# OFFICERS' Pulse

ISSUE NO. 44 | 5TH APRIL TO 11TH APRIL, 2020

#### Coverage.

The Hindu PIB Yojana Rajya Sabha TV All India Radio

## At a Glance & In Depth.

Polity and Social Issues
Economy
International Relations
Environment
Science and Tech
Culture



## CURRENT AFFAIRS WEEKLY THE PULSE OF UPSC AT YOUR FINGER TIPS.

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## News @ a glance

#### **POLITY**

#### 1) Ayushman Bharat Scheme

#### Why in News?

- To strengthen the country's response to COVID -19 pandemic, the Government of India has decided to make the testing and treatment for COVID-19 available under Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM JAY).
- The testing and treatment of COVID -19 is already available for free in the public facilities.
- Now, more than 50 crore citizens, eligible under the Government of India's health assurance scheme will be able to avail free testing through private labs and treatment for COVID -19 in empaneled hospitals.
- Similarly, treatment of COVID-19 by private hospitals will be covered under AB-PMJAY.

#### **About Ayushman Bharat**

- Ayushman Bharat is an attempt to move from sectoral and segmented approach of health service delivery to a comprehensive need-based health care service. Ayushman Bharat adopts a continuum of care approach, comprising of two interrelated components, which are -
- Health and Wellness Centres (HWCs)
- Pradhan Mantri Jan Arogya Yojana (PM-IAY)

#### **Health and Wellness Centres (HWCs)**

- Health and Wellness Centers are envisaged to deliver an expanded range of services to address the primary health care needs of the entire population in their area, expanding access, universality and equity close to the community.
- The emphasis of health promotion and prevention is designed to bring focus on keeping people healthy by engaging and empowering individuals and communities to choose healthy behaviours and make changes that reduce the risk of developing chronic diseases and morbidities.

#### Pradhan Mantri Jan Arogya Yojana (PM-IAY)

- Ayushman Bharat PM-JAY is the largest health assurance scheme in the world which aims at providing a health cover of Rs. 5 lakhs per family per year for secondary and tertiary care hospitalization to over 10 crores poor and vulnerable families that form the bottom 40% of the Indian population.
- The households included are based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011) for rural and urban areas respectively.
- PM-JAY was earlier known as the National Health Protection Scheme (NHPS) .It subsumed the then existing Rashtriya Swasthya Bima Yojana (RSBY) and the Senior Citizen Health Insurance Scheme (SCHIS).

#### **Key Features:**

- PM-JAY is the world's largest health insurance/ assurance scheme fully financed by the government.
- It provides a cover of Rs. 5 lakh per family per year for secondary and tertiary care hospitalization across public and private empanelled hospitals in India.
- Over 10.74 crore poor and vulnerable entitled families (approximately 50 crore beneficiaries) are eligible for these benefits.
- PM-JAY provides cashless access to health care services for the beneficiary at the point of service, that is, the hospital.
- There is no restriction on the family size, age or gender.
- All pre-existing conditions are covered from day one.
- Benefits of the scheme are portable across the country i.e. a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.

 Public hospitals are reimbursed for the healthcare services at par with the private hospitals.

#### **About National Health Authority (NHA):**

- The National Health Authority (NHA) is the apex agency of the Government of India responsible for the design, roll-out, implementation and management of Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PM JAY) across the country.
- NHA functions as an attached office of the Ministry of Health and Family Welfare and is governed by a Governing board chaired by the Union Minister of Health & Family welfare and has 11 members.
- Inter-alia, its functions include formulation of PM JAY policies, development of operational guidelines, implementation mechanisms, and coordination with state governments, monitoring and oversight, among others.

#### 2) Members of Parliament Local Area Development Scheme

#### **About:**

- The Members of Parliament Local Area Development Scheme (MPLADS) is meant to enable Members of Parliament to recommend works of developmental nature with emphasis on creation of durable community assets based on locally felt needs to be taken up in their constituencies in the area of national priorities namely drinking water, education, public health, sanitation, roads etc.
- The MPLAD scheme was formulated in 1993 to enable Members of Parliament (MPs) to recommend development works in their constituencies with emphasis on the creation of durable community assets based on the locally felt need.
- Durable assets of national priorities and community need viz. drinking water, primary education, public health, sanitation and roads, etc.
- Initially, the Scheme was under the control of the Ministry of Rural Development and Planning. In October, 1994, the scheme was transferred to the Ministry of Statistics & Programme Implementation.
- Under this scheme, every MP is entitled to spend Rs 5 crore annually.

