



May - 06

## **TNPSC BITS**

- ❖ The Arunachal Pradesh Chief Minister Pema Khandu recently inaugurated the revamped strategic bridge "Hangpan Dada" over River Subansiri at Daporijo in Upper Subansiri district in the state.
  - The reconstruction work was entrusted to the Border Road Organization (BRO) under Project ARUNANK.
- ❖ The Tirunelveli Municipality Corporation has created the State's first Social Distancing theatre.
- ❖ Pakistan batsman Umar Akmal was banned for 3 years by the Pakistan Cricket Board recently for not reporting corrupt approaches.

## **NATIONAL**

### **Micro Irrigation**

- ❖ In the financial year 2019-20, Tamilnadu (2,06,853.25 ha) is on top at the all-India level for micro-irrigation coverage.
- ❖ It is followed by Karnataka and Gujarat with 1,41,103.56 Ha and 1,08,322.00 Ha of coverage respectively.
- ❖ This has been achieved as part of implementation of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).
- ❖ It is a programme aimed at promoting the "more crop per drop" concept by focussing on water-saving technologies.

## **INTERNATIONAL**

### **R&D Statistics and Indicators 2019-20**

- ❖ It is based on the national S&T survey 2018 brought out by the National Science and Technology Management Information (NSTMIS), Department of Science and Technology (DST).
- ❖ India's gross expenditure in R&D has tripled between 2008 & 2018.
- ❖ With the rise in research publication, the country is globally at the 3rd position.
- ❖ The two main contributors were Department of Science and Technology (63%) and Department of Biotechnology (14%).
- ❖ The first two ranks were occupied by USA and China.

- ❖ India is also 3rd in the number of Ph.D. in science & engineering.
- ❖ India's per capita R&D expenditure has increased to \$ 47.2 in 2017-18 from \$ 29.2 in 2007-08 on the basis of Purchasing Power Parity (PPP).
- ❖ India spent 0.7% of its GDP on R&D in 2017-18.
- ❖ Among the BRICS countries, it was Brazil 1.3%, Russian Federation 1.1%, China 2.1% and South Africa 0.8%.
- ❖ India is ranked at 9th position in terms of Resident Patent Filing activity in the world.
- ❖ According to WIPO, India's Patent Office stands at the 7th position among the top 10 Patent Filing Offices in the world.
- ❖ The women participation in the R&D field has increased from 13% to 24%.



### **The Most Popular Central bank**

- ❖ RBI has the maximum number of Twitter followers across all central banks in the world with 7.45 lakh followers.
- ❖ The Reserve Bank of India (RBI) has beaten US Federal Reserve and European Central Bank on Twitter by emerging as the most popular central bank.
- ❖ Closely behind RBI is the Bank Indonesia.
- ❖ At the third spot is Banco de Mexico - the apex bank of Mexico.

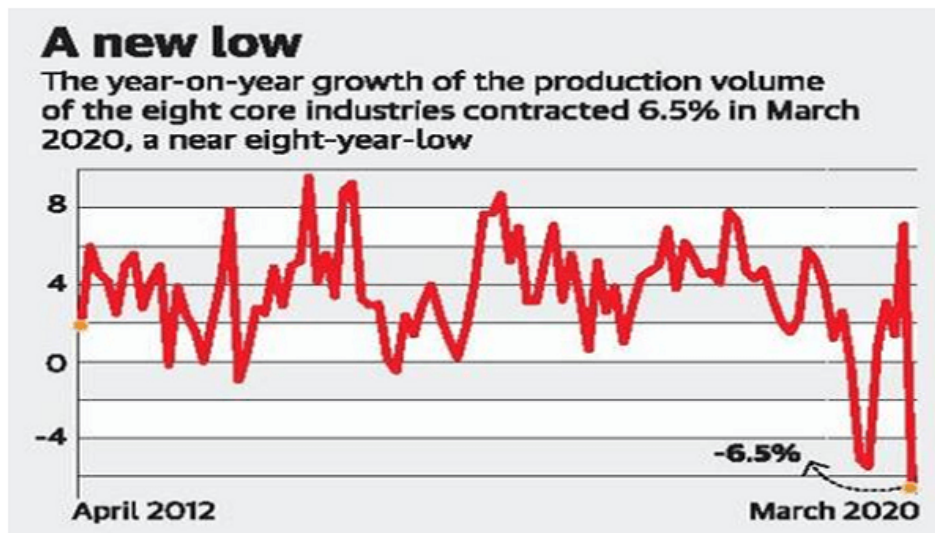
## **ECONOMY**

### **Core sectors**

- ❖ The output of the core industries has reduced by 6.5% in the month of March.
- ❖ The Data was released by the Ministry of Commerce and Industry.



- ❖ This is the sharpest reduction since 2012.
- ❖ The core sectors of India include crude oil, steel, natural gas, refinery product, cement, fertilizer, electricity and coal.
- ❖ The eight core industries have a weight of 40.27% in the Index of Industrial Production.
- ❖ The Index of Industrial Production (IIP) is published by the Central Statistical Organization.
- ❖ The IIP indicator measures broad sectors namely mining, electricity and manufacturing.
- ❖ The IIP is calculated with 2004-05 as the base year.



