

December - 24

TNPSC BITS

- ❖ WHO Regional Director (South-East Asia) Dr Poonam Khetrapal Singh has been awarded Bhutan's National Order of Merit Gold Medal for her distinguished services to the country.
 - She is the first woman regional director of WHO South-East Asia region,
- ❖ IndiGo, carrier has created history by becoming the first Indian airline to carry 100 million passengers in a single calendar year.
- ❖ The International Monetary Fund has reclassified India's exchange rate regime to "stabilised arrangement" from "floating" for the period from December 2022 to October 2023.
- ❖ The 18th session of the UNESCO-Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage 2024 will take place in Kasane, Republic of Botswana.

TAMIL NADU

Own Tax Revenue impacts - Tamilnadu

A substantial rise
The tax collection in Tamil Nadu has increased by over 50% in the first quarter of fiscal 2023

	Q1 2023	Q1 2022	% change
State Goods and Services Tax	13692.84	9224.11	48.4
Stamps and Registration Fees	4457.95	2314.46	92.6
Land Revenue	58.46	38.07	53.5
Taxes on Sales, Trade etc	13119.24	9484.81	38.3
State Excise Duties	2594.55	1199.23	116.3
Total	33923.04	22260.68	52.3

(IN ₹ CRORE) SOURCE: COMPTROLLER AND AUDITOR GENERAL OF INDIA

- ❖ Tamil Nadu's Own Tax Revenue, which accounts for over 70% of total revenue, is likely to be affected by the floods in Chennai and the Southern districts.

- ❖ For 2023-24, the State's Own Tax Revenue (SOTR) is projected to be ₹1,81,182 crore, as per the Budget estimates.
- ❖ It is a 20.61% growth from 2022-23.
- ❖ The SOTR accounts for 78.9% of Tamil Nadu's total revenue.
- ❖ So far in 2023-24 (Till October 2023), Tamil Nadu's Own Tax Revenue was ₹84,930.9 crore.
- ❖ This constitutes around 46.88% of the Budget estimates.

NATIONAL

Scheme to expedite the exploration of critical minerals



- ❖ The Ministry of Mines has introduced a new scheme to expedite the exploration of critical and deep-seated minerals.
- ❖ It aims to eliminate delays in project approvals, accelerate project execution, and encourage larger companies and international players to engage in exploration projects with NMET funding.

- ❖ The ministry of Mines will directly sanction exploration projects to Notified Private Exploration Agencies (NPEAs).
- ❖ These NPEAs are now permitted to bid for auctioning mineral blocks they have explored, a privilege previously unavailable to them.

INTERNATIONAL

Century's Largest Flood - North Queensland



- ❖ The Tropical Cyclone Jasper, has caused the largest flood in more than a century in Australia's Far North Queensland.
- ❖ Two rain gauges recorded over 660 millimetres (26 inches) of rain in just 12 hours.
- ❖ It is breaking the previous all-time state record of 617 mm set in 1972.
- ❖ The Barron River at Myola experienced its highest flood levels in more than 100 years.
- ❖ The Daintree River exceeded major record flooding levels.
- ❖ It hit 15 metres — above the 2019 record of 12.6 metres.

Egypt's new President

- ❖ The president of Egypt, Abdel Fattah al-Sisi, won for a third term.
- ❖ He was elected to the Presidency in 2014, and re-elected in 2018, both times with 97% of the vote.

- ❖ The constitution was amended in 2019.
- ❖ It is extending the presidential term to six years from four, and allowing Mr. Sisi to stand for a third term.




ECONOMY

Net Borrowing limits for states 2023

NET BORROWING CEILINGS (NBC) FOR THE YEAR 2023-24

- › Normal Net Borrowing Ceiling for States fixed at 3 percent of Gross State Domestic Product (GSDP), i.e. Rs. 8,59,988 crore, for FY 2023-24 as recommended by Fifteenth Finance Commission [XV-FC].
- › Approval issued for raising Rs. 6,99,016 crore for Open Market Borrowing (OMB) & of Rs. 69,370.81 crore for availing Negotiated Loan during FY2023-24.
- › Further, States allowed extra borrowing ceiling equivalent to employer and employee share of contribution of its employees with actual NSDL/trustee bank as per the guidelines of National Pension Scheme (NPS), over and above the normal net borrowing ceiling of 3% of GSDP, for FY2023-24.
- › Extra borrowing ceiling of Rs. 60,876.80 crore allowed to 22 States in 2023-24 (as on 27.10.2023) for NPS contribution by complying States.

