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1 Novel technique to detect tropical cyclones for Bay of Bengal Basin

CONTEXT:

- Indian Scientists have found a promising technique for early detection of development or strengthening of tropical cyclones in the atmospheric column prior to satellite detection over ocean surface in North Indian Ocean region.

ABOUT

What are the newly founded techniques?

- Scientists have devised a novel method using Eddy detection technique to investigate the formative stages and advance detection time of tropical cyclogenesis in the North Indian Ocean region.
- The method aims to identify initial traces of pre-cyclonic eddy vortices in the atmospheric column and track its Spatio-temporal evolution.
- The method could bring about genesis of prediction with a minimum of four days (~ 90 h) lead time for cyclones developed during the pre-and post-monsoon seasons.

Cyclone eddies

- Prior to the formation of cyclonic system over the warm oceanic environment, the **initial atmospheric instability mechanism**, as well as the **vortex development**, is triggered at higher atmospheric levels.
- These cyclonic eddies are prominent features in the vertical atmospheric column encompassing the disturbance environment with a potential to induce and develop into a well-marked cyclonic depression over the warm ocean surface.
- They could be used for detection of prediction of cyclones.

The previous method

- So far, remote sensing techniques have detected them the earliest.
- However, this detection was possible only after system developed as a well-marked low-pressure system over the warm ocean surface.

Significance of the technique

- Early detection of Tropical cyclones has wide socio-economic implications.
- A larger time gap between the detection and the impact of the cyclone could help preparation activities.

Eddy :

- It is a circular movement of water, wind, dust, etc.

Cold-core rings:

- Cold-core rings are a type of oceanic eddy, which are characterized as unstable, time-dependent swirling 'cells' that separate from their respective ocean current and move into water bodies with different physical, chemical, and biological characteristics.

- ▶ Their size can range from 1 mm to over 10,000 km in diameter with depths over 5 km.
- ▶ Cold-core rings are the product of warm water currents wrapping around a colder water mass as it breaks away from its respective current.
- ▶ The nature of eddies are such that the center of the eddy, the outer swirling ring, and the surrounding waters are well stratified and all maintain their distinct properties throughout the eddy's short time-scale.

2 Model Tenancy Act

CONTEXT:

- Cabinet approves Model Tenancy Act for circulation to the States/Union Territories for adoption

ABOUT:

- The Model Tenancy Act aims at creating a vibrant, sustainable and inclusive rental housing market in the country.
- The Law provides for-
 - protection of interest of landlords
 - protection of interest of tenants
 - speedy adjudication of disputes between landlord and tenant

Who is a landlord and tenant?

Landlord	Tenant
<ul style="list-style-type: none"> ▶ A landlord, or in other words a landowner or lessor, means a person who receives rent from or on behalf of a tenant, in respect of a rented premises. <ul style="list-style-type: none"> • legal heirs or his assignees • trustee or guardian of a minor or a person of unsound mind, who receives rent on his/ her behalf 	<ul style="list-style-type: none"> ▶ A tenant or a lessee means a person by whom or on whose behalf rent is payable to the landlord under a tenancy agreement. A tenant also includes- <ul style="list-style-type: none"> • a sub-tenant • a person who continues to be in possession after the termination of his/ her tenancy.

Significance of the Law

- **Formalization of the sector:** Model Tenancy Act will enable institutionalization of rental housing by gradually shifting it towards the formal market.
- **Private partnership:** The Model Tenancy Act will facilitate unlocking of vacant houses for rental housing purposes. It is expected to give a fillip to private participation in rental housing as a business model for addressing the huge housing shortage.
- **Overall growth of the sector:** It will help overhaul the legal framework with respect to rental housing across the country, which would help spur its overall growth.

Can States implement it?

- States can adopt the Act as it is with fresh legislation, since it is a state subject, or they can amend their existing rent acts to factor in the new MTA.

- States and Union Territories have MoUs with the Centre under the Pradhan Mantri Awas Yojana-Urban which has this provision.

Need of this Act:

- As per Census 2011, more than 1 crore houses were lying vacant in urban areas.
- The existing rent control laws are restricting the growth of rental housing and discourage owners from renting out their vacant houses due to fear of repossession.

