

September - 21

TNPSC BITS

- ❖ The Government of India in consultation with the RBI has notified the National Bank for Financing Infrastructure and Development (NaBFID) as a “public financial institution”.
- ❖ Indian Immunologicals (IIL) and Indian Council of Medical Research (ICMR) have signed a memorandum of agreement (MoA) for clinical development of the country’s first codon de-optimised live attenuated Zika vaccine.
- ❖ The National Virology Institute in Pune confirmed the Nipah infection as the cause of death of a man in Malappuram district, marking the resurgence of the deadly zoonotic disease.
- ❖ OpenAI recently released two new ChatGPT models, namely o1 and o1-mini models with advanced reasoning capability.
- ❖ The 4th edition of Global Bio-India 2024 was organized by Department of Biotechnology in New Delhi.
- ❖ Rashtriya Ispat Nigam Limited (RINL) has been honored with the National Energy Leader Award by the Confederation of Indian Industry – Green Business Centre (CII-GBC) for the sixth consecutive year.
- ❖ On the occasion of 30th World Ozone Day, Union Ministry of Environment, Forest and Climate Change, organized a dialogue on the theme of “Montreal Protocol: Advancing Climate Action”.
- ❖ DRDO has successfully conducted the first phase of developmental field firing trials of the Indian Light Tank Zorawar.

NATIONAL

Vision for India as Green Hydrogen Hub

- ❖ The second edition of the International Conference on Green Hydrogen (ICGH-2024) was held in Delhi.
- ❖ During the event, an ambitious vision has unveiled to make India a global hub for green hydrogen production, utilization, and export.
- ❖ Earlier, the National Green Hydrogen Mission, launched in 2023, is a critical step toward realizing this ambition.
- ❖ India's non-fossil fuel capacity has increased nearly 300% over the last decade.

- ❖ The solar energy capacity has seen an astounding 3000% growth in the same period.



Indian Navy's 'Vinetra'



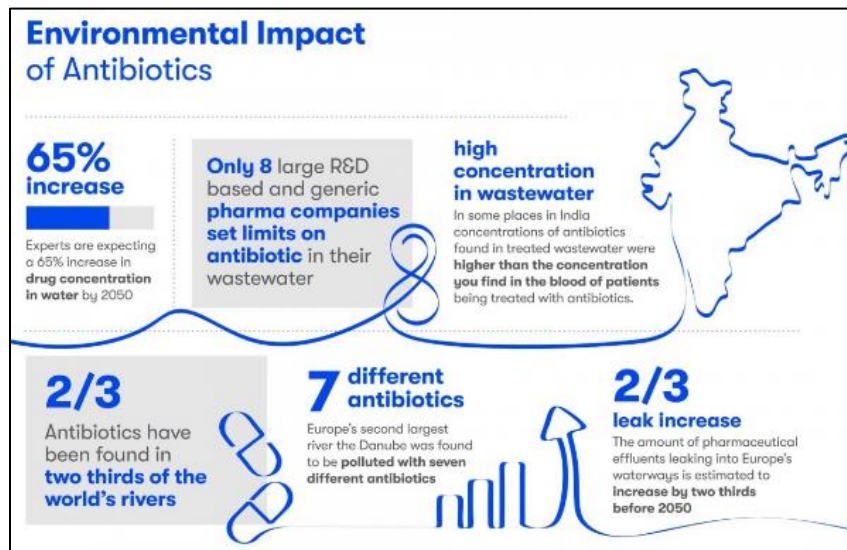
- ❖ A state-of-the-art submarine escape training facility, named "Vinetra" (Trainer) was commissioned at INS Satavahana in Visakhapatnam.
- ❖ The facility, designed to enhance the escape capabilities of crew members from distressed Kalvari-class submarines.

- ❖ Kalvari-class submarines are a series of diesel-electric attack submarines built for the Indian Navy.
- ❖ The first submarine in this class, INS Kalvari, was commissioned in 2017.
- ❖ Other submarines in the class include INS Khanderi, INS Karanj, INS Vela, INS Vagir, and INS Vagsheer.

INTERNATIONAL

Global guidance to tackle antibiotic pollution from manufacturing

- ❖ WHO released its first ever global guidance on antibiotic pollution stemming from manufacturing processes.
- ❖ This document is titled as “Guidance on wastewater and solid waste management for manufacturing of antibiotics”.
- ❖ The comprehensive document offers a scientific framework for the regulators, industry players and other stakeholders to implement effective controls against antibiotic pollution.



