

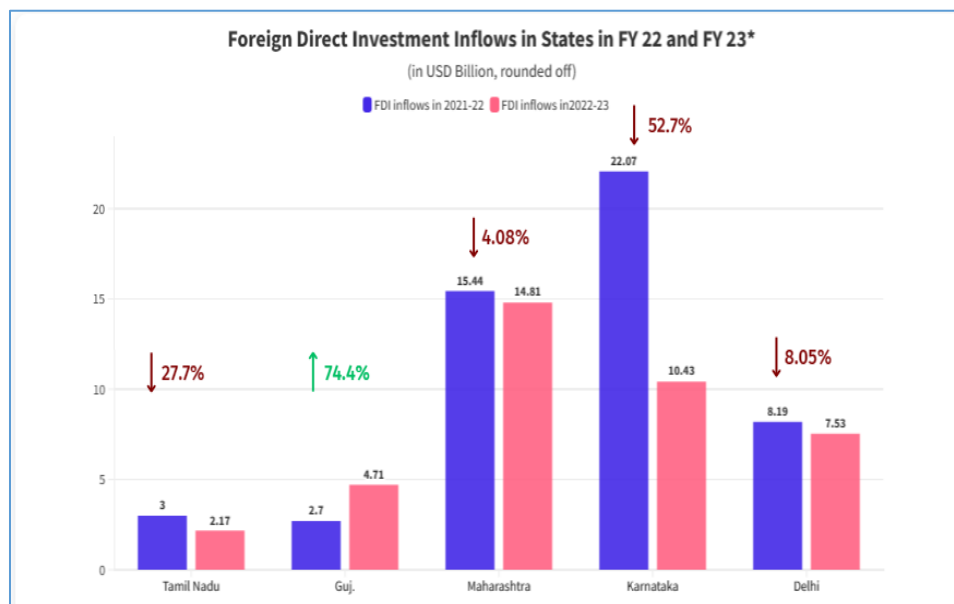
August - 05

TNPSC BITS

- ❖ August 1st is observed as World Fintech Day to celebrating and recognizing the financial technology and its transformative impact on the global financial industry.
- ❖ The fourth and final G-20 Environment and Climate Sustainability Working Group (ECSWG) and Environment and Climate Ministers meeting held in Chennai.

TAMIL NADU

Foreign direct investment inflows 2022-23



- ❖ Tamil Nadu's Foreign Direct Investment (FDI) inflows declined 27.7% to about 2.17 billion USD in the financial year 2022-23.
- ❖ This was around 3 billion USD in 2021-22.
- ❖ India's FDI inflows as a whole, declined 16.34% to \$70.97 billion in 2022-23 from \$84.84 billion in 2021-22.
- ❖ Maharashtra has seen a 4.08% decline in FDI inflows and Karnataka has seen a 52.74% drop to \$10.43 billion.
- ❖ Gujarat's inflows jump 74.4% to \$4.71 billion in 2022-23 from \$2.70 billion in 2021-22.

- ❖ Tamil Nadu's fresh investments increased to ₹1,73,494.34 crore in FY 2023 from ₹1,72,974.93 crore in FY 2022, with share of private investment at 75.20%.

NATIONAL

MASI App

- ❖ National Commission for Protection of Child Rights (NCPCR) has developed an application 'MASI'.
- ❖ MASI stands for Monitoring App for Seamless Inspection.
- ❖ It aims to real time monitoring of the Child Care Institutions (CCIs) and their inspection mechanism across the country.
- ❖ The app is linked to the monitoring Portal where the automatic reports are generated.



Mines and Minerals (Development and Regulation) Amendment Bill, 2023

- ❖ Rajya Sabha cleared the Mines and Minerals (Development and Regulation) Amendment Bill, 2023 by a voice vote.
- ❖ The bill allows the Centre to exclusively auction mining leases and composite licences for certain critical minerals of the country, with states also getting their revenue.
- ❖ The bill also seeks to allow increased private sector participation.

- ❖ Players now allowed to mine six out of 12 atomic minerals, including lithium, and deep-seated minerals such as gold and silver.
- ❖ Earlier, all 12 atomic minerals were reserved for mining and exploration by government entities.

