

17 Jan 2022: PIB Summary for UPSC

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1. PM delivers 'State of the World' special address at the World Economic Forum's Davos Agenda

Syllabus: GS2-International Relations

Prelims: World Economic Forum – Davos Dialogue 2022

Context: The Prime Minister delivered a 'State of the World' special address at the World Economic Forum's Davos Agenda via video conferencing.

World Economic Forum – Davos Dialogue 2022

- The Davos Dialogue 2022 is organized by the World Economic Forum (WEF).
- Theme: 'The State of the World'
- The Prime Minister appealed to the world leaders to make **Mission LIFE** (lifestyle for environment).
- He also emphasized the need for the world to move fast towards a "circular economy" for sustainable growth.

Mission LIFE:

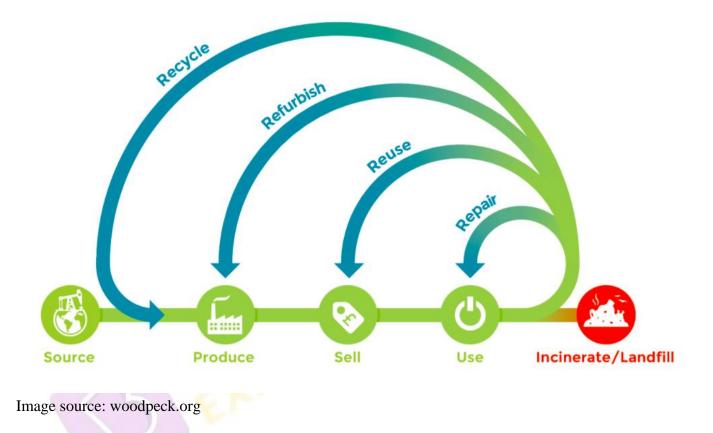
- LIFE i.e. 'Lifestyle for Environment', is a vision of a resilient and sustainable lifestyle that will come in handy in dealing with the climate crisis and other unpredictable challenges of the future.
- The Prime Minister at COP26 called for making 'Lifestyle for Environment' (LIFE) a global mission.

Know more about **World Economic Forum – Davos Dialogue** in the link.



What is a circular economy?

- A circular economy is characterized by marketplaces that encourage people to reuse things rather than discard them and then extract new resources.
- All types of waste, such as clothing, scrap metal, and obsolete technology, are returned to the economy and utilized more efficiently in a circular economy.



2. Shri Subhas Sarkar addresses Assistive Technology Innovation Showcase for Inclusive Education

Syllabus: GS3-Science and technology

Mains: Significance of Assistive Technology for Inclusive Education

Context: The Minister of State for Education addressed the Assistive Technology Innovation Showcase for Inclusive Education.

What is Assistive Technology?



- Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible.
- People who have trouble speaking, typing, writing, remembering, pointing, seeing, hearing, learning, walking, and many other activities can benefit from assistive technology.
- Assistive technology is required for a variety of disabilities.

What is the Significance of Assistive Technology for Inclusive Education?

- Schools, teachers, and students are increasingly able to access and apply assistive technology to enhance inclusion within mainstream classrooms.
- Assistive technology provides teachers and other professionals involved in supporting children with disabilities with appropriate knowledge and skills to bring potential to reality.
- Provision of <u>NEP-2020</u> mandates equitable & inclusive education so that every citizen has an equal opportunity to dream, thrive and contribute to the growth of the nation.
- The assistive technology for education should not only be considered as a social venture but it also has a solid business model of its own and the same needs to be developed further.
- The event highlighted access to assistive technology and global best practices and stressed how India can become truly inclusive.

What are the Challenges?

Policy Challenges

- Lack of National assistive technology policy or programme.
- Lack of access to assistive technology
- Implementation is expensive

Product Challenges

- · Limited Availability of products
- Lack of Specialization
- lack of state funding

Provision Challenges

- Disintegrated services
- Lack of national service delivery
- lack mechanisms for repair and followup



3. SCM, MoHUA launches 'Open Data Week'

Syllabus: GS3-Science and technology

Prelims: Open Data Week, Data Day

Context: The Ministry of Housing and Urban Affairs (MoHUA) announced the initiation of the Open Data Week.

