



May - 31

TNPSC BITS

- ❖ The College of Engineering Thiruvananthapuram (CET) and the Indian Institute of Technology (IIT) Madras have bagged a patent for designing a contactless voltage measurement device.
- ❖ The Foundation for Interoperability in Digital Economy (FIDE) has unveiled a multi-network AI agent that can carry out commercial transactions on the user's behalf.
- ❖ GAIL (India) Ltd. inaugurated India's first 10 MW Green Hydrogen Plant under the National Green Hydrogen Mission in Madhya Pradesh's Vijaipur.
- ❖ Mountaineer and cricketer Kabak Yano from Arunachal Pradesh creates history by becoming first Nyishi tribe woman to scale Mount Everest.
- ❖ Jyoti Ratre (55) from Madhya Pradesh, has become the oldest Indian woman to conquer Mount Everest.
- ❖ Purnima Shrestha from Nepal, has made history as the first woman in the world to climb Mount Everest three times in the same season, all in just 13 days.
- ❖ Gymnast Dipa Karmakar made history by becoming the first Indian to win a gold medal at the Asian Senior Championships 2024, by clinching the title in the women's vault.
- ❖ Charles Leclerc, the Ferrari driver, has achieved a remarkable feat by becoming the first Monegasque driver to win the Monaco Grand Prix 2024.
- ❖ Filmmaker Payal Kapadia made a history after her film 'All We Imagine As Light' won the prestigious Grand Prix at the 2024 Cannes Film Festival, France.
- ❖ Smartphones become India's Fourth Largest Export Item with 42% growth to \$15.6 billion in FY24.
- ❖ NHPC, India's premier hydropower company, has been conferred with the prestigious 'The Economic Times HR World Future Ready Organization Award 2024-25'.

TAMIL NADU

Salem Central Prison

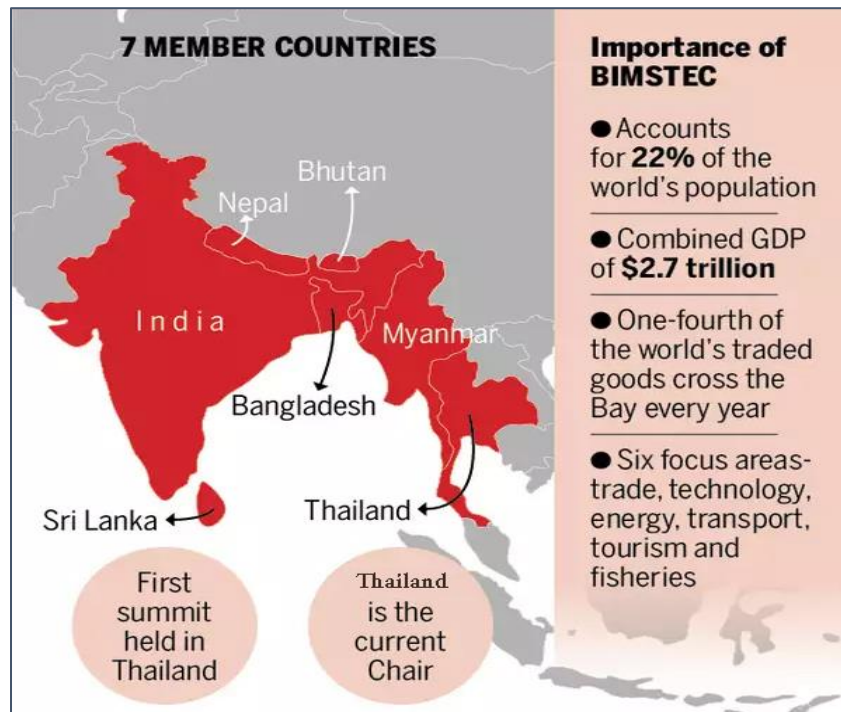
- ❖ Salem Central Prison, previously designated as a facility for habitual offenders, has now been reclassified as a casual prison.
- ❖ Constructed by the British in 1862, Salem Central Prison includes an annex built in 1934 to accommodate adolescent prisoners.

- ❖ After 162 years, the Home Department reclassified Salem Central Prison as a casual prison.
- ❖ Salem Central Prison hosts several factories and an open-air prison (farm jail).



NATIONAL

BIMSTEC Charter 2024



- ❖ BIMSTEC now open to new members and observers after a historic first charter of the grouping came into force.

- ❖ The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation grouping has acquired a 'legal personality'.
- ❖ It will be able to enter into structured diplomatic dialogue with other groupings and countries.
- ❖ BIMSTEC was formed in 1997 but for a long time, the organization could not form consensus among its seven member states.
- ❖ The members are Bangladesh, Bhutan, Sri Lanka, Nepal, Thailand, Myanmar and India.

INTERNATIONAL

'Drone wall' against Russia



- ❖ Six NATO countries neighbouring Russia are joining forces to build a “drone wall” to protect their borders.
- ❖ The “drone wall” will be constructed using a combination of unmanned aerial vehicles (UAVs) and advanced surveillance technologies.
- ❖ The drones will be equipped with various sensors and cameras to monitor border activities continuously.

- ❖ The states taking part are Lithuania and its Baltic neighbours Latvia and Estonia, as well as Poland, Finland, and Norway.
- ❖ Finland, which joined NATO in 2023, shares an 832-mile border with Russia.