Delhi services bill



- ❖ The Delhi services bill, officially known as the Government of National Capital Territory of Delhi (Amendment) Bill, 2023, was passed in the Lok Sabha.
- ❖ This bill will replace an existing ordinance that overrides a Supreme Court order giving the Delhi government control over most services.
- ❖ The ordinance had granted the elected government in Delhi the authority to handle the transfer and appointments of bureaucrats.

ECONOMY

Central Govt debt

- ❖ The central government's debt stood at Rs 155.6 lakh crore or 57.1 per cent of the GDP at the end of March 2023.
- ❖ The debt of state governments at the end of 2022-23 is estimated to be about 28 per cent of GDP.

- ❖ Central Government's capital expenditure has increased from 2.15 per cent of GDP in 2020-21 to 2.7 per cent of GDP in 2022-23.

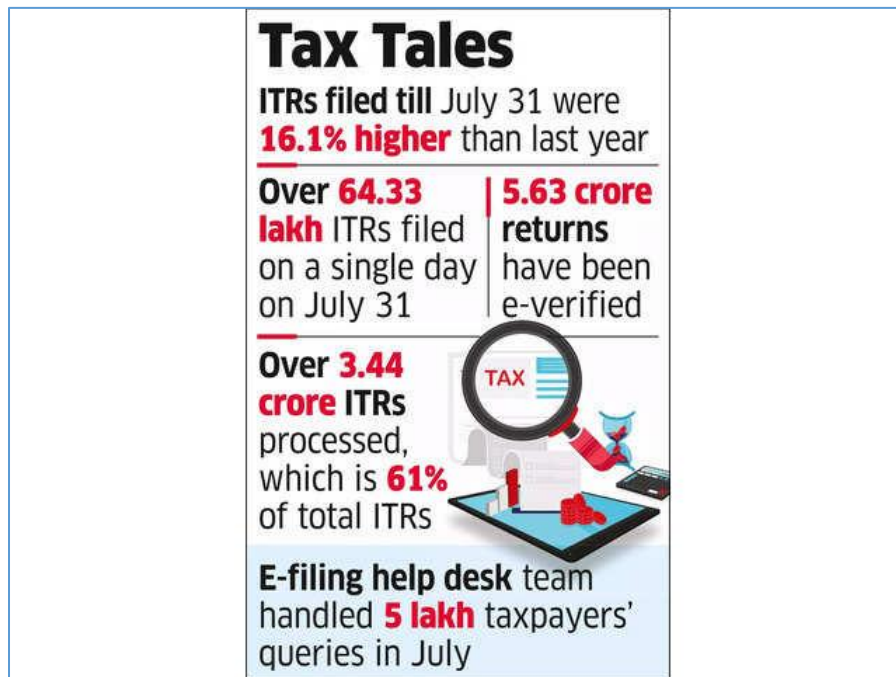
(i) Year-wise details of the Central Government debt/total liabilities outstanding from FY 2013-14 to FY 2022-23 are given in the following table:

FY	Central Government's debt/total liabilities*	
	Amount (₹ lakh crore)	% of GDP
2013-14	58.6	52.2%
2014-15	64.1	51.4%
2015-16	71.0	51.5%
2016-17	75.0	48.7%
2017-18	82.9	48.5%
2018-19	92.5	49.0%
2019-20	105.2	52.4%
2020-21	122.1	61.6%
2021-22	138.9	58.7%
2022-23 (RE)	155.8	57.3%

*Includes External Debt valued at current exchange rates as on 31st March of the respective financial year.

RE: Revised Estimates

New record of Income Tax Returns



- ❖ The Income Tax Return (ITR) filing for the AY 2023-24 has set a new record with over 6.77 crore filings till July 31.
- ❖ The filings before the deadline are 16.1 percent more than the total ITRs for AY 2022-23.

- ❖ The ITR filings peaked on the last day of the filing (July 31) with over 64.33 lakh filing.
- ❖ The IT department also received 53.67 lakh ITRs from first time filers.
- ❖ The highest per-hour rate of filing was witnessed between 5 PM to 6 PM with a total of 4,96,559 ITR filing.
- ❖ The highest per-second rate of ITR filing of 486 at 16:35:06.
- ❖ The highest per-minute rate of ITR filing of 8,622 at 17:54 on July 31.

