

1. Which ministry recently launched the Civil Registration System (CRS) mobile application to integrate technology with governance?

- [A] Ministry of Home Affairs
- [B] Ministry of Defence
- [C] Ministry of Urban Development
- [D] Ministry of Tourism

Correct Answer: A [Ministry of Home Affairs]

The Union Home Minister launched the Civil Registration System (CRS) mobile app to integrate technology with governance.

The app, developed by the Registrar General and Census Commissioner of India (RGCCI), enables registration of births and deaths nationwide. It simplifies the process, allowing citizens to register these events anytime, from anywhere, in their state's official language. The RGCCI, under the Ministry of Home Affairs, oversees the Census, compiles population data, and manages the CRS. Established in 1961, RGCCI provides data essential for social, economic, and policy decisions across government levels.

2. What is the name of the newly discovered black hole triple system located in the constellation of Cygnus?

[A] V404 Cygni

[B] Sagittarius A*

[C] Sirius B

[D] Andromeda

Correct Answer: A [V404 Cygni]

Astronomers discovered a rare triple black hole system named V404 Cygni, altering our understanding of black hole formation. It is located about 8,000 light years away from Earth in the constellation of Cygnus. The first star orbits the black hole closely every 6.5 days, while the second is much farther, at 100 times Pluto's distance from the Sun. This system suggests a "direct collapse" formation, where the black hole forms quietly without a supernova explosion. Thousands of simulations confirmed that this formation spared the distant star from being ejected.

3.What is the primary objective of Mission Amrit Sarovar?

[A] To promote drip irrigation

[B] To address the water crisis in rural areas

[C] To increase tourism in river cities

[D] None of the Above

Correct Answer: B [To address the water crisis in rural areas]

The Prime Minister of India announced that over 60,000 Amrit Sarovars have been built in villages, creating a legacy for future generations. The initiative began on April 24, 2022, aiming to construct 75 Amrit Sarovars for the 75th year of independence. It addresses water crises in rural areas, with each Sarovar having at least 1 acre of pond area and a capacity of about 10,000 cubic meters. The mission promotes water conservation, community participation, and the use of excavated soil for infrastructure. It involves six government ministries but has no separate financial allocation.

4. Which organization has developed a catalyst to produce methanol using gases emitted from fossil-fired power plant?

- [A] National Hydroelectric Power Corporation (NHPC)
- [B] National Thermal Power Corporation (NTPC) Limited
- [C] Power Grid Corporation of India
- [D] Northeast Electric Power Company (NEEPCO)

Correct Answer: B [National Thermal Power Corporation (NTPC) Limited]

NTPC has created a catalyst to produce methanol from gases emitted by fossil-fired power plants. This development was achieved in collaboration with the Indian Institute of Petroleum. CO₂ mitigation is a major challenge for fossil-fired power plants. The focus is on capturing CO₂ from flue gas and converting it into valuable fuels and chemicals. The catalyst produces methanol with a purity of over 99%.

5. Where was India's first helicopter ambulance service launched?

[A] AIIMS New Delhi

[B] AIIMS Jaipur

[C] AIIMS Rishikesh

[D] AIIMS Bilaspur

Correct Answer: C [AIIMS Rishikesh]

PM Modi launched India's first helicopter ambulance service at Rishikesh AIIMS to improve emergency healthcare access.

The service aims to transport critical patients quickly within the 'golden hour' for better trauma care. It is part of a larger healthcare upgrade project worth over Rs 12,850 crore. A toll-free number will link all district disaster management centers to facilitate this service. Drones will aid in delivering blood samples and medicines to remote regions. The initiative extends to Uttarakhand and some border areas of Uttar Pradesh, transforming healthcare access in tough terrains.

6. What atmospheric phenomenon was recently observed above Antarctica's Pine Island Glacier by NASA's Landsat 8 satellite?