3 Unmanned Aircraft System (UAS) Rules, 2021

CONTEXT:

Ministry of Civil Aviation (MoCA) and Directorate General of Civil Aviation (DGCA) granted conditional exemption to Survey of India (Sol) from **Unmanned Aircraft System (UAS) Rules, 2021**.

ABOUT:

- The drone deployment permission has been granted for large scale mapping of inhabited areas of villages under the central government scheme - Survey of villages and Mapping with Improved Technology in Village Areas (SVAMITVA).

What is SVAMITVA scheme?

- The SVAMITVA scheme aims to provide an integrated property validation solution for rural India.
- The demarcation of Abadi areas (the Abadi area includes inhabitant land, inhabited areas contiguous to Abadi and wadis/basties in rural areas) would be done using Drone Surveying technology, with the collaborative efforts of the Ministry of Panchayati Raj, State Panchayati Raj Department, State Revenue Department.
- This permission grant will allow Large Scale Mapping (LSM) by Survey of India using drones.
- The aerial surveillance would generate high resolution and accurate maps to confer ownership property rights.
- Based on these maps or data, property cards would be issued to the rural household owners.

Unmanned Aircraft System Rules, 2021 (key-highlights)

- **Issued by:** The Ministry of Civil Aviation
- The new drone laws and regulations apply to anyone looking to operate an unmanned aircraft system (UAS) in India.
- The ability to fly a drone in India is subject to the type of drone and the corresponding permit and license needed for it.
- As per the size of the drone, the following categories have been listed under the Gazette:
 - **Nano Drones:** Drones weighing less than or equal to 250 grams fall under this category.
 - No license or permit is needed to fly such drones.
 - **Micro and Small Drones:** more than 250 grams but less than 2 kg. The latter, Small drones, indicates UAS weighing more than 2 kg but under 25 kg.
 - Pilots of such drones require a **UAS Operator Permit-I (UAOP-I)** for all flying purposes.
 - **Medium and Large Drones:** Medium drones- weighing more than 25 kg but less than 150 kg and Large drones- weighing more than 150 kg
 - For the operation of either one of them, one would require **UAS Operator Permit-II (UAOP-II)**.

Drone:

- ▶ An **unmanned aerial vehicle (UAV)** or uncrewed aerial vehicle, commonly known as a drone, is an aircraft without any human pilot, crew or passengers on board.
- ▶ **UAVs** are a component of an **unmanned aircraft system (UAS)**, which include additionally a ground-based controller and a system of communications with the UAV.

4**All India Survey on Higher Education (AISHE) 2019-20****CONTEXT:**

Ministry of Education announced release of Report of All India Survey on Higher Education (AISHE) 2019-20.

Key-highlights of the findings

- Total Enrolment in Higher Education stands at 3.85 crore in 2019-20 as compared to 3.74 crore in 2018-19, registering a growth of 11.36 lakh (3.04 %).
- Gross Enrolment Ratio (GER), the percentage of students belonging to the eligible age group enrolled in Higher Education, in 2019-20 is 27.1% against 26.3% in 2018-19 and 24.3% in 2014-2015.
- Gender Parity Index (GPI) in Higher Education in 2019-20 is 1.01 against 1.00 in 2018-19 indicating an improvement in the relative access to higher education for females of eligible age group compared to males.
- Pupil Teacher Ratio in Higher Education in 2019-20 is 26.

What is AISHE?

- ▶ AISHE is an annual web-based survey.
- ▶ It provides key performance indicators on the current status of higher education in the country.
- ▶ Data is collected on several parameters such as teachers, student enrolment, programmes, examination results, education finance and infrastructure.
- ▶ Indicators of educational development such as Institution Density, Gross Enrolment Ratio, Pupil-Teacher ratio, Gender Parity Index and Per Student Expenditure will also be calculated from the data collected through AISHE.
- ▶ **Conducted by:** The Ministry of Education has been conducting since 2010-11.

