

July - 03

## TNPSC BITS

- ❖ The National Insurance Awareness Day is observed on 28 June.
  - The Nicholas Barbon, an English economist, set up the first fire insurance company in 1666.

## NATIONAL

### Uddhav Thackeray



- ❖ Maharashtra Chief Minister Uddhav Thackeray has announced his resignation from the Chief Minister post.
- ❖ He has also resigned from the Member of Legislative Council post.
- ❖ The announcement came right after the Supreme Court refused to order a stay on the floor test or majority proving test.
- ❖ The court has also allowed two jailed MLAs Nawab Malik and Anil Deshmukh to participate in the floor test.
- ❖ Since the two elected MLAs are in judicial custody in cases registered by Enforcement Directorate/CBI, both the agencies have been directed to escort them for the vote.

- ❖ Maharashtra Governor Bhagat Singh Koshyari had earlier called for a special session of the Maharashtra State Assembly on June 30 to conduct trust vote against Maharashtra Chief Minister Uddhav Thackeray.

### **Attorney General of India**

- ❖ KK Venugopal was appointed as the Attorney General of India in July 2017 in place of Mukul Rohatgi.
- ❖ Now, KK Venugopal's term was extended for 3 more months in 2022 June.



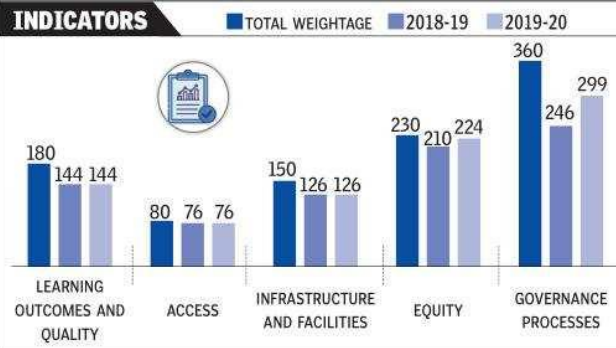
### **Performance Grading Index for Districts**

- ❖ The Department of School Education and Literacy, under the Ministry of Education released the Performance Grading Index for Districts for the reference years 2018-19 and 2019-20.
- ❖ As per the 2019-20 report, around 3 districts of Rajasthan have scored over 80 per cent in school education performance.
- ❖ These districts have achieved 'Utkarsh' grade (second highest grade).
- ❖ It assesses the performance of school education system at the district level by creating an index for comprehensive analysis.
- ❖ It comprises of total weightage of 600 points across 83 indicators.
- ❖ These 83 indicators are grouped under 6 categories.
  - Outcomes
  - Effective Classroom Transaction
  - Infrastructure Facilities & Student's Entitlements

- School Safety & Child Protection
- Digital Learning
- Governance Process

## ASSESSMENT IN THE FIVE INDICATORS

The total weightage under the PGI is 1,000 points with each of the 70 indicators having an assigned weightage of either 10 or 20 points

