

September - 06

TNPSC BITS

- ❖ Anna University has granted the patent for the airborne-based intelligent autonomous landing system for mini-Unmanned Aerial Vehicles that come with accurate identification of geographical location of landing sites from the plurality of images captured.
- ❖ American renewable energy firm Ohmium would set up its unit in Chengalpattu district to produce green hydrogen and to manufacture electrolyzer by investing ₹400 crore.
- ❖ The Ministry of Finance has added 4 new companies -SJVN, Solar Energy, NHPC, and RailTel into the list of Navratna Companies of India.
- ❖ Former Supreme Court lawyer and eminent scholar AG Noorani died recently.
- ❖ WWF-India has launched an initiative that involves counting of vultures and raising awareness on the critically endangered bird species.
- ❖ The US-India Strategic Partnership Forum has announced the third edition of the India-US Defense Acceleration Ecosystem (INDUS-X) Summit at the Stanford University.
- ❖ Rubina Francis clinched a bronze in the women's 10m air pistol SH1 event in Paralympic 2024.
- ❖ Preethi Pal became the first Indian woman to win two Paralympic medals in track and field events, after won the bronze in the women's 200 T35 class and bronze in the women's 100m T35 class at Paris 2024.
- ❖ The President of France Emmanuel Macron was presented with the Olympic Order for recognition of his unstinting support for the success of the Olympic Games Paris 2024.

TAMIL NADU

Borrowings in first quarter of 2024-25

- ❖ Tamil Nadu government's gross market borrowings stood at ₹21,000 crore in the first quarter (April-June) of 2024-25.
- ❖ In the first quarter of 2023-2024, the State government had a gross market borrowing of ₹25,000 crores.
- ❖ The State government borrows from the market through the issue of bonds known as State Development Loans (SDLs).



- ❖ In the April-June 2024 period, the Andhra Pradesh government was the top borrower at ₹27,000 crore, followed by Tamil Nadu.
- ❖ State's Own Tax Revenue (SOTR) constitutes over 70% of its total revenue receipts.
- ❖ SOTR increased 3.13% in the first quarter of 2024-25 to ₹37,605.43 crore from ₹36,461.89 crore in the same period last year.
- ❖ Tamil Nadu's overall revenue receipts stood at ₹55,467.63 crore in the first quarter of 2024-25.

Gross market borrowings		Outstanding liabilities from SDLs	
Year	Amount (in ₹ crore)	Year	Amount (in ₹ crore)
Fiscal 2023-24*	53,000	At end of Mar. 2024	6,00,992.9
Fiscal 2022-23	87,000	At end of Mar. 2023	5,18,367
Fiscal 2021-22	87,000	At end of Mar. 2022	4,50,364.5
Repayment of market borrowings		Total outstanding liabilities	
Year	Amount (in ₹ crore)	Year	Amount (in ₹ crore)
Fiscal 2023-24*	21,320	At end of Mar. 2024	8,34,543.5
Fiscal 2022-23	21,278.30	At end of Mar. 2023	7,41,497.7
Fiscal 2021-22	14,500	At the end of Mar. 2022	6,67,974.9

Dhaincha green manure

- ❖ The distribution of green manure has commenced under the newly launched Chief Minister's Mannuyir Kaathu Mannuyir Kaappom (MKMK) Scheme recently.
- ❖ The Department of Agriculture is distributing 20 kg of green manure per acre to farmers at 50% subsidy.
- ❖ The manure, dhaincha (Thakkai Poondu), typically costs ₹100 in the open market.
- ❖ It is available at block-level agriculture extension offices for ₹50.
- ❖ Dhaincha can contribute up to eight tonnes of biomass per acre.

- ❖ When dhaincha decomposes, it secretes weak organic acids that are highly beneficial to the rice ecosystem.
- ❖ In addition to the biomass it provides, the root nodules formed by it fix atmospheric nitrogen.



Chennai Formula 4 car race

SPEED WAY

The Indian Racing Festival (IRF) will host its Inaugural night street race from August 30 to September 1, 2024. Here are some highlights:

- The Indian Racing League (IRL) and the Formula 4 Indian Championship (F4IC) are the two championships conducted under the Indian Racing Festival banner
- The Indian Racing League (IRL) is country's only 4-wheel racing league featuring six city-franchise-based teams
- It's world's first gender-neutral racing championship series, promoting inclusivity and competitive spirit
- Formula 4 is an open-wheel, single-seater racing category intended for junior drivers

**Formula 4
India
Championship
(F4IC) Format**

16 drivers
8 Teams
16 cars (each team runs 2 cars)
5 Rounds
All the cars are run by MP Motorsports
India's only FIA Certified single seater series

