

TABLE OF CONTENTS

- [1. World Heritage Day \(18th April\)](#)
- [2. Animal Birth Control Rules, 2023](#)
- [3. NTPC signs MoU with Chempolis India](#)
- [4. Electromagnetic Ion Cyclotron \(EMIC\) Waves](#)

1. World Heritage Day (18th April)

Syllabus - GS1, Heritage & Culture.

Prelims - World Heritage Day or International Day for Monuments and Sites (IDMS).

Context - World Heritage Day or IDMS was celebrated with the theme 'Heritage Changes'.

Details -

- World Heritage Day is celebrated every year on 18 April to preserve the human heritage and to recognise all the efforts of relevant organisations.
- The **theme for World Heritage Day 2023 was “Heritage Changes”**. The primary objective of World Heritage Day is to promote cultural heritage sites and their preservation. These sites include historical monuments, archaeological sites, museums and other cultural and natural properties.
- The GoI has taken several measures to preserve the ancient civilisational ethos and protect cultural spiritual heritage. One such initiative is ‘Bringing Our Gods Home’. In total, 244 invaluable antiques of Indian origin have been brought back to India from abroad. Also, 72 antiques are in the process of being repatriated from various countries.
- Continuous efforts have been made by the GoI for the revival and redevelopment of heritage sites across the country like the [Kashi Vishwanath Corridor](#). The project is aimed at ensuring easy movement of pilgrims and devotees between the ghats and the temple. The 900 km Char Dham road project will provide all-weather connectivity to the four holy Dhams of Kedarnath, Yamunotri, Badrinath, and Gangotri.
- The GoI is taking the "Whole of Government" approach to preserve Indian culture and heritage and several ministries have converged together for holistic outcomes.

World Heritage Day

- The idea of World Heritage Day was proposed by the International Council on Monuments and Sites (ICOMOS) in 1982 and was later adopted by the United Nations Educational, Scientific and Cultural Organization ([UNESCO](#)).
- The first World Heritage Day was celebrated in 1983, and since then, it has been observed every year to recognize the value of cultural heritage and encourage people to protect and conserve it.
- UNESCO has a total of 1,154 monuments designated as World Heritage Sites from all over the world.

Also read - [UNESCO World Heritage Sites in India](#).

2. Animal Birth Control Rules, 2023

Syllabus - GS2, Government policies and interventions.

Prelims - Animal Birth Control rules, 2023

Context - Animal Birth Control (ABC) Rules 2023, notified by the Central government.

Details -

- In view of the growing menace of stray dogs in the country, the Central government has notified Animal Birth Control Rules 2023.
- The 2023 Rules, superseding the ABC (Dog) Rules, 2001, say that the birth control programmes for sterilisation and immunisation of stray dogs are to be carried out by the respective local bodies/municipalities/municipal corporations and panchayats. The Municipal Corporations need to implement the rules along with the anti-rabies programmes.
- Under the rules, the animal birth control programme should be run by an Animal Welfare Board of India-accredited organisation specifically accredited for the animal birth control program. Along with this, the list of such organisations will be made available on the website of the Board. It will also be updated from time to time.

3. NTPC signs MoU with Chempolis India

Syllabus - GS3, Conservation, environmental pollution and degradation.

Prelims - NTPC, Chempolis India.

Context - NTPC (National Thermal Power Corporation) signed MoU with Chempolis India to set up a bamboo-based biorefinery.

Details -

- NTPC has signed an MoU with Chempolis India, a Fortum group associate company and a leading Finnish bio-refining technology provider to explore the feasibility of setting up a bamboo-based bio-refinery in Bongaigaon (Assam).
- The bio-refinery project shall utilise bamboo for the production of 2G ethanol, bio-coal for thermal power plants and other value-added products.
- The project will support NTPC's decarbonization efforts, create job opportunities and build a sustainable model by promoting the use of locally available resources.

About NTPC -

- NTPC Ltd. is a Central Public Sector Undertaking (PSU) under the Ministry of Power.
- It is the largest power-generating utility in India.
- It became a [Maharatna company](#) in May 2010.

4. Electromagnetic Ion Cyclotron (EMIC) Waves

Syllabus - GS3, Science and Technology: Space Technology.

Prelims - Plasma waves - electromagnetic Ion Cyclotron (EMIC) waves.

Context- Indian scientists have identified a new wave - EMIC, a form of plasma wave in the Indian Antarctic Station, Maitri.

Details -

- Indian scientists have identified a unique form of plasma wave at Maitri, the Indian Antarctic station, which plays a key role in the radiation belt of Earth. The analysis of the wave could further help in safeguarding Indian assets in Low Earth Orbit.
- The Electromagnetic Ion Cyclotron (EMIC) waves identified in Antarctica play an important role in the precipitation of killer electrons, which have speeds close to the speed of light. The waves are formed when low-energy ions in the magnetosphere interact with electromagnetic fields, causing the ions to spiral along the magnetic field lines.
 - A magnetosphere is that area of space around a planet that is controlled by the planet's magnetic field.

- The magnetosphere shields the earth from solar and cosmic particle radiations and also from the erosion of the atmosphere by the solar winds.
- The study of plasma waves provides us with information on regions inaccessible to us, transport mass and energy across different regions, how they interact with charged particles, and control the overall dynamics of the Earth's magnetosphere.
- Scientists from the Indian Institute of Geomagnetism (IIG) collected data between 2011 and 2017 using the Induction Coil Magnetometer, installed at the Indian Antarctic station Maitri to bring out several aspects of the ground observation of the EMIC waves. They found the location of the generation of waves in space and also suggested that the lower-frequency waves modulate the high-frequency waves.

