JALDOST AIRBOAT

Recently, the National Aerospace Laboratories (NAL) unveiled the JALDOST airboat.

About JALDOST:

- It is an airboat that **operates on water.**
- It is designed to **remove excess aquatic weed** and floating waste from water bodies.
- It has a closed airtight **pontoon type hull to make it inherently unsinkable**.
- According to NAL, it has a hybrid propulsion system, comprising air propulsion and paddle wheel propulsion.
- **How it works?**
  o The ability to travel through weed makes JALDOST an ideal platform to collect them and bring them to the shore.
  o A steel **mesh belt conveyor system fixed** in the front collects the waste. The collected waste falls on the horizontal deck conveyor.
  o After reaching the shore, the collected waste is unloaded by a rear conveyor system to trucks or tractors.
- NAL has developed two versions of the airboat — JALDOST Mark-1 and an upgraded version JALDOST Mark-2.

Key facts about National Aerospace Laboratories (NAL)

- It is a **constituent of the Council of Scientific and Industrial Research** (CSIR), India, established in the year 1959.
- It is the only government aerospace R&D laboratory in the country's civilian sector.
- CSIR-NAL is a **high-technology-oriented institution** focusing on advanced disciplines in aerospace.
- It has several advanced test facilities, and many of them are recognized as National Facilities.

- It has provided significant value-added inputs to all **the Indian national aerospace programmes.**
- It has also developed many critical technologies for the strategic sector and continues to support the mission-mode programmes of the country.
- **Mandate:** To develop **aerospace technologies with strong science content**, design and build small, medium-sized civil aircraft, and support all national aerospace programmes.

MASI PORTAL

Recently, the Minister of Women and Child Development informed the Rajya Sabha about MASI Portal.

About the MASI Portal:

- Monitoring App for Seamless Inspection (MASI) was developed for synchronous monitoring of the **Child Care Institutions** (CCIs) and their inspection mechanisms across the country.
- The **National Commission for Protection of Child Rights** (NCPCR) has developed this application.
- The effective and efficient functioning of the mechanism for inspection of CCIs provided **under the Juvenile Justice Act, 2015** (as amended in 2021).
- The app is linked to the monitoring Portal where the automatic reports are generated.
- This App enables unified **inspections by Child Welfare Committees** (CWCs), State Inspection Committees**, District Inspection Committees**, Members of Juvenile Justice Boards (JJBs) and **State Commissions for Protection of Child Rights** (SCPCRs) as laid down under the JJ Act, 2015.
- It serves as a single platform for inspections of all the CCIs across the country by any of the above stated authorities.
- Regular follow-up is done before and after the completion of cycle of inspection.
- The complete reports are automatically generated on the Portal as soon as the questionnaire is filled and submitted by the authority.

Key Facts about National Commission for Protection of Child Rights

- It is a **statutory body** established by an Act of Parliament, **the Commission for Protection of Child Rights (CPCR) Act, 2005.**

- It works under the aegis of **the Ministry of Women and Child Development.**

- **Mandate:** The Commission is mandated under section 13 of the CPCR Act, 2005 "to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and the UN Convention on the Rights of the Child."

- **Members:**

  o A **chairperson** who, is a person of eminence and has done outstanding work for promoting the welfare of children.

  o **Six members** were appointed by the Central Government out of which at least two are women, who are having experience in Education, Child Health, Juvenile justice Elimination of child labour, Child psychology or sociology Laws relating to children.

  o The members are appointed by the Central Government **for a term of 3 years.**

WHAT IS AYUSH VISA?

The Ministry of Home Affairs recently notified the creation of a new category of Ayush visa for foreign nationals for treatment under Ayush systems/Indian systems of medicine.

About Ayush Visa:

- It is specifically **designed for foreign nationals** looking to receive medical treatment in India through traditional Indian systems of medicine.

- This visa aims to **cater to those interested in** Ayurveda, Yoga, and other **traditional forms of therapeutic care** and wellness.

- **A new chapter, e., Chapter 11A**, **Ayush Visa, has been incorporated** after Chapter 11 - Medical Visa of the Visa Manual, which d**eals with treatment under the Indian systems**

of medicine, and accordingly, necessary **amendments have been made in various chapters of the Visa Manual,** 2019.