- Lok Sabha Members can recommend works within their constituencies and elected Members of Rajya Sabha can recommend works within the State they are elected from.
- Nominated Members of both the Rajya Sabha and Lok Sabha can recommend works anywhere in the country.
- According to the 'Guidelines on Members of Parliament Local Area Development Scheme (MPLADS)' published by the Ministry of Statistics and Programme Implementation in June 2016, the MPLAD funds can also be used for implementation of the schemes such as Swachh Bharat Abhiyan, Accessible India Campaign (Sugamya Bharat Abhiyan), conservation of water through rain water harvesting and Sansad Aadarsh Gram Yojana, etc.

#### Why in News?

■ The Government of India in the event of Covid-19 has suspended Member of Parliament Local Area Development Scheme or MPLADS funds for two years (2020 and 2021) and directed these funds to be transferred to the Consolidated Fund of India. These funds will be used to strengthen Government's efforts in managing the challenges and adverse impact of COVID19 in the country.

## 3) PM, MPs, ministers and President take 30% pay cut for a year

#### Why in News?

• Union Cabinet has approved an Ordinance amending the Salary, Allowances and Pension of Members of Parliament Act, 1954 for reducing salary by 30 per cent for one year. It will come into effect from 1st of this month.

#### **News in Detail:**

- It is applicable to all MPs, including the Prime Minister and the Council of Ministers, for the financial year 2020-2021.
- The President and Vice-President of India along with all the State Governors have also decided on their own to take a 30% salary cut.
- The amendment will only cut MPs' salaries, not allowances or the pensions of ex-MPs.
- According to the pay hike in 2018, each MP draws a monthly salary of ₹1 lakh, ₹70,000

as constituency allowance and ₹60,000 for running office besides other perks.

#### **Consolidated Fund of India:**

- Consolidated Fund of India fund was constituted under Article 266 (1) of the Constitution of India. All revenues received by the government by way of direct taxes and indirect taxes, money borrowed and receipts from loans given by the government flow into the Consolidated Fund of India.
- All government expenditure is made from this fund, except exceptional items which are met from the Contingency Fund or the Public Account. Importantly, no money can be withdrawn from this fund without the Parliament's approval.

#### The Consolidated Fund of India is divided into five parts namely:

- Revenue account (receipts)
- Revenue account (disbursements)
- Capital account (receipts)
- Capital account (disbursements)

 Disbursements charged on the Consolidated Fund.

#### Charged Expenditures on Consolidated Fund of India

- The disbursements charged on the Consolidated Fund or Charged Expenditures are non-votable charges. No voting takes place for the withdrawal of these expenditures from the Consolidated Fund of India. These charges have to be paid whether the Budget is passed or not.
- The expenses under this category include salaries and allowances of:
- the President
- the Speaker
- the Deputy Speaker of the Lok Sabha
- Chairman and Deputy Chairman of the Rajya Sabha
- salaries and allowances of Supreme Court judges
- pensions of Supreme Court and High Court judges

#### HEALTH

### 1) Hydroxychloroquine: Can the anti-malarial drug contain COVID-19?

#### **About Hydroxychloroquine (HCQ)**

- Hydroxychloroquine (HCQ) is an antimalarial drug similar to chloroquine, one of the oldest and best-known anti-malarial drugs.
- It can be bought over the counter and is fairly inexpensive.
- Mechanism of action:
- Hydroxychloroquine is an interferon blocker, and works by diminishing the immune system's response to a viral infection.
- This property of HCQ makes it useful in autoimmune disorders such as lupus and rheumatoid arthritis.

#### **Hydroxychloroquine and COVID-19:**

- A hyperactive response by the immune system is said to be primarily responsible for pneumonia, also a fallout of a severe SARS-CoV-2 infection.
- Since it has the ability to diminish the immune system's response to a viral infection it seems to be effective incase of COVID-19 patients.
- The drug has shown to have shortened the time to clinical recovery of COVID-19 patients.
- However, many of these are in small labcontrolled testing and no proper human trials have been conducted to determine its efficacy.
- A study in France enrolling 80 patients and a study in Wuhan, the epicentre of outbreak, showed that Hydroxychloroquine alone or in combination with azithromycin appeared to reduce virus levels quicker.
- It's primarily these results that have prompted drug regulators in several countries including India to approve the drug in restricted settings.

