



October - 29

TNPSC BITS

- The Amaravati Drone Summit 2024, hosted by the Government of Andhra Pradesh, was drawing an impressive turnout of over 11,000 visitors.
- The second edition of the Indian Army's flagship international seminar, the Chanakya Defence Dialogue, was held in Delhi.
- The 14th All India Civil Defence and Home Guards conference was held at Gandhinagar, Gujarat.
- Centre launched the 21st Livestock Census to update data on the livestock population.
- The European Union has awarded its top human rights prize Sakharov Prize - to Venezuelan opposition leaders Maria Corina Machado and Edmundo Gonzalez Urrutia.
- Global industry body International Copper Association (ICA) has elected Aditya Birla Group firm Hindalco Industries Ltd as its newest member.
- The 31st edition of the Singapore-Indian Maritime Bilateral Exercise (SIMBEX) was held at Visakhapatnam.
- Mormugao Port Authority, Goa became the first Indian port to be listed on the Environmental Ship Index (ESI) portal for their Harit Shrey program.
- India's top women wrestlers Sakshi Malik had authored her memoir as 'Witness'.

TAMIL NADU

CM Trophy campaign 2024

- ✤ Chennai topped by winning 105 gold, 80 silver and 69 gold.
- Chengalpattu took the second spot in the medals tally with 31 gold medals with 26 silver and 36 bronze medals.
- ✤ Coimbatore ended with 23 gold, 40 silver and 39 bronze medals.
- Salem was the biggest mover on the medals tally from the last edition as they jumped to fourth spot from 19th in 2023, winning 21 gold, 12 silver and 23 bronze.





- The 2024 CM Trophy is one of the largest grassroots initiatives in the country and attracted over 33,000 participants from 38 districts.
- This was the first time that all the 38 participating districts found a spot on the medals tally with Nilgiris taking the last spot.



NATIONAL

Bhu-Aadhaar



✤ Bhu-Aadhaar or ULPIN was launched in 2021 as a part of the land records modernisation program.





- Around 30 percent of the rural land parcels in the country have been given a Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhaar.
- This is an initiative to give a 14-digit alpha-numeric identity to each land parcel.
- ULPIN was launched in 2021 as part of the Centre's Digital India Land Records Modernisation Programme (DILRMP).
- It aims to streamline and bring uniformity to the process adopted by states in assigning unique identification numbers to land parcels.
- Gujarat, Goa, Madhya Pradesh, Andhra Pradesh, and Uttar Pradesh have made significant progress.
- In Gujarat, which has over 1.2 crore land parcels, the data show, the ULPIN has been generated for 1.19 crore land parcels.



1st Mid-Career Training Program

The National Centre for Good Governance (NCGG) has successfully concluded its first Mid-Career Training Program for civil servants from the BIMSTEC nations.

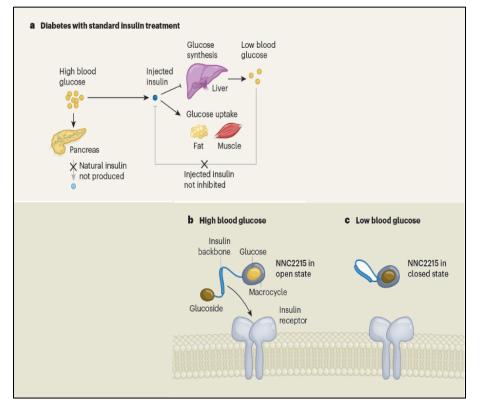




- The two-week program brought together 36 senior officials, including Deputy Commissioners, Assistant Divisional Secretaries, Commissioners, and Deputy Directors, from Sri Lanka, Myanmar, Nepal, and Bhutan representing the key ministries.
- The program aimed to foster the regional cooperation and enhance governance capabilities.

SCIENCE AND TECHNOLOGY

Smart Insulin for Diabetes



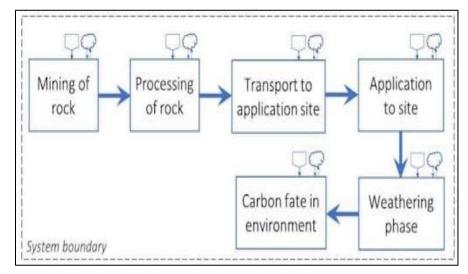
- Scientists have developed the "holy grail" diabetes treatments a "smart" insulin that responds in real time to fluctuations in one's blood sugar level.
- The newly developed NNC2215 is effective as human insulin at lowering blood glucose in rats and pigs.
- The engineered insulin requires a significant glucose spike to be activated, and once it is activated, there is a sudden rush of insulin in the system.
- Type 1 diabetes, which often starts in childhood, occurs when the pancreas does not produce insulin (or enough insulin).





Type 2 diabetes sees the cells of the body develop resistance to insulin, meaning greater amounts are required that what is produced by the pancreas.

ENVIRONMENT



Mining Dust for Carbon Capture

- Darjeeling-based company, Alt Carbon, is turning mining dust into a climatefriendly solution.
- ✤ It utilising a geo-chemical process known as enhanced rock weathering to tackle atmospheric carbon dioxide (CO₂).
- Being an organic fertiliser, the basaltic dust enriches the soil as well as accelerates carbon sequestration.
- It takes about a 3-4 tonnes of basalt dust to sequester, or trap, a tonne of atmospheric carbon over two to four years.
- ◆ Carbon sequestration is the process of capturing and storing atmospheric CO₂.
- The oceans are the major carbon sinks and capture about 30% of the CO_2 from human activities.