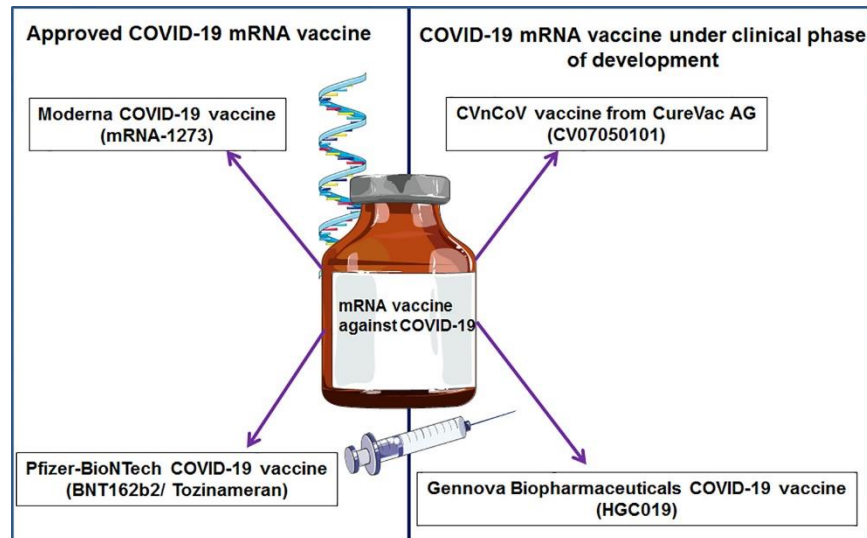


### ABOUT THE INDEX

- The Performance Grading Index is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement
- Grading will allow all the states and Union Territories to occupy the highest level, Grade I, at the same time, which is a sign of fully developed nation

## SCIENCE AND TECHNOLOGY

### Genova mRNA Vaccine



- ❖ The Genova mRNA-based vaccine, GEMCOVAC-19, is India's first homegrown mRNA COVID-19 vaccine.
- ❖ It is the first mRNA vaccine that remains stable during storage even at 2-8 degrees Celsius.

- ❖ While most of the other mRNA vaccines have to be stored at sub-zero temperatures.
- ❖ It has got emergency use authorization in emergency situations for all adults aged above 18 years.
- ❖ The Drugs Controller General of India (DCGI) gave its approval.
- ❖ It was developed by Pune-based Gennova Biopharmaceuticals.
- ❖ mRNA is short for messenger RNA, a type of RNA found in cells that is used for the production of proteins.
- ❖ The mRNA vaccine teaches our cells how to make a protein that will trigger an immune response inside our bodies.
- ❖ The mRNA vaccines protect us from infectious diseases by activating cells to fight against invading virus.
- ❖ The immune response leads to the creation of antibodies that are required to fight the foreign virus by targeting that particular piece of protein.
- ❖ The mRNA-based Covid-19 vaccines send instructions to the cells to create a piece of protein known as spike protein.
- ❖ It is the same as the one found studded on the surface of the novel coronavirus.
- ❖ These proteins have been engineered to stop them from replicating.
- ❖ The Pfizer-BioNTech and Moderna COVID-19 vaccines are both mRNA vaccines.
- ❖ The children are being administered Corbevax COVID-19 vaccine manufactured by Hyderabad-based Biological E.

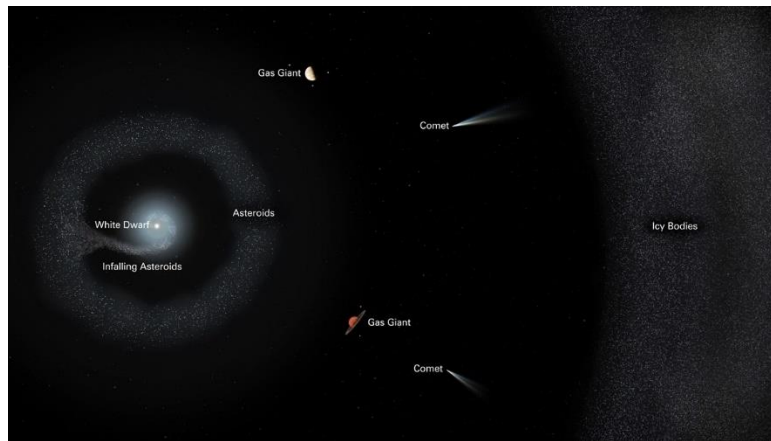
### **Nuclear-powered Flying Hotel**



- ❖ The Sky cruise is a futurist sky hotel.

- ❖ It is a nuclear-powered flying hotel that never lands in the Earth.
- ❖ It will remain suspended above the clouds.
- ❖ It has 20 nuclear-powered engines.
- ❖ It is big enough to accommodate over 5000 guests.
- ❖ It will always be airborne throughout the scheduled travel.
- ❖ It has been designed by a Yemeni producer Hashem Al-Ghaili.