#### Adverse effects of HCQ:

- 1) cardiac arrhythmia
- 2) liver damage
- 3) its ability to tune down the body's immune response.

#### Hydroxychloroquine and India:

- The Indian Council for Medical Research (ICMR) has cleared HCQ to be used as a prophylaxis, or preventive medication, by doctors, nurses and other health staff.
- The Union Health Ministry moved it to Schedule H1 recently, which can be sold on prescription only.
- India produces 70 per cent of the world's supply of Hydroxychloroquine, according to Indian Pharmaceutical Alliance (IPA) secretary-general making it the biggest manufacturer.
- The country has a production capacity of **40 tonnes of HCQ every month**, implying 20 crore tablets of 200 mg each.
- India gets the active pharmaceutical ingredient (API) that is used to manufacture HCQ from China and supplies so far have been steady.

#### Why in the news?

 U.S. President Donald Trump warned "retaliation" against India, if it didn't revoke the ban on its exports. India eventually allowed export of the drug.

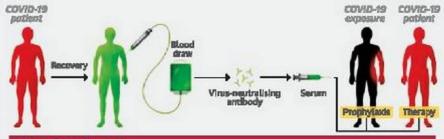
#### 2) Convalescent Plasma Therapy

- It is a therapy in which antibodies are taken from the blood of a person who has recovered from a virus and transfuses those antibodies into a person sick with that virus, and has long been used as a way to help kickstart a person's immune system.
- It has been approved as an experimental treatment in clinical trials and for critically ill COVID-19 patients without other treatment options in some of the countries.

#### Promising treatment

What is convalescent plasma?

Convalescent plasma therapy involves transfusing certain components from the blood of people who have recovered from a virus attack into people who are very sick with the virus or people who are at high risk of getting the virus.



#### How does it work

- As people fight the virus, they produce antibodies that attack it.
   Those antibodies, proteins that are secreted by immune cells known as B lymphocytes, are found in plasma or the liquid part of blood that helps the blood to clot and supports immunity.
- Once a person recovers, that person has developed antibodies that will stay in their blood waiting to fight the same virus. Those antibodies, when injected into another person with the disease, recognise the virus as something to attack.
- In the case of coronavirus disease, scientists say antibodies attack the spikes on the outside of the virus, blocking the virus from penetrating human cells.

#### **Earlier trials**

- This is not the first time that plasma from recovered patients has been used to treat people infected with certain viruses for which drugs are not available.
- When Ebola struck Guinea, Sierra Leone, and Liberia in 2014, the World Health Organization prioritised the evaluation of treatment with convalescent plasma derived from patients who have recovered from the disease.
- Treatment with convalescent plasma is a classical, time-tested method.
- It has been used against measles, chickenpox, and rabies.

#### Selection of donors for convalescent plasma:

 Donors for convalescent plasma must have received a lab-confirmed positive test for the coronavirus or test positive for COVID-19 antibodies after recovery and be

- symptom-free for at least 28 days before donating.
- Someone who initially tests positive and then has a second test for the coronavirus that comes back negative can donate after being symptom-free for 14 days.
- Plasma recipients must be of the same blood type group as the donor.
- Blood would be screened for other infections such as HIV and malaria before being taken for transfusion

#### Why in the news?

• Kerala and Tamil Nadu's Health Department has won Indian Council of Medical Research's (ICMR) approval for the clinical protocol exploring the feasibility of convalescent plasma transfusion, which may be administered to severe COVID-19 patients.

#### **ENVIRONMENT**

#### 1) Koundinya Wildlife Sanctuary Why in the news?

• An elephant fallen in the well was rescued in the Koundinya Wildlife Sanctuary.

#### **About:**



- Koundinya Wildlife Sanctuary is essentially an elephant reserve, which was established in 1990 to accommodate elephants that had migrated back to this area from places around after 200 years of living away.
- It is located 50 km away from Chittoor, Andhra pradesh.
- The animals found here are Indian Elephant, Wild Boar, Sloth Bear, Cheetal, Slender Loris, Chowsingha, Sambar, Tortoise, Porcupine, Jungle Cat, Jungle Fowl, Jackal, Starred Tortoise, Panther, etc. The Sanctuary is also home to the vulnerable yellow-throated bulbul.
- The sanctuary has dry deciduous forests with thorny shrubs interspersed with trees. These forests have small ponds, tanks and the Kaundinya and Kaigal tributaries of Palar River.