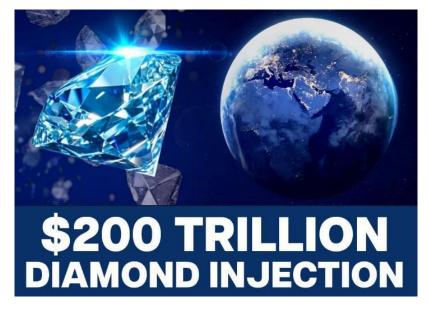
Diamond Dust Solution for Global Warming

- ✤ A new study suggests that injecting diamond dust into the atmosphere could be an effective method to cool the planet.
- Diamond dust is chemically inert.
- ✤ Annually injecting 5 million tons of synthetic diamond dust into the atmosphere could potentially cool the Earth by 1.6°C over 45 years.





 However, implementing this solution would require an estimated investment of \$200 trillion.



REPORTS AND INDICES

Economic Freedom of the World 2024



- The Fraser Institute, a Canada-based libertarian think tank, had produced the analysis.
- This Annual Report ranked Hong Kong as the freest global economy.





- ✤ It is followed by Singapore, and Switzerland.
- India was ranked 84th and neighbour Nepal placed 86th, Bhutan at 98th rank and China place in 104th place.

Emissions Gap Report 2024

	Total GHG emissions in 2023	Change in total GHG emissions, 2022–2023	Per capita GHG emissions in 2023	Historical CO ₂ emissions, 1850–2022
	MtCO₂e (% of total)	%	tCO2e/capita	GtCO ₂ (% of total)
China	16,000 (30)	+5.2	11	300 (12)
United States of America	5,970 (11)	-1.4	18	527 (20)
India	4,140 (8)	+6.1	2.9	83 (3)
European Union (27 countries)	3,230 (6)	-7.5	7.3	301 (12)
Russian Federation	2,660 (5)	+2	19	180 (7)
Brazil	1,300 (2)	+0.1	6.0	119 (5)
African Union (55 countries)	3,190 (6)	+0.7	2.2	174 (7)
Least developed countries (47 countries)	1,730 (3)	+1.2	1.5	115 (4)
G20 (excl. African Union)	40,900 (77)	+1.8	8.3	1,990 (77)

- The Emissions Gap Report is an annual publication of the UN Environment Program.
- Six largest GHG emitters accounted for 63% of global GHG emissions.
- ✤ Least developed countries accounted for only 3%.
- India ranks 3rd in total GHG emissions with 4,140 MtCO₂e compared to China and USA
- ✤ India's historical CO₂ emissions (1850–2022) are much lower (83 GtCO₂ than China (300 GtCO₂) and US (527 GtCO₂).
- ✤ Greenhouse-gas emissions rose to a new high of 57 gigatons (Gt) of CO₂ equivalent in 2023 (1.3 % increase from 2022).
- ✤ The Nations must collectively commit to cut 42 % off annual greenhouse gas emissions by 2030 and 57 % by 2035 in next NDCs.

IMPORTANT DAYS

World Development Information Day 2024 - October 24

- It is a platform for raising awareness about issues such as education, health, the environment, and economic development.
- It aims to promote awareness of global development issues and the importance of information in addressing these challenges.

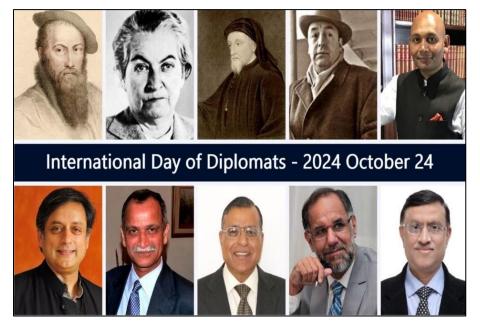




- ✤ It was established by the United Nations General Assembly in 1972.
- The date coincides with United Nations Day.



International Day of Diplomats 2024 - October 24

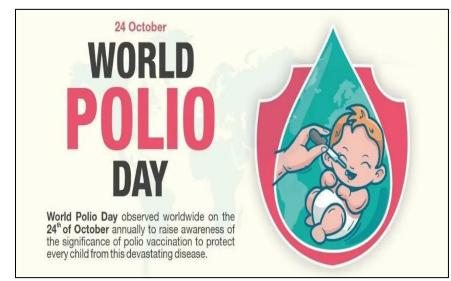


- It is honouring the invaluable role that the diplomats play in maintaining international relations, fostering peace, and promoting dialogue between the countries.
- ✤ It was initiated in 2017 by Indian diplomat Abhay Kumar.





- This day was first commemorated in Brasília, Brazil, with diplomats from several nations participating.
- International Day of Multilateralism and Diplomacy for Peace was observed on April 24.



World Polio Day 2024 - October 24

- The Day was established by the Rotary International to commemorate the birth of Jonas Salk.
- Jonas Salk led the first team to develop the vaccine against the disease in the 1950s.
- ✤ In 1955, he created the Inactivated Poliovirus Vaccine.
- ✤ In 1962, Albert Sabin created the Oral Polio Vaccine.
- ✤ OPV is being used exclusively in India since 1978.
- ✤ In 1988, WHO committed to eradicate the poliovirus, at the time, there were around 3,50,000 cases worldwide.

63rd ITBP Raising Day - October 24

- The Indo-Tibetan Border Police (ITBP) is one of India's five Central Armed Police Forces.
- ✤ It was raised in the aftermath of the 1962 Sino-Indian War.
- ✤ ITBP was formally raised on October 24, 1962.
- * with the security of the India-China border in the Himalayas.





The force safeguarded along the 3,488-km-long Line of Actual Control (LAC) with China.



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