- The introduction of the Ayush Visa category is **part of the country's roadmap for the Heal in India initiative.**

- **Heal in India initiative:** It seeks to **provide "integrated and holistic treatment" to the world in India** and enhance **patient mobility for access to world-class**, affordable, and quality **healthcare services".**

What is AYUSH?

- AYUSH, which **stands for Ayurveda, Yoga, Unani, Naturopathy, Siddha, and Homoeopathy,** is an **acronym devised in 2003** to change the name of the Department of Indian Systems of Medicine and Homoeopathy (ISM & H).

- ISM & H was created in March 1995 under the Ministry of Health and Family Welfare.

- On November 9, 2014, the **government elevated AYUSH to a separate ministry**.

- The **word AYUSH is derived from a Sanskrit phrase "ayusmanbhava" meaning long life.**

WHAT IS SOVEREIGN CREDIT RATING?

Global credit rating agency Fitch recently downgraded US Sovereign rating from AAA to AA+.

What is credit rating?

- Credit rating is an **assessment of the creditworthiness of a borrower,** including an individual, a company, or a country.

What is Sovereign Credit Rating?

- It is an independent **assessment of the creditworthiness of a country** or sovereign entity.

- **Governments borrow** huge funds by issuing debt instruments like government bonds. **Creditworthiness here means the ability of the government to pay back its debt** without default.

- Sovereign credit ratings can **give investors insights into the level of risk** associated **with investing in the debt instruments (like bonds) of a given country**, including political risks.
- **Standard & Poor's**, **Moody's, and Fitch Ratings** are the three most **influential credit rating agencies.**
- When evaluating the creditworthiness of a country, credit **rating agencies consider various economic and financial indicators of the country**, including its **economic growth, fiscal policies**, **public debt levels**, **political stability**, and external trade position, **to assign an appropriate credit rating.**

Why is it important?

o Obtaining a good credit rating is **important for a country** that wants **to access funding** for development projects **in the international bond market**.

o Countries with a good credit rating **can attract more foreign direct investment.**

o It **influences the country's borrowing costs** in global financial markets. **Governments with higher credit ratings can borrow at lower interest rates**, which can save significant amounts of money in interest payments.

WHY IS REMOVAL OF SPECIAL STATUS OF J&K BEING CHALLENGED IN THE SC

Why in News?

- The Supreme Court of India **began hearing the constitutional challenge** to the 2019 abrogation of Article 370 of the Constitution which granted special status to Jammu and Kashmir.

FOR	AGAINST
Article 370 was a temporary provision of Constitution	The same provision of Article 370 cannot be used to dilute it
Special privileges were temporary, cannot confer rights	Parliament cannot replace state legislature with the governor
In opposition with Article 14 which guarantees equality	Not seeking state legislature's nod is against spirit of consultation
Can be revoked through Presidential order	SC precedents cite Parliament's approval for abrogation

- **Legal arguments against removal:**

o The SC will examine whether it is **unconstitutional or violates the basic structure** of the Constitution.

o Article 370 is not only part of the Constitution but also part of **federalism**, which is basic structure. Accordingly, the court has upheld successive Presidential Orders under Article 370.

- o In **Sampat Prakash (1969)** the SC refused to accept Article 370 as temporary and said "Article 370 has never ceased to be operative". Thus, it is a permanent provision.
- o The Delhi HC in **Kumari Vijayalaksmi (2017)** too rejected a petition that said Article 370 is temporary and its continuation is a fraud on the Constitution.

Legal arguments for removal:

- o **Article 35A** was not passed as per the amending process given in Article 368, but was inserted on the recommendation of J&K's Constituent Assembly through a Presidential Order.
- o **Article 35A empowers the J&K legislature** to define the state's permanent residents and their special rights and privileges.
- o **Since Article 35A predates basic structure theory of 1973**, as per Waman Rao (1981), it cannot be tested on the touchstone of basic structure.

Arguments Presented during the Ongoing SC Hearings wrt Article 370:

- **A temporary provision:** Since the Article itself [370(3)] provides for the process through which it can be declared inoperative, it is a temporary provision.
- **Permanence of Article 370:**
- o While the Constitution of India came into force in 1950, the Constituent Assembly of J&K came into being only in 1951.
- o **Yet, Article 370(3) makes a reference to the "Constituent Assembly of the State."**
- o Any change to the relationship between the State of J&K and the Indian Union could only be brought about on the recommendation of the Constituent Assembly of the State.
- o Once the Constituent Assembly ceased to exist (1951-1957), the Article became a permanent feature of the Constitution.