TRACK DETAILS

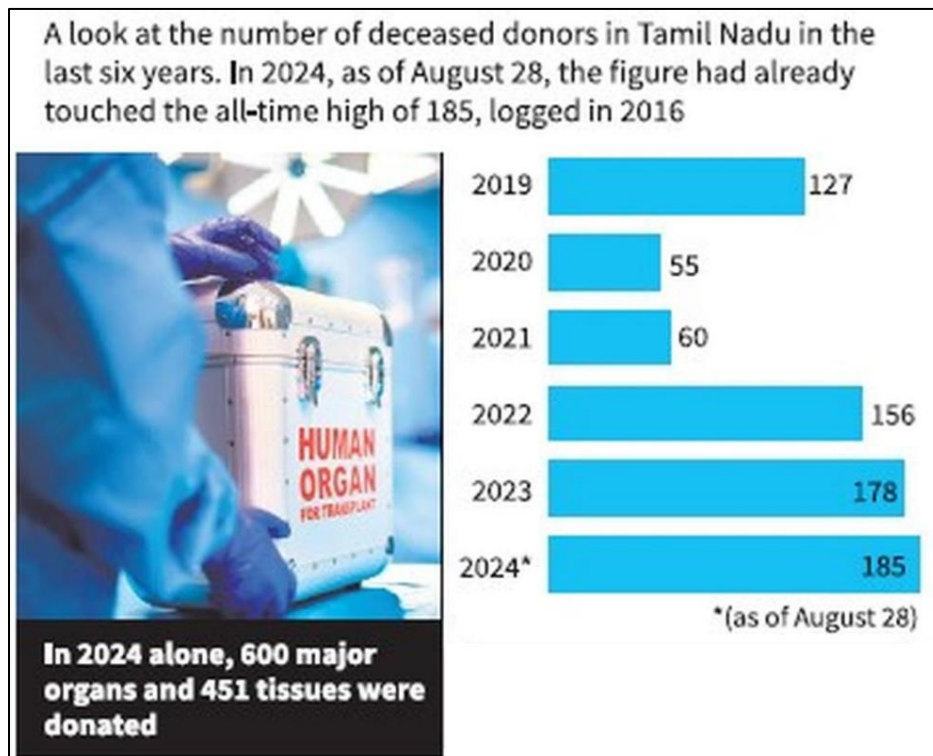
The 3.5km Chennai Formula Racing Circuit features 19 turns, multiple chicanes, and tricky elevations, providing a thrilling and challenging experience for drivers and fans alike

- ❖ Australian Hugh Barter made a history as the first winner of the Formula 4 race held around the streets of Chennai.
- ❖ This is the country's first-ever night racing event, in Chennai.

- ❖ Chennai is the first city in South Asia to hosted a Formula 4 street race at night.
- ❖ It is noteworthy that the race was held on the longest street circuit in South Asia.
- ❖ This is the world's first gender-neutral racing championship, promoting inclusivity and competitive spirit in motorsports.

TN organ donations in 2024

- ❖ Within eight months in 2024, Tamil Nadu has already touched its previous all-time high of 185 deceased donors from 2016.
- ❖ The State has recorded 185 deceased donors as of August 28.
- ❖ Last year, Rajiv Gandhi Government General Hospital recorded 26 deceased donors.
- ❖ It has recorded 24 donors so far this year.



NATIONAL

Rule 170 of Drugs Act

- ❖ The Supreme Court recently stayed a Central government notification, whereby Rule 170 of the Drugs and Cosmetics Rules, 1945, was omitted.



- ❖ The rule, introduced in 2018, is designed to prevent misleading advertisements of AYUSH products.
- ❖ Rule 170 aims to govern the manufacture, storage, and sale of medicines in the country.
- ❖ It is made “specifically for controlling inappropriate advertisements of Ayurvedic, Siddha and Unani medicines”.
- ❖ The rule prohibits AYUSH drug manufacturers from advertising their products without approval and allotment of a unique identification number from the state licensing authority.
- ❖ Like allopathic medicines, manufacturers of AYUSH drugs also have to seek a license from the drug controller.
- ❖ As per the Drugs and Cosmetics Act, phase I, II, and III trials for approval of new allopathic medicines to be conducted before a drug is cleared for marketing.
- ❖ However, such trials are not necessary for AYUSH drugs.



ECONOMY

India's Gold Consumption Forecast 2024

- ❖ The World Gold Council (WGC) has raised its projection for India's gold consumption in 2024 to 850 tonnes from 750 tonnes.
- ❖ In the July-September quarter, the gold demand in India is expected to be 230 tonnes, up 10% year-on-year.
- ❖ The Gold demand in the April-June quarter fell 5% year-on-year to 158.1 tonnes owing to high import duty.

