

**August – 02**

## **TNPSC BITS**

- ❖ NASA's new planet hunting Spacecraft Transiting Exoplanet Survey Satellite (TESS) has become operational and has started collecting data after its successful launch in April 2018.
- ❖ Common Service Center (CSC) and National Health Accounts (NHA) signed Memorandum of Understanding (MoU) to implement the Ayushman Bharat scheme through 3 lakh Common Service Centers (CSCs) across the country.

## **INTERNATIONAL**

### **China launches high-resolution Earth observation satellite**

- ❖ China successfully launched Gaofen-11, an optical remote sensing satellite, as part of the country's high-resolution Earth observation project.
- ❖ It was launched on board of Long March 4B rocket from Taiyuan Satellite Launch Center in northern Shanxi Province.



- ❖ It was overall 282nd flight mission by Long March carrier rocket.
- ❖ Gaofen-11 is sub-meter resolution optical satellite. It was developed by China Academy of Space Technology (CAST).



- ❖ It is the 6th in Gaofen series launched this year, following triplet of Gaofen-1 satellites and larger Gaofen-5 and Gaofen-6, all placed in Sun-synchronous orbits.
- ❖ China High-resolution Earth Observation System (CHEOS) was initiated in 2010 to provide all-weather, all-day coverage by 2020 with optical and synthetic aperture radar satellites.

### **World Schools Debating Championship (WSDC 2018)**

- ❖ Indian school students won the silver medal in the World Schools Debating Championship (WSDC 2018) held in Zagreb, Croatia.
- ❖ China beat India and the Gold medal.
- ❖ The five students who participated in the event,
  - Saranya Ravindran, Tejas Subramaniam and Hemanth Chakravarthy - PSBB school, Chennai,
  - Manya Gupta - Neerja Modi School, Jaipur.
  - Dhananjay Ashok - The International School, Bangalore.
- ❖ The WSDC is an annual English-language debating tournament for high school-level teams representing different countries.
- ❖ The championships were first held in 1988 in Australia. In 2017, Singapore won the championship held at Bali in Indonesia.
- ❖ World Schools Debating Championships (WSDC) 2019 is going to be held in Colombo, Sri Lanka.

## **ECONOMY**

### **Concessional Financing Scheme**

- ❖ Union Cabinet has approved first extension of Concessional Financing Scheme (CFS) for another five years from 2018 to 2023
- ❖ The move comes in a bid to support Indian Entities bidding for strategically important infrastructure projects abroad.
- ❖ The scheme also has been liberalized, allowing any Indian company, irrespective of ownership eligible to benefits of it.



- ❖ Under CFS, Ministry of External Affairs (MEA) selects specific projects keeping in view strategic interest of India and sends same to Department of Economic Affairs (DEA).
- ❖ The strategic importance of project to deserve financing is decided on case to case basis, by Committee chaired by Secretary, DEA
- ❖ Deputy National Security Adviser (Dy NSA) is also a member of this Committee.
- ❖ The Scheme is presently being operated through EXIM Bank, which raises resources from market to provide concessional finance.
- ❖ Union Government provides counter guarantee and interest equalization support of 2% to EXIM Bank
- ❖ EXIM Bank can extend credit at rate not exceeding LIBOR (avg. of six months) + 100 bps. The repayment of loan is guaranteed by foreign government.

### **25% safeguard duty imposed on import of solar cells**

- ❖ Union Government has imposed safeguard duty of 25% on import of solar cells (whether or not assembled in modules or panels) from China and Malaysia.
- ❖ The move is aimed at helping domestic solar cell manufacturing sector.



- ❖ The decision by Union Government follows recommendation made by Directorate General of Trade Remedies (DGTR).
- ❖ It will not be imposed on imports from developing countries other than China and Malaysia.

## SCIENCE AND TECHNOLOGY

### **Zika virus causes microcephaly deciphered**

- ❖ Scientists from National Brain Research Centre (NBRC) have successfully identified molecular and cellular mechanisms by which Zika virus causes microcephaly.
- ❖ Babies born with microcephaly have significantly smaller head size compared with normal babies.
- ❖ The researchers found envelop protein (E protein) of Zika virus, which is responsible for entry of virus into brain stem cells, was responsible for arresting proliferation of human foetal neural stem cells and also killing cells that were becoming neuron-like.



- ❖ The study shows that neutralising E protein of Zika virus can help prevent or reduce its harmful effects in developing foetus.

## ENVIRONMENT

### **First State to implement biofuel policy**

- ❖ Rajasthan became first state in the country to implement National Policy on Biofuels unveiled by Union Government in May 2018.
- ❖ Its implementation was approved by high-power Biofuel Authority.
- ❖ It was also decided that Government will release Biofuel Rules, 2018.



