

May - 13

TNPSC BITS

- ❖ The Defence Ministry of India recently approved the abolition of 9,304 posts in the military engineering services.
 - The posts were abolished based on the recommendation of Shekatar Committee.
- ❖ The World Health Organization and the United Nations Postal Agency released a commemorative stamp to mark 40th anniversary of eradication of small pox.
 - In 1980, the organization officially declared that the world is free from small pox.

NATIONAL

Mission Sagar

MISSION SAGAR
India's helping hand across the Indian Ocean

Inspired by Prime Minister's vision of **SAGAR** - Security and Growth for All in the Region

INS Kesari on special Mission to deliver Covid-19 Assistance including Medicines, Medical Personnel, Food items to 5 Indian Ocean partners

- **Maldives** - 600 tonnes of food items
- **Mauritius** - Covid related essential medicines & a special consignment of Ayurvedic medicines along with a Medical Assistance Team
- **Madagascar** - Covid related essential medicines including HCQ tablets
- **Comoros** - Covid related essential medicines including HCQ tablets along with a Medical Assistance Team
- **Seychelles** - Covid related essential medicines

Covid-19 related essential medicines including HCQ tablets already sent earlier to Mauritius, Maldives and Seychelles.
A team of select medical personnel was also dispatched earlier to Maldives to augment their preparedness to fight this crisis.

India's time-tested role as the first responder in the region continues.

- ❖ The Government of India has launched “Mission Sagar”.
- ❖ It aims at providing food items, Ayurvedic medicines related to COVID-19, HCQ tablets to Maldives, Mauritius, Madagascar, Seychelles and Comoros.
- ❖ It is being conducted under close cooperation of Ministry of Defence and Ministry of External Affairs.
- ❖ It has been deployed under the India’s vision “SAGAR” in the Indian Ocean.
- ❖ In 2015, India introduced its vision of Indian Ocean called “SAGAR”, Security and Growth for All in the Region.

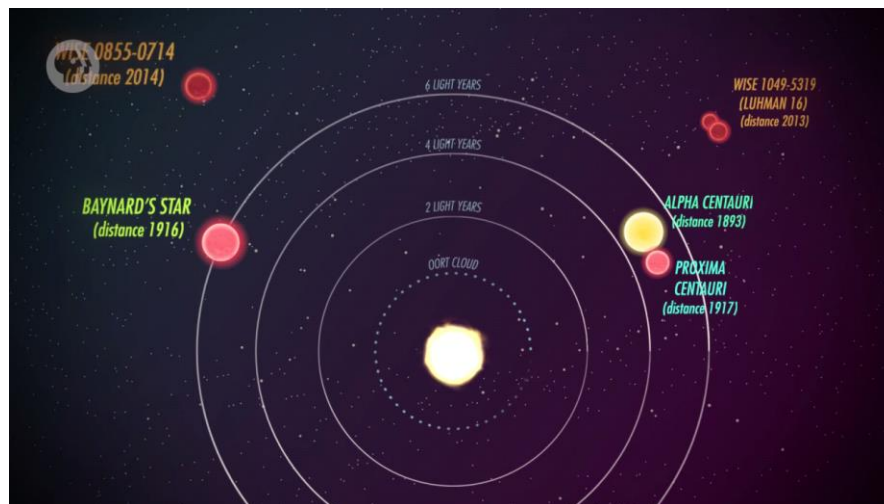
SCIENCE AND TECHNOLOGY

Brown dwarfs

- ❖ A group of international astrophysicists have identified cloud bands on the surface of Luhman 16A.
- ❖ Luhman 16A is the closest known brown dwarf.
- ❖ It is one of a pair of binary brown dwarfs in the Vela constellation.
- ❖ They are similar to those seen on Saturn and Jupiter.
- ❖ Luhman 16A has been a part of the binary system that also contains a second brown dwarf i.e. Luhman 16B.
- ❖ After Alpha Centauri and Barnard's star, it has been the third closest system to our sun, at a distance of 6.5 light-years.
- ❖ The technique of polarimetry has been used for the first time by the scientists.
- ❖ The researchers used an instrument on the very large telescope in Chile.
- ❖ It is to determine the properties of atmospheric clouds that are outside of the exoclouds or solar system.