Open Data Week:

- The Open Data Week is part of a series of pre-event initiatives being undertaken by MoHUA to promote awareness and use of open data.
- The event aims to show the benefits of open data such as increased efficiency, transparency, a spur in innovation, and economic growth.

Data Day:

- Open Data Week includes the celebration of a **Data Day** by all smart cities on **21st January 2022.**
- The Data Day aims to provide a platform that offers ample opportunities on how to continue creating and promoting the use of data that addresses complex urban issues.

About Azadi Ka Amrit Mahotsav:

• Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of progressive India and the glorious history of its people, culture and achievements.

4. CSIR's newly developed Disinfection technology

Syllabus: GS3-Science and technology

Prelims: Disinfection technology



Context: CSIR's newly developed disinfection technology is being installed to combat the pandemic in railway coaches, AC buses, closed spaces, etc.

What is Disinfection Technology?

- Disinfection technology is effective for the mitigation of airborne transmission of SARS-COV-2 and will also remain relevant in the post-COVID era.
- UV-C deactivates viruses, bacteria, fungus and other bioaerosols with appropriate dosages using 254nm UV light.
- UV-C air duct disinfection systems can be used in auditoriums, large conference rooms, classrooms, malls, etc. which provides a relatively safer environment for indoor activities in the current pandemic.
- The disinfection technologies for handling COVID waste from its separate collection to various physical and chemical treatment steps have been reviewed.

5. Motion of some stars holds clue of dark matter shape in barred galaxies

Syllabus: GS3-Science and technology

Prelims: Dark Matter, Shape of dark matter

Context: Scientists have found that out-of-plane bending events of the bar explain the shape of dark matter halos in barred galaxies.

What is Dark Matter?

- Dark matter is made up of particles that do not absorb, reflect, or emit light, making it impossible to detect with electromagnetic radiation.
- Know more about **Dark Matter** in the linked article.

What is the Recent Observation by Scientists?

- Galaxies develop, evolve, and merge on the skeleton of dark matter.
- Scientists looking into how the geometry of the dark matter halo impacts the motion of stars in stellar bars discovered that out-of-plane bending events in the bar explain the shape of dark matter halos in barred galaxies.
- **Buckling:** Out of plane bending of the bar in barred galaxies is a rare violent bar thickening mechanism known as buckling. One of the interesting and violent thickening mechanisms is buckling, where the bar bends out of the plane of the galaxy disk.



- **Bulge:** The Milky Way galaxy is a disk galaxy made up of stars moving in circular orbits around the centre in a flattened disk. It has a dense collection of the stars at the centre called the bulge. These bulges can have shapes ranging from nearly spherical to as flat as the galaxy disk.
- Why are Bulges formed? The Milky Way has a flat boxy or peanut-shaped bulge in its centre. Such bulges are formed due to the thickening of the stellar bars in galaxies.

6. Ministry of Textiles

Syllabus: GS3-Economy

Prelims: National Technical Textiles Mission (NTTM)

Context:

The Ministry of Textiles cleared 20 strategic research projects in the areas of Specialty fibres and Geotextiles which fall under the Flagship Programme 'National Technical Textiles Mission.'

National Technical Textiles Mission: The National Technological Textiles Mission was launched by the Ministry of Textiles to improve the penetration of technical textiles in India while leveraging the sector's outstanding growth rate.

Know more about National Technical Textiles Mission (NTTM).

Important Terms:

- **Geotextiles:** Geotextiles are synthetic textiles that are permeable. It's usually made of polyester or polypropylene polymers. Geotextiles are used to improve soil stability, limit erosion, and improve drainage.
- **Technical textiles:** Technical textiles are defined as materials and products manufactured primarily for their technical and performance properties rather than their aesthetic or decorative characteristics.