

**COVID-19 NEWS****'Faith' Trials**

With the number of COVID-19 patients rising in India, Glenmark Pharmaceuticals Ltd. will conduct 'FAITH' trials to test combined efficacy of two antiviral drugs — Favipiravir and Umifenovir — as potential COVID-19 treatment strategy.

**About:**

- The two antiviral drugs have different mechanisms of action, and their combination may demonstrate improved treatment efficacy by effectively tackling high viral loads in patients during early stages of the disease.
- The new combination clinical trial will be called FAITH – (FA vipiravir plus Um I fenovir (efficacy and safety) Trial in Indian Hospital setting).
- As many as 158 hospitalised patients of moderate COVID-19 infection will be enrolled in the combination study and randomised in two groups.

**NATIONAL SOCIAL ISSUES- WOMEN, POPULATION, URBANISATION, EMPOWERMENT ETC****Chardham Pariyojana**

Union Minister for Road Transport & Highways inaugurated the breakthrough event of Chamba Tunnel under Chardham Pariyojana.

**About:**

- Border Roads Organisation (BRO) achieved this major milestone by digging up a 440 m long Tunnel below the busy Chamba town on Rishikesh-Dharasu road Highway (NH 94).
- Opening of this tunnel will ease out congestion through the Chamba town and reduce the distance by one kilometre. This Project will be completed by October 2020.
- Under prestigious Chardham Project costing around Rs 12,000 Crore with approximate length of 889 Km, BRO is constructing 250 Km of National Highways leading to holy shrine Gangotri and Badrinath.

**INDIAN HERITAGE AND CULTURE, HISTORY****Ramkinkar Baij**

Ministry of Culture's National Gallery of Modern Art organised a virtual tour titled "Ramkinkar Baij | Journey through silent transformation and expressions" to commemorate the 115th Birth Anniversary of Ramkinkar Baij.

**About:**

- Ramkinkar Baij (1906-1980), one of the most seminal artists of modern India, was an iconic sculptor, painter and graphic artist.
- He was born in Bankura, West Bengal. In 1925, he made his way to Kala Bhavana, the art school at Santiniketan and was under the guidance of Nandalal Bose.
- He along with Nandalal Bose and Benodebehari Mukherjee played a pivotal role in making Santiniketan one of the most important centres for modern art in pre-Independent India.
- In 1970, the Government of India honoured him with the Padma Bhushan. In 1976 he was made a Fellow of the Lalit Kala Akademi.

**Kheer Bhawani Mela**

In the Union Territory of Jammu and Kashmir, the Annual Kheer Bhawani Mela on 30th May this year in Tulmulla village of Ganderbal district has been cancelled by the Dharmarth Trust of Jammu and Kashmir because of outbreak of Coronavirus pandemic.

**About:**

- Ragyna Devi Temple in Tulmulla Ganderbal village, near Srinagar (J&K) is popularly known as "Mata Kheer Bhawani temple"
- Deity: The temple is dedicated to the Goddess kheer Bhawani. The deity is also called as Maharagya Devi, Ragnya Devi, Rajni, Ragnya Bhagwati. The term kheer refers to rice pudding that is offered in the spring located in the temple to Please the Goddess.
- This is the most important temple for Kashmiri Pandits.
- Mela Kheer Bhawani: It is an Annual Festival during which the devotees of the Goddess Mata Kheer Bhawani fast and gather here on the day of "Zeshta Ashtami," the eighth day of the full moon in the month of May/ June when, according to belief, the Goddess changes the colour of the spring's waters.

### **GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.**

#### **Arogya Setu**

The source code of Arogya Setu App has now been made open source. Opening of the source code upto the developer community signifies Government of India's commitment to Transparency Principle.

About:

- On 2nd April 2020, India launched Arogya Setu mobile App for helping augment the efforts of limiting the spread of COVID19, with an objective of enabling Bluetooth based contact tracing, mapping of likely hotspots and dissemination of relevant information about COVID19.
- The App has over 114 million users as on 26th May, which is more than any other Contact Tracing App in the world.
- The App is available in 12 languages and on Android, iOS and KaiOS platforms.