#### 2) Fall Armyworm attack

#### Why in the news?

 Severe fall Armyworm attack affected Assam crops.

What is it?

- Fall Armyworm (FAW), Spodoptera frugiperda, is a dangerous transboundary insect with a high potential to spread rapidly due to its natural distribution capacity and opportunities presented by international trade.
- The armyworm caterpillar, the larval stage of several species of moths, has a voracious appetite. Entomologists say it feeds on more than 80 species of plants.
- FAW represents a real threat to food security and livelihoods of millions of smallholder farmers.



#### 3) National Board for Wildlife About:

- The National Board for Wildlife came into existence with the Gazette Notification dated 22nd September 2003 under the Wildlife (Protection) Act, 1972.
- The National Board for Wildlife has 47 members with the **Prime Minister** in the Chair.
- The Minister in charge of the Ministry of Environment & Forests in the Central Government is the Vice-Chairperson.
- The Additional Director General of Forests (WL) & Director, Wildlife Preservation is the Member-Secretary to the Board.
- The Board is responsible for promotion of conservation and development of wildlife and forests. No alteration of boundaries in national parks and wildlife sanctuaries can be done without approval of the NBWL.

#### **Functions of the National Board**

 Framing policies to the advising the Central Government and the State Governments on the ways and means of

- promoting wildlife conservation and effectively controlling poaching and illegal trade of wildlife and its products;
- Making recommendations on the setting up of and management of national parks, sanctuaries and other protected areas and on matters relating to restriction of activities in those areas;
- Carrying out or causing to be carried out impact assessment of various projects and activities on wildlife or its habitat;
- Reviewing from the time to time, the progress in the field or wildlife conservation in the country and suggesting measures for improvement thereto; and
- Preparing and publishing a status report at least once in two years in wildlife in the country.

#### Why in the news?

 The Standing committee of the National Board of Wildlife had their first ever video-conferencing meet.

#### 4) Tiger gets infected with CORONA

#### What's in the news?

- The death of a 10-year-old ailing male tiger, in the Pench Tiger Reserve (PTR) the country's most munificent reserve that succumbed to a 'respiratory illness'.
- This is connected to the news of a fouryear-old female Malayan tiger at the Bronx Zoo USA being tested positive for the coronavirus. This has cautioned authorities of India to protect more than 3000 tigers of India.

#### **Pench Tiger Reserve**



- Pench Tiger Reserve, Seoni (Madhya Pradesh) is one of the major Protected Areas of Satpura-Maikal ranges of the Central Highlands, which is among the most important tiger habitats of the world.
- Pench Tiger is among the sites notified as IMPORTANT BIRD AREAS of India. This is one of the highest herbivores densities in India.
- Pench Tiger Reserve comprises the Indira Priyadarshini Pench National Park, the Pench Mowgli Sanctuary and a buffer.
- The river Pench, which splits the National Park into two, forms the lifeline of the Park. To the south of the tiger reserve lies the Pench Tiger Reserve of Maharashtra, the first inter-state project tiger area of the country.
- Mowgli, the wolf child, was caught by Lieut Moor in the Jungles of Seoni in the year 1831 near the village Sant Vavadi, situated 10 kms away from Seoni. This became the inspiration for the book 'Jungle Book' by Rudyard Kipling.

#### **ECONOMY**

#### 1) Industrial output grows 4.5% in Feb.

#### **About IIP**

- Index of Industrial Production (IIP) details out the growth of various sectors in an economy such as mineral mining, electricity and manufacturing.
- It is compiled and published every month by the Central Statistics Office (CSO) of the Ministry of Statistics and Programme Implementation.
- The current base year is **2011-2012**.
- The Eight Core Industries (Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity) comprise 40.27 per cent of the weight of items included in the IIP.

#### Why in News?

- India's factory output measured by the Index of Industrial Production accelerated 4.5% in February in comparison to the previous year.
- The growth came on the back of higher output in mining, electricity and manufacturing sectors. February saw the second straight month of improved industrial output after a contraction in December.
- However, the IIP is likely to plunge drastically again for March, due to the lockdown caused by the COVID-19 pandemic, which has resulted in a halt in most business.

