

May - 02

## TNPSC BITS

- ❖ The Migration and Development Brief report is recently prepared and released by the Migration and Remittances Unit, Development Economics (DEC) under the World Bank.
- ❖ The Airport Authority of India (AAI) has upgraded Trichy international airport to category II airport from category I.
  - Meanwhile, Tuticorin, Prayagraj, Jabalpur, Hubli and Gorakhpur airports have been elevated to category III from category IV.
- ❖ Sweden has taken the herd immunity approach in dealing with the coronavirus.
- ❖ The scientists of Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) operating under Department of Science and Technology have invented a natural product for Alzheimer disease.
  - The Berberine used in traditional medicines has been converted into Ber-D.
- ❖ The robotic device HCARD - Hospital Care Assistive Robotic Device was launched to help frontline health care workers.
  - It was developed by CSIR laboratory located in Durgapur, West Bengal.
- ❖ The foreign ministers of the BRICS grouping are to discuss on measures to combat COVID-19.
  - The video conference is to be hosted by Russia as it is the current rotating head.

## NATIONAL

### CARES Programme

- ❖ The COVID-19 Active Response and Expenditure Support Programme is CARES Programme.
- ❖ The Government of India and the Asian Development Bank (ADB) today signed a \$1.5 billion loan.
- ❖ It will support the government's response to the novel coronavirus disease (COVID-19) pandemic.



## **INTERNATIONAL**

### **USCIRF Annual Report 2020**

- ❖ The U.S. Commission on International Religious Freedom (USCIRF) has released its annual report recently.
- ❖ The report placed India alongside countries, including China, North Korea, Saudi Arabia and Pakistan.
- ❖ It has downgraded India to the lowest ranking, “countries of particular concern” (CPC).

### **Global Terrorism Index (GTI) 2019**

- ❖ It is released by the Australian Think Tank - the Institute for Economics and peace.
- ❖ India has moved to the seventh position from the previous year's eighth spot.
- ❖ The countries ahead of it are Afghanistan, Iraq, Nigeria, Syria, Pakistan and Somalia.

## **SCIENCE AND TECHNOLOGY**

### **Nano-Microbial Disinfectant**

- ❖ INST (Institute of nano science and technology) scientists at Mohali in Punjab find low-cost metal-free nanomaterial towards disinfection of garments under visible light exposure.
- ❖ It can be an alternative to silver and other metal-based materials.

### **Mycobacterium MW**

- ❖ The Council of Scientific and Industrial Research has started the trials of anti-leprosy drug trials against COVID-19.
- ❖ The drug trial is to be conducted with the help of Mycobacterium MW.
- ❖ It is a heat killed bacteria.

### **Smart Dust Bin**

- ❖ A Madras IIT-incubated start-up Antariksh has developed a ‘smart bin system’.
- ❖ It works to prevent the spread of COVID-19 through waste generated at hospitals, clinics, public places and quarantine zones.

- ❖ Called 'AirBin', the system developed by Indian Institute of Technology (IIT)-Madras enables remote monitoring of waste accumulation levels through smart phone.



### **COVID Action Collab**

- ❖ It is an initiative ideated by the Catalyst Group.
- ❖ It is now to test sewage for the presence of COVID-19 virus.
- ❖ The main objective of this initiative is to diagnose COVID-19 early, to prevent new infections and to treat the disease with care.
- ❖ The COVID-19 patients shed the virus through stools and urine.

### **NanoBlitz 3D**

- ❖ The International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) has developed an advanced tool NanoBlitz 3D.
- ❖ It is used for mapping Nano-mechanical properties of materials like multi-phase alloys, composites, and multi-layered coatings.
- ❖ It can measure hardness and elastic modulus of a given material.

### **COVID-19 Tools (Act) Accelerator**

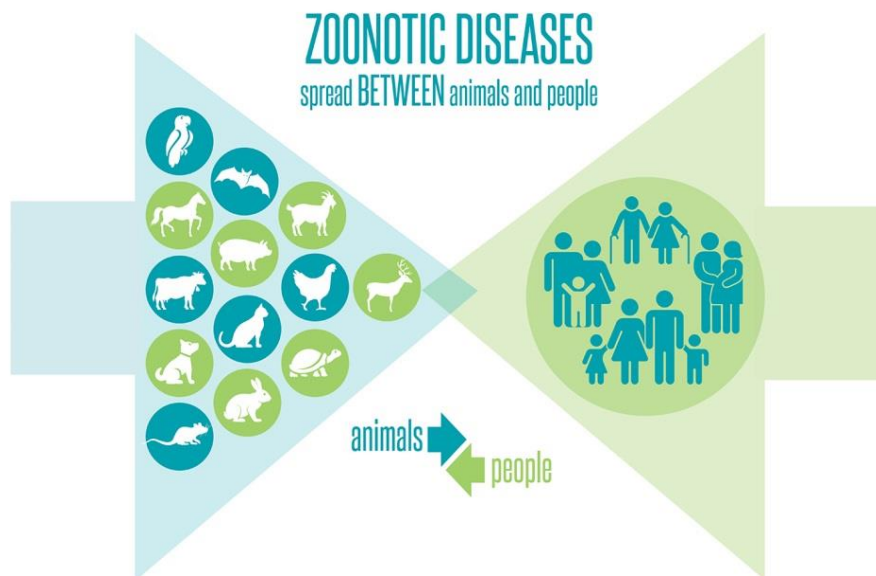
- ❖ The World Health Organization along with the other international leading organizations such as Global Fund, UNITAID, CEPI (Coalition for Epidemic

Preparedness Innovations) etc has launched the COVID-19 Tools (Act) Accelerator.

- ❖ The collaboration helps to speed up the development, production and access to therapeutics, diagnostics and vaccines of COVID-19.