[A] Fog bank

[B] Sea smoke

[C] Aurora borealis

[D] Dust storm

Correct Answer: B [Sea smoke]

NASA's Landsat 8 satellite captured images of 'sea smoke' rising from Antarctica's Pine Island Glacier, a phenomenon where frigid air meets warm water, creating fog-like plumes. This rare atmospheric event highlights the glacier's vulnerability and the impact of strong winds on polar ice sheets. Sea smoke forms when cold air cools and condenses over open waters, resulting in ghostly ice crystal plumes that can influence ice mass balance. Pine Island Glacier is known for its rapid retreat and significant role in ice flow dynamics.

7. Which organization recently released the Global TB Report 2024?

[A] Global Forum for Health Research

[B] Global Health Council

[C] United Nations Environment Programme (UNEP)

[D] World Health Organization (WHO)

Correct Answer: D [World Health Organization (WHO)]

World Health Organization (WHO) released the “Global TB Report 2024”. India has significantly improved treatment coverage for tuberculosis (TB), achieving 85% coverage among diagnosed individuals. The World Health Organization’s Global TB Report highlights an increase in preventive therapy for high-risk groups, such as household contacts of TB patients and people living with HIV. In 2023, 12.2 lakh people received preventive therapy, up from 10.2 lakh in 2022 and 4.2 lakh in 2021. The government provides free TB medications to alleviate financial burdens, as treatments can be costly and last up to two years. Treatment success rates are 89% for drug-susceptible TB, 73% for drug-resistant TB, and 69% for extremely drug-resistant TB. Challenges include the long duration of treatment, leading to poor compliance, prompting the government to introduce innovative solutions like pill boxes and shorter treatment courses.

8. What technology was used to detect the lost Mayan city hidden in the Mexican forest?

[A] GPS

[B] LiDAR

[C] Sonar

[D] MRI

Correct Answer: B [LiDAR]

Scientists have discovered a lost Mayan city in the dense Mexican jungle using LiDAR technology. LiDAR stands for Light Detection and Ranging and is a remote sensing method that uses pulsed lasers to measure distances to the Earth's surface. It can create high-resolution 3-D models of ground elevation with vertical accuracy of up to 10 cm. The LiDAR system includes a laser, scanner, and GPS receiver. The laser fires rapidly, hitting surfaces like vegetation and buildings, with the reflected light recorded by the sensor.

9. Chronic Wasting Disease (CWD), which was seen in the news, primarily affect which animals?

[A] Deer, elk, and moose

[B] Cattle and sheep

[C] Pigs and Wolves

[D] Dogs and cats

Correct Answer: A [Deer, elk, and moose]

New York State authorities confirmed a case of Chronic Wasting Disease (CWD) in a deer facility, highlighting its impact on deer, elk, and moose. CWD is a fatal neurological disease caused by prions that damage brain tissue in cervids. It leads to severe symptoms like weight loss, lack of coordination, drooling, and eventually death. CWD spreads through bodily fluids and contaminated environments, but there is no evidence of it infecting humans. Symptoms can take up to 16 months to appear, and there is currently no vaccine or treatment available.

10. Which city set a Guinness World Record by lighting over 2.5 million diyas during Deepotsav 2024?

[A] Varanasi

[B] Ayodhya

[C] Mathura

[D] Haridwar

Correct Answer: B [Ayodhya]

Ayodhya set two Guinness World Records during the 2024 Deepotsav celebrations. Over 25 lakh diyas (2,512,585 oil lamps) were lit along the Saryu River, marking the largest display of oil lamps. Another record was set for the most people performing diya rotation simultaneously. Uttar Pradesh Chief Minister Yogi Adityanath received the Guinness certificates, joined by Union Minister Gajendra Singh Shekhawat and Deputy CM Brajesh Pathak. Celebrations included lamps illuminating the ghats, laser shows, a sound-and-light Ram Leela, a drone show, and fireworks. This Deepotsav was the first since the Pran Pratishtha ceremony of Ram Lala at the Ayodhya temple.