## **Cosmic cannibalism**



- ❖ Astronomers have observed for the first time a phenomenon, called, “cosmic cannibalism”.
- ❖ In this, a dead star is sucking in debris from both the inner and outer reaches of its planetary system.
- ❖ A white dwarf is formed when a low-mass star like our sun exhausts most of its nuclear fuel.
- ❖ It is usually very dense, dim and about the size of a planet.
- ❖ It is the last observable stage of evolution for low- and medium-mass stars.

## **Anti-Tank Guided Missile of India (ATGM)**

- ❖ As per the Defence Ministry, the ATGM hit the target with precision and successfully tested the target at the minimum ranges.
- ❖ The Defence Research and Development Organisation (DRDO) and the Indian Army successfully tested the indigenously-developed anti-tank guided missile at the KK range in Ahmednagar, Maharashtra.
- ❖ It was successfully test-fired from the Arjun battle tank.

- ❖ It employs a tandem High Explosive Anti-Tank (HEAT) warhead for defeating the Explosive Reactive Armour (ERA) protected armoured vehicles.

### TANK KILLERS

- Anti-tank guided missiles (ATGMs) are meant to **destroy advancing enemy armoured units**
- **Range** from shoulder-launched to larger tripod-mounted systems for infantry soldiers
- Army has a shocking **60% shortage** in its 'authorised holding' of ATGMs
- **Big operational gap**, especially on the western front with Pakistan
- Army demanding 3rd-generation ATGMs with

night-fighting capabilities & higher range for a decade

- Defence Acquisitions Council in June 2009 gave nod for 8,356 ATGMs, 321 launchers & 15 simulators for ₹3,200 crore
- This included transfer of

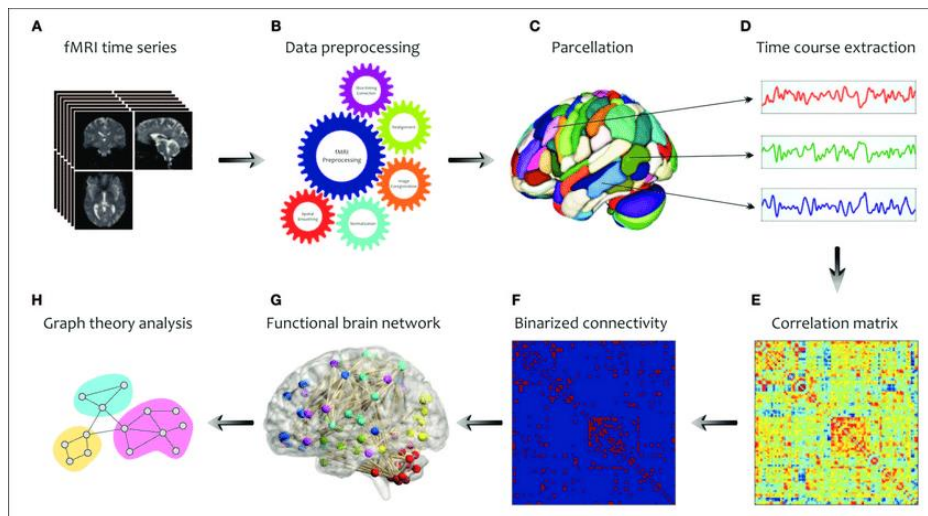
technology to Bharat Dynamics for mass production

- Israeli company Rafael's **Spike ATGM** underwent trials in a single-vendor situation. Tender scrapped in late-2017
- Separate process to acquire **Javelin ATGMs** from US also didn't materialise

Infantry battalions making do with 2nd-Generation **Mīan (2 km)** & **Konkurs (4 km)** ATGMs




### New algorithm to study brain connectivity



- ❖ Indian Institute of Science (IISc) have developed a new Graphics Processing Unit (GPU) based machine learning algorithm.
- ❖ It is called RaAl-LiFE (Regularized, Accelerated, Linear Fascicle Evaluation).
- ❖ It can help scientists in understanding and predicting connectivity between different regions of brain, in a better manner.
- ❖ It can rapidly analyse the enormous data generated from diffusion Magnetic Resonance Imaging (dMRI) scans of human brain.