- ❖ With the government reducing the importing duty on gold to 6% from 15% in the Union budget on July 23, demand saw a quick uptick

WGC RAISES INDIA'S 2024 GOLD CONSUMPTION FORECAST TO 850 TONNES



The World Gold Council (WGC) has increased its 2024 projection for India's gold consumption to 850 tonnes from 750 tonnes due to factors such as a good monsoon, duty cuts on gold, and increased demand for gold jewelry in India. Gold demand for the July–September quarter is expected to be 230 tonnes, up 10% year-on-year.

ENVIRONMENT

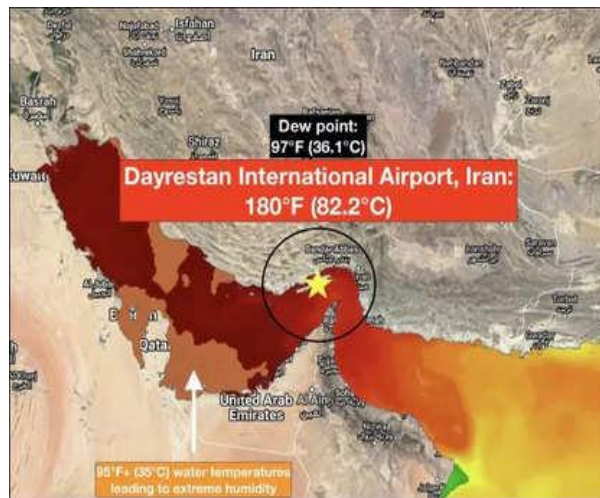
Northern bald ibis



- ❖ The northern bald ibis, also known as the Waldrapp, is used to be common across North Africa, the Arabian Peninsula, and much of Europe.

- ❖ However, it became extinct in central Europe for over 300 years due to hunting and habitat destruction.
- ❖ By 2011, the first bird migrated back to Bavaria (Germany) from Tuscany (Italy) without human help.
- ❖ Now scientists guide 36 of these birds on their ancient migration route from Austria to Spain using an ultralight aircraft.
- ❖ This is the first use of an ultralight aircraft for reintroducing a migratory species.
- ❖ It is inspired by the 1996 film Fly Away Home and naturalist Bill Lishman's 1988 work with Canadian geese.

Earth's highest ever heat index



- ❖ A village in southern Iran has recorded the earth's highest ever heat index at 82.2°C (180°F) with a dew point of 97°F (36.1°C).
- ❖ The extreme figures were generated through a combination of an air temperature of 102°F (38.9°C) and 85% relative humidity.
- ❖ The weather station in Dhahran, Saudi Arabia has recorded a dew point as high as 93°F (33.9°C) in recent days.
- ❖ It currently holds the world record dew point of 95°F (35°C).

MISCELLANEOUS

7th Rashtriya Poshan Maah 2024

- ❖ The month-long campaign aims to bolster efforts against malnutrition and promote holistic well-being throughout the nation.

- ❖ It was dedicated to combat the malnutrition among children, adolescent girls, pregnant women, and lactating mothers across the country.
- ❖ It will focus on key themes including Anaemia, Growth Monitoring, Complementary Feeding, Poshan Bhi Padhai Bhi, Technology for the Better Governance, and Ek Ped Maa Ke Naam.

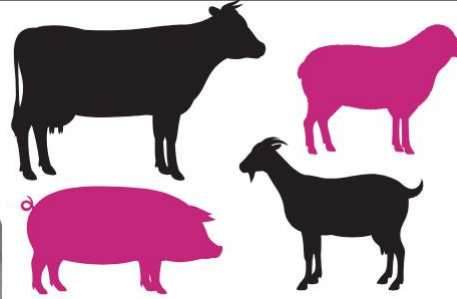


Foot-And-Mouth Disease Free Zones 2024

- ❖ The Union government has decided to establish foot-and-mouth disease-free zones in eight States.
- ❖ They are Karnataka, Tamil Nadu, Andhra Pradesh, Telangana, Uttarakhand, Punjab, Haryana, Maharashtra, and Gujarat.
- ❖ It aims to expand export opportunities for Indian animal products, and enhance the country's global market presence.
- ❖ Foot-and-mouth disease is a highly contagious viral disease of wild and domesticated animals, most notably in cattle, pigs, and sheep.
- ❖ The viral disease, causes wounds to the feet and mouth of cattle, leads to cattle developing fever and not consuming fodder.

WHAT IS IT?

- A highly contagious disease affecting cloven-hoofed animals
- Animals suffer fever and blisters in the mouth and on the feet, affecting their ability to eat and walk



48 hours:

Time taken for FMD to infect an entire herd

How does it spread?

- The virus passes between animals through breath, saliva, mucus, milk and faeces
- It can spread on the wind and through animal products, including meat
- It can survive on shoes and clothing and objects like farm tools, camping equipment and tyres