PCAPS project

- ❖ The World Meteorological Organization launched the "Polar Coupled Analysis and Prediction for Services" (PCAPS).
- ❖ It aims to enhance weather forecasting in the Arctic and Antarctic.
- ❖ It will improve information on weather, water, ice, and climate in these regions.

- ❖ The project will develop better observation systems, Earth system models, and advocate for improved forecasting services.
- ❖ PCAPS is part of WMO’s World Weather Research Programme (WWRP).



ECONOMY

Review Tax Rate on Insurances

FY24 TALLY		Tax evasion cases	GST amount (₹ crore)
Real-money online gaming	●	78	81,875
Banking, financial, insurance	●	171	18,961
Iron, copper, scrap, alloys	●	1,976	16,806
Pan masala, tobacco, cigarette, bidi	●	212	5,794
Works contract services	●	343	2,846

- ❖ The GST Council constituted a 13-member Group of Ministers to suggest GST rate on premiums of various health and life insurance products.
- ❖ Currently, 18 per cent of Goods and Services Tax (GST) is levied on the insurance premiums.
- ❖ Additionally, the panel is tasked with suggesting the tax rates for life insurance, including term insurance, life insurance with investment plans, and the re-insurance.
- ❖ In the fiscal year 2023-24, the central and state governments collected a total of Rs 8,262.94 crore through GST on health insurance premiums.

- ❖ Additionally, Rs 1,484.36 crore was collected as GST on health reinsurance premiums.

SCIENCE AND TECHNOLOGY

Image of the Red Spider Nebula

- ❖ The Hubble Telescope clicked a few pictures of the stunning Red Spider Nebula.
- ❖ It is located approximately 3,000 light-years away in the constellation Sagittarius.
- ❖ This planetary nebula is home to one of the most scorching stars in the universe.
- ❖ Its surface temperatures are reaching as high as 250,000°C (450,000°F).
- ❖ Hubble is a joint project of the NASA and the European Space Agency (ESA).
- ❖ The telescope was launched on April 24, 1990.
- ❖ It has made more than 1.4 million observations of nearly 47,000 celestial objects.

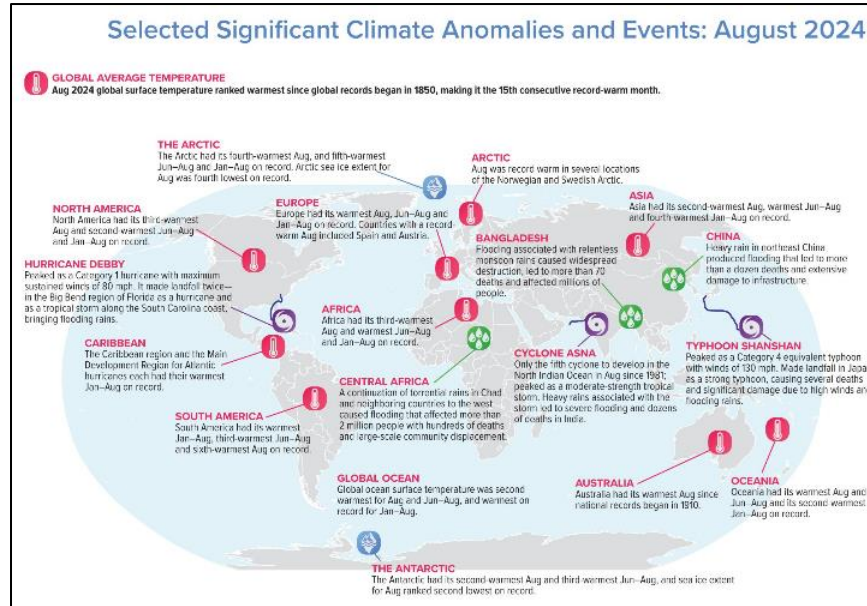


ENVIRONMENT

Earth's hottest August in 175 years

- ❖ August 2024 was the hottest August in 175 years.
- ❖ The average global land and ocean surface temperature in August was 2.29 degrees F (1.27 degrees C) above the 20th-century average of 60.1 degrees F (15.6 degrees C).
- ❖ The southern hemisphere was its warmest winter on the record at 0.96-degree centigrade above average.
- ❖ The summer season in 2024 was the northern hemisphere's warmest on record.

