



August - 28

TNPSC BITS

- India's first woman Director General of Police (DGP), 1973-batch IPS Officer Kanchan Chaudhary Bhattacharya has passed away. She made history when she was appointed the DGP of Uttarakhand in the year 2004.
 - She was also the second woman IPS officer in the country.
- In its new Industrial Policy, Maharashtra government has put in place a new 'sons-of-the-soil' clause which mandates 80% jobs for the locals. Companies not adhering to the clause will have their GST incentives cancelled.
- 10th bus service between India and Nepal has been launched. It connects Siliguri in West Bengal with Kathmandu.
- U.S. space agency NASA is investigating what may be the 'first crime committed in outer space'.
 - Astronaut Anne McClain is accused of identity theft and improperly accessing her estranged wife's private financial records while being aboard International Space Station (ISS).

NATIONAL

Construction around Protected Monuments

- Union Ministry of Tourism has relaunched and expanded the integrated 'No Objection Certificate Online Application Processing System (NOAPS)' portal of National Monuments Authority (NMA).
- It will cover protected monuments in 6 states Madhya Pradesh, Andhra Pradesh, Haryana, Punjab, Jharkhand and Telangana.
- Permission and No Objection Certificate for any construction activity around protected monuments can be processed through NOAPS.
- ✤ The portal is supported by ISRO's 'Smarac' mobile app.

Amazon and Indian Military Veterans

- Amazon India has launched a Military Veterans Employment programme.
- It plans to create continued work opportunities in Amazon for 'military families' across India.
- ✤ Amazon has collaborated with





- Director-General of Resettlement (DGR)
- Department of Ex-Servicemen Welfare (Ministry of Defence)
- o Army Welfare Placement Organisation, an NGO

Microsoft India Trains 5,000 Government Employees

- Microsoft India launched a program to train 5000 government employees over the next year on AI (artificial intelligence) and cloud computing skills.
- This program was inaugurated by Amitabh Kant, chief executive of NITI Aayog.
- The program, called 'Digital Governance Tech Tour', will comprise of physical and virtual workshops.
- ✤ It will be open for technocrats and IT professionals across the government, including employees of Public Sector Undertakings (PSUs).

Anubhav Awards 2019

- The Union Minister of State for Personnel, Public Grievances & Pensions Jitendra Singh has presented the 4th ANUBHAV awards, 2019.
- The Anubhav portal was created in 2015 with a vision to 'preserve rich experience' of retired officials in digital form.
- ✤ An award scheme to incentivize and encourage more retiring employees to submit their write-ups was subsequently introduced in 2016.

National Digital Library of India

- Under the National Mission on Education through Information and Communication Technology, the Union HRD ministry has launched the National Digital Library (NDL) of India project.
- It would be a virtual repository of learning resources with a single-window search facility.
- NDL has been integrated with UMANG (Unified Mobile Application for New-age Governance) App.
- There are more than 3 crore digital resources available in NDL and contents cover almost all major domains of education and all major levels of learners.

September – Month of Poshan

In his weekly radio interactive program 'man ki bhat' Prime Minister Modi addressed the nation to celebrate September 2019 as a month of nutrition.



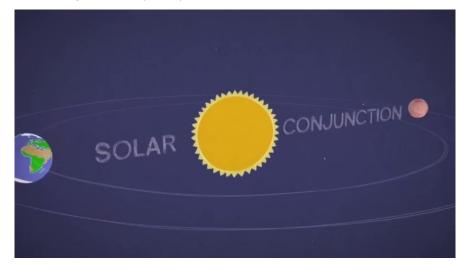


- It is to be observed as a part of 'POSHAN Abhiyaan' (National Nutrition Mission-NNM).
- ✤ NNM is a flagship programme of the Union Ministry of Women and Child Development (MWCD).
- The program aims to achieve improvement in nutritional status of Children from 0-6 years, Adolescent Girls, Pregnant Women and Lactating Mothers in a time bound manner in three years (2017-20).
- ✤ A similar scheme to eliminate malnutrition of girl children had been launched by Gujarat state government in 2018, known as Purna.

SCIENCE AND TECHNOLOGY

Mars Sun Earth in Same Line: Solar Conjunction

The daily exchange of data between antennas on Earth and those on NASA spacecraft at Mars will be stopped between August 28 to September 7 due to Mars solar conjunction (MSC).



