

## 1. Dark Sky Reserve

**Topic: Science and Technology**



**In News:** In a first-of-its-kind initiative, the Department of Science & Technology (DST) has announced the setting up of India's first Dark Sky Reserve in Hanle, Ladakh as a part of Changthang Wildlife Sanctuary.

### **More on the Topic:**

- Hanle is located in Ladakh's cold desert region away from any form of human disturbance.
- A Dark Sky Reserve is a designation given to a place that has policies in place to ensure that a tract of land or region has minimal artificial light interference.
- The International Dark Sky Association is a U.S.-based non-profit that designates places as International Dark Sky Places, Parks, Sanctuaries and Reserves, depending on the criteria they meet.
- Several such reserves exist around the world but none so far in India.

### **The Indian Astronomical Observatory, Hanle:**

- The Indian Astronomical Observatory, the high-altitude station of IIA, is situated to the north of Western Himalayas, at an altitude of 4,500 metres above mean sea level.
- **Located atop Mt. Saraswati in the Nilamkhul Plain in the Hanle Valley of Changthang,** it is a dry, cold desert with sparse human population and has the Hanle monastery as its nearest neighbour.
- The cloudless skies and low atmospheric water vapour make it one of the best sites in the world for optical, infrared, sub-millimetre, and millimetre wavelengths.
- The Himalayan Chandra Telescope (HCT), High Energy Gamma Ray telescope (HAGAR), the Major Atmospheric Cherenkov Experiment Telescope (MACE) and GROWTH-India are prominent telescopes located at the Hanle observatory.

### **Changthang Wildlife Sanctuary:**

- Located in the **Changthang Plateau in the Leh district of Ladakh**, Changthang Wildlife Sanctuary is one of the most popular sanctuaries in the Ladakh region.
- **This sanctuary also houses the highest lake on earth, Lake Tso Moriri.** It is considered to be the second largest nature reserve after Northeast Greenland National Park.

Source: Indian Express

## 2. BPaL Tuberculosis Treatment

**Topic: Science and Technology**



One day of typical BPaL regimen  
6 months / <750 pills

One day of typical XDR-TB treatment  
18+ months / 14,000+ pills

**In News:** A short tuberculosis treatment regimen of six months called BPaL had showed "favourable outcomes".

**More on the Topic:**

- The **“bedaquiline-pretomanid-linezolid”** regimen, abbreviated as the BPaL regimen, has been reported to have around 90% efficacy against highly drug-resistant tuberculosis.
- Developed by a non-profit organisation, TB Alliance, **pretomanid is the newest anti-TB drug**, prescribed as part of the BPaL regimen, which includes bedaquiline and linezolid.
- Medical practitioners believe that **this new drug in the BPaL combination will cut short the treatment duration** by half (and more), and reduce the amount of medication an MDR-TB patient must take during treatment.
- **From a treatment duration range of 18 to 24 months**, BPaL is likely to bring down the time to around 6 months.
- Furthermore, **the older “all oral drug regimen” included nearly 14 different anti-TB drugs** for a patient to take every day.
- With BPaL, it is likely to take just three daily tablets. A shorter regimen, which is all oral and requires fewer doses per day, makes it easier for a patient to adhere to and complete treatment.

**Why Is Bpal Important For India?**

- Data from the India TB Report has revealed that the situation for drug-resistant forms of TB or multi-drug resistant TB needs urgent mitigation in India.
- According to the Global TB Report 2021, the mortality rate due to all forms of TB between 2019 and 2020 increased by 11% in India.
- **India accounts for more than 1 in 4 of all cases of active TB diseases**, including nearly 1.20 lakh cases of drug-resistant forms of TB.

#### About Tuberculosis:

- TB is caused by bacillus Mycobacterium tuberculosis which typically affects lungs (pulmonary TB) but can affect other sites.
- Currently, **BCG is the only licensed vaccine available for prevention of TB.**

Source: Hindu

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### 3. NCRB Road Accident Report

#### Topic: Reports and Indices



**In News:** NCRB Data suggests that besides the deaths, 3.71 lakh people were also injured in 4.03 lakh 'road accidents' across the country last year.

