
1. Hope Spacecraft

Why in News?

- The UAE is on the verge of making history after turning its dream of becoming the first Arabic and Islamic country to send a spacecraft to Mars into a reality through a spacecraft named Hope.

Highlights:

- Although this spacecraft was assembled on U.S. soil, it will not be exploring the red planet for NASA.
- Hope is instead an effort by the United Arab Emirates.
- As a newcomer, the UAE has taken a novel approach. It could have tried to do everything itself, developing homegrown technology similar to what India has done.
- That would have taken years longer. It could have bought someone else's spacecraft design, which would have been the quickest path.
- The country has sought partners with long experience in sending machines into space. This, its space team believed, would help avoid many of the pitfalls of trying to pull off such missions for the first time while training future engineers who will be expected to step up to bigger roles in the next mission.
- In the process, the country's leaders hope to sow seeds for future companies. Hope will be just one of a four robotic spacecraft scheduled to launch this summer during a once-in-26-months alignment of Earth and Mars that enables a relatively short trip to the red planet. India celebrated putting a spacecraft in orbit around Mars and boasted how its price tag was a fraction of that for MAVEN, a NASA probe that arrived two days earlier. But it did not perform any significant discoveries.
- MAVEN has determined how quickly the Martian atmosphere is being stripped away by the solar wind: about 4 pounds a second. This information is an important clue in the puzzle of understanding why early Mars, which was warmer and wetter, turned into the cold, barren, almost airless place it is today.
- Hope's aim is to fill in a gap in MAVEN's findings by looking at the dynamics closer to the ground that influence the rate of leaking.
- Hope will give scientists a global view of Martian weather, noting changes in temperature and other conditions during the course of a day.

2. Central Administrative Tribunal (CAT)

Why in News?

- All India Conference of Central Administrative Tribunal 2020 held in New Delhi.

Central Administrative Tribunal:

- The Central Administrative Tribunal had been established under Article 323 A of the Constitution for the adjudication of disputes and complaints with respect to recruitment and conditions of service of persons appointed to public services and posts in connection with the affairs of the Union or other authorities under the control of the Government
- The CAT has been established as a specialist body comprising of Administrative Members and Judicial Members who by virtue of their specialized knowledge are better equipped to dispense speedy and effective justice.
- CAT is distinguishable from the ordinary courts with regard to its jurisdiction and procedure.
- It exercises jurisdiction only in relation to the service matters of the parties covered by the Act.
- It is also free from the shackles of many of the technicalities of the ordinary Courts. The procedural simplicity of the Act can be appreciated from the fact that an aggrieved government employee can also appear personally before the Tribunal.
- An Original Application can be filed by remitting a nominal fee of Rs. 50/- before the Tribunal. A provision has also been made in the Rules that where the Tribunal is satisfied that an applicant is unable to pay the prescribed fee on the ground of indigence, it may exempt such an applicant from the payment of fee.
- The Tribunal is guided by the principles of natural justice in deciding cases and is not bound by the procedure, prescribed by the Civil Procedure Code.
- It is empowered to frame its own rules of procedure and practice.
- The Tribunal has been conferred with the power to exercise the same jurisdiction and authority in respect of contempt of itself as a High Court.
- The Tribunal also has 17 Benches.

3. Simplified Proforma for Incorporating Company Electronically (SPICe)

Why in News?

- The Corporate Affairs Ministry (MCA) has come out with the format of the new web form – SPICe+ – for the incorporation of companies.

SPICe:

- The webform – issued as part of the Centre’s Ease of Doing Business initiative – has replaced the existing SPICe form.
- The web form will help save many procedures, time and cost for starting a business in India.
- The MCA has also come up with an AGILE PRO form, part of SPICe+, for GSTIN/ EPFO/ ESIC/ Profession Tax/ Bank Account.
- The MCA also said the RUN service will be applicable only for a change of name of an existing company with effect.

Components:

- SPICe+ has two parts – Part A for name reservation for new companies and Part B offering a bouquet of services including incorporation, DIN allotment, mandatory issue of PAN, mandatory issue of TAN, mandatory issue of EPFO and ESIC registration and mandatory opening of bank account for the company (through the AGILE PRO linked web form) besides allotment of GSTIN (if applied for).

4. ISRO 2020-21

Why in News?

- The Indian Space Research Organisation (ISRO) has recently released its annual report for 2019-20 recently.

Highlights:

- India, currently has 19 national Earth Observation (EO) satellites, 18 communication satellites and 8 navigation satellites in service.
- Among them, three of the communication satellites are dedicated to military communication and networking.
- The report states an annual plan of 36 missions (including both satellites and their launchers) including the launch of 10 Earth Observation (EO) satellites.

