UNPACKING THE NEW SET OF E-WASTE RULES

Key highlights of New E-Waste Management Rules 2022

- **Registration of stakeholders**: Entities like manufacturer, producer, recycler, refurbisher shall be required to apply for EPR (Extended Producer Responsibility) registration.

  o Further, these entities are not allowed to deal with unregistered manufacturers, producers, recyclers and refurbishers.

- **Responsibilities and Compliances**:

Registered entities	Responsibilities and Compliances
Producers	• Obtaining and fulfilling the EPR targets and create awareness through various mediums.
Manufacturers	• Collecting the e-waste generated during the manufacturing of any electrical or electronic components and ensuring that it is recycled or properly disposed of.
Refurbishers	• Collecting e-waste that is generated during the refurbishing process and handing it over to the recycler. • The refurbished equipment should be in conformity with BIS standards.
Recyclers	• The recycling process and the facility should be in accordance with CPCB and residue generated should be disposed of in an authorized treatment storage disposal facility. • The materials not recycled in its facility should be sent to the respective registered recyclers. • Recyclers can accept e-waste provided that they do not contain any radioactive material and upload information on the portal. • Maintaining a record of e-waste including collection, recycling, dismantling, and those sent to the registered recycler • Provide information regarding the non-recyclable e-waste.
Bulk Consumers	• They should ensure that the e-waste generated by them is handed over only to the registered producers, recyclers or refurbishers.

  o

- **Applicability**: The products on which e-waste management rules apply can be bifurcated into two categories as follows:

  o Consumer Electricals and Electronics

  o IT and Telecommunication Equipment

- **Storage of E-waste**: Any manufacturer, producer, recycler or refurbisher can store the e-waste only for a period of up to 180 days are required to maintain the record of its sale, transfer or storage.

  o The CPCB has the power to extend storage period up to 365 days specifically for recycling or reuse of e-waste.

- **Reduction in use of Hazardous Substances**: The producers of e-waste have been specified proportions of hazardous substances in their new products.
  - Examples of hazardous substances include Mercury, Lead, Cadmium, Polybrominated Biphenyls and Hexavalent Chromium, Polybrominated Diphenyl Ethers.
- **Digitalized systems approach**: The EPR obligations shall be discharged by producers through the online purchase of certificates from registered recyclers.
  - Standardizing the e-waste value chain through a **common digital 'portal'** may ensure transparency.
  - It is also crucial to reduce the frequency of **'paper trading'** or **'false trail'**, i.e., a practice of falsely revealing 100% collection on paper while collecting and/or weighing 'scrap' to meet targets.

Way Forward

- In order to ensure maximum efficiency, the **activities of the recyclers must be recorded** in the system and the **authorities should periodically trace** the quantity of e-waste that went for recycling vis-à-vis the 'recovery' towards the end.
- The **intermediate stages** in hierarchical process of e-waste handling should be **strategically utilised** for better collection of e-waste as it does not involve any hazardous practices.
  - These intermediate stages include **collection** of mixed waste, **segregation** of e-waste, clustered accumulation of e-waste according to their type, etc.
- The e-waste handling should also **inculcate best practices** to incorporate informal sector in an organized e-waste network.
  - For instance, **'Karo Sambhav'**, a Delhi-based PRO, has **integrated informal aggregators** in its collection mechanism.
  - Through this initiative, e-waste is entered in a safe and structured system and the informal sector also has an advantage in terms of financial and legal security.
- In order to ensure the efficient implementation of the law, stakeholders must have the **right information and intent** to safely dispose e-waste.

AUSTRALIA'S DEAKIN UNIVERSITY TO BECOME THE FIRST FOREIGN VARSITY TO SET UP CAMPUS IN INDIA

Why in News?

- Australia's Deakin University is set to become the first foreign university to enter India via an independent campus in Gujarat's GIFT City.