#### More on the Topic:

- Deaths in road accidents has increased by 17%
- In 2021, 1.55 lakh people died in accidents on Indian roads, up from 21.33 lakh in 2020
- A maximum number of cases were reported in Tamil Nadu.
- Reasons include speeding which accounted for over half of all deaths, dangerous and careless driving which caused over 42000 deaths.
- The NCRB report's data for 2021 also suggested that public transport, like buses, were safer than private modes of conveyance, like motorcycles.

#### Road Accident Safety Measures:

- The three-point seat belt a passive safety device first incorporated into a car by Volvo in 1959, and now standard in cars sold in India, is a low cost restraint system that prevents occupants of a vehicle from being thrown forward in a crash.
- An IIT Delhi study reveals that Air-bag deployment has reduced mortality by 63%.
- Head restraints, which are found either as adjustable models or moulded into the seats, prevent a whiplash injury (sudden backwards and forward movement of head-on collision).

Source: Hindu

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## 4.Martand Temple

Topic: Art and Culture



**In News:** ASI had objected to the 'Navgrah Ashtamangalam Puja' on the premises of Martand Temple.

**More on the Topic:**

- The temple is a heritage site.
- It was built by the Karkota dynasty king Lalitaditya Muktapida, who ruled Kashmir from 725 AD to 753 AD.
- **Dedicated to Vishnu-Surya, the Martand Temple has three distinct chambers;** the mandapa, the garbhagriha, and the antralaya. It is probably the only three-chambered temple in Kashmir
- The temple is built in a unique Kashmiri style, though it has definite Gandhar influences.

Source: Indian Express

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## 5. Ramon Magsaysay Award

**Topic: Miscellaneous**



**In News:** Former Kerala health minister K K Shailaja has declined to receive the Ramon Magsaysay Award recently.

**More on the Topic:**

- The Rockefeller Brothers Fund (RBF) in 1957 established the Ramon Magsaysay Awards to honour the late President of the Philippines, who died in a plane crash in March 1957.
- The awards were given for contributions made by citizens of the Philippines and other Asian countries in government service, public service, international understanding, journalism and literature, and community leadership.

**Source: Business Standard**

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## 6. Pradhan Mantri Schools For Rising India (PM-SHRI) Yojana

**Topic: Government Schemes**



**In News:** The Prime Minister has announced the development and upgradation of 14,500 schools across India under the Pradhan Mantri Schools For Rising India (PM-SHRI) Yojana.

**More on the Topic:**

- 14,500 schools across the country will be developed and upgraded under the scheme.
- The PM-SHRI schools will have a modern, transformational and holistic method of imparting education. Emphasis will be on a discovery oriented, learning centric way of teaching.
- Focus will also be on modern infra including latest technology, smart classrooms, sports and more.

**Source:** Business Standard

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## 7. Inflatable Aerodynamic Decelerator (IAD)

**Topic:** Science and Technology



**In News:** ISRO has successfully tested IAD technology to land missions on Venus & Mars.

**More on the Topic:**



- Designed and developed by ISRO's Vikram Sarabhai Space Centre (VSSC), the technology is being developed for aerodynamically decelerating an object descending through the atmosphere.
- It means that through this technology the payload will land back on Earth by decelerating the fall at the required level.
- The IAD has huge potential in a variety of space applications including the recovery of spent stages of rockets, landing payloads on Mars or Venus and making space habitats for human space flight missions.

**Source: Business Standard**

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## 8. Shumang Leela

**Topic: Art and Culture**

**In News:** The 50th All Manipur Shumang Leela Festival 2021-2022 kicked off at Imphal.

**More on the Topic:**

- Shumang Leela is a traditional form of theatre in Manipur and the roles of female artists are all played by male actors and male characters are played by female artists in case of female theatre groups.
- The present-day Shumang Leelas address the issues of moral values, unity and integrity.
- The fostering of bonds of brotherhood and friendship among various communities in the State is also promoted by the theatre.

**Source: Business Standard**

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