- The EO satellites include radar imaging satellites **RISAT-2BR2, RISAT- 1A and 2A; Oceansat-3, GISAT-1 and Resourcesat-3/3S.**
- ISRO plans to launch a new series of high-resolution HRSATs through Polar Satellite Launch Vehicle (PSLV) launcher. It is expected to develop its own space station within a decade.
- **RISAT-2BR2** will form a triad with RISAT-2B and RISAT-2B1 covering around 120 degrees apart. It carries a synthetic aperture radar on them, providing all-weather, 24-hour information to security agencies.
- **GISAT-1** will be placed in a geostationary orbit of around 36,000 km. It has been placed so far in a 600-odd-km orbits and circle the earth pole to pole.

5. Madhav National Park

Why in News?

- Madhav National Park is recently seen in news.

About Madhav National Park:

- It is situated in Shivpuri District, Madhya Pradesh. It is a part of the upper Vindhyan hills.
- It got the status of a National Park in 1959. It has a diverse ecosystem consisting of lakes, dry deciduous & dry thorn forests.
- It falls within one of the **32 major Tiger Corridors** of the country, which are operationalised through the Tiger Conservation Plan. Tiger Conservation Plan is implemented under the **Wildlife (Protection) Act, 1972.**
- It is a part of the Ranthambhore-Kuno-Madhav (Madhya Pradesh and Rajasthan) Tiger Corridor of Central India & Eastern Ghats landscape.
- It is home to tigers, leopards, Nilgai, and Chinkara (*Gazella bennettii*) and Chousingha (*Tetracerus quadricornis*) and Deers (Chital, Sambar and Barking Deer) among others.
- The **tiger landscapes of India** are Shivalik Hills and Gangetic Plains, Central Indian Landscape and Eastern Ghats, Western Ghats, and North-East.
- It is currently facing **displacement and rehabilitation** issues as it is home to **Particularly Vulnerable Tribal Groups (PVTG)s** like **Saharia.**

6. Seemai Karuvelam (Prosopis Juliflora)

Why in News:

- The Madras High Court has recently called for a report from National Environmental Engineering Research Institute (NEERI), on the **Seemai Karuvelam (Prosopis Juliflora)** trees.

About Seemai Karuvelam:

- It is native to **West Africa**.
- It was brought to **Tamil Nadu** in 1960s as fuelwood.
- It disrupts the local ecosystem of its habitation by soaking in all the ground water near it.
- It is an invasive species that has infiltrated the water bodies and dry lands of Tamil Nadu.
- **About Council of Scientific & Industrial Research- National Environmental and Engineering Research Institute (CSIR-NEERI)**
- It is a research institute created and funded by the Government of India. It functions under the Ministry of Science & Technology.
- It is established in Nagpur in 1958 with focus on water supply, sewage disposal, communicable diseases and to some extent on industrial pollution and occupational diseases found common in post-independent India.
- It has 38 national laboratories working in various areas of Science and Technology.

7. SUTRA PIC

Why in News?

- The government has unveiled a 'SUTRA PIC or Scientific Utilisation Through Research Augmentation-Prime Products from Indigenous Cows' programme to research on 'indigenous' cows.

About SUTRA PIC:

- It is to be funded by multiple scientific ministries, the initiative, SUTRA PIC, is led by the Department of Science and Technology (DST).
- It has the Department of Biotechnology, the Council of Scientific and Industrial Research, the Ministry for AYUSH (Ayurveda, Unani, Siddha, Homoeopathy) among others and the Indian Council of Medical Research as partners.
- **It has Five Themes**
 - ✓ Uniqueness of Indigenous Cows,

- ✓ Prime-products from Indigenous Cows for Medicine & Health,
- ✓ Prime-products from Indigenous Cows for Agricultural Applications,
- ✓ Prime-products from Indigenous Cows for Food & Nutrition and
- ✓ Prime-products from indigenous cows-based utility items.

8. 'Station Programme'- Google

Why in News?

- Google has recently decided to wind down its 'Station Programme' services globally.

About:

- It is a free public WIFI program to 400 busiest railway stations in India.
- In India, it was kick started in 2015 as a partnership between Google, Indian Railways and RailTel to bring fast and free public WI-FI.
- Google has decided so because getting online has become much simpler and cheaper as mobile data plans have become more affordable and mobile connectivity is improving globally.
- But users in India will be able to continue using the existing facilities at the railway stations via RailTel, Google's partner in India for the programme.