

March - 29

TNPSC BITS

- ❖ Every year on 24th of March, the International Day for the Right to the Truth concerning Gross Human Rights Violations and for the Dignity of Victims is celebrated.
 - This annual observance pays tribute to the memory of Monsignor Óscar Arnulfo Romero, who was murdered on 24 March 1980.
- ❖ International Day of Solidarity with Detained and Missing Staff Members is observed on March 25 every year.
 - The Day is observed each year on the anniversary of the abduction of Alec Collett, a former journalist who was working for the UNRWA in 1985.
- ❖ The International Day of the Unborn Child is observed on March 25 every year in commemoration of unborn fetuses.

INTERNATIONAL

UN Resolution on AI



- ❖ The UN General Assembly has approved the first United Nations resolution on artificial intelligence.

- ❖ It is giving global support to an international effort to ensure the powerful new technology benefits all nations, respects human rights and is “safe, secure and trustworthy.”
- ❖ It is a first-of-its-kind global approach to the development and use of this powerful emerging technology.
- ❖ Unlike Security Council resolutions, General Assembly resolutions are not legally binding but they are a barometer of world opinion.

SCIENCE AND TECHNOLOGY

SAMAR-2 missile system



- ❖ The SAMAR air defence missile system was fired at the Exercise Vayushakti for the first time.
- ❖ It is developed in-house by the units of Indian Air Force’s Maintenance Command.
- ❖ SAMAR stands for Surface to Air Missile for Assured Retaliation.
- ❖ It is utilizing old Russian-origin R-27 air-to-air missile systems from its inventory.

3D-printed brain tissue

- ❖ Researchers have created the world’s first 3D-printed brain tissue that behaves like a natural brain tissue.

- ❖ This model will help us to understand how brain cells and parts of the brain communicate in humans.
- ❖ This will greatly aid on treatments for a broad range of neurological and neurodevelopmental disorders.



Roen olmi



- ❖ Two researchers in Goa have synthesised gold nanoparticles from a wild mushroom species that is widely eaten as a delicacy in the coastal state.
- ❖ Mushrooms of the *Termitomyces* species, which grow on termite hills, is locally known as 'roen olmi'
- ❖ It is an edible wild mushroom popular among Goans and consumed during the monsoons.
- ❖ This species of mushroom has been cultured in a pure three-dimensional pelletised form and successfully used to produce gold nanoparticles.

- ❖ The demand for gold nanoparticles is so high in various applications, such as targeted drug delivery, medical imaging and electronics manufacturing.
- ❖ In February 2016, a single milligram of gold nanoparticles cost around \$80, which equates to \$80,000 dollars per gram.
- ❖ Other countries are using very toxic chemical agents for production.

ENVIRONMENT

Santjordia Pagesi

- ❖ In 2002, scientists aboard a research vessel discovered a peculiar jellyfish near a volcanic crater off Japan.
- ❖ Spotting the same creature again in 2020, scientists have now confirmed that it is a new species named Santjordia pagesi.
- ❖ Its name “Santjordia” refers to Saint George in Catalan.
- ❖ Its most distinctive feature is a bright red, cross-shaped stomach.



FARM Program

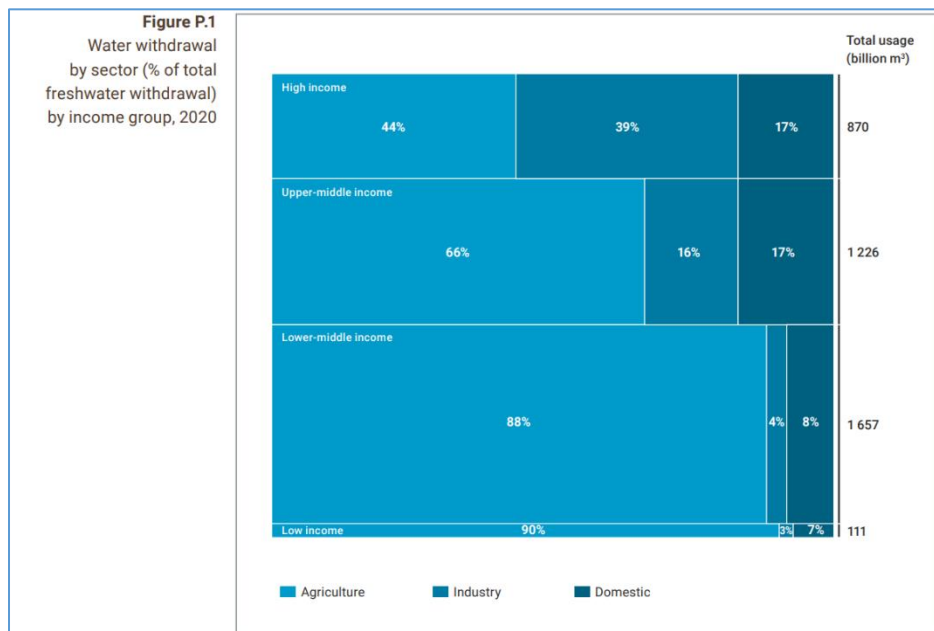
- ❖ The Financing Agrochemical Reduction and Management Programme (FARM) is a \$379 million initiative to combat agrochemical pollution.
- ❖ It is Funded by the Global Environment Facility; the programme is led by UNEP.
- ❖ It seeks to change that, elaborating the business case for banks and policy-makers to reorient policy and financial resources towards farmers.
- ❖ These resources will help them adopt low- and non-chemical alternatives to toxic agrochemicals and facilitate a transition towards better practices.
- ❖ The five-year programme is projected to prevent over 51,000 tons of hazardous pesticides and over 20,000 tons of plastic waste from being released.