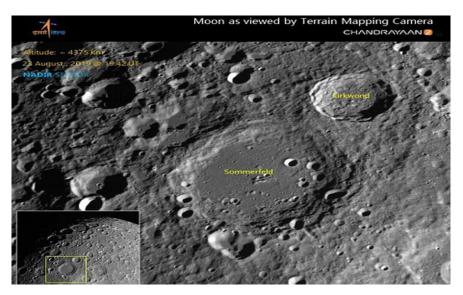
- ◆ During MSC, Mars and Earth will be on opposite sides of the Sun.
- Sun's hot, ionised gas emitted from its corona can 'interfere' with radio communication between Earth and Mars.
- So, the spacecraft might show unexpected behaviour and commands will be corrupted.

Images sent by Chandrayaan -2

 ISRO has released images of the lunar surface captured by the Terrain Mapping Camera-2 of the Chandrayaan-2 spacecraft orbiting the Moon.







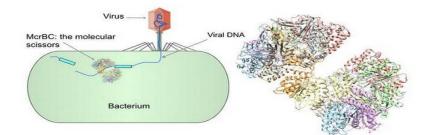
- The images show impact craters named after various scientists (Arnold) Sommerfeld (Germany), (Daniel) Kirkwood (US), Mitra (India), (Charles) Hermite (France) etc.
- Mitra (1890-1963), born in Bengal, was a physicist and Padma Bhushan winner.
- ✤ The system of nomenclature of lunar features is now standardised.
- According to a resolution by the International Astronomical Union in 1973,
 - Crater and crater-like formations: named after astronomers or eminent scientists, posthumously
 - Mountains: named corresponding to the geographical names of mountains of the Earth
 - $\circ~$ Extensive dark surfaces: names that correspond to the mental states of humans.

Why No Viral Infections in a Bacteria? - Molecular Scissors

- Scientists at the Indian Institute of Science Education and Research (IISER), Bhopal have determined the atomic structure of "McrBC".
- ✤ McrBC is a bacterial protein.
- It functions as a molecular scissor and prevents viral infections in bacteria.
- ✤ This is the first report of the high-resolution structure from India, determined using electron "cryomicroscopy", commonly known as cryo-EM.







Practical Applications

- The determination of the McrBC's structure has long-term implications in 'phage therapy' and could help combat "drug-resistant infections" in the future.
- Phages are groups of viruses that infect and kill bacterial cells.

ENVIRONMENT

CoP-18 on CITES at Geneva

- The Eighteenth Conference of the Parties (CoP-18) of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was recently held in Geneva.
- It was decided to move the smooth-coated otter (Lutrogale perspicillata) from CITES Appendix II to CITES Appendix I.
- * The Tokay gecko (Gekko gecko) will be included in CITES Appendix II.
- The Indian star tortoise was upgraded to CITES Appendix I, giving it the highest level of international protection from commercial trade.

Plastic to Waste – IIP, Dehradun

- CSIR- Indian Institute of Petroleum (IIP) has set up a waste plastic to diesel plant in Dehradun, Uttarakhand as a step towards eradicating plastic.
- ◆ The plant has a capacity to produce 800-litre diesel from 1 tonne of plastic.
- On August 2018, India's first ever biofuel jet ran on biofuel produced by CSIR-IIP.
- Located at Dehradun, this institute was founded in 1960 and dedicated to R & D in in hydrocarbon sector.





PERSONALITIES, AWARDS, AND EVENTS

Tenzing Norgay National Adventure Award 2018

- Aparna Kumar, a 2002 batch Uttar Pradesh Cadre IPS officer has been selected for the Tenzing Norgay National Adventure Award 2018.
- ✤ Aparna is the first IPS officer to be bestowed with this prestigious award.
- This is the highest National award at par with Arjuna award for Adventure sports in India.
- These awards are given every year to recognize the achievements of persons in the fields of adventure.
- ✤ Categories:
 - \circ Land Adventure: Aparna Kumar, Dipankar Ghosh, Manikandan K
 - o Water Adventure: Prabhat Raju Koli
 - o Air Adventure: Rameshwer Jangra
 - o Life Time Achievement: Wangchuk Sherpa

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