Norms for foreign universities to set up campus in GIFT City

Background:

- The Union Finance Minister, in her Budget 2022 speech, had said that world-class foreign universities and institutions would be permitted to offer courses in the GIFT City.
- She also said that such institutions would be exempted from domestic regulations in order to facilitate the availability of high-end human resources for financial services and technology.

About the norms for foreign universities to set up campus in GIFT City

- It allows an educational institution from **the top 500 QS World Universities** to visit GIFT City and commit to establishing suitable infrastructure and facilities to offer courses in Science, Technology, Engineering, and Mathematics (STEM), etc.
- It aims to address some of the barriers that foreign universities have faced in coming to India, such as fee and administrative control, reservation policy implementation and the requirement that they be a not-for-profit entity.
- It also permits the parent entity to repatriate any profit without restriction.
- The foreign entity's courses or programs must be identical to those offered by the parent entity in its home jurisdiction, and the same degree, diploma or certificate must be conferred.
- The IFSCA would have the right to inspect foreign campuses set up in GIFT city.
- If an institution withdraws or discontinues a programme it would have to provide an alternative to the affected students, including reallocation.

What is the need for allowing Foreign Universities to set-up Campuses in India?

- The UGC chief pointed out that in 2022 over 4.5 lakh Indian students went abroad to study, leading to outflow of estimated $28-30 billion.

- Allowing foreign universities to set-up campuses in India will also ensure that all our students — there are around 40 million pursuing higher education — have access to global quality education.
- The **ideal of setting up foreign universities' campuses in India is also mentioned in the National Education Policy 2020**.

What is GIFT City?

- Gujarat International Finance Tech-City (GIFT City) is a **planned business district** in the state of Gujarat.
- **Features of GIFT City –**
  o It is India's **first operational greenfield smart city** and International Financial Services Centre (IFSC).
  o It is a vertical city that will optimise the land area consumption for the development.
  o It is located on the banks of **Sabarmati River**, connecting business capital (Ahmedabad) and political capital (Gandhinagar) of Gujarat state.
  o It has a dedicated multi-services **Special Economic Zone (SEZ)** for international operations for various services sector players.

NATIONAL COMMISSION FOR SAFAI KARAMCHARIS

Why in news?

- The National Commission for Safai Karamcharis (NCSK), after being headless for close to a year, has finally got a chairperson, vice-chairperson and member on board.

What is National Commission for Safai Karamcharis (NCSK)?

- NCSK was established as an institution to investigate the conditions of Safai Karamcharis (waste collectors) in India and make recommendations to the Government.
- It is currently a non-statutory body under the Ministry of Social Justice and Empowerment.

Background of NCSK

- The NCSK was established in the year 1993 as per the provisions of the NCSK Act 1993 initially for the period upto 31.3.1997.

- o Hence, initially NCSK was established as a statutory body.

- Later the validity of the Act was initially extended up to 2002 and thereafter up to 2004.

- o The NCSK Act ceased to have effect from 29.2.2004.

- After that the tenure of the NCSK has been extended as a non-statutory body from time to time through resolutions.

- The tenure of the present Commission was up to March 2022. However, it was extended further for a period of three years.

What are the functions of NCSK?

- The NCSK has been giving its recommendations to the Government regarding:

- o specific programmes for welfare of Safai Karamcharis,

- o study and evaluate the existing welfare programmes for Safai Karamcharis,

- o investigate cases of specific grievances etc.

- The NCSK has been assigned the work to monitor the implementation of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013.

- It is the only body keeping track of sewer deaths in the entire country.

What is the need for NCSK?

- **Deprivation among Safai Karamcharis**

- o The Government has taken many steps for the upliftment of the Safai Karamcharis.

- o However, the deprivation suffered by them in socio-economic and educational terms is still far from being eliminated.

- **Sporadic instances of manual scavenging**

- o As per the NCSK (2020 data), a total of 631 people have died in the country while cleaning sewers and septic tanks in the last 10 years.

- o Although manual scavenging has been almost eradicated, sporadic instances do occur.

