



December - 23

TNPSC BITS

- ❖ Aditya K. of Ramanattukara, Kozhikode, Kerala became the first child from the State to receive the highest honour award for bravery, the Bharat award.
 - He was awarded for saving 20 people from a burning bus on the move.
- ❖ Venkaiah Naidu released a book titled 'Turbulence and Triumph: The Modi Years' in New Delhi.
 - The book is jointly authored by Rahul Agarwal and Bharathi S Pradhan.
- ❖ The 92nd Annual Convention of the Federation of Indian Chambers of Commerce & Industry (FICCI) was conducted in New Delhi.
- ❖ The Second National Conference on Uniformed Women in Prisons Administration was held at Central Academy for Police Training in Bhopal, Madhya Pradesh.
 - The first conference was held in New Delhi in 2017.

NATIONAL

Swachchh Samundra NW-2019

- ❖ The Indian Coast Guard conducted a 2-day regional level pollution response exercise named 'Swachchh Samundra NW-2019' at sea off Vadinar in Gulf of Kutch.
- ❖ The aim of the exercise was to create a response mechanism by taking actions for oil pollution incidents.

EChO Network

- ❖ Krishnasamy VijayRaghavan, Principal Scientific Adviser to the Govt of India launched a national program called "EChO Network" in New Delhi.
- ❖ The EChO network provides a template for cross-disciplinary leadership in India.
- ❖ The purpose of this program is to bring citizens, govt, and others to solve problems in the areas of research knowledge, and awareness of Indian ecology and the environment.



ECONOMY

Operation Twist

- ❖ The Reserve Bank of India (RBI) will simultaneously buy (government bonds maturing in 2029) and sale (short-term bonds maturing in 2020) government securities worth ₹10,000 crore each under its open market operations.
- ❖ It is a move aimed at managing the yields and to make long term borrowing cheaper.
- ❖ As the central bank buys long term securities), the rise in demand for them leads to lower long-term yields.
- ❖ Eventually, it is long term interest rates that matter for investment and growth in the economy.
- ❖ This way the yield curve becomes “twisted” as short-term rates are pushed up and long-term rates are pushed down.
- ❖ The central banks opt for this measure when despite lowering interest rates, the long-term interest rates remain high.
- ❖ Open Market Operations (OMO) is one of the quantitative (to regulate or control the total volume of money) monetary policy tools which is employed by the central bank of a country to control the money supply in the economy.
- ❖ OMOs are conducted by the RBI by way of sale or purchase of government securities (g-secs) to adjust money supply conditions.

About OT

- ❖ This policy measure of buying long-term bonds and selling short-term ones is known as Operation Twist (OT).
- ❖ The US has announced OT twice, the first time in 1961 during John F Kennedy and the second in 2011 during Obama.
- ❖ Japan also announced its own version of OT called as Qualitative and Quantitative Easing program (QQE) in 2013.

SCIENCE AND TECHNOLOGY

5G trails

- ❖ The 5G (the fifth generation of wireless technology) trials are expected to begin in the last quarter of current fiscal (2019-2020).
- ❖ Any proposal on 5G is required to address twin considerations, with first being the adoption of new technology, and second the imperatives of national security.



Dunzo and throttle

- ❖ The Directorate General of Civil Aviation's (DGCA), India's civil aviation authority has given approval to the applications of Google-backed hyperlocal delivery startup Dunzo and Bengaluru-based drone maker Throttle Aerospace Systems to test long-range and autonomous drone use.
- ❖ The approvals are a part of the DGCA's experimental programme, called Beyond Visual Line of Sight (BVLOS) drone operations.
- ❖ The long-range drones can significantly enhance logistic services in Indian hinterland and may become a significant multiplier to the economy.

New Star-Sharjah and its planet

- ❖ The International Astronomical Union (IAU) has announced new names of its newly discovered star and its planet.
- ❖ The star 'HIP 7943' was named as "Sharjah" and one of its planet (exoplanet) was named as "Barjeel".
- ❖ Appreciating the achievements of Sharjah city, capital of UAE, the star was named as "Sharjah".
- ❖ A barjeel is a wind tower that directs the flow of wind, where the air can be recirculated as a form of air conditioning.

PERSONALITIES, AWARDS, AND EVENTS

18th National Maritime Search and Rescue Board meeting

- ❖ Indian Coast Guard has organized the 18th National Maritime Search and Rescue Board (NMSARB) meeting 2019 in New Delhi.
- ❖ NMSAR Board recognizes the Maritime Search and Rescue efforts of merchant mariners, Govt. Owned Vessels and Fishermen every year.

S.No	Name of the Award	Winner
1	Merchant Vessel (MV) for the year 2018-19	MV Asia Emerald III (It saved 6 lives from a distressed fishing boat)
2	Award for Fisherman	Anand A Ambhire from Maharashtra (for saving 11 lives from a sinking fishing boat)
3	Government-Owned SAR Unit	ICG Ships (ICGS) Sujoy & ICGS Vikram (for saving 46 lives from ROSV Sagar Sampada off New Mangalore)