5**Indo-Thai CORPAT****CONTEXT:**

Recently, the 31st edition of India-Thailand Coordinated Patrol (Indo-Thai CORPAT) between the Indian Navy and the Royal Thai Navy has been conducted.

ABOUT:

- CORPAT builds up understanding and interoperability between navies and facilitates institution of measures to prevent and suppress unlawful activities like Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy.
- It further helps enhance the operational synergy by exchange of information for prevention of smuggling, illegal immigration and for conduct of SAR operations at sea.

Security And Growth for All in the Region

- As part of Government of India's vision of SAGAR (Security And Growth for All in the Region), the Indian Navy has been proactively engaging with the countries in the Indian Ocean Region towards enhancing regional maritime security.

6**47th G7 Summit****CONTEXT:**

Recently, India participated in the Outreach Sessions of the G7 Summit in virtual format.

ABOUT:

- The theme for the Summit was 'Build Back Better'.
- The UK has outlined four priority areas for its Presidency. These are
 - leading the global recovery from coronavirus while strengthening resilience against future pandemics
 - promoting future prosperity by championing free and fair trade
 - tackling climate change and preserving the planet's biodiversity
 - championing shared values and open societies

G7:

- ▶ The Group of Seven (G7) is an inter-governmental political forum consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
- ▶ Its members are the world's largest IMF-advanced economies and wealthiest liberal democracies; the group is officially organized around shared values of pluralism and representative government.

7**Report of Committee on Variable Capital Company****CONTEXT:**

Expert Committee on Variable Capital Company submits its report to the International Financial Services Centres Authority (IFSCA).

BACKGROUND

- IFSCA constituted a Committee of Experts ('the Committee') to examine the feasibility of the Variable Capital Company ('VCC') in India to examine the suitability of the Variable Capital Company as a vehicle for fund management in the International Financial Services Centre in India.
- The IFSCA set up this Committee to explore the potential for allowing another legal structure – popularly known as a variable capital company (VCC) – as an additional option through which asset managers could pool the investors' funds.
- The VCC structure dispenses with some of the key limitations of companies and LLPs and provides for higher regulatory standards than those applicable to trusts.

Key-highlights of the recommendations

- The Committee assessed the features of a VCC or its equivalent, in other jurisdictions such as the UK, Singapore, Ireland and Luxembourg.
- The Committee recommended the adoption of a VCC-like legal structure for the purpose of conducting fund management activity in IFSCs.

International Financial Services Centres Authority (IFSCA):

- ▶ The International Financial Services Centres Authority (IFSCA) has been established on April 27, 2020 under the International Financial Services Centres Authority Act, 2019.
- ▶ It is headquartered at GIFT City, Gandhinagar in Gujarat.

Role of IFSCA

- ▶ The IFSCA is a unified authority for the development and regulation of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India.
- ▶ At present, the GIFT IFSC is the maiden international financial services centre in India.
- ▶ Prior to the establishment of IFSCA, the domestic financial regulators, namely, RBI, SEBI, PFRDA and IRDAI regulated the business in IFSC.
- ▶ The main objective of the IFSCA is to develop a strong global connect and focus on the needs of the Indian economy as well as to serve as an international financial platform for the entire region and the global economy as a whole.

8

Compressed Bio Gas to give fillip to SATAT scheme

CONTEXT:

Recently, a number of initiatives were launched to provide major fillip to the SATAT initiative, and help India leap ahead towards a 'greener tomorrow'.

- The initiatives included signing of a Cooperation Agreement by Oil and Gas major companies for the promotion and development of the SATAT (Sustainable Alternative towards Affordable Transportation) scheme.

What is SATAT Scheme?

- The SATAT scheme aims to set up Compressed Bio-Gas production plants and make CBG available in the market for use as a green fuel.

- 'SATAT', launched in 2018, envisages to target production of 15 MMT of CBG from 5000 plants by 2023.