SCIENCE AND TECHNOLOGY

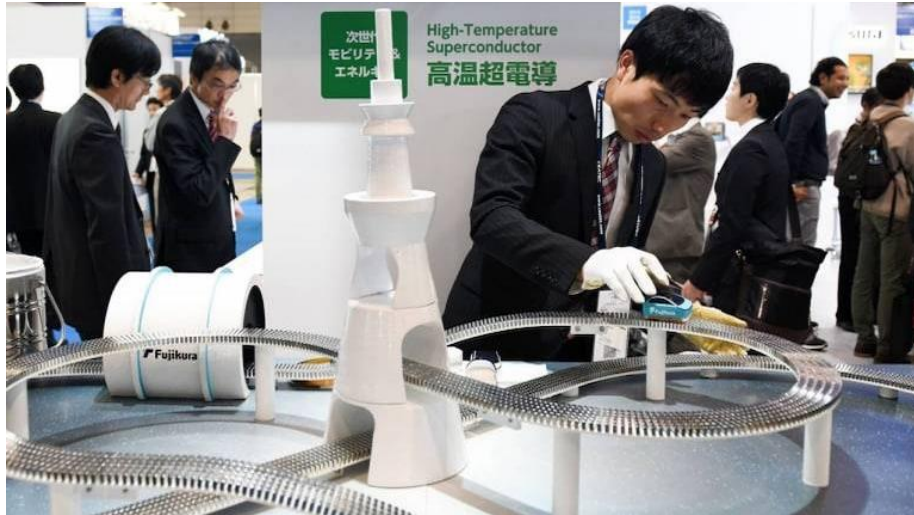
Watermelons in Vostok Station



- ❖ Scientists have achieved the remarkable milestone of cultivating watermelons in Antarctica.
- ❖ They cultivated at the Russian research facility - Vostok Station situated at the Pole.
- ❖ This location is classified as the coldest spot-on Earth.
- ❖ Here the temperatures plunge to minus 128.6 degrees Fahrenheit (minus 89.2 degrees Celsius).
- ❖ Watermelons are originating over 4,300 years ago in present-day Sudan.
- ❖ Korean scientists achieved watermelon cultivation at the King Sejong Station in West Antarctica in 2021.

- ❖ That site recorded temperature as low as minus 78.1 F (minus 25.6 C).

Room-temperature superconductor



- ❖ The South Korean researchers have claimed the discovery of a practical superconductor.
- ❖ The material, dubbed LK-99, is made by introducing a small number of copper atoms into a relatively common mineral called lead apatite.
- ❖ Superconductors are materials that allow electrical current to flow without resistance.
- ❖ Existing superconducting materials only display their superconducting properties at extremely low temperatures.
- ❖ This making them impractical for widespread use.

New blood testing technology

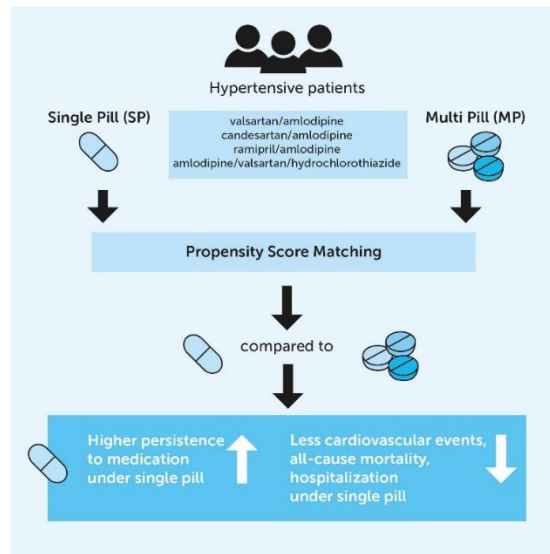


- ❖ Researchers have developed a new blood testing technology called GEMINI.

- ❖ GEMINI stands for Genome-wide Mutational Incidence for Non-Invasive detection of cancer.
- ❖ It combines genome-wide sequencing of single molecules of DNA with machine learning.
- ❖ This technology has the potential to allow earlier detection of lung and other cancers.
- ❖ Advanced level of GEMINI detected over 90% of lung cancers, including stage I and II diseases.

