

October - 09

TNPSC BITS

- ❖ After transporting 437.25 million litres of water from Jolarpet, Vellore district to Chennai over three months the water train service has been suspended.
 - Water was sourced through Vellore combined water supply scheme (CWSS), that receives Cauvery water from Mettur dam.
- ❖ The Supreme Court has held that those violating traffic rules and causing accidents by rash and negligent driving could be tried and punished separately under the Indian Penal Code besides the Motor Vehicles (MV) Act.
 - The court also pointed out that there is “no provision” under the MV Act to deal separately with offences causing death or grievous hurt.
- ❖ For the first time, Durga idol immersions in Yamuna river was banned by Delhi government. Idol immersion pits were provided as an alternative.
- ❖ “Spirit of Kerala”, a short film that highlights the emotion, rhythm, culture and celebration around riverboat racing in Kerala has won the People’s Choice award at My Rode Reel 2019 competition.
 - This competition is dubbed as the world’s largest short film competition.

NATIONAL

SEI report of NITI Aayog

- ❖ Kerala and Tamil Nadu have retained their places as the best states in terms of quality of school education as per NITI Aayog’s School Education Quality Index (SEI).
- ❖ While Kerala was given a total evaluation point of 82.2%, Tamil Nadu got 73.4%.
- ❖ SEI report analysed the quality of education for 2016-2017 based on 30 indicators and under 2 categories
 - Category 1: Outcomes
 - Domain 1: Learning outcomes
 - Domain 2: Access outcomes
 - Domain 3: Infrastructure and facilities for outcomes
 - Domain 4: Equity outcomes
 - Category 2: Governance processes aiding outcomes.
- ❖ The overall performance has declined in Karnataka and Uttarakhand.

- ❖ All seven union territories have shown an improvement in their overall performance scores.
- ❖ The performance and ranks have decreased in Mizoram, Sikkim and Arunachal Pradesh.
- ❖ The most-populous Uttar Pradesh was ranked at the bottom position in overall performance.
- ❖ This is the first time that the government think tank has come up with a report on the educational progress.

Rafale Deal

- ❖ India received its first French-made Rafale fighter jet on 08.10.19.
- ❖ It is considered one of the biggest-ever boosts to India's deterrence capabilities vis-à-vis Pakistan and China.
- ❖ The aircraft (the first of 36 ordered by India) was received by defence minister Rajnath Singh.
- ❖ Also, the Indian Air Force (IAF) celebrated its 87th founding day on this day.
- ❖ India is the fourth country after France, Egypt and Qatar, to fly the Rafale.
- ❖ The induction of the Rafale is critical for the IAF, which is set to decommission the MiG-21 Bison aircraft.
- ❖ The Producer of Rafale is the French Aircraft Company Dassault.





Upcoming Joint Military Exercise

- ❖ India conducts joint military exercises with the following countries

Kazind 2019

- ❖ Joint Military Exercise KAZIND-2019 between India and Kazakhstan is conducted at Pithoragarh, Uttarakhand from 02 to 15 of October 2019.
- ❖ This is the fourth edition of an annual event which is conducted alternatively in Kazakhstan and India.

Ekuverin 2019

- ❖ Tenth edition of the Joint Military Exercise Ekuverin between the Indian Army and the Maldives National Defence Force is organised from 07 to 20 of October 2019 at Aundh Military Station in Pune, Maharashtra.
- ❖ Ekuverin means 'Friends' in the Dhivehi language of Maldives.
- ❖ The first such exercise began in 2009.

Maitree 2019

- ❖ India and Thailand organised the Joint Military Exercise MAITREE-2019 at Foreign Training Node, Umroi (Meghalaya) from 16-29 of September 2019.

Army Battle Casualties Welfare Fund

- ❖ Defence Ministry has enhanced monetary assistance to Next of Kin (NoK) of all categories of Battle Casualty from Rs 2 lakh to Rs 8 lakh.
- ❖ The amount will be granted under Army Battle Casualties Welfare Fund (ABCWF).
- ❖ The ABCWF has been set up in 2017 under Department of Ex-Servicemen Welfare, Ministry of Defence.
- ❖ This fund is in addition to the various existing schemes for the welfare of NoK and children of battle casualties.