Biogas

- ▶ Biogas is the mixture of gases produced by the breakdown of organic matter in the absence of oxygen (anaerobically), primarily consisting of methane and carbon dioxide.
- ▶ Biogas is a renewable energy source.
- ▶ It can be produced from raw materials such as agricultural waste, manure, municipal waste, plant material, sewage, green waste or food waste.
- ▶ Biogas is produced by anaerobic digestion with methanogen or anaerobic organisms, which digest material inside a closed system, or fermentation of biodegradable materials. This closed system is called an anaerobic digester, biodigester or a bioreactor.
- ▶ Biogas can be compressed after removal of Carbon dioxide, the same way as natural gas is compressed to CNG, and used to power motor vehicles.

9 Sub-Mission on Agricultural Mechanization (SMAM) scheme

CONTEXT:

To empower the farmers through Sub-Mission on Agricultural Mechanization (SMAM) scheme, Government of India has released funds for various activities of Farm Mechanization.

What is Sub-Mission on Agricultural Mechanization (SMAM)?

- Ministry of Agriculture and Farmers Welfare has launched a Sub-Mission on Agricultural Mechanization (SMAM) in 2014-15.
- It aims to increase the reach of farm mechanization to small and marginal farmers and to the regions & difficult area where farm power availability is low.

Why agricultural mechanization is important?

- Agricultural Mechanization plays a vital role in optimizing the use of land, water energy resources, manpower and other inputs like seeds, fertilizers, pesticides etc to maximize the productivity of the available cultivable area and make agriculture a more profitable and attractive profession for rural youth.
- Agricultural Mechanization is one of the key drivers for the sustainable development of the agriculture sector.
- Sustainable Agriculture mechanization growth will require appropriate and precision agricultural machinery adequately supported by the latest technology.

10 Green room air conditioners

CONTEXT:

The Government e-Marketplace (GeM) has added a new product category called Green Room Air Conditioners to mark the World Environment Day.

Sustainable Public Procurement

- The GeM portal will enable and encourage all central and state government agencies to buy efficient and environment friendly green ACs, thereby paving a way for Sustainable Public Procurement in India.
- The purchase of Green RACs shall be a voluntary approach.
- United Nations Environment Programme (UNEP) in collaboration with other partners is supporting the Sustainable Public Procurement (SPP) initiative of the Government of India with initial focus on three prioritized product categories including paper, disinfectant and Green Room Air Conditioners.
- This initiative is one of the several steps taken by the government towards a circular and green economy.
 - In 2018, the Ministry of Finance had constituted a **Task Force on Sustainable Public Procurement**.
 - Additionally, the **draft National Resource Efficiency Policy (2019)** had included the agenda of Sustainable Public Procurement, that suggested establishing green procurement guidelines providing information on resource efficiency criteria to be used in the procurement processes for the prioritized products/service categories.
- Leveraging the procurement power and promoting sustainable public procurement that align with India's climate policies and priorities would play a key role in achieving India's Nationally Determined Contributions and its commitment towards relevant SDGs particularly **SDG 12.7**.
- Green Room Air Conditioner integration within the public procurement system will be a catalyst for market transformation towards sustainable cooling.

World Environment Day :

- ▶ World Environment Day (WED) is celebrated annually on 5 June.
- ▶ It is the United Nations' principal vehicle for encouraging awareness and action for the protection of the environment.
- ▶ First held in 1974, it has been a platform for raising awareness on environmental issue such as marine pollution, human overpopulation, global warming, sustainable consumption and wildlife crime.
- ▶ World Environment Day is a global platform for public outreach, with participation from over 143 countries annually.
- ▶ Each year, the program has provided a theme and forum for businesses, non government organizations, communities, governments and celebrities to advocate environmental causes.