UNIQUE IDENTIFICATION AUTHORITY OF INDIA (UIDAI):

- The Unique Identification Authority of India is a **statutory authority** established under the provisions of **Aadhaar Act 2016**.

- UIDAI was created to issue a 12-digit Unique Identification numbers (UID), named as "Aadhaar", to all residents of India.

- Under the Aadhaar Act 2016, UIDAI is responsible for:

o Aadhaar enrolment and authentication,

o Operation and management of all stages of Aadhaar life cycle,

o Developing the policy, procedure, and system for issuing Aadhaar numbers to individuals and

o Perform authentication and the security of identity information and authentication records of individuals.

- As on 30th November 2022, the Authority has issued more than **135 crore Aadhaar numbers** to the residents of India.

- **Nodal Ministry –** Ministry of Electronics and Information Technology (MeitY)

HOW UIDAI IS USING AI TO TACKLE PAYMENT FRAUDS

- As more frauds related to the **Aadhaar-enabled Payment System** (AePS) come to the fore, the Unique Identification Authority of India (UIDAI), has turned to artificial intelligence-based systems in a bid to limit the cases.

About Aadhar Act, 2016:

- The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 (shortly called Aadhar Act), was passed by the Parliament in March, 2016.

- **Objectives**:

o To provide legal backing to the Aadhaar unique identification number project.

o To provide for targeted delivery of subsidies and services to individuals residing in India by assigning them unique identity numbers, called Aadhaar numbers.

What is Aadhaar-enabled Payment System (AePS)?

- AePS is a payment service that allows a bank customer to use Aadhaar as his/her identity to access his/her Aadhaar enabled bank account.

- Through this, a person can perform basic banking transactions like balance enquiry, cash withdrawal, remittances through a Business Correspondent.
- The customer looking to avail AEPS should mandatorily:
- Have a Bank Account with a Bank participating in AEPS
- His / Her Aadhaar should be linked to his/her Bank account with other Bank.
- Transaction is completed using his/her biometric authentication only.

Rise in Aadhaar-enabled Payment Frauds:

- According to the Home Ministry, in the financial year 2020-21, 2.62 lakhs financial crimes, such as money laundering, bribery, corruption and different kinds of frauds, were reported.
- The number jumped to **6.94 lakhs in 2022**, as per a report released by the Standing Committee on Finance.
- However, due to limited awareness about cyber frauds, a significant number of people do not report them to authorities, the committee said.
- Out of 6.94 complaints related to financial frauds **only in 2.6 per cent of cases an FIR was registered**.

How is UIDAI Using Artificial Intelligence to Tackle Payment Frauds?

- UIDAI launched Aadhar Fingerprint technology in February, 2023.
- The technology **uses a combination of both finger minutiae and finger image to check the liveness of the fingerprint captured**.
- The measure was implemented after instances of people creating fake fingerprints using silicone to syphon off money from unsuspecting individuals' bank accounts were reported.
- In effect, the AI-based technology is able to identify whether the fingerprint is from a real, or 'live' finger, or a cloned one.
- In May this year, Airtel Payments Bank collaborated with the National Payments Corporation of India (NPCI) to roll out a **facial recognition-based authentication measure** for Aadhar-enabled payments.

Can Technology Alone Solve the Fraud Problem?

- Deploying technological measures to curtail financial frauds has its own limits, though.

- For instance, **they have failed to thwart a number of frauds related to AePS**, in which a business correspondent, a key member in the payment supply chain, is the culprit.

  o A business correspondent (BC) is an informal bank agent equipped with a biometric Point-of-Sale (PoS) machine, which works like a micro ATM.

  o If someone needs Rs 500, they have to give their bank details to the BC along with their Aadhaar-based biometric details and the BC will give them the Rs 500.

  o However, officials aware of the matter said often, **BCs misrepresent the amount they have paid an individual and input a higher amount in their system**.

  o Unsuspecting individuals, especially in rural areas, do not always have the wherewithal to ask for a receipt that the BC is supposed to generate after each transaction.

- There have also been instances of fingerprint cloning, which AI-based technologies — at least in theory — are better equipped to deal with.