SCIENCE AND TECHNOLOGY

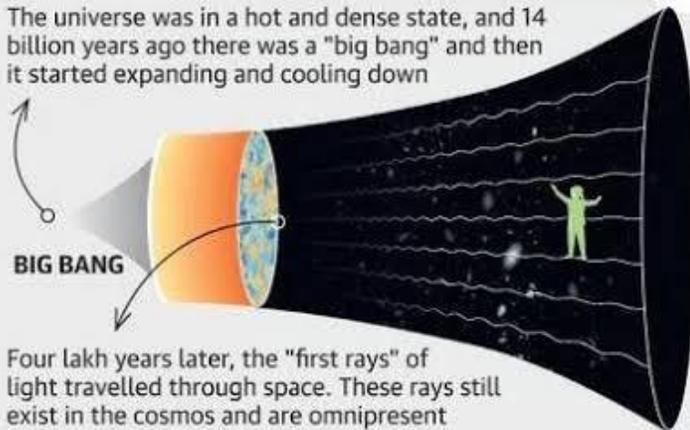
Physics Nobel Prize

- ❖ James Peebles, Michel Mayor and Didier Queloz have won the 2019 Nobel Prize in Physics.
- ❖ They were awarded for their contribution to the understanding of the evolution of the universe and "Earth's place in the cosmos."

- ❖ One half of the award was given to James Peebles "for theoretical discoveries in physical cosmology".
- ❖ The other half was awarded jointly to Michel Mayor and Didier Queloz "for the discovery of an exoplanet orbiting a solar-type star."
- ❖ They will share a 9-million kronor (USD 918,000) cash award, a gold medal and a diploma.

The unknown & an exoplanet

Canadian-American cosmologist James Peebles and Swiss scientists Michel Mayor and Didier Queloz won the 2019 Nobel Prize for Physics for revealing the wonder of the evolution of the universe and discovering exoplanets



The universe was in a hot and dense state, and 14 billion years ago there was a "big bang" and then it started expanding and cooling down

Four lakh years later, the "first rays" of light travelled through space. These rays still exist in the cosmos and are omnipresent



James Peebles **Michel Mayor** **Didier Queloz**

- **Peebles** interpreted the "first rays" and showed that in the universe just 5% is known matter. The rest is unknown dark matter & dark energy. His insights turned cosmology from speculation to science sparking further research
- The dark matter is the force which holds together galaxies which otherwise may get torn apart. The dark energy helps the universe's increasingly rapid and constant expansion. Thus, one pulls and the other pushes

- **Mayor and Queloz** discovered "51 Pegasi b" – first-ever find of an exoplanet orbiting a solar-type star
- Surprisingly, the planet was as big as Jupiter (1,300 times Earth's volume) but was very close to its star (takes just 4 days to orbit)
- Big planets were thought to be created far from their stars. How did "51 Pegasi b" get so close? This question led to theories that described how large gas balls formed at the edges of their solar systems, then spiralled inward

ENVIRONMENT

1,400 km Long Great 'Green Wall' of India

- ❖ The Centre is mulling an ambitious plan to create a 1,400km long and 5km wide green belt from Gujarat to the Delhi-Haryana border.
- ❖ It is a project to combat climate change and desertification.
- ❖ The green belt may not be contiguous, but would roughly cover the entire degraded Aravali range from Porbandar to Panipat.
- ❖ It will be modelled on the lines of the "Great Green Wall" running through the width of Africa, from Dakar (Senegal) to Djibouti.

SHIELD AGAINST DESERT



Rough contours of proposed 1,400km 'green wall'

- Forest belt likely to run roughly from **Porbandar to Panipat**, covering entire Aravali range and beyond
- 'Green wall' will act as barrier for dust from west and check eastward march of Thar desert
- It will check desertification by **restoring degraded land through massive afforestation**
- Project yet to get formal nod, details to be worked out

Climate Coordination with China, Pakistan

- ❖ Indian Meteorological Department (IMD) has decided to focus on better “data gathering” and provide climate forecast services to neighbouring countries including China and Pakistan.
- ❖ IMD aims to better gauge the impact of climate change on the Hindu Kush mountains, which includes the Himalayas.