### **INDIAN ECONOMY**

#### **Hydro-Electric Projects In Madhya Pradesh**

Power Finance Corporation (PFC) entered into an agreement with Narmada Basin Projects Company Ltd. (NBPCL) to fund projects worth Rs.22,000 crore for 225 MW hydro-electric projects & multipurpose projects in the State of Madhya Pradesh.

About:

- The funds will be deployed by NBPCL for setting up hydroelectric projects of 225 MW and power components of 12 major multipurpose projects in Madhya Pradesh.
- The MoU will help PFC to actively partner with NBPCL and provide finance for hydro-electric plants totaling 225 MW along with power components of multipurpose projects as part of state government's endeavor to implement twelve major multipurpose projects.

Some of the major multipurpose projects that will be financed under the MoU are Basaniya Multipurpose Project Dindori, Chinki Boras Multipurpose Project Narsinghpur Raisen Hoshangabad, Sakkar Pench Link Narsinghpur Chhindwara, Dudhi Project Chhindwara Hoshangabad, etc.

Related Info:

- Power Finance Corporation (PFC) is the central PSU under Ministry of Power and India's leading NBFC.
- Narmada Basin Projects Company Ltd. (NBPCL) is a wholly-owned company of Govt. of Madhya Pradesh.

### **ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES**

#### **Puntius Sanctus**

Velankanni in Tamil Nadu has thrown up a new species of small freshwater fish of the family Cyprinidae. The silver-hued fish has been christened *Puntius sanctus* — ‘sanctus’ is Latin for holy — after the popular pilgrim town.

About:

- Encountered in a small waterbody in Velankanni, *Puntius sanctus* grows to a length of 7 cm. It is used both as food and as an aquarium draw
- The *Puntius* species are known locally as ‘Paral’ in Kerala and ‘Kende’ in Tamil Nadu. They are purely freshwater fishes. While the genus shows great species richness in Kerala and Tamil Nadu, the specimen from Velankanni bears “distinct differences” from its *Puntius* cousins.
- Its physical characteristics included a protractible mouth, a pair of maxillary barbels (a sensory organ near the snout), 24-25 lateral line scales and 10 pre-dorsal scales.

### **DEFENCE AND SECURITY**

#### **Number-18 - Flying Bullets**

The Indian Air Force (IAF) is set to operationalize its squadron called the Number-18 - Flying Bullets with a fleet of the Light Combat Aircraft, LCA Tejas at its Sullur base near Coimbatore. It will be launched by the Chief of the Air Staff, Air Chief Marshal R K S Bhadauria on May 27, 2020.

About:

- It will be the second Indian Air Force squadron to operate with the modern multi-role light fighter aircraft.
- The No.18 Squadron was formed in 1965 and has the distinction of being the first to land and operate from Srinagar. It has also produced a Param Veer Chakra awardee during the 1971 war with Pakistan. It has been revived on the 1st April this year at the Sullur base.
- The LCA Tejas is a tailless, fourth generation, compound delta-wing aircraft developed by the Hindustan Aeronautics Limited. The supersonic combat aircraft is considered the lightest and the smallest of its kind.

### **SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE ETC**

#### **APOE**

A new study has found a link between the severity of Covid-19 and a gene linked to dementia. Having a faulty gene linked to dementia doubles the risk of developing severe COVID-19.

About:

- The gene is called APOE, and exists in a different forms, one of which is termed e4e4.
- The team found that people with the APOE e4e4 genotype were at double the risk of developing severe Covid-19, compared to those with the common e3e3 form of the APOE gene.

Related Info:

- APOE (Apolipoprotein E) is a Protein Coding gene.
- APOE transports lipids, fat-soluble vitamins, and cholesterol into the lymph system and then into the blood.
- It is implicated in Alzheimer's disease and cardiovascular disease.

#### **NGC 3895**

NASA's Hubble telescope released an image of a spiral galaxy, NGC 3895, that, in colour and shape, resembles a coffee made by a barista.