- ❖ It will avoid 35,000 tons of carbon dioxide emissions.
- ❖ It is protecting over 3 million hectares of land from degradation as farms and farmers convert to low-chemical and non-chemical alternatives.
- ❖ The Global Environment Facility (GEF) is a multilateral fund dedicated to confronting biodiversity loss, climate change, pollution, and strains on land and ocean health.



REPORTS AND INDICES

UN World Water Development Report 2024



- ❖ The Freshwater use has been growing by just under 1% per year.

- ❖ Agriculture accounts for roughly 70% of freshwater withdrawals.
- ❖ It is followed by industrial ($\approx 20\%$) and domestic ($\approx 10\%$) uses are the main drivers of increasing water demand.
- ❖ One quarter of the world's population face 'extremely high' levels of water stress.
- ❖ In higher-income countries, runoff from agriculture poses the most serious problem.
- ❖ Emerging contaminants of concern include per- and poly-fluoroalkyl substances (PFAS), pharmaceuticals, hormones, industrial chemicals, detergents, cyanotoxins and nanomaterials.
- ❖ High concentrations of antimicrobials, originating from insufficiently treated domestic wastewater, livestock farming and aquaculture, have been found across all regions.

STATES

Saurauia Punduana – Manipur

- ❖ Saurauia Punduana plant, a critically endangered species has been recorded for the first time in Manipur's Tamenglong district.
- ❖ Its fruits are spherical shining white, and are used in veterinary medicine.
- ❖ The native range of this species is from Bhutan to Southeastern Tibet.



Rajasthan - water resource dashboard

- ❖ A first-ever water resource dedicated portal was launched in Jaipur, Rajasthan.
- ❖ It will provide real time information on the water level in dams and reservoirs and the quantity of water available in canals in different parts of Rajasthan.

- ❖ The portal is expected to help in an efficient water management and facilitate prediction of floods and drought.
- ❖ Rajasthan was the first State to develop a system which would bring the information on the availability of water to the public domain.
- ❖ The portal will provide full data of 805 dams, daily data of 242 dams and live data of 88 dams.



IMPORTANT DAYS

World Meteorological Day 2024 - March 23

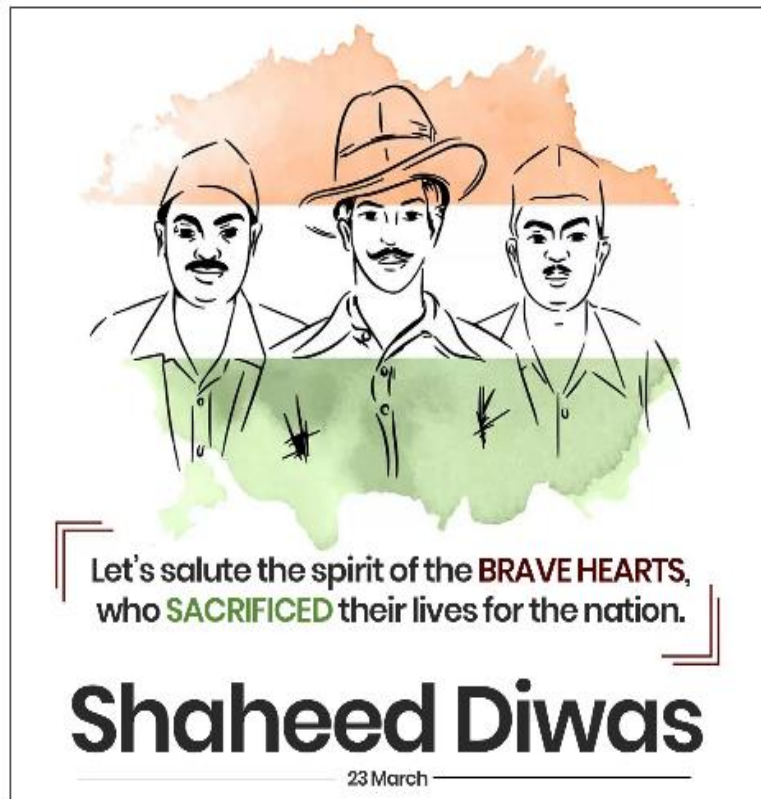


- ❖ It commemorates the formal establishment of the World Meteorological Organisation (WMO).

- ❖ On March 23, 1950, the World Meteorological Organisation Convention came into force and it became a UN specialised agency in 1951.
- ❖ The theme for 2024 is “At the Frontline of Climate Action.”

Martyr's Day/ Shaheed Diwas 2024 - March 23

- ❖ This day honouring the courageous freedom fighters who valiantly fought for India's independence.
- ❖ On March 23, 1931, in Lahore jail, young freedom fighters Bhagat Singh, Rajguru, and Sukhdev were executed by the British government.
- ❖ Their sacrifice for India's freedom is honored every year on Shaheed Diwas.



World Tuberculosis (TB) Day 2024 - March 24


- ❖ It aims to raise awareness around the disease, increase efforts to eradicate the disease, and mobilise support for those affected by TB.
- ❖ Tuberculosis mainly affects lungs, is one of the leading killer diseases that led to 1.3 million deaths in 2022.
- ❖ It is caused by a type of bacteria called Mycobacterium tuberculosis.

❖ The theme for 2024 is “Yes! We can end TB”.

World Tuberculosis Day

24 March

World Tuberculosis Day is a global healthcare event celebrated on the 24th of March every year since 1982, intending to remind and cherish achievements made toward the control of tuberculosis (TB). It also encourages everyone to join the ever-growing movement of eradicating tuberculosis and its antimicrobial resistance as much as possible.



Mycobacterium Tuberculosis