Third Pole

- ❖ The Hindu-Kush-Himalayan (HKH) region is considered the third pole after the North and South Poles and it has significant implications for climate.
- ❖ The third pole, which contains vast cryospheric zones is also the world's largest store of snow and ice outside the polar region and source of 10 major rivers.
- ❖ Therefore, it is extremely sensitive to climate change.
- ❖ HKH region spans across the following countries

Afghanistan	Bangladesh	Bhutan	China
India	Kyrgyzstan	Mongolia	Myanmar
Nepal	Pakistan	Tajikistan	Uzbekistan



STATES

39th World Congress of Poets – Bhubaneshwar

- ❖ The 39th World Congress of Poets (WCP) was inaugurated at a private institution in Bhubaneshwar.
- ❖ It was held in English, Spanish and Chinese.
- ❖ The theme of the event was Compassion through Poetry.
- ❖ It celebrates the power of poetry to create a more compassionate world.
- ❖ The WCP was founded in 1969 by Amado M. Yuzon, Krishna Srinivas, Lou Lutour and Tin-Wen Chung.
- ❖ The first event was held at Manila, Philippines.

PERSONALITIES, AWARDS, AND EVENTS

American Historical Association – Ramachandra Guha

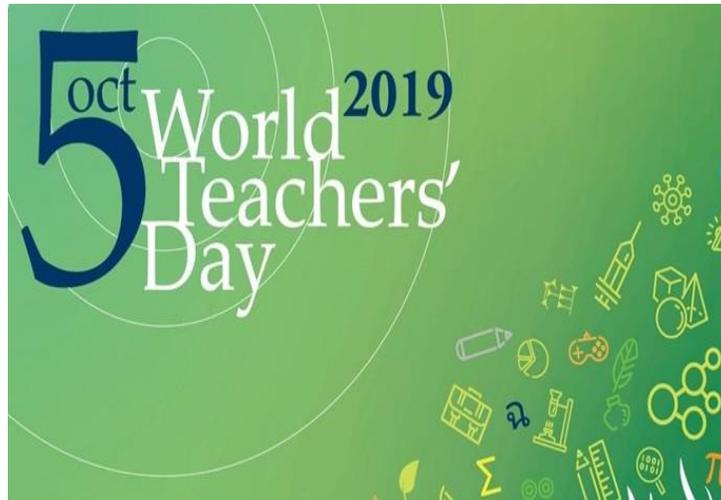
- ❖ The American Historical Association has announced that historian Ramachandra Guha will receive the honorary foreign member prize this year.

- ❖ Guha is the third Indian historian after Jadunath Sarkar and Romila Thapar to be honoured with this award since 1886.
- ❖ The award recognises historians working outside the United States for their distinguished scholarship and assistance to American scholars in their country.

IMPORTANT DAYS

World Teachers Day – October 5

- ❖ The world teacher's day is held annually on 5 October since 1994.
- ❖ It is co-convened in partnership with UNICEF, UNDP, the International Labour Organization (ILO) and Education International.
- ❖ It commemorates the anniversary of the adoption of the 1966 UNESCO/ILO resolution that set benchmarks regarding the rights and responsibilities of teachers.
- ❖ The 2019 theme of the day is “Young Teachers: The future of the Profession.”



World Habitat Day – October 7

- ❖ The United Nations designated the first Monday of October of every year as World Habitat Day.
- ❖ The day is observed to reflect on the state of our towns and cities, and on the basic right of all to adequate shelter.
- ❖ It was in 1986 that the United Nations first celebrated World Habitat Day.
- ❖ The 2019 theme of observance of the day is “Frontier Technologies as an innovative tool to transform waste to wealth”.



IAF Day – October 08

- ❖ The 87th Indian Air Force Day (IAF) Parade was held at the Hindon airbase, in Ghaziabad, Uttar Pradesh on October 8, 2019.
- ❖ IAF officers who participated in the Balakot airstrike flew three Mirage 2000 aircraft and two Su-30 MKI fighter planes in ‘Avenger formation’.
- ❖ The celebration of day seeks to increase the awareness about the importance of IAF as an important part of the national security.



World Post Day – October 9

- ❖ World Post day is observed each year on October 9.
- ❖ It is the anniversary of the Universal Postal Union (UPU), which started in 1874 in Switzerland that revolutionised world communication.
- ❖ In 1948, the UPU become an agency of the United Nations.
- ❖ October 9th was first declared World Post Day at the 1969 UPU Congress in Tokyo, Japan.
- ❖ The proposal was submitted by Anand Mohan Narula, a member of the Indian delegation.