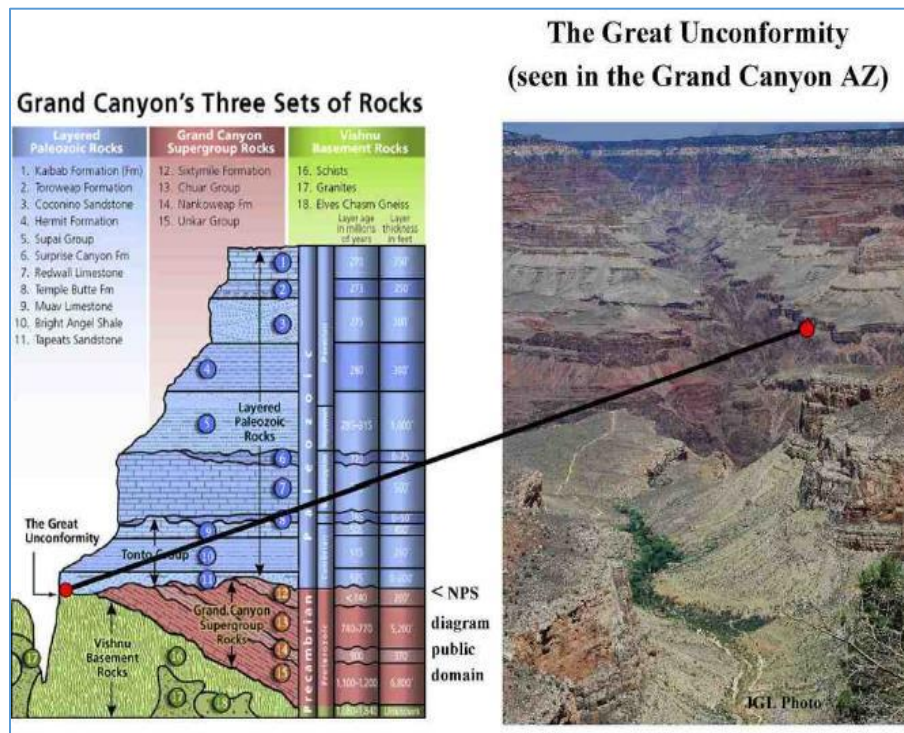


- ❖ States may be able to tap about ₹2.04 lakh crore as additional borrowings over and above their net borrowing limits for the year.

- ❖ The Centre had allowed 22 States to raise additional borrowings of almost ₹61,000 crore this year.
- ❖ This is on top of their net borrowing ceilings of 3% of Gross State Domestic Product (GSDP).
- ❖ The extra borrowing ceiling was granted to States who met their pension liabilities by making required contributions to the National Pension System.
- ❖ Moreover, States are eligible to raise a little more than ₹1.43 lakh crore this year, based on the recommendations of the Ministry of Power.
- ❖ While the normal net borrowing ceiling for States is fixed at ₹8,59,988 crore for this year, in line with the recommendations of the 15th FC.

SCIENCE AND TECHNOLOGY

The Great Unconformity



- ❖ Scientists have recently unravelled the mystery of "The Great Unconformity,"
- ❖ It is a phenomenon where large sections of the Earth's crust are missing from the geological record.
- ❖ This gap most likely emerged from the intense glacial erosion during a period known as "Snowball Earth," when much of the planet was covered in ice.

- ❖ The process of glacial erosion, occurring during this ancient time, led to a significant removal of rocks, creating a gap in the sedimentary record.
- ❖ This geological oddity was first observed in 1869 at the Grand Canyon in Arizona.
- ❖ A recent study estimated that an astonishing 3-5 kilometres of rock globally were eroded due to glacial activity.
- ❖ It is leaving a billion cubic kilometres of pre-Cambrian material missing from records.
- ❖ The more extensive erosion occurred before the Phanerozoic era than previously believed.
- ❖ The Phanerozoic is the current and the latest of the four geologic eons in the Earth's geologic time scale.
- ❖ It is covering the time period from 538.8 million years ago to the present.

