



**July - 23** 

#### TNPSC BITS

- ❖ According to the World Health Organisation (WHO) preliminary data suggest that the Merck's vaccine (VSV-EBOV) used during the current outbreaks in Congo was 97.5% efficacious in preventing Ebola infection.
  - o The vaccine is based on a virus found in animals called 'vesicular stomatitis virus' (VSV) that is combined with a portion of the protein covering of the Ebola virus.
- ❖ Indian bodybuilder Ravinder Kumar Malik has clinched Mr. South Asia title.
  - o He was crowned as the overall champion at 12th South Asian Bodybuilding and Physique Sports Championship in Kathmandu, Nepal.
- ❖ Pi Approximation Day is celebrated worldwide on 22 of July every year.
  - $\circ$  The fraction 22/7 is said to be the common approximation of Pi (π).
- As part of its efforts to revamp the Veermata Jijabai Bhosale Udyan and Zoo, the Brihanmumbai Municipal Corporation (BMC) has planned to get two pairs of lions from Gujarat, in exchange for two pairs of zebras from an international zoo and some exotic birds.

#### **NATIONAL**

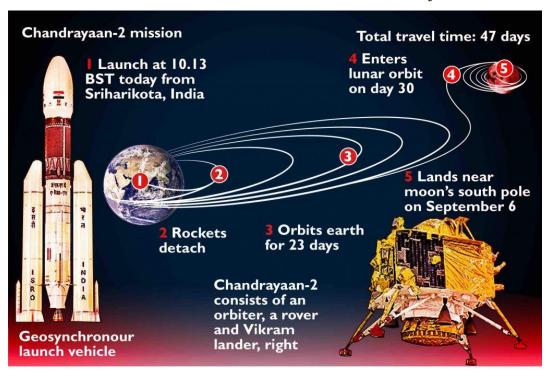
#### Chandrayaan - 2 Mission

- ❖ India's most powerful satellite launch vehicle GSLV MkIII-M1 has successfully launched Chandrayaan-2 spacecraft on July 22,2019 into its planned orbit.
- ❖ The launch took place from the Second Launch Pad at Satish Dhawan Space Centre SHAR, Sriharikota in Andhra Pradesh.
- ❖ The Chandrayaan 2 mission comprises
  - o A fully indigenous Orbiter
  - o Lander (named as Vikram)
  - o Rover (names as Pragyan)
- The Lander aims to make a soft landing in a high plain between two moon craters
  Manzinus C and Simpelius N on 7th September 2019.
- ❖ The mission life of Vikram is 1 lunar day.





- ❖ The Rover will roll out and carry out experiments on Lunar surface for a period of 1 lunar day which is equal to 14 Earth days.
- ❖ The Orbiter will continue its mission for a duration of one year.



#### The Fifth Dornier aircraft squadron

- ❖ Indian Naval Air Squadron (INAS) 313, the fifth Dornier aircraft squadron was commissioned into the Indian Navy by Admiral Karambir Singh.
- The Squadron will be operating from Chennai International Airport.
- ❖ With commissioning of INAS 313, Tamil Nadu will have three naval air bases which is the highest number for any Coastal State.
- The other two naval air bases are
  - o INS Rajali at Arakkonam
  - o INS Parundu at Ramnad
- ❖ The aircraft is used for maritime surveillance, Search and Rescue Operations and to provide targeting data to weapon platforms.







# **Indian Army HQ Revamp**

- ❖ The revamp of the Army Headquarters (AHQ) is expected to formally begin by the month-end.
- ❖ The entire training function will move under the Army Training Command, which will be shifted from Shimla to Meerut.
- ❖ The Delhi based-Director-General, Rashtriya Rifles will be moved to Udhampur where the Northern Command is located.
- ❖ 2 new Additional Director-General (ADG) posts will be created
  - o ADG, Human Resources
  - o ADG, Vigilance
- ❖ The revamp aims to enhance the army's operational and functional efficiency.

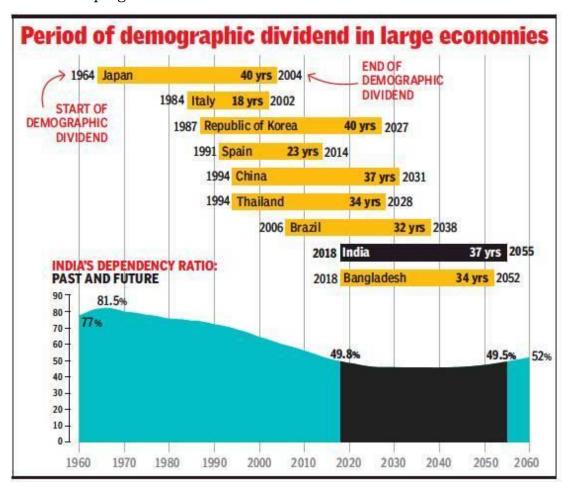
# **Demographic Dividend Period**

- ❖ Recent Studies have shown that India has entered a 37-year period of "Demographic Dividend" in 2018.
- ❖ The bulge in the working age population is going to last till 2055.





- ❖ UN Population Fund (UNFPA) defines demographic dividend as the "growth potential" that results from shifts in a population's age structure.
- ❖ Since 2018, India's working-age population (people between 15 and 64 years of age) has grown larger than the dependant population (age 0 to 14 and age more than 65).
- ❖ Japan, China and South Korea have already used this period and shown huge economic progress.