SPORTS

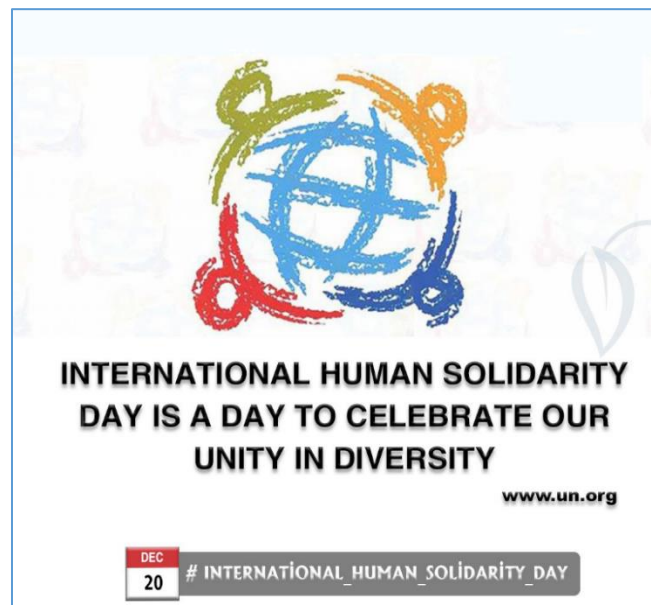
FIFA rankings

- ❖ According to FIFA's year-ending ranking, Indian men's football team remains at number 108.
- ❖ The Indian team, however, slipped 11 places throughout the year (In December 2018, India was ranked 97 in the FIFA rankings).
- ❖ Belgium topped their second consecutive year, France remained at 2nd and Brazil in 3rd place.
- ❖ Among Asian countries, India has ranked 19th, while Japan tops the list (28th in the overall).

IMPORTANT DAYS

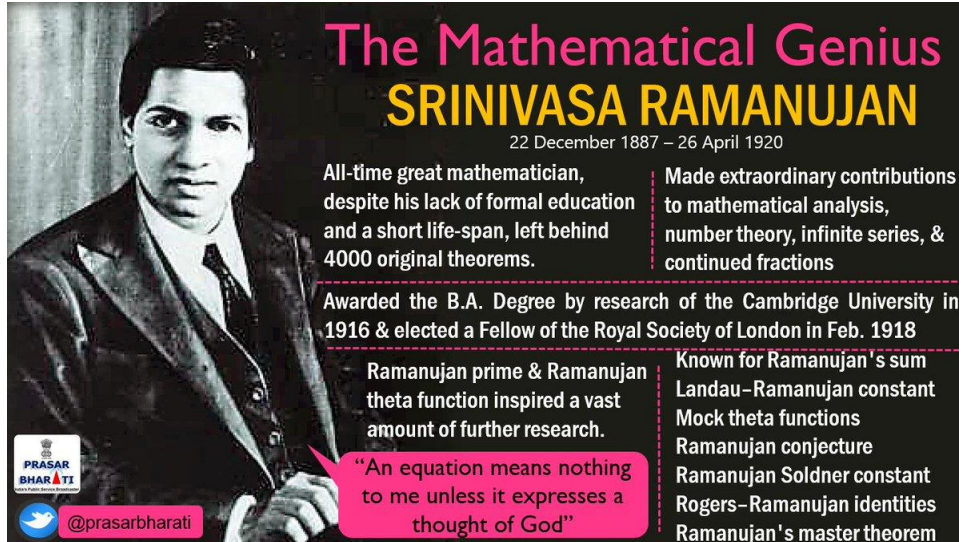
International Human Solidarity Day - December 20

- ❖ International Human Solidarity Day is observed annually on December 20 by the United Nations.
- ❖ This day aims to promote the culture of solidarity and the spirit of sharing to combat poverty.
- ❖ On December 22, 2005, the UN General Assembly (UNGA) proclaimed to observe the solidarity day.



National Mathematics Day - December 22

- ❖ National Mathematics Day celebrated every year on the birth anniversary of mathematician Srinivasa Ramanujan.
- ❖ The main objective behind the celebration is to raise awareness among people about the importance of mathematics for the development of humanity.
- ❖ on 22 December 2012, National Mathematics Day was celebrated across the country for the first time.



The Mathematical Genius
SRINIVASA RAMANUJAN
22 December 1887 – 26 April 1920

All-time great mathematician, despite his lack of formal education and a short life-span, left behind 4000 original theorems.

Made extraordinary contributions to mathematical analysis, number theory, infinite series, & continued fractions

Awarded the B.A. Degree by research of the Cambridge University in 1916 & elected a Fellow of the Royal Society of London in Feb. 1918

Ramanujan prime & Ramanujan theta function inspired a vast amount of further research.

Known for Ramanujan's sum
Landau–Ramanujan constant
Mock theta functions
Ramanujan conjecture
Ramanujan Soldner constant
Rogers–Ramanujan identities
Ramanujan's master theorem

"An equation means nothing to me unless it expresses a thought of God"

PRASAR BHARATI
@prasarbharati

MISCELLANEOUS

1st Recognition to Indian Pharmacopoeia

- ❖ The National Department of Regulation of Medicines and Health Products of the Ministry of Public Health of the Islamic Republic of Afghanistan has formally recognized Indian Pharmacopoeia (IP).
- ❖ IP is an official book of standards for drugs manufactured & marketed in India in terms of their identity, purity, and strength.
- ❖ With this, Afghanistan has become the 1st nation to recognize IP.
- ❖ It is published by the Indian Pharmacopoeia Commission (IPC) on behalf of the Department of Commerce, and Ministry of Health & Family Welfare.
- ❖ The standards of the book have been made under the Drugs and Cosmetics Act, 1940 and Rules 1945.