- ❖ Using the new algorithm, this team was able to evaluate dMRI data 150 times faster as compared to existing state-of-the-art algorithms.

## PERSONALITIES, AWARDS, AND EVENTS

### Oscar Academy Members 2022



- ❖ Bollywood actor Kajol and Tamil actor Suriya have been invited to join the Class of 2022 of the Academy of Motion Picture Arts and Sciences.
- ❖ It hosts the Oscars every year.
- ❖ The two Indian actors are among the 397 distinguished artists and executives from around the globe to be invited to join the organisation in 2022.

### Eoin Morgan Retirement

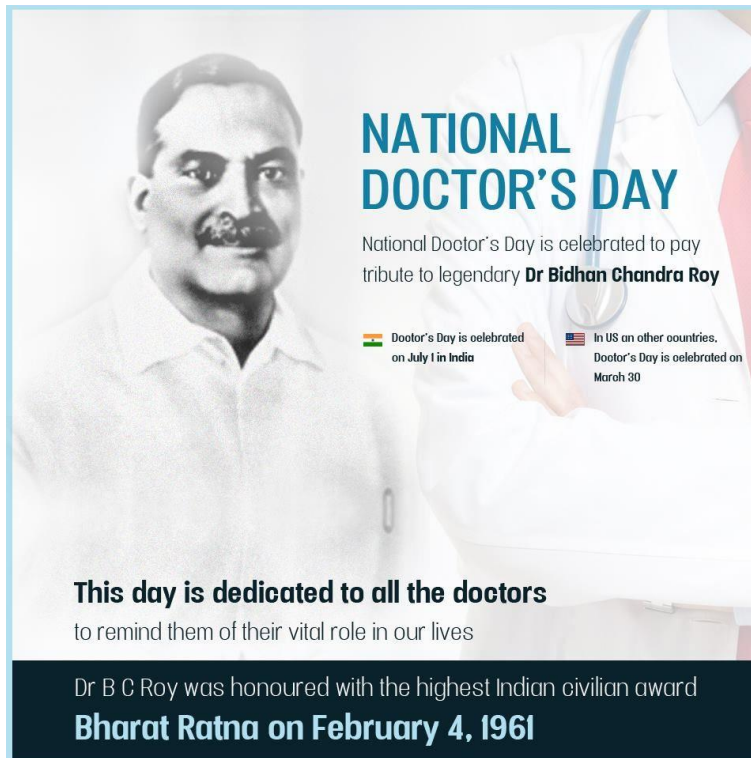


- ❖ The England's cricket team captain Eoin Morgan announced his retirement from the International Cricket.
- ❖ Under his captaincy, England lifted their first-ever ODI World Cup in 2019
- ❖ He is also the most successful T20I captain, with his team winning 42 out of the total 72 matches.

## IMPORTANT DAYS


### National Doctors Day – July 1


- ❖ It was first observed in 1991.
- ❖ It is to recognize the contribution of the Second Chief Minister of Bengal, Dr. Bidhan Chandra Roy.
- ❖ On July 1, 1882, he was born, and on the same date in 1962, he died.
- ❖ Family Doctors on the Front Line is the theme for 2022.



**NATIONAL DOCTOR'S DAY**

National Doctor's Day is celebrated to pay tribute to legendary **Dr Bidhan Chandra Roy**

 Doctor's Day is celebrated on July 1 in India

 In US on other countries, Doctor's Day is celebrated on March 30

**This day is dedicated to all the doctors**  
to remind them of their vital role in our lives

Dr B C Roy was honoured with the highest Indian civilian award  
**Bharat Ratna on February 4, 1961**