# Representation of SC and ST in Scientific Institutions

❖ A Right to Information query has found that scientists from Scheduled Castes (SC) and Scheduled Tribes (ST) are grossly under-represented in scientific institutions funded by the Department of Biotechnology.





❖ Several of these institutions just about meet the government prescribed criteria for reservation — 15% for SC and 7.5% for ST.

|  | Permanent staff |       | Scientists |    |
|--|-----------------|-------|------------|----|
| Institute  | Total           | SC/ST | SC         | ST |
| National Institute of Animal<br>Biotechnology            | 37              | 6     | 1          | 0  |
| National Institute of Immunology                         | 208             | 34    | 2          | 0  |
| Regional Centre for Biotechnology                        | 44              | 4     | 0          | 0  |
| National Insitute of Plant Genome<br>Research            | 74              | 9     | 5          | 0  |
| Centre for DNA Fingerprinting and Diagnostics            | 110             | 19    | 2          | 0  |
| National Centre for Cell Sciences                        | 149             | 27    | 5          | 2  |
| Centre of Innovative and Applied Bioprocessing           | 13              | 2     | 1          | 0  |
| Translational Health Science and<br>Technology Institute | 32              | 2     | 1          | 0  |
| Institute of Bioresources and<br>Sustainable Development | 14              | 0     | 0          | 0  |

#### **Colistin Antibiotic - Animals**

- ❖ The Ministry of Health and Family Welfare has issued an order prohibiting the manufacture, sale and distribution of "colistin" and its formulations for food-producing animals, poultry, aqua farming and animal feed supplements.
- ❖ It has advised manufacturers to display this information on containers.
- Colistin is a last-resort antibiotic that saves lives in critical care units.
- ❖ It is effective against most Gram-negative bacilli.
- ❖ As it enters through food chain, an increasing number of patients exhibit resistance to the drug.

### DefExpo India - 2020

- ❖ The Eleventh biennial edition of DefExpo India 2020 is scheduled to be held for the first time in Uttar Pradesh's capital Lucknow in February 2020.
- ❖ The main theme of the event will be "India the Emerging Defence Manufacturing Hub".





It focusses on Digital Transformation of Defence.

#### **ECONOMY**

#### **Committee on Virtual Currencies**

- The Inter-Ministerial Committee on Virtual Currencies has submitted its Report along with draft Bill 'Banning of Cryptocurrency & Regulation of Official Digital Currency Bill, 2019.'
- ❖ It has officially banned and proposed fines for carrying on any activities connected with cryptocurrencies in India.
- ❖ But it has also the government urged to consider announcing an "official digital currency".
- ❖ It highlighted the positive aspect of Distributed-Ledger Technology (DLT) commonly known as "blockchain technology".
- ❖ DLT has immense use in the financial services sector. Ex: loan-issuance tracking.

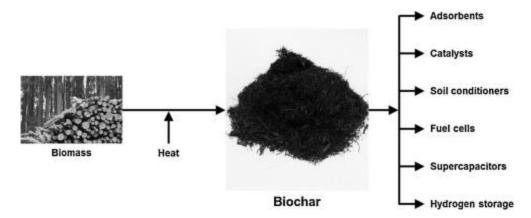
#### **ENVIRONMENT**

# **Eco-friendly Water Pollutants Removal**

- \* Researchers have developed a wastewater treatment process that uses a common agricultural by-product called as "endocrine disruptors" to effectively remove
  - o Pollutants
  - o Environmental Hormone
- Environmental hormones in waste water do not break down easily.
- ❖ The catalysts currently used to process sewage and wastewater is of high cost and low efficiency.







- ❖ Eco-friendly catalysts made of biochar and manganese dioxide can be used to treat waste water at low cost and with high efficiency.
- ❖ "Biochar" is a common agricultural byproduct and made form organic waste.

#### **SPORTS**

# Mohun Bagan Ratna

- ❖ Two-time Olympic gold medallist Keshav Dutt and former India Football Captain Prasun Banerjee will be conferred the 'Mohun Bagan Ratna' during Mohun Bagan Athletic Club's annual day celebrations on the 29th of this month.
- ❖ The 94-year Olympian Keshav Dutt played and won the first Gold for India in Hockey in 1948 London Games and again in 1952 Helsinki Games.

#### **About**

- ❖ Mohun Bagan Athletic Club is a professional association football club based in West Bengal, India.
- ❖ Established on 15 August 1889 by Bhupendra Nath Bose, it is the oldest existing association football club in India.
- ❖ It was the first Indian football club to win against an English football team 'East Yorkshire Regiment' in the 1911 IFA Shield final match.

#### **IMPORTANT DAYS**

# National Broadcasting Day - July 23

The national broadcasting day in India is celebrated annually on July 23.





- ❖ On July 23, 1927 the first ever radio broadcast in the country went on the air from the Bombay Station under a private company, the Indian Broadcasting Company.
- ❖ On 8th of June, 1936, the Indian State Broadcasting Service became All India Radio (AIR).

❖ The motto of AIR is "Bahujan Hitaya Bahujan Sukhaya".

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