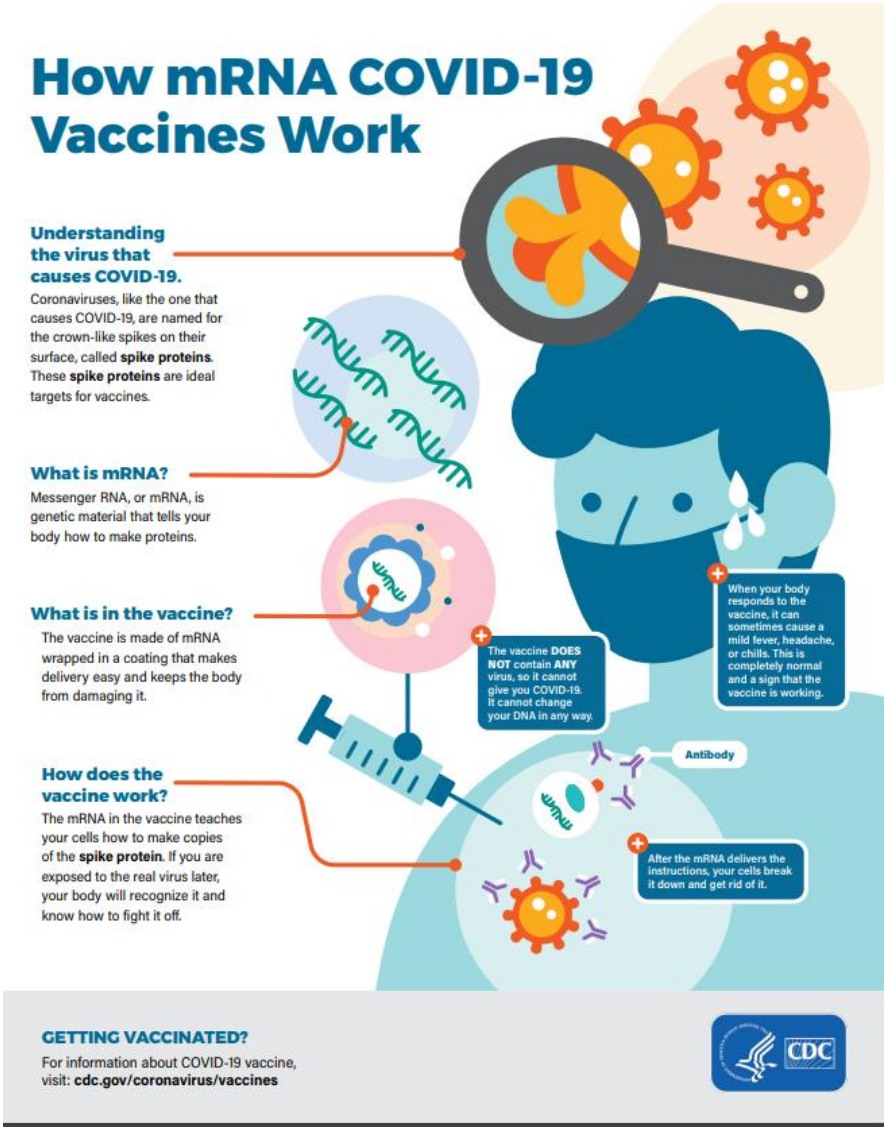
Current Affairs of the Day

CCMB develops Indian mRNA vaccine platform

1. The Centre for Cellular and Molecular Biology (CCMB) has established the "proof of principle" of the first indigenous mRNA vaccine technology coming from a scientific institution in India.
2. It is based on the Moderna model but has been built with the information available in the open and our own technology and materials.



3. While vaccines work by training the immune system to identify disease-causing micro-organisms and eliminate them quickly when they encounter them, in the mRNA technology, the host cell's immune system is trained to evade the real infection. This is done by introducing mRNA of the micro-organism of concern into the host.

4. The home-grown mRNA vaccine platform holds promise to deal with other infectious diseases such as TB, dengue, malaria, chikungunya, rare genetic diseases and others.
5. The beauty of this technology is in its rapid turnaround times, which means vaccines can be developed for other diseases or a pan-COVID vaccine covering different variants.

The scientists said the technology was ready to be transferred to any interested firm to take it to the next level of human trials and bring out the vaccine into the market after approval of the regulatory authorities.

The Centre for Cellular and Molecular Biology (CCMB)

The Centre for Cellular and Molecular Biology or CCMB is an Indian fundamental life science research establishment located in Hyderabad that operates under the aegis of the Council of Scientific and Industrial Research. CCMB is a designated "Centre of Excellence" by the Global Molecular and Cell Biology Network, UNESCO.