- ❖ Under this policy, State Government will lay emphasis on increasing production of oilseeds and establish Centre for Excellence in Udaipur to promote research in fields of alternative fuels and energy resources.
- ❖ The policy categorises of biofuels into first generation (1G), second generation (2G) and third generation (3G) to enable extension of appropriate financial and fiscal incentives under each category.

### **Blueprint of Deep Ocean Mission unveiled**

- ❖ Union Ministry of Earth Sciences has unveiled blueprint of Deep Ocean Mission (DOM).
- ❖ The mission proposes to explore deep-ocean by emulating success of Indian Space Research Organisation (ISRO) in designing and launching satellites.
- ❖ Two key projects planned under it include
  - Desalination plant powered by tidal energy and
  - Submersible vehicle that can explore depths of at least 6,000 metres.
- ❖ India has been allotted site of 1,50,000 sq. km in Central Indian Ocean Basin (CIOB) by United Nations International Sea Bed Authority (UN-ISA) for exploitation of polymetallic nodules (PMN).
- ❖ These are rocks scattered on seabed containing iron, nickel, manganese and cobalt.
- ❖ It is envisaged that 10% of recovery of that large reserve can meet energy requirement of India for next 100 years.
- ❖ It has been estimated that 380 million metric tonnes of polymetallic nodules are available at the bottom of the seas in CIOB.

## **PERSONALITIES, AWARDS AND EVENTS**

### **Akshay Venkatesh gets prestigious Fields Medal**

- ❖ India-origin mathematician Akshay Venkatesh was awarded the prestigious Fields medal at the International Congress of Mathematicians in Rio de Janeiro.



- ❖ The 36-year-old was chosen as one of the four winners of the prize, which is commonly referred to as the Nobel prize for mathematics.
- ❖ The other three winners are,
  - Caucher Birkar (Iranian Kurdish origin),
  - Germany's Peter Scholze,
  - Italy's Alessio Figalli
- ❖ The Fields medals are awarded every four years to the most promising mathematicians under the age of 40.
- ❖ The prize was inaugurated in 1932 at the request of Canadian mathematician John Charles Fields, who ran the 1924 Mathematics Congress in Toronto.
- ❖ Each winner receives a 15,000 Canadian-dollar cash prize. At least two, and preferably four people, are always honoured in the award ceremony.

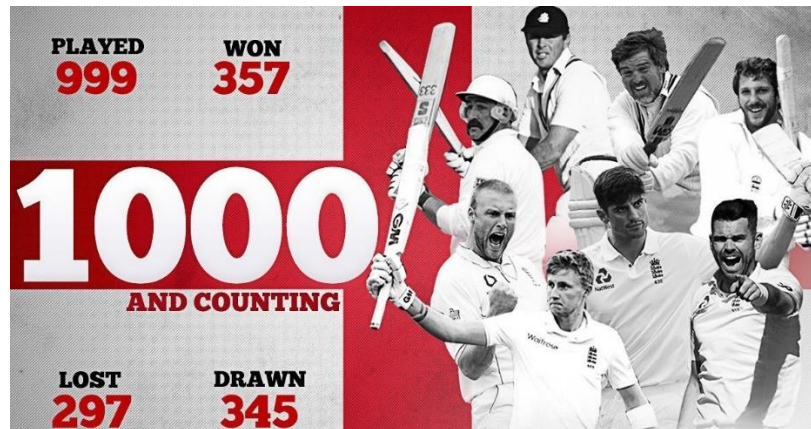
## SPORTS

### 1000th Test - England

- ❖ England became the first country to play the 1000th Test.
- ❖ England achieved this milestone in the series-opener against India at Edgbaston.



- ❖ Out of the 999 men's Tests that England have played till date since their debut Test against Australia in March, 1877, they have won 357 Tests and lost 297 Tests with 345 ending in draws.



## IMPORTANT DAYS

### World Day Against Trafficking in Persons – 30 July

- ❖ World Day against Trafficking in Persons is observed every year on July 30 to raise awareness of the plight of human trafficking victims, and promote and protect their rights.
- ❖ This year, theme chosen by United Nations Office on Drugs and Crime (UNODC) is 'responding to the trafficking of children and young people'.
- ❖ It draws attention to issues faced by trafficked children and to possible action initiatives linked to safeguarding and ensuring justice for child victims.
- ❖ United Nations General Assembly (UNGA) had designated July 30 as the World Day against Trafficking in Persons by adopting a resolution in 2013.