11

New waste water treatment technology

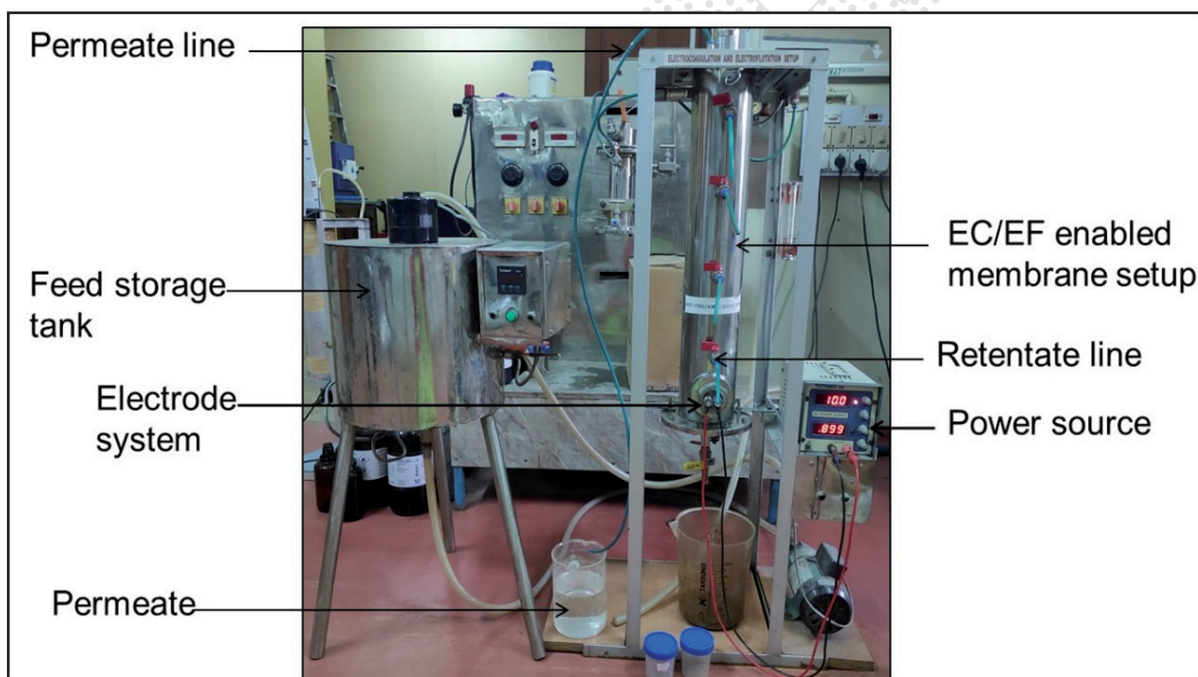
CONTEXT:

Scientists have developed a new waste water treatment technology which uses a combination of Electrocoagulation and Electroflotation Enhanced Membrane Module (ECEFMM) techniques for waste water treatment.

ABOUT:

- In the developed module, electro-coagulation and electrofloatation are adjoined with membrane in a single indigenous setup.
- The innovation being an economically feasible wastewater treatment technology (both in terms of capital and recurring investment) for low-scale and medium enterprises, has a good market potential.
- Moreover, unlike other conventional treatment, it can break the highly stable oil-water emulsion through electric discharge and simultaneously separates oil from water with high efficiency.
- Besides, by integrating the electrochemical process setup with the membrane module in a single hybrid ECEFMM setup, one process has been eliminated.
- This significantly lowers the initial capital investment expense along with the additional advantage of reduced installation area requirement.

- **Electrocoagulation** is a waste water treatment technique that uses electrical charge for changing the particle surface charge, allowing suspended matter to form aggregates
- **Electrofloatation** is the separation of suspended particles from water using hydrogen and oxygen bubbles generated by passing electricity through water.



12

Cryogenic-Electron microscopy (Cryo-EM) Facilities

CONTEXT:

Researchers in the country would soon have access to four Cryogenic-Electron microscopy (Cryo-EM) facilities paving the way towards establishment of leadership in structural biology, enzymology, and drug discovery to combat new and emerging diseases.

ABOUT:

- Cryo-EM has revolutionized structural investigations of macromolecules in recent times.
- It is a testimonial for a revolutionary technology for structural biologists, chemical biologists, and ligand discovery, which has gained a clear edge over contemporary x-ray crystallography.
- In light of these advancements, cryo-electron microscopy technique was recognized with the Nobel Prize for the high-resolution structure determination of biomolecules in solution (2017).
- The revolution in resolution resulted in atomic-level understanding of the Zika virus surface proteins, thus aiding structure-based drug discovery, deciphering of structure of hard-to-crystallize membrane proteins and other macromolecular complexes.
- The first national cryo-EM facility was established at National Centre for Biological Sciences (NCBS) in 2017 and then subsequently in IISc, Bangaluru, and RCB Faridabad.
- However, it was felt that the existing cryo-EM research facilities in the country are not adequate to leave a mark at the global stage.