## SCIENCE AND TECHNOLOGY

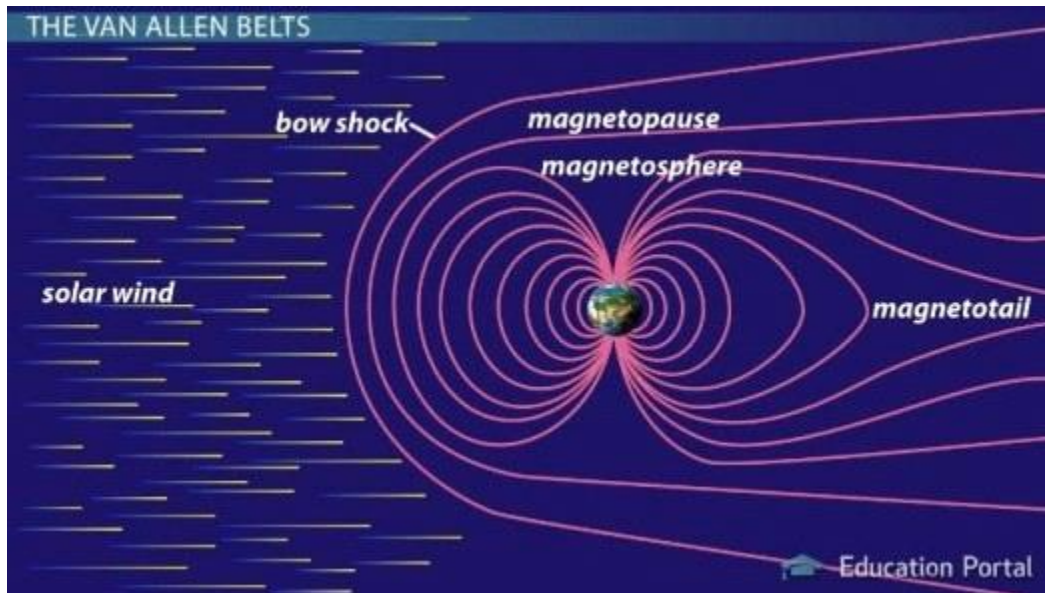
### Fluid Simulation Code

- ❖ The Indian Scientists at the Indian Institute of Geomagnetism has developed fluid simulation code to study electric field structure in the magnetosphere of the Earth.
- ❖ The study will help to plan the future space missions.
- ❖ The sun is the major source that deposits plasma around the earth.
- ❖ It forces its plasma towards the earth through its solar wind.
- ❖ This creates interplanetary magnetic field that is carried by the solar magnetic field.
- ❖ The interaction of the earth's magnetic field and the interplanetary magnetic field creates magnetosphere of the earth.

- ❖ The magnetosphere of the earth has several numbers of satellites revolving.

### About magnetosphere

- ❖ It is the region around a planet dominated by the planet's magnetic field.
- ❖ The Earth has the strongest one of all the rocky planets.
- ❖ It is generated by the convective motion of charged, molten iron, far below the surface in Earth's outer core.



### **BoBBLE – Bay of Bengal Boundary Layer Experiment**

- ❖ It is a project funded by Union Ministry of Earth Sciences and the Natural Environment Research Council of UK.
- ❖ A team from Indian Institute of Science in Bengaluru and UK based University of East Anglia have created a blueprint for accurate prediction of monsoon, tropical cyclones and other weather related forecast.
- ❖ The team carried out studies of oceanographic properties on board RV Sindhu Sadhana in the southern Bay of Bengal.

### **Bug Snifer**

- ❖ Researchers at the Agharkar Research Institute (ARI), Pune have developed 'bug sniffer,' a sensitive and low-cost sensor to rapidly detect bacteria.
- ❖ It can detect pathogens with a limit of detection of 10 cells per 1 milli liter within 30 minutes.

- ❖ The most common disease-causing bacteria is Escherichia coli and Salmonella typhimurium.
- ❖ The Bug Snifer is a biosensor that uses synthetic peptides, magnetic nanoparticles, and quantum dots to detect the presence of bacteria.
- ❖ The ARI is an autonomous institute under the Department of Science & Technology.



## **PERSONALITIES, AWARDS, AND EVENTS**

### **International Prize for Arabic Fiction 2020**

- ❖ The Spartan Court by Abdelouahab Aissaoui has won the 13th International Prize for Arabic Fiction.
- ❖ Aissaoui is the first Algerian to win the prize.
- ❖ It is sponsored by the Emirates Foundation in Abu Dhabi of the UAE.
- ❖ The Prize is run with the support, as its mentor, of The Booker Prize Foundation in London and funded by Department of Culture and Tourism, Abu Dhabi (DCT).

## **IMPORTANT DAYS**

### **World Press Freedom Day – May 03**

- ❖ It was proclaimed by the UN General Assembly in December 1993.
- ❖ The day May 3 also marks the anniversary of Windhoek Declaration.
- ❖ It was a statement of free press principles put together by African newspaper journalists in Windhoek, the capital of Namibia in 1991.



- ❖ UNESCO marks World Press Freedom Day by conferring the UNESCO/Guillermo Cano World Press Freedom Prize.
- ❖ It is given on a deserving individual, organisation or institution that has made an outstanding contribution to the defence and/or promotion of press freedom anywhere in the world.
- ❖ 2020 Theme is - "Journalism without Fear or Favor".
- ❖ Since 1993, the Global Conference is organized annually.
- ❖ The Netherlands is the host for 2020 World Press Freedom Conference.



### **World Laughter Day - May 3**

- ❖ It was first celebrated on May 10, 1998, in Mumbai, India.
- ❖ The day was arranged by Dr Madan Kataria, founder of the worldwide Laughter Yoga movement in 1998.