About:

- The galaxy's existence was known earlier as well and it has been captured by the telescope in the past as well. However, the current image is trending online for its aesthetic beauty.
- The Hubble Space Telescope released the image under the title "One Large Stellar Latte To Go".
- The galaxy, located at a distance of over 161 million light-years, is a part of Ursa Major.
- It was discovered by German-born British astronomer William Herschel on March 18, 1790.
- The galaxy has a diameter of approximately 45,000 light-years.

**Tianwen-1**

In July, China will launch its first Mars mission, the 'Tianwen-1', which is expected to land on the Red Planet's surface in the first quarter of 2021.

About:

- Tianwen-1, an all-in-one orbiter, lander and rover will search the Martian surface for water, ice, investigate soil characteristics, and study the atmosphere, among completing other objectives.
- The Tianwen-1 mission will lift off on a Long March 5 rocket. The success of the mission will make China the third country to achieve a Mars landing after the USSR and the United States.
- The Chinese mission is expected to take off in late July, around the same time when NASA is launching its own Mars mission– the ambitious 'Perseverance' which aims to collect Martian samples and bring them back to Earth in a two-part campaign.

Previous Mars missions:

- The USSR in 1971 became the first country to carry out a Mars landing– its 'Mars 3' lander being able to transmit data for 20 seconds from the Martian surface before failing.
- The second country to reach Mars's surface, the US, holds the record for the most number of Mars landings. Since 1976, it has achieved 8 successful Mars landings, the latest being the 'InSight' in 2019 (launched in 2018).
- India and the European Space Agency have been able to place their spacecraft in Mars's orbit. India's Mars Orbiter Mission (MOM) or 'Mangalyaan' was able to do so in September 2014, almost a year after its launch from the Satish Dhawan Space Centre in Andhra Pradesh.

**DAILY ANSWER WRITING PRACTICE**

**Qns:** Indigenous people are one of the most vulnerable sections facing climate change, however, they can act as change agents, towards mitigating and adapting to climate change. Discuss.

**Answer:** Indigenous peoples, who have been long inhabiting an area, are among the first to face the direct consequences of climate change, due to their dependence upon, and close relationship, with the environment and its resources. Climate change exacerbates the difficulties already faced by indigenous communities including political and economic marginalization, loss of land and resources, human rights violations, discrimination and

unemployment. For example, in the high altitude regions of the Himalayas, glacial melts affect hundreds of millions of rural dwellers who depend on the seasonal flow of water.

#### Indigenous People as Agents of Change

- Indigenous peoples are vital to, and active in, the many ecosystems that inhabit their lands and territories and may therefore help enhance the resilience of these ecosystems, for example, at many places in India forest's pristine core area have been conserved in the form of sacred groves by tribals.
- In addition, indigenous people interpret and react to the impacts of climate change in creative ways, drawing on traditional knowledge and other technologies to find solutions which may help society at large to cope with impending changes. This is because of their relationship with nature i.e. Man in harmony with Environment.
- Place-based knowledge rooted in local culture, Indigenous Knowledge (IK), is useful in determining impacts of climate change, especially at the local level where scientific models often fail. This, IK plays a crucial part in the rolling-out of new environmental programs because these programs have a higher participation rate and are more effective when indigenous peoples have a say in how the programs themselves are shaped. Thus, including this knowledge in climate change research would lead to further improvements in not only the REDD+ program, but also in the myriad environmental programs that have emerged and will continue to emerge throughout the new millennium.
- Taking governance issues to indigenous people, those who are most exposed to climate issues, would build community resilience and increase local sustainability.

Conclusion: Despite such known potential of indigenous people's vulnerability and role in helping mitigate & adapt climate change, there are challenges that hinder such like non-recognition of rights in conservation efforts (their role in UNFCCC remains marginal), incursion of their already given rights like case of Forest Rights Act, negative fallout of development like displacement due to industries etc. All these need to be addressed so that they can become active partners in conservation efforts.