Cryogenics:

- Cryogenics describes the science that deals with the production, effects, and uses of a wide variety of materials at very low temperatures.
- To put this into perspective, water undergoes a phase transition from liquid state to solid state at 32° F (0° C), whereas cryogenic temperatures range from -150° C to -273° C.
- At -273° C or 0 Kelvin (K), which is also known as absolute zero, the movement of molecules ceases, thereby resulting in these molecules to be at their lowest energy state.

13**Ethanol distillation capacities to double by 2025****CONTEXT:**

The roadmap for ethanol blending in India 2020-25 has been released on 5th June, 2021 i.e. on World Environment day.

ABOUT:

- To achieve blending targets, Government is encouraging sugar mills and distilleries to enhance their distillation capacities for which Government is facilitating them to avail loans from banks for which interest subvention up to 6% is being borne by Government.
 - India is facing a situation of plenty with surplus sugar, leading to liquidity problem to sugar mills and delayed payments of cane dues.
 - The Government is encouraging sugar mills to divert excess sugarcane to ethanol which is blended with petrol.
- The production of fuel grade ethanol and its supply to OMCs has increased by 5 times from 2013-14 to 2018-19.
- Government has fixed remunerative price of ethanol from maize & FCI rice.

Ethanol fuel:

- Ethanol, which is sometimes known as ethyl alcohol, is a kind of alcohol derived from corn, sugarcane, and grain or indirectly from paper waste.

- ▶ It's also the main type of alcohol in most alcoholic beverages obtained as a result of fermentation of a mash of grains (gin, vodka, and whiskey) or sugarcane (rums).
- ▶ It's also a source of fuel commonly blended with gasoline to oxygenate the fuel at the gas pump.
- ▶ Ethanol fuel can also be used on its own to power vehicles.

Methanol fuel:

- ▶ Methanol fuel is an alternative [biofuel] for internal combustion and other engines, either in combination with gasoline or independently.
- ▶ Methanol (CH₃OH) is less expensive to produce sustainably than ethanol fuel, although it is generally more toxic and has lower energy density.
- ▶ For optimizing engine performance and fuel availability, however, a blend of ethanol, methanol and petroleum is likely to be preferable to using any of these alone.
- ▶ Methanol fuel is currently used by racing cars in many countries but has not seen widespread use otherwise.

14 Nanorods-based oxygen sensor

CONTEXT:

Indian Scientists have developed a nanorods-based oxygen sensor which works at room temperature with assistance of UV irradiation and can detect oxygen gas concentrations in places such as underground mines, at higher altitudes, inside aeroplanes and research labs.

ABOUT:

- A team of scientists have fabricated a metal oxide semiconductor (MOS) nanorods array-based oxygen sensor.
- It works at room temperature with assistance of UV irradiation. The sensor gives the best sensitivity with low power consumption and works at room temperature.
- It can detect broad ppm range of oxygen gas concentrations.
- The fabricated sensors exhibited response and recovery times of around 3 sec and 10 sec, respectively, at 1000 ppm.
- The sensor works in oxygen concentrations ranging from 25 ppm to 10 lakh ppm (100%) with good stability.

The need

- Monitoring O₂ concentration in very low ppm-level is of paramount importance, and a fast and selective oxygen sensor working at room temperature can save lives in places like underground mines, higher altitudes and improve the accuracy of numerous experiments being conducted in research labs.

Ultraviolet germicidal irradiation (UVGI):

- ▶ Ultraviolet germicidal irradiation (UVGI) is a disinfection method that uses short-wavelength ultraviolet (ultraviolet C or UV-C) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions.
- ▶ UVGI is used in a variety of applications, such as food, air, and water purification.
- ▶ UV-C light is weak at the Earth's surface since the ozone layer of the atmosphere blocks it.
- ▶ UVGI devices can produce strong enough UV-C light in circulating air or water systems to make them inhospitable environments to microorganisms such as bacteria, viruses, molds, and other pathogens.
- ▶ UVGI can be coupled with a filtration system to sanitize air and water.