- ❖ At present, global sea ice extent is the second-smallest in the 46-year record, at 8.32 million square miles.
- ❖ It was 1.05 million square miles below the 1991-2020 average.



Herpetofauna Survey



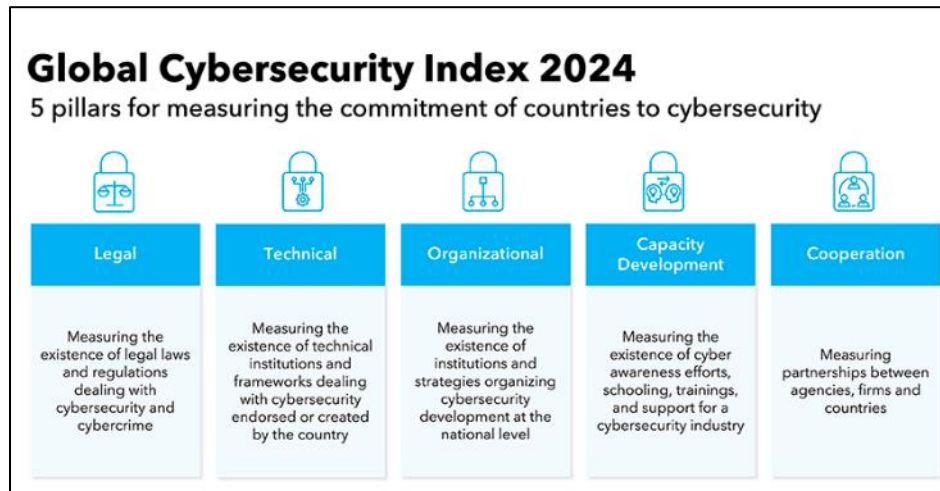
- ❖ The first-ever preliminary herpetofauna survey was conducted in Grass Hills National Park and Karian Shola National Park in the Pollachi division of the Anamalai Tiger Reserve (ATR).
- ❖ The survey has identified 20 species of reptiles and 34 species of amphibians.
- ❖ The survey team recorded 11 reptile species and 12 amphibian species in Grass Hills National Park.
- ❖ This park is spread over 3,122 hectares in the Valparai forest range.
- ❖ A total of nine reptiles and 22 amphibians were recorded in Karian Shola National Park, which is situated at Top Slip in Ulandy forest range.

- ❖ The survey team had recorded the critically endangered Anaimalai flying frog (*Rhacophorus pseudomalabaricus*) and the Deccan night frog (*Nyctibatrachus deccanensis*).

REPORTS AND INDICES

Global Cyber Security Index 2024

- ❖ India has jumped to Tier 1 in the Global Cybersecurity Index (GCI) 2024, released by the International Telecommunication Union (ITU).
- ❖ The report placed 46 countries in Tier 1, the highest of the five tiers.
- ❖ This is reserved for “role modelling” countries that demonstrate a strong commitment in all five cybersecurity pillars.
- ❖ Most countries are either “establishing” (Tier 3) or “evolving” (Tier 4) in terms of cybersecurity.
- ❖ India has strong legal measures in place, like the Information Technology Act (2000) and the Digital Personal Data Protection Bill (2022).



STATES

Naga king chilli festival

- ❖ Seiyhama village in Nagaland celebrated the third edition of the Naga king chilli festival recently.
- ❖ The festival is the hallmark of Seiyhama’s cultural and agricultural identity.
- ❖ It highlighted the importance of the Naga king chilli, one of the world’s hottest chillies.

- ❖ It is also known as raja mircha, a spice renowned globally for its extreme heat, which exceeds 1 million Scoville heat units (SHU).



IMPORTANT DAYS

International Day for Interventional Cardiology - September 16



- ❖ In September 2022, the General Assembly decided to proclaim this day.
- ❖ It aims to raise the public awareness of cardiovascular diseases and procedures, related complications, as well as prevention and care, including through education and the mass media.
- ❖ Cardiovascular diseases are a group of disorders of the heart and blood vessels.
- ❖ They are the leading cause of death globally.



- ❖ Over three quarters of deaths from cardiovascular diseases take place in low- and middle-income countries.