3.2 cr. used facilities under the Ayushman scheme: Centre

1. More than 18 crore health cards have been issued under the Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme so far and over 3.2 crore people have availed the hospital facilities, the Health Ministry said.
2. The National Health Authority (NHA), under its flagship scheme Ayushman Bharat Digital Mission (ABDM), announced the successful integration of additional 13 digital health solutions in the ABDM Sandbox.

ISRO tests booster for Gaganyaan

1. The Indian Space Research Organisation (ISRO) has successfully carried out the static test of the HS200 solid rocket booster, taking the space agency one more step closer to the keenly awaited Gaganyaan human spaceflight mission.
2. Designed and developed by the Vikram Sarabhai Space Centre (VSSC) the HS200 booster is the 'human-rated' version of the S200 rocket boosters used

on the geosynchronous satellite launch vehicle Mk-III (GSLV Mk-III), also called the LVM3.

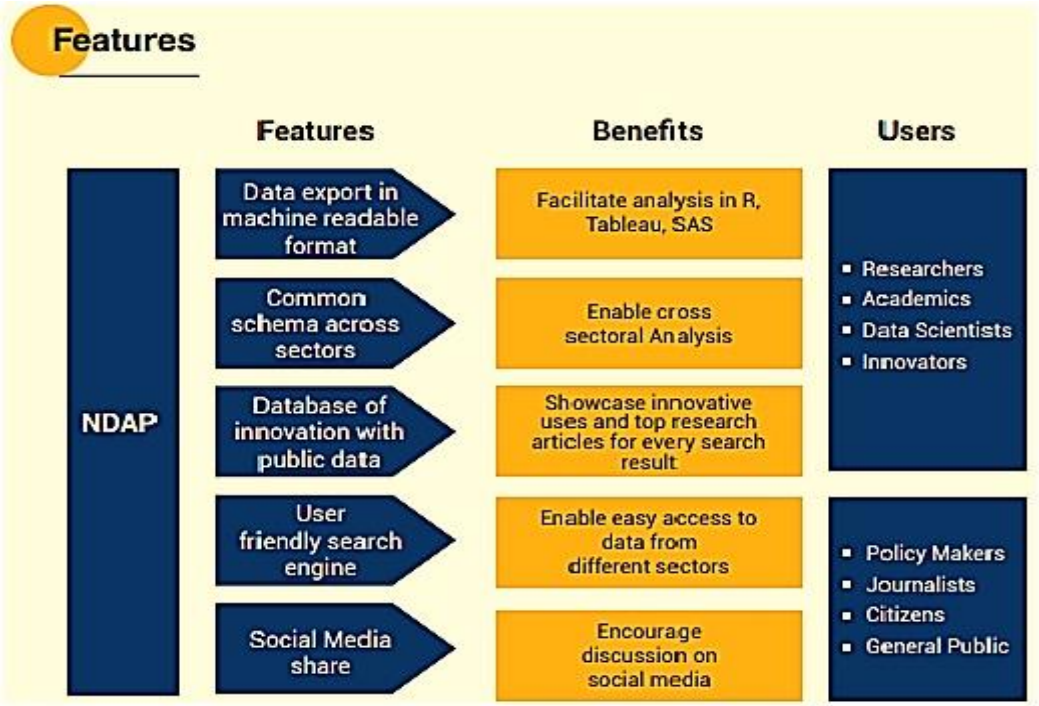
3. The GSLV Mk-III rocket, which will be used for the Gaganyaan mission, will have two HS200 boosters that will supply the thrust for lift-off.
4. The HS200 is a 20-metre-long booster with a diameter of 3.2 metres and is the world's second-largest operational booster using solid propellants.

Human rating for Gaganyan mission:

1. Since Gaganyaan is a manned mission, the GSLV Mk-III will have improvements to increase reliability and safety to meet the requirements of 'human rating.'
2. Of the three propulsion stages of the GSLV Mk-III, the second stage uses liquid propellant while the third is a cryogenic stage.

Niti launches national data analytics portal

1. In a step toward data-based decision making, NITI Aayog launched the National Data Analytics Platform (NDAP) for public use.
2. The main value that NDAP adds is making key foundational datasets interoperable with each other. This will enable easy cross-sectoral analysis and democratise the use of Indian government data.
3. Conceived in 2020, the platform aims to standardise data across government sources and provide flexible analytics, making it easy for users to analyse information using multiple datasets. Currently, government data available in the public domain is not standardised.



MAINS DAWP	Q1. More needs to be done to enhance WHO's ability to respond to disease outbreaks. Critically discuss. Q2. In the prevalent atmosphere of broad-based Inflation cutting fuel taxes is a must to ensure overall macroeconomic stability. Comment.
MCQs	Q1. Consider the following statements about the COVID-19 Vaccine COVAXIN: 1. COVAXIN is made by using the mRNA method 2. It uses inactivated viruses to induce an immune response Which of the above statements is/are correct? a. 1 only b. 2 only c. Both 1 and 2 d. Neither 1 nor 2