15 Decline in star formation activity**CONTEXT:**

- Researchers track reason behind decline in star formation activity 8 billion years ago.

What has been found?

- The likely cause for the decline is that galaxies were running out of fuel.
- The fuel critical to hydrogen formation is atomic hydrogen gas content of galaxies. Two studies that measured the atomic hydrogen content 9 billion years ago and 8 billion years ago, respectively, have helped come to this conclusion.

Neutral hydrogen:

- ▶ Neutral hydrogen is a normal, electrically neutral hydrogen atom with one proton and one electron.
- ▶ It is commonly referred to as HI (pronounced H-one), and is located throughout galaxies as HI clouds or external to galaxies as part of the intercloud gas.
- ▶ It is detected via the spin-flip transition at 21cm in the radio, and HI clouds were used to determine the structure of our Galaxy from our location within it.

15 SAGE (Senior care Ageing Growth Engine) initiative**CONTEXT:**

The Senior Care Ageing Growth Engine (SAGE) initiative is launched by the Ministry of Social Justice and Empowerment.

ABOUT:

- The programme has been implemented to further the welfare of senior citizens in the country.
- It is a value addition to the existing schemes that cater to this demographic—
 - Integrated Programme for Older People (IPO)
 - Rashtriya Vayoshri Yojana (RVY) 2016
 - Pradhan Mantri Vaya Vandana Yojana (PMVVY) 2017
 - Vayoshreshtha Samman 2019
 - Maintenance & Welfare of Parents and Senior Citizens (MWPSC) Act 2007

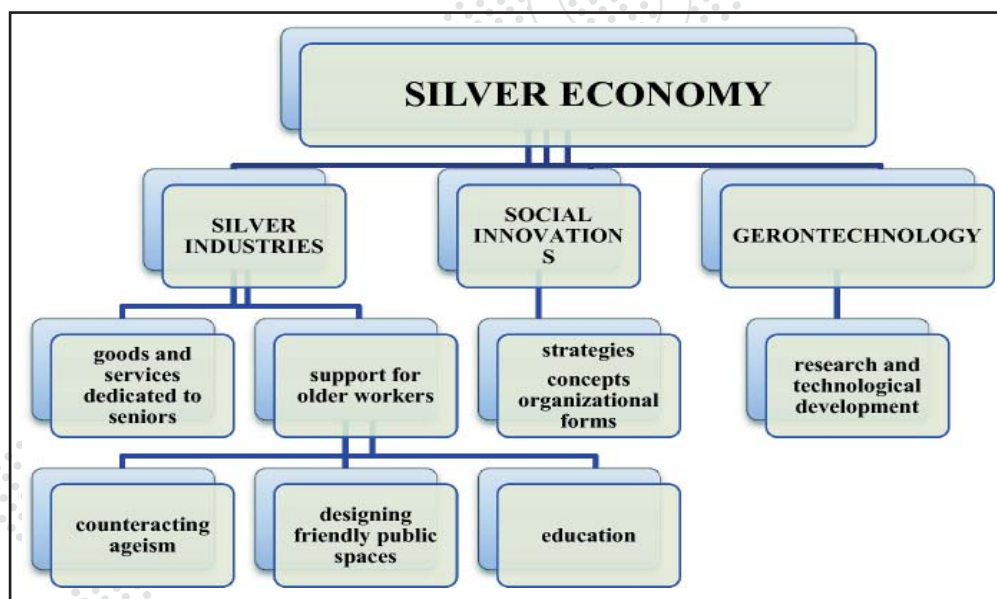
SAGE Objectives

The key objective of the SAGE initiative is

- To promote the 'Silver Economy' by encouraging entrepreneurial ventures and start-ups to participate in this space.

- Silver Economy is defined as the system of production, distribution and consumption of goods and services aimed at utilising the purchasing potential of the older and ageing populations, as well as satisfying their consumption requirements and living essentials and healthcare needs.