ENVIRONMENT

Endangered Bat Species

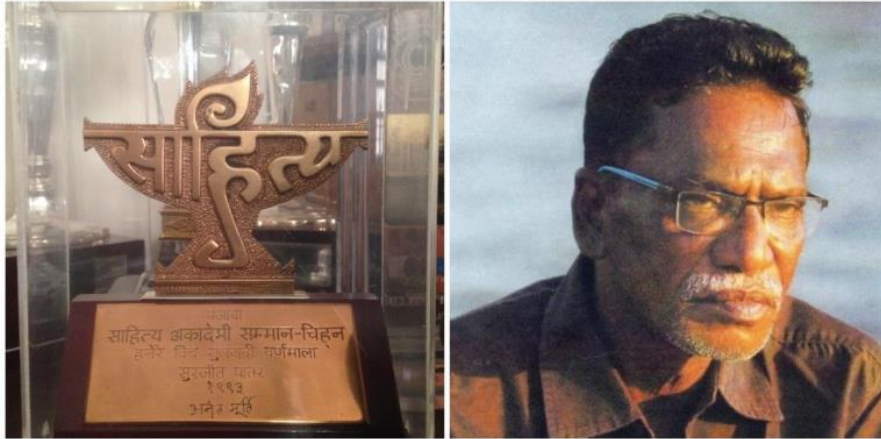


- ❖ Researchers have discovered a new creature considered to be “very rare” and endangered on the French island of Corsica.
- ❖ The bat discovered in the mountains belonged to a previously unknown species in the genus *Myotis*.
- ❖ It has over 120 species found throughout six continents.

- ❖ This newfound species was named ‘nustrale’, which means “ours” in the Corsican dialect.

PERSONALITIES, AWARDS, AND EVENTS

Sahitya Akademi Awards for 2023



- ❖ Tamil writer Devibharathi’s novel Neervazhi Padoom, has won the Sahitya Akademi award for 2023.
- ❖ It is depicting the life of the Kudi Navithar, the community barbers in the Kongu region of Tamil Nadu
- ❖ Neervazhi Padoom is a line from Purananuru poem, a Sangam age literary work.
- ❖ The lines Neervazhi Padoom “punaipol aaruyir muraivazhi padoom” translates to a float that sails on the way of the water, indicating that life travels on the path chalked out by fate.
- ❖ Telugu writer T. Patanjali Sastry and Malayalam litterateur E.V. Ramakrishnan were among those named for the Sahitya Akademi Awards for the year 2023.
- ❖ Nine books of poetry, six novels, five short story collections, three essays and one literary study have won the Sahitya Akademi Awards this year.
- ❖ The Sahitya Akademi, founded on March 12, 1954 is an autonomous body under the Union Culture Ministry.

IMPORTANT DAYS

National Mathematics Day 2023 - December 22

- ❖ It commemorates the birth anniversary of the great mathematician Srinivasa Ramanujan.

- ❖ He is known as one of the greatest Indian mathematicians of all time, Ramanujan worked on theorems that seemed almost impossible to solve.
- ❖ He is known for the work he did in the areas of continued fractions, Riemann series, elliptic integrals, hypergeometric series and functional equations of the zeta function.
- ❖ In 2012, former Prime Minister Manmohan Singh declared this day.
- ❖ 2012 was also termed and celebrated as the National Mathematics Year.

Srinivasa Ramanujan, famous Indian mathematician and autodidact, died on April 26, 1920

MASTER OF NUMBERS

Had almost no formal training in pure mathematics

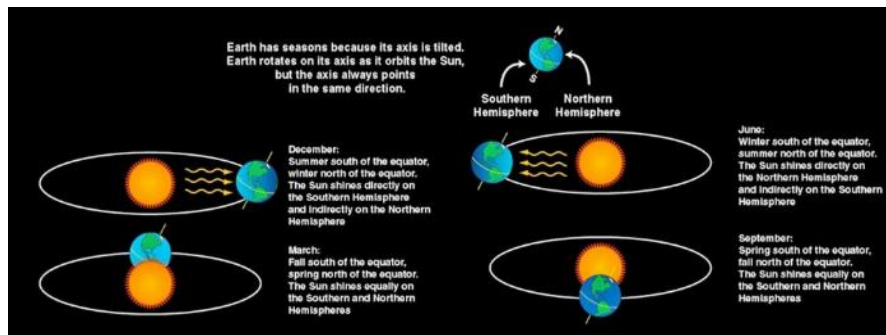
At 12 years, mastered trigonometry, developing his own theorems

At 17 years, conducted own complex research, including in Bernoulli numbers

Made extraordinary contributions to mathematical analysis and number theory

Did not offer any proof for most of his mathematical results, but others have since validated and proved many

Winter Solstice 2023 - December 21



- ❖ December 21 is recognised as the shortest day and the longest night of the year in the Northern Hemisphere.
- ❖ This is a specific moment in time when the Earth's axial tilt is farthest away from the sun. This tilt, at approximately 23.4 degrees.
- ❖ It means that the North Pole is angled at its maximum distance from the sun.



- ❖ This causing sunlight to spread thinly over the hemisphere and creating the shortest path through the sky.