Single-pill strategy

- ❖ WHO included three fixed dose combinations of cardiovascular medicines or polypills on its revised Model Lists of Essential Medicines (EML) 2023.
- ❖ This will be used in primary and secondary prevention of atherosclerotic cardiovascular diseases.
- ❖ The polypill is an important low-cost public health intervention.
- ❖ It can prevent over millions of cardiovascular events and deaths every year.

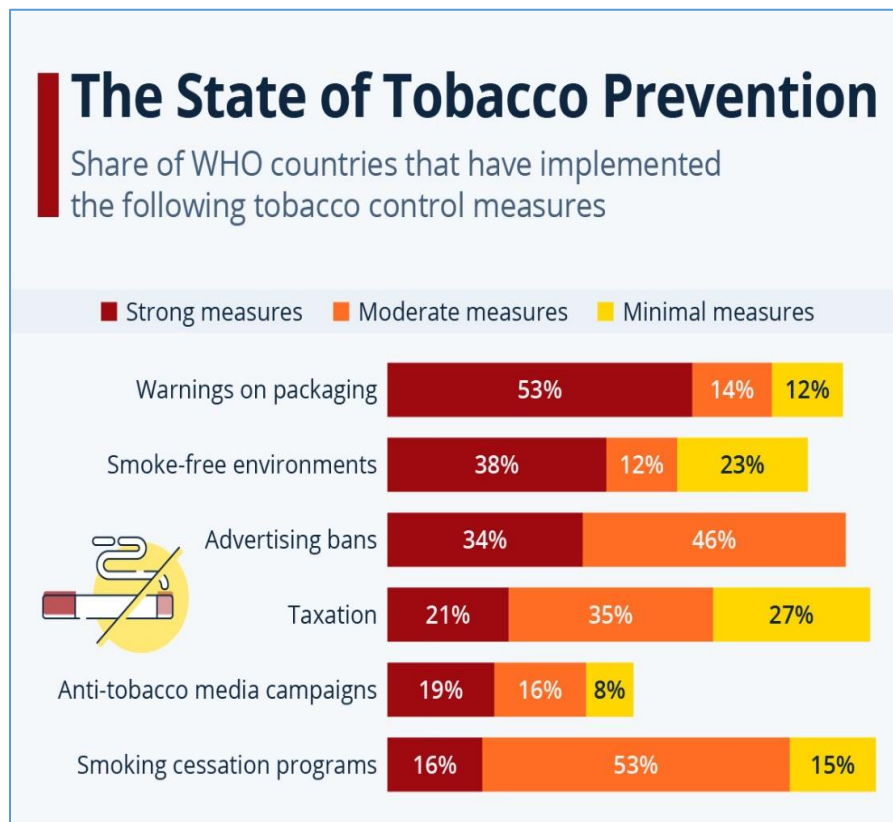


REPORTS AND INDICES

Global tobacco epidemic 2023

- ❖ WHO released a report called the 'global tobacco epidemic, 2023: protect people from tobacco smoke'.

- ❖ The global rate of the prevalence of smoking had dropped from 22.8 per cent in 2007 to 17 per cent in 2021.
- ❖ Netherlands, Mauritius, Brazil and Turkey are only implementing all the recommended measures to reduce tobacco smoking globally.
- ❖ More than seven in 10 people on the planet (5.6 billion) are now protected by measures to curb the dangers of tobacco smoke.
- ❖ 8.7 million people still die from tobacco-related diseases every year.
- ❖ 2.3 billion people in 44 countries remain unprotected without any WHO anti-tobacco measures in place.
- ❖ 74 countries have no regulations in place addressing such products, meaning no bans on use in public places, no labelling requirements and no bans on advertising.



MISCELLANEOUS

Perucetus colossus

- ❖ A partial skeleton of Perucetus colossus was found in Peru.

- ❖ This whale lived nearly 40 million years ago could be the heaviest animal to have ever lived.
- ❖ The animal reached about 20 meters (65 feet) in length.
- ❖ The modern blue whale has long been considered the largest and heaviest animal ever.
- ❖ The biggest blue whale ever recorded weighed 190 tonnes, according to Guinness World Records.
- ❖ But the researchers estimated the ancient whale's weight range was between 85 and 340 tonnes.



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