- To identify, evaluate, verify and aggregate these needs to deliver products, solutions and services to the stakeholders.



15 Micro-arc oxidation (MAO)

CONTEXT:

Indian Scientists have developed an environmental-friendly process, which can provide excellent corrosion resistance to the high-strength aluminium (Al) alloys extensively used in aerospace, textile, and automotive applications.

About the process

- The process, called micro-arc oxidation (MAO), involves an electrochemical method for the production of an oxide film on the metallic substrate.
- The electrolyte of the film is alkaline in nature and capable of providing better wear and corrosion resistance compared to the existing process.
- The process with necessary modifications can be used for wear, corrosion, thermal, and fatigue and corrosion-fatigue life enhancement of a variety of components made out of Al, Mg, Ti, Zr, and their alloys.

Usage of High-strength aluminium (Al) alloys

- High-strength aluminium (Al) alloys are extensively used in aerospace, textile, and automotive applications owing to their low density and high specific strength.
- Aerospace components made out of Al alloys include landing gear, wing spar, which is the main structural part of the wing, fuselage (main body of an aircraft), aircraft skins or outer surface and pressure cabins.
- These parts often need resistance against wear, corrosion damages, and enhanced fatigue life.
- The widely used technique for Al alloys to improve corrosion resistance called hard anodizing (HA) process is an electrolyte-based coating deposition.
- It involves sulphuric/oxalic based electrolytes, which emits not only toxic fumes but are also hazardous to handle during processing.



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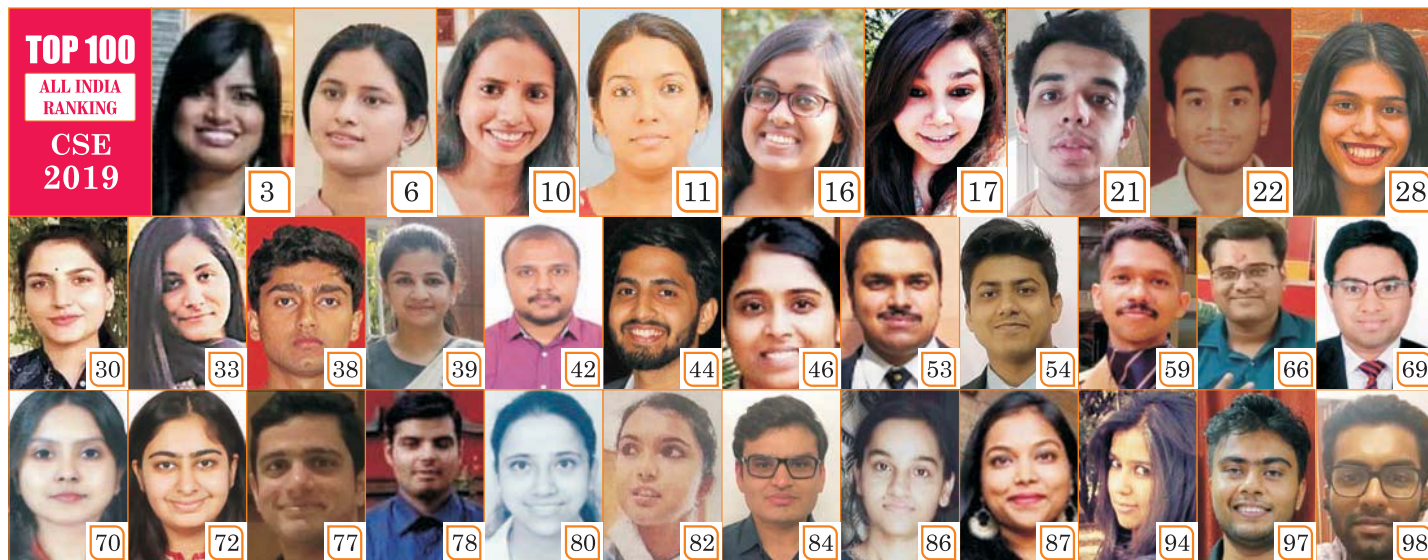
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