- o In 2018, 29,923 people were engaged in manual scavenging in Uttar Pradesh, making it the highest in any State in India.

What are the challenges faced by NCSK?

- NCSK does not have any powers and works as a non-statutory body on government resolution.

o Recently, the govt mentioned in the Parliament that there is no such proposal for converting the commission into a statutory body.

- Due to this, the commission is not able to implement its own orders or directions.
- The chairperson and members are political appointees, so they don't question the government or speak against their schemes.
- The commission remains understaffed and many posts remain vacant.
- The commission itself is running on a temporary basis, the posts in the commission are filled either through deputation or co-terminus basis.

WHAT IS AUGMENTED REALITY (AR)?

MIT researchers recently built an augmented reality headset called X-AR that lets users see hidden objects inside a box or under a pile.

About Augmented Reality (AR):

- It is an **enhanced version of the real physical world** that is **achieved through the use of digital visual elements**, **sound, or other sensory stimuli** and **delivered via technology.**
- It **overlays digital content onto real-life environments** and objects.
- AR works by **superimposing digital information onto real-world objects to create a 3D experience** that **allows users to interact with both the physical and digital worlds.**
- It incorporates three features: a **combination of digital and physical worlds**, **interactions made in real time,** and **accurate 3D identification** of virtual and real objects.
- Unlike Virtual Reality (VR), which creates its own cyber environment, **AR adds to the existing world as it is**.
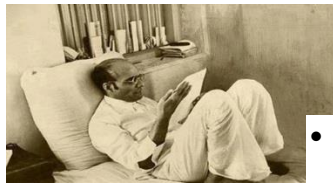
What is Virtual Reality (VR)?

- It is a simulated 3D environment that **enables users to explore and interact with a virtual surrounding in a way that approximates reality** as it is perceived through the users' senses.

- The environment **is created with computer hardware and software**, and the **users need to wear** devices such as helmets or goggles (**Virtual Reality headsets or helmets**) to interact with the environment.

WHO IS VEER SAVARKAR?

Home Minister recently paid his tributes to Veer Savarkar on his death anniversary.

About Veer Savarkar:

- He was **born in 1883 near Nasik in Maharashtra**.
- He was the **first to acknowledge the mutiny of 1857 as the first struggle for Independence** and wrote the **book 'The History of the War of Indian Independence'**.
- He was a passionate **promoter of Hindutva since childhood.**
- He was **sentenced** to 50 years in the **cellular jail of Andamans, also** known as Kala Pani, **for revolting against the Morley-Minto reforms** (Indian Councils Act 1909) in 1911.
- After his release from jail, he worked on the **abolishment of untouchability in Ratnagiri**.
- Serving as the **president of the Hindu Mahasabha** political party, **he opposed the Quit India movement in 1942.**
- He founded the organizations **Abhinav Bharat Society and Free India Society.**
- He was a **critic of the Indian National Congress** and **its acceptance of India's partition**.
- He was also a **critic of Mahatma Gandhi** and **called him a 'hypocrite'**. In 1948, he was charged as a co-conspirator in the assassination of Mahatma Gandhi.

EXERCISE COBRA WARRIOR

India recently dispatched Mirage-2000 fighters and other aircraft to participate in the 'Cobra Warrior' exercise in the United Kingdom.

About Exercise Cobra Warrior:

- It is a **multilateral exercise** in which **Air Forces** from **Finland**, **Sweden**, **South Africa, USA, and Singapore** would also participate alongside **UK's Royal Air Force** and **Indian Air Force**.

- The **aim** of the exercise is **to participate in diverse fighter aircraft engagements and learn from the best practices of various Air Forces**.

- **IAF is participating** in the exercise with five Mirage 2000 fighters, two C-17 Globemaster, and an IL-78 mid-air refueller aircraft.

   Other Exercises between India and the United Kingdom:

- **Konkan Shakti**-Tri services exercise

- **Ajeya warrior**-Army exercise

WHAT IS THE HAYABUSA 2 MISSION?

