

SHORTNEWS:

I.MAGNETARS

NEWS: In a paper published in The Astrophysical Journal Letters, scientists have discovered that magnetar flares can produce gold through r-process nucleosynthesis.

About Magnetars

- **Type of Star:** Magnetars are a special kind of neutron star, which are extremely dense remnants of massive stars that exploded in supernovae.
- **Magnetic Field:** They have extremely strong magnetic fields, among the most powerful known in the universe.
- **Energy Emissions:** Occasionally, magnetars release large bursts of energy in the form of flares, which can include high-energy gamma rays.
- **Role in Study:** In the 2004 event, a magnetar's flare emitted delayed gamma rays that provided direct evidence of r-process nucleosynthesis (rapid neutron-capture process), a process responsible for forming heavy elements like gold.

Implications Of The Findings

- Until now, neutron star mergers were thought to be the main source of cosmic gold.
 - This discovery shows magnetar flares can also create heavy elements like gold.
- Since magnetars may have formed earlier than neutron star mergers, gold could have existed earlier in cosmic history.

2.100 YEARS OF THE ART DECO STYLE

NEWS: It has been 100 years since Art Deco Style was introduced to the world.

About Art Deco Style

- Art Deco is a modernist design style that emerged in 1925, known for its bold geometric patterns, streamlined forms, rich colors, and use of new materials like concrete, glass, and chrome.
- Arrival in India: Bombay was the first Indian city to embrace Art Deco.
 - Indian-owned banks and institutions adopted the style.
- Introduction in Madras: Art Deco arrived in Madras in the 1930s through the pioneering efforts of architect L.M. Chitale.
- UNESCO Recognition: On 30 June 2018, UNESCO declared the Mumbai precincts of Fort and Marine Drive as prestigious World Heritage Sites for its huge collection of gothic and art deco structures.

3.TURKISH SONGAR DRONES

NEWS: Recently, The Pakistani military launched Turkish-made 'Songar' armed drones.

About Songar Drones

- Songar drones are developed by Asisguard, a defence company based in Turkey.
- First launched in April 2019, they were given to the Turkish Armed Forces in February 2020 after successful testing.
- These are Turkey's first locally made armed drones.
- **Key features**
 - Flight Time: Can fly for 35 minutes without carrying weapons.
 - Range: Operates within a 5 km radius.
 - Altitude: Can fly up to 3,000 m above sea level and 300 m

above ground.

Operation: Suitable for day and night missions

4.PERSIAN GULF

NEWS: President Donald Trump is making plans for the United States to begin referring to the Persian Gulf as the Gulf of Arabia or the Arabian Gulf.

About Persian Gulf

- Location: The Persian Gulf lies in the Middle East, between Iran to the northeast and the Arabian Peninsula to the southwest.
- Countries Bordering the Gulf: Iran, Iraq, Kuwait, Saudi Arabia, Bahrain, Qatar, the United Arab Emirates (UAE), and Oman.
- Significance: It's one of the world's most important oil trade routes, with massive geopolitical relevance.
- Strait of Hormuz: The Persian Gulf connects to the Arabian Sea through Strait of Hormuz which is a critical choke point for global oil supply.
- Historical Name: The name Persian Gulf has been used for centuries and is tied to the ancient Persian Empire (modern-day Iran).
- Arab Nations' Preference: All Gulf-bordering Arab states (except Iran) refer to it as the Arabian Gulf or simply the Gulf and have long advocated for an official renaming.
- Trump previously renamed the Gulf of Mexico to "Gulf of America,".

5.PLASTIC WASTE IN HIMALAYAS

NEWS: According to the Zero Waste Himalaya Alliance, about 70% of the plastics collected from across the Himalayan belt are non-recyclable.

Himalayan Plastic Waste Crisis

- Dominance of Single-Use Plastics: Over 84% of plastic waste in the Himalayan region is single-use food and beverage packaging.
- Non-Recyclable Waste: 70% of collected plastics are non-recyclable with no market value, mainly multilayered plastics and tetrapaks.
- Impact on Ecosystems: Plastic waste is choking waterways, filling landfills, and threatening biodiversity.
 - Water bodies at tourist spots are the most littered areas.

About Zero Waste Himalaya Alliance

- Zero Waste Himalaya Alliance is a collective of civil society organisations and individuals working to combat plastic pollution and promote sustainable waste management in the Indian Himalayan region.
- Initiated by:
 - Zero Waste Himalaya (based in Gangtok, Sikkim)
 - Integrated Mountain Initiative (based in Dehradun, Uttarakhand)
- The alliance brings together NGOs, community groups, and institutions from across the Himalayan States.