ECONOMY

India's Trade Deficit in 2023-24



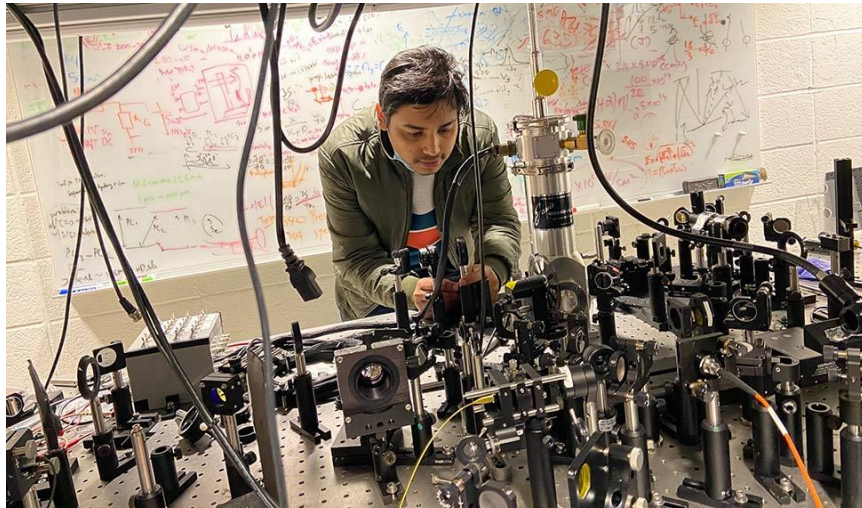
- ❖ India recorded a trade deficit with nine of its top ten trading partners, including China, Russia, Singapore, and Korea, in 2023-24.
- ❖ The deficit with China, Russia, Korea, and Hong Kong increased compared to the previous fiscal year.
- ❖ It narrowed with the UAE, Saudi Arabia, Russia, Indonesia, and Iraq.
- ❖ The trade deficit with China rose to \$85 billion, Russia to \$57.2 billion, Korea to \$14.71 billion and Hong Kong to \$12.2 billion in 2023-24.
- ❖ It was \$83.2 billion, \$43 billion, \$14.57 billion and \$8.38 billion, respectively, in 2022-23.
- ❖ China has emerged as India's largest trading partner with \$118.4 billion of two-way commerce in 2023-24, edging past the U.S.
- ❖ The bilateral trade between India and the U.S. stood at \$118.28 billion in 2023-24.
- ❖ Washington was the top trading partner of New Delhi during 2021-22 and 2022-23.
- ❖ India has a free trade agreement with four of its top trading partners — Singapore, the UAE, Korea and Indonesia (as part of the ASEAN bloc).
- ❖ India has a trade surplus of \$36.74 billion with the U.S. in 2023-24.

- ❖ The surplus is also there with the U.K., Belgium, Italy, France and Bangladesh.

SCIENCE AND TECHNOLOGY

Optical Nanopatterning Process

- ❖ IIT Guwahati and Columbia University, USA scientists have developed a method for nanopatterning using a simple tabletop IR (infrared) laser.
- ❖ A simple IR laser on a table is used to change the qualities of materials at their resonance frequency, without touching them directly.
- ❖ Nanopatterning involves creating patterns on materials at the nano meter scale.
- ❖ It is a hundred thousand times smaller than the width of a single human hair.



ENVIRONMENT

First Global Mangrove Assessment

- ❖ The report, Red List of Mangrove Ecosystems, is the first global mangrove assessment for the International Union for Conservation of Nature (IUCN).
- ❖ It warns that half of the world's mangrove ecosystems run the risk of collapse.
- ❖ The report shows that 50% of the mangrove ecosystems assessed are at risk of collapse.
- ❖ Under business as usual, 25% of the global mangrove area is predicted to be submerged in the next 50 Years.
- ❖ By 2050 about ~7,065 km² (-5%) more mangroves will be lost and ~23,672 km² (-16%) will be submerged.

- ❖ Indian mangrove ecosystems have been bunched into three parts.
- ❖ The ecosystems in the Bay of Bengal region shared by India and Bangladesh and those in the west shared by India and Pakistan are in the least concerned category.
- ❖ However, the mangrove ecosystem in the south, which India shares with Sri Lanka and Maldives, is categorised as critically endangered.



GSAP SKILLS Platform



- ❖ IUCN has launched the Global Species Action Plan Online Knowledge Platform, known as GSAP SKILLS,
- ❖ The GSAP SKILLS platform aims to facilitate global collaboration and partnership, connecting decision makers, species conservation practitioners and experts at all levels.

- ❖ The platform provides real-time updates on technical tools and resources, ensuring accessibility and relevance.

IMPORTANT DAYS

World Dugong Day 2024 - May 28

- ❖ The dugong is commonly known as the sea cow.
- ❖ Dugongs are an endangered marine species like sea turtles, seahorses, sea cucumbers and others.
- ❖ It is the only existing species of herbivorous mammal that lives exclusively in the sea including in India.
- ❖ Dugongs are mammals, which means they give birth to live young and then produce milk and nurse them.



Anti-Tobacco Day 2024 - May 31

- ❖ This annual event was started by the World Health Organization (WHO).
- ❖ It gives a platform to young people across the world, who are urging governments to shield them from predatory tobacco marketing tactics.
- ❖ Children are using e-cigarettes at rates higher than adults in all regions.



- ❖ Globally an estimated 37 million youth aged 13–15 years use tobacco.
- ❖ The theme for 2024 is “Protecting Children from Tobacco Industry Interference”.