Scientists at the National Aeronautical and Space Administration (NASA) recently discovered life-forming molecules from studying samples returned by Hayabusa 2 explorer.

About Hayabusa 2 Mission:

- It is a **Japanese spacecraft that studied the asteroid Ryugu**, **collected samples**, and **brought them to Earth** for analysis.

- It was the **first to deploy rovers to operate on an asteroid**.

- **Mission Objectives:**

- To **clarify the origin and evolution of the Solar System**, including the **beginnings of life.**

- To **establish deep space exploration technology** by taking on new challenges.

- It was **launched by the Japan Aerospace Exploration Agency (JAXA)** in December **2014**.

- It **arrived at asteroid Ryugu on June 2018, collected samples** from the asteroid during two touchdowns **in 2019**, and **delivered the sample** capsule back to the Earth **on December 2020.**

- **After delivering** the capsule, **the spacecraft continued on to a new mission**. This new phase is referred to as the **"Extended Mission"**, with a **new target destination of the small asteroid, 1998 KY26.**

- Hayabusa2 **is a follow-up to Japan's original Hayabusa mission**, **which was the first spacecraft to take samples from an asteroid**, and was also the first mission to successfully land and take off from an asteroid. It returned samples from asteroid 25143 Itokawa to Earth on June 13, 2010.

WHAT IS RAISINA DIALOGUE?

The Ministry of External Affairs (MEA) recently announced that Italian Prime Minister Giorgia Meloni would be the chief guest and keynote speaker at the 8th Raisina Dialogue.

About Raisina Dialogue:
- It is **India's premier conference on geopolitics and geoeconomics**, committed to **addressing the most challenging issues** facing the global community.
- It is **held annually since 2016 in New Delhi.**
- The Dialogue is **structured as a multi-stakeholde**r, cross-sectoral discussion involving **heads of state, cabinet ministers,** and **local government officials**, who are joined by thought leaders from the private sector, media, and academia.
- It is **organized by the Observer Research Foundation (ORF)** in **partnership with the Ministry of External Affairs**, Government of India.

About Observer Research Foundation (ORF):
- **Established in 1990**, the **ORF is an independent, nonpartisan think tank** that **conducts policy research** on good governance, foreign policy, and sustainable economic development for India.
- ORF's work spans a **wide range of topics**, including climate, energy, cyber issues and media, economic development, and national security.
- It **provides non-partisan, independent, well-researched analyses** and **inputs** to diverse **decision-makers in governments**, business communities, academia, and to civil society around the world.
- **Mandate**: It **seeks to lead and aid policy thinking towards building a strong and prosperous India** in a fair and equitable world.

WHAT ARE RADIO GALAXIES?

A team of astronomers from the National Centre of Radio Astrophysics (NCRA) Tata Institute of Fundamental Research (TIFR) Pune; Physical Research Laboratory (PRL) Ahmedabad; and the University of Oxford recently discovered several 'elusive dying radio galaxies'.

About Radio Galaxies:

- Radio Galaxies, also known as **radio-luminous galaxies** or **radio-loud galaxies**, are a **particular type of active galaxy that emits more light at radio wavelengths** than at visible wavelengths.

- These happen through the **interaction between charged particles and strong magnetic fields related to supermassive black holes** at the galaxies' center.

- Radio galaxies are **driven by non-thermal emissions.**

- They are **much bigger** than most of the other galaxies in the universe.

- There are **two broad classes of radio galaxies**:

- **Core-halo radio galaxies:**

- They **exhibit radio emission** from a region **concentrated around the nucleus of the galaxy.**

- The region of radio emission is comparable in size to the optically visible galaxy.

- **Lobed radio galaxies**:

- **They display great lobes of radio emission extending,** in some cases, for **millions of light years beyond the optical part of the galaxy**.

- Some radio galaxies have a single lobe, but **more often, the lobes are double, arrayed on both sides of the optical galaxy.**