#### 2) Post-pandemic job sector What are 'sunrise' sectors?

- A sunrise industry is a new business or business sector showing potential for substantial and rapid growth.
- As a sunrise industry develops, it may transition to the maturity stage and then to the sunset stage.

#### **About gig economy**

- A gig economy is a free market system in which temporary positions are common and organizations hire independent workers for short-term commitments.
- Examples of gig employees in the workforce could include freelancers, independent contractors, project-based workers and temporary or part-time hires.

- The gig economy can benefit workers, businesses, and consumers by making work more adaptable to the needs of the moment and demand for flexible lifestyles.
- At the same time, the gig economy can have downsides as the workers are generally not entitled to the same benefits as the regular employees.

#### Why in News?

- Analysts opined that the post-COVID-19 period will see a turnaround in the job market where the gig economy will be institutionalised and new 'sunrise' sectors such as pharma, medical equipment companies, and the digital and e-commerce segments will dominate the job market.
- Experts predict that gaming, over-the-top (OTT) services, work-from-home virtual team, project management software, ecommerce and edutech segments would see a steady increase in business.
- Virtual medical tourism could also take off to provide psychological aid and faster therapeutic healing to patients.

#### 3) Inflation may drop to 2.4% in FY21: RBI

#### About CPI

- Consumer Price Index (CPI) is an index which measures the weighted average of prices of a basket of consumer goods and services such as transportation, food and medical care.
- It is calculated by measuring price changes for each item in the predetermined basket of goods & services and averaging them.
- It is released by the Central Statistical Organisation (CSO) under the Ministry of Statistics and Program Implementation.
- The base year used to calculate CPI in India is **2011-2012**.

#### Why in News?

- The RBI in its monetary policy report said that the CPI-based inflation, which had stayed elevated in the last few months, is expected to soften during the course of the financial year.
- CPI inflation is tentatively projected to ease from 4.8% in Q1 of 2020-21 to 4.4% in Q2, 2.7% in Q3 and 2.4% in Q4.
- Under the flexible inflation targeting (FIT) framework, the RBI targets to contain CPI-

based inflation within 4 percent with a band of (+/-) 2 percent.

#### 4) States told to curb black marketing

#### **About ECA**

- The Essential Commodities Act (ECA) was enacted by the Central Government in 1955 to control and regulate trade and prices of commodities declared essential under the Act.
- The Act empowers the Central and state governments concurrently to control production, supply and distribution of certain commodities in view of rising prices and to prevent Black marketing.
- The measures that can be taken under the provisions of the Act include licensing, distribution and imposing stock limits. The governments also have the power to fix price limits, and selling the particular

- commodities above the limit will attract penalties.
- Some of the major commodities that are covered under the act:
- 1) Petroleum and its products
- 2) Food stuff, including edible oil and seeds, vanaspati, pulses, sugarcane
- 3) Drugs- prices of essential drugs
- 4) Fertilisers

#### Why in News?

- Union Home Secretary has written to all State Chief Secretaries to ensure the availability of essential goods by invoking the Essential Commodities Act, 1955.
- There have been reports of loss of production due to various factors, especially reduction in labour supply. In this situation, there is a possibility of inventory building/hoarding and black marketing, profiteering, and speculative trading, resulting in price rise of essential goods.

#### INTERNATIONAL RELATIONS

#### 1) EU strikes €500bn relief deal About European Union

- The European Union (EU) is a unique economic and political union between 27 EU countries.
- The United Kingdom, which had been a founding member of the EU, left the organization in 2020.
- The EU was created by the Maastricht Treaty, which entered into force on November 1, 1993. The treaty was designed to enhance European political and economic integration by creating a single currency (the euro), a unified foreign and security policy, and common citizenship rights and by advancing cooperation in the areas of immigration, asylum, and judicial affairs.
- Additionally, the **Treaty of Lisbon**, enacted in 2009, gave the EU more broad powers that included being authorized to sign international treaties, increase border patrol, and other security and enforcement provisions.
- EU's headquarters is currently located in Brussels, Belgium.
- Currently, the euro is the official currency of 19 out of 27 EU member countries which together constitute the Eurozone, officially called the euro area.



#### Why in News?

 EU member states agreed to a 500 billion euro emergency plan to tackle the COVID-19 pandemic.

#### 2) U.S.-Taliban Peace deal

#### **Background**

- In March 2020, the U.S. signed a peace deal with the Taliban which represented a step towards ending the 18-year-war in Afghanistan.
- The deal was signed in the Qatari capital Doha, which is the Taliban's political headquarters.
- The US-Taliban agreement calls for a phased withdrawal of American and coalition forces and also requires the Taliban to initiate a formal dialogue with the Afghan government and other political and civil society groups on a permanent nationwide ceasefire and power-sharing in post-war Afghanistan.
- A full withdrawal of all US and coalition forces would occur within 14 months of this deal getting signed, if Taliban fulfil their end of the deal.
- Up to 5,000 Taliban prisoners will be released in a phased manner.
- The United States will work with the UN Security Council to remove Taliban members from sanctions by May 2020.

#### Why in News?

 The Afghan government has released 100 Taliban prisoners as a part of the peace process.

#### SCIENCE AND TECHNOLOGY

#### 1) TCS uses AI for drug discovery What Is Artificial Intelligence (AI)?

- Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions.
- The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

#### Why in News?

- Scientists from TCS Innovation Labs in Hyderabad are harnessing the power of artificial intelligence (AI) to identify new molecules which might have the potential to target specific parts of the SARS-CoV-2.
- Using new methods, they have identified 31 candidate small molecules, which may serve as inhibitors of the chymotrypsin-like protease, one of the key drug targets in the fight against COVID-19.

#### **Target proteins**

- The genome of the novel coronavirus codes for several proteins that have crucial roles in entry of the virus into the host cell, its replication, assembly and host-pathogen interactions.
- Some of these proteins that help the virus perform its functions are common targets for drug developers.
- Among these drug targets are the spike protein, which helps the virus attach itself to the host cell and enter it, and viral proteases which help it replicate.

#### Role of viral protease

- The viral RNA (SARS-CoV-2) synthesises two long polyproteins when it infects human cells via a human cell surface protein.
- The role of the protease protein is to cut the polyproteins to individual proteins, so that new viruses can be assembled.
- This is important for its replication and survival.
- The chymotrypsin-like protease or the main protease primarily does the function of cleaving the polyprotein into proteins and the papain-like protease also aids in this process.

• The former was chosen as the drug target by the group for their research.

#### 2) Global Initiative on Sharing All Influenza Data (GISAID)

#### **About GISAID**

- The GISAID platform was launched on the occasion of the Sixty-first World Health Assembly (of WHO) in May 2008.
- The GISAID Initiative promotes the international sharing of all influenza virus sequences, related clinical and epidemiological data associated with human viruses, and geographical as well as species-specific data associated with avian and other animal viruses.
- The data help researchers understand how the viruses evolve, spread and potentially become pandemics.
- The Initiative ensures that **open access** to data in GISAID is provided **free-of-charge** and to everyone, provided individuals identify themselves and agree to uphold the GISAID sharing mechanism governed through its **Database Access Agreement**.

#### Why in News?

- As on April 7, India has shared nine whole genome sequences of the novel coronavirus (SARS-CoV-2) with the GISAID.
- All the sequences have been shared by the Pune-based National Institute of Virology.

#### 3) Interpol warns of cyberattacks on hospitals

#### What is Ransomware?

- Ransomware is a type of malicious software, or malware, designed to deny access to a computer system or data until a ransom is paid.
- Ransomware typically spreads through phishing emails or by unknowingly visiting an infected website.
- Ransomware can be devastating to an individual or an organization.
- Anyone with important data stored on their computer or network is at risk, including government or law enforcement agencies and healthcare systems or other critical infrastructure entities.

- Recovery can be a difficult process that may require the services of a reputable data recovery specialist, and some victims pay to recover their files.
- However, there is no guarantee that individuals will recover their files if they pay the ransom.
- Examples: Reveton (2012), CryptoLocker (2013), Locky (2016), WannaCry and Petya (2017), Sodinokibi (2019)

#### **Types of ransomware**

- Ransomware attacks can be deployed in different forms. Some variants may be more harmful than others, but they all have one thing in common: a ransom.
- Crypto malware encrypts files, folders, and hard-drives. Example- 2017
   WannaCry. Victims were asked to pay ransom in Bitcoin to retrieve their data.
- Lockers completely lock you out of your computer or devices, making it impossible to access any of your files or applications. This type of ransomware is most often Android-based.
- Scareware fake software that acts like an antivirus or a cleaning tool. Scareware often claims to have found issues on your computer, demanding money to resolve the problems.