## Zoonotic Diseases

- ❖ According to the United Nations Environment Programme (UNEP), 60% of all infectious diseases in humans are zoonotic, and about 75% of all emerging infectious diseases are zoonotic in nature.
- ❖ Zoonotic diseases, also called zoonosis, are illnesses caused by germs that are passed between animals and people.
- ❖ Among zoonosis that emerged or re-emerged recently, the UNEP counts
  - Ebola,
  - Bird flu (Avian Influenza),
  - Middle East Respiratory Syndrome (MERS),
  - Rift Valley fever,
  - Severe Acute Respiratory Syndrome (SARS),
  - West Nile virus,
  - Zika virus disease,
  - COVID-19.



## **ENVIRONMENT**

### **New List of Cyclone names**

- ❖ The India Meteorological Department (IMD) has released a new list of names of tropical cyclones over north Indian Ocean including Bay of Bengal and Arabian Sea.
- ❖ The new list comprises of 169 names including 13 from India.
- ❖ It is recommended by 13 member countries (13 names by 13 countries) of the World Meteorological Organization (WMO).
- ❖ India, Sri Lanka, Maldives, Myanmar, Oman, Thailand, Qatar, UAE, Saudi Arabia, Yemen, Pakistan, Bangladesh and Iran are the 13 countries
- ❖ Gati, Tej, Aag, Neer, Vyom, Jhar, Jaladhi, Murasu, Probaho, Prabhanjan, Ghumi, Ambud and Vega are given by India.
- ❖ Among them Neer and Murasu are Tamil names.
- ❖ The Regional Specialize Meteorological Centre (RSMC) in New Delhi is responsible to name the cyclones in the region of Bay of Bengal and Arabian Sea.
- ❖ Since the earlier list of 2004 is left with only one name – Amphan (shared by Thailand), all other 63 names were used.
- ❖ In 2004, 8 countries gave each 8 names into total 64 names.
- ❖ The 8 countries of 2004 list are India, Bangladesh, Maldives, Myanmar, Pakistan, Oman, Sri Lanka and Thailand.
- ❖ Now the addition is Qatar, UAE, Saudi Arabia, Yemen and Iran.

### **Other names of Cyclones**

- ❖ Typhoons in the China Sea and Pacific Ocean.
- ❖ Hurrricanes in the West Indian islands in the Caribbean Sea and Atlantic Ocean.
- ❖ Tornados in the Guinea lands of West Africa and southern USA.
- ❖ Willy-willies in north-western Australia.
- ❖ Tropical cyclones in the Indian Ocean.

Annexure-I

New list of tropical cyclone names adopted by WMO/ESCAP Panel Member Countries in April 2020 for naming of tropical cyclones over North Indian Ocean including Bay of Bengal and Arabian Sea  
(To be used after the name 'Amphan' from the previous list is utilised)

WMO/ESCAP Panel Member countries	Column 1		Column 2		Column 3		Column 4	
	Name	Pron'	Name	Pron'	Name	Pron'	Name	Pron'
Bangladesh	Nisarga	Nisarga	Biparjoy	Biporjoy	Arnab	Omab	Upakul	Upokul
India	Gati	Gati	Tej	Tej	Murasu	Murasu	Aag	Aag
Iran	Nivar	Nivar	Hamoon	Hamoon	Akvan	Akvan	Sepand	Sepand
Maldives	Burevi	Burevi	Midhili	Midhili	Kaani	Kaani	Odi	Odi
Myanmar	Tauktae	Tau' Te	Michaung	Migjaum	Ngamann	Ngaman	Kyarthit	Kjathi
Oman	Yaas	Yass	Remal	Re-Mal	Sail	Sail	Naseem	Naseem
Pakistan	Gulab	Gul-Aab	Asna	As-Na	Sahab	Sa-Hab	Afshan	Af-Shan
Qatar	Shaheen	Shaheen	Dana	Dana	Lulu	Lulu	Mouj	Mouj
Saudi Arabia	Jawad	Jowad	Fengal	Feirjal	Ghazeer	Razeer	Asif	Aasif
Sri Lanka	Asani	Asani	Shakhti	Shakhti	Gigum	Gigum	Gagana	Gagana
Thailand	Sitrang	Si-Trang	Montha	Mon-Tha	Thianyot	Thian-Yot	Bulan	Bu-Lan
United Arab Emirates	Mandous	Man-Dous	Senyar	Sen-Yaar	Afoor	Aa-Foor	Nahhaam	Nah-Haam
Yemen	Mocha	Mokha	Ditwah	Ditwah	Diksam	Diksam	Sira	Sira

## Petersberg Climate Dialogue

- ❖ The eleventh and first ever virtual Petersberg Climate Dialogue was held.
- ❖ This has been hosted by Germany since 2010.
- ❖ The Dialogue was co-chaired by Germany and the United Kingdom.
- ❖ It was originally an initiative of German Chancellor Angela Merkel after the failure of Copenhagen Climate Change Summit in 2009.
- ❖ India along with 30 nations participated this.

PETERSBERG  
CLIMATE  
DIALOGUE XI





### **Air Pollution in India**

- ❖ The NASA announced that Air Pollution in India has reached 20 year low.
- ❖ According to the data published by NASA, the Aerosol Optical Depth (AOD) in 2020 has been the least as compared to the average of 2016 to 2019.
- ❖ Aerosol Optical Depth is absorption of light by airborne particles in the atmosphere.
- ❖ The aerosols are particles in atmosphere released due to anthropogenic activities
- ❖ The Aerosol Optical Depth is the quantitative measure of aerosols present in the atmosphere.
- ❖ It measures the extinction of light when it passes through the atmosphere.
- ❖ As AOD increases, the rate of extinction of light increases.

