality.

1

Four new Ramsar sites recognized in India

CONTEXT:

- Recently, four more Indian sites - two each from Haryana and Gujarat - have been recognized as wetlands of international importance under the Ramsar Convention.

ABOUT WETLANDS:

- Wetlands are ecosystems saturated with water, either seasonally or permanently.
- They include mangroves, marshes, rivers, lakes, deltas, floodplains and flooded forests, rice fields, coral reefs, marine areas no deeper than 6 metres at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.
- Though they cover only around 6% of the Earth's land surface, 40% of all plant and animal species live or breed in wetlands.

Ramsar Convention

- It was signed in **1971** in the **Iranian city of Ramsar** and is one of the oldest inter-governmental accords for preserving the ecological character of wetlands.
- It is also known as the **Convention on Wetlands**.
- It aims to develop and maintain an international network of wetlands which are important for the conservation of global biological diversity and for sustaining human life through the maintenance of their ecosystem components, processes and benefits.
- Wetlands declared as Ramsar sites are protected **under strict guidelines** of the convention.

New Ramsar Sites

- Recently, the Ramsar Convention has designated four new wetlands in India, as wetlands of global importance. It is an international treaty for the conservation and wise use of wetlands.
 - **Bhindawas Wildlife Sanctuary**, the largest wetland in Haryana is a human-made freshwater wetland.
 - **Sultanpur National Park** from Haryana supports more than 220 species of resident, winter migratory and local migratory waterbirds at critical stages of their life cycles.
 - **Thol Lake Wildlife Sanctuary** in Gujarat lies on the Central Asian Flyway and more than 320 bird species can be found here.
 - **Wadhvana Wetland** from Gujarat is internationally important for its birdlife as it provides wintering ground to migratory waterbirds, including over 80 species that migrate on the Central Asian Flyway.
- These wetlands are home to endangered bird species like Egyptian Vulture, Saker Falcon, Sociable Lapwing, and the near-threatened Dalmatian Pelican.
- With this, the number of Ramsar sites in India is 46.

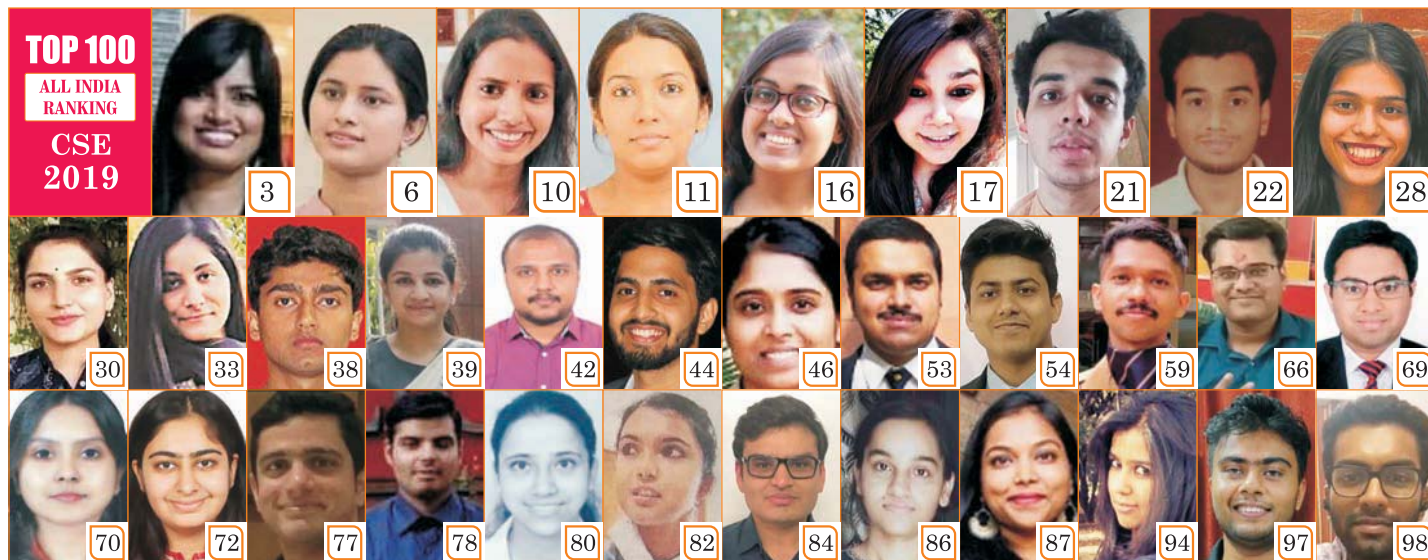
Global Wetland Conservation Initiatives

- The Ramsar convention
- Montreux Record
- World Wetland Day
- Cities4Forests global campaign: It works closely with cities around the world to connect with forests, emphasizes the importance of wetlands and their multiple benefits to help combat climate change and protect biodiversity in cities.

Conservation Efforts by India

- National Plan for Conservation of Aquatic Ecosystems (NPCA)
- Wetlands (Conservation and Management) Rules, 2017
- ISRO carried out the National Wetland Inventory and Assessment using remote sensing satellites from 2006 to 2011 and mapped around two lakh wetlands in India.

GSSCORE



SUCCESS IS A PRACTICE WE DO!