About

- ❖ Brown dwarfs are those objects that are lighter than the stars but heavier than the planets.
- ❖ Brown dwarfs are also called failed stars, because their masses are intermediate to the largest planets and the smallest main sequence stars.
- ❖ They typically have the 13 to 80 times the mass of the Jupiter.
- ❖ Their masses being too small, they are unable to sustain fusion of their hydrogen to produce energy.





Human monoclonal antibodies in India

- ❖ The Council of Scientific and Industrial Research (CSIR) has sanctioned the project to develop human monoclonal antibodies (hmAbs).
- ❖ It will work as a therapy for COVID-19 infections.
- ❖ The project will generate hmAbs from patients that are in convalescent phase.
- ❖ Monoclonal antibodies will be virus-neutralizing and will be able to block the spread of infection by binding to the virus and making it ineffective.
- ❖ Israel was the first to isolate monoclonal antibodies.
- ❖ The council has passed the project under its flagship project named the New Millennium Indian Technology Leadership Initiative Programme (NMITLI).
- ❖ It is the largest PPP (Public-private partnership) model of Research and Development programme in the country.
- ❖ The project will involve Indian Institute of Technology, Indore and National Centre for Cell Science (NCCS), Pune and Bharat Biotech Industry and PredOmix Technologies, Gurugram for a public health emergency.

Favipiravir trial in India

- ❖ The Council of Scientific and Industrial Research (CSIR) begins its clinical trials on Favipiravir and Phyto pharmaceutical.
- ❖ Favipiravir is commonly used in China and Japan and also in other countries to treat influenza.
- ❖ The CSIR is also working on native herbs as biological medicine.
- ❖ The DGCI (Drug Controller General of India) has approved the clinical trials.

PiCoVacc – China's Vaccine

- ❖ China has developed a coronavirus vaccine - PiCoVacc.
- ❖ It has been developed by Beijing-based Sinovac Biotech.
- ❖ It has proven very effective in monkeys.
- ❖ This is being considered as the world's first animal trial for a coronavirus vaccine.

Indian Coronavirus vaccine

- ❖ The Indian Council of Medical Research (ICMR) has partnered with Bharat Biotech International Limited to develop India's first fully indigenous coronavirus vaccine.
- ❖ Bharat Biotech is a Hyderabad-based leading Vaccine manufacturing company.
- ❖ It will be developed using the virus strain, which has been isolated at ICMR's National Institute of Virology (NIV), Pune.



IMPORTANT DAYS

World Hand Hygiene Day - May 5

- ❖ The World Health Organization (WHO) has marked this day.
- ❖ This year's theme is "Save Lives: Clean Your Hands".
- ❖ It is aligned with the Year of the Nurses and the Midwife.





World Mother's Day - May 10

- ❖ It is largely celebrated on the second Sunday of May every year.
- ❖ The modern Mother's Day began in the United States, at the initiative of Anna Jarvis in the early 20th century.
- ❖ In 1914, the USA President Woodrow Wilson signed a proclamation declaring the second Sunday in the month of May as a national holiday.

National Technology Day - May 11

- ❖ Every year, This Day is observed to remind India's technological advancements.
- ❖ Theme of this year is "Focusing on Rebooting the economy through Science and Technology".
- ❖ On May 11th 1998, India tested its first successful Shakti-I nuclear missile.
- ❖ The missile was tested in the Indian Army Pokhran Test Range, Rajasthan.
- ❖ The operation was called "Operation Shakti" (Pokhran II).
- ❖ After this successful test, PM Vajpayee called India a complete nuclear state.
- ❖ It was led by our former Indian President Dr APJ Abdul Kalam.
- ❖ It made India the sixth country to join the nuclear club after P5 countries.
- ❖ It also made India the first country to not join the Non- Proliferation of Nuclear Weapons Treaty (NPT).
- ❖ Earlier India's first nuclear experiment was "Smiling Buddha" (Pokhran I).
- ❖ It was conducted in May 1974 at Pokhran.
- ❖ May 11 was also the day the DRDO (Defence Research Development Organization) accomplished the test of Trishul missile.
- ❖ It also marks the flight of first indigenous aircraft called Hansa-3.