- Doxware Commonly referred to as leakware or extortionware, doxware threatens to publish your stolen information online if you don't pay the ransom.
- RaaS ("Ransomware as a service") RaaS is a type of malware hosted anonymously by a hacker. These cybercriminals handle everything from distributing the ransomware and collecting payments to managing decryptors software that restores data access in exchange for their cut of the ransom.
- Ransomware on mobile devices Mobile ransomware often is delivered via a malicious app, which leaves a message on your device that says it has been locked due to illegal activity.

#### Why in News?

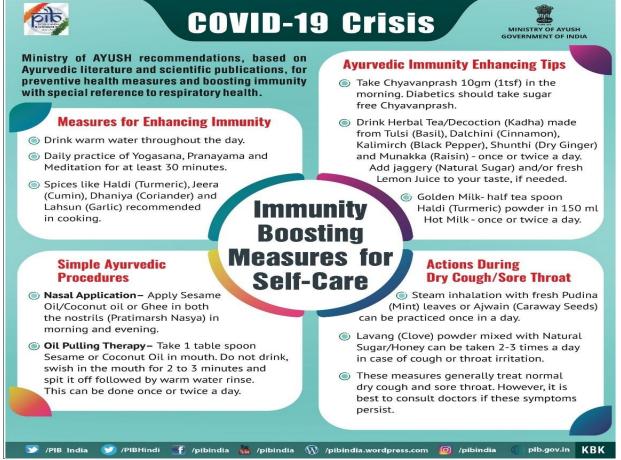
- In an alert sent to 194 nations, including India, Interpol said organisations at the forefront of the global response to the COVID-19 outbreak had also become targets of ransomware attacks.
- The agency's **Cybercrime Threat Response Team** had detected an increase in the number of attempted ransomware attacks against key organisations and infrastructure engaged in the virus response.

#### PIB ANAYSIS

#### 1) AYUSH reiterates immunity boosting measures

#### Why in News?

 The Ministry of AYUSH had issued an advisory on various immunity enhancing steps from the time tested approaches of Ayurveda. The advisory is reiterated again in these testing times to support the efforts of all as a measure towards enhancing one's immunity.



#### 2) Aarogya Setu App Why in News?

The Government of India launched a mobile app developed in public-private partnership to bring the people of India together in a resolute fight against COVID-19.It has been launched by the Ministry of Electronics and Information.

#### Features:

- The App, called 'AarogyaSetu' joins Digital India for the health and well-being of every Indian. It will enable people to assess themselves the risk for their catching the Corona Virus infection.
- It will calculate this based on their interaction with others, using cutting edge Bluetooth technology, algorithms and artificial intelligence.

- Once installed in a smart phone through an easy and user-friendly process, the app detects other devices with AarogyaSetu installed that come in the proximity of that phone.
- The app can then calculate the risk of infection based on sophisticated parameters if any of these contacts is tested positive.
- The App will help the Government take necessary timely steps for assessing risk of spread of COVID-19 infection, and ensuring isolation where required.
- The App's design ensures privacy-first. The personal data collected by the App is encrypted using state-of-the-art technology and stays secure on the phone till it is

- needed for facilitating medical intervention.
- Available in 11 languages, the App is ready for pan-India use from day-1 and has highly scalable architecture.

#### **Significance:**

 This app is a unique example of the nation's young talent coming together and pooling resources and efforts to respond to a global crisis. It is at once a bridge between public and private sectors, digital technology and health services delivery and the potential of young India with a disease-free and healthy future of the nation.

## News in Depth

#### AIR NEWS

#### 1) e-Courts

#### Why in News?

The Supreme Court today passed a slew of directions for all courts across the country to extensively use video-conferencing for judicial proceedings. It said that a congregation of lawyers and litigants must be suspended to maintain social distancing amid coronavirus pandemic.

#### **News in Detail:**

- The Government of India had initiated the second phase of the eCourts project as one of the National e-Governance projects in 2015.
- The eCourts project has made significant progress under the guidance of the e-Committee of Supreme Court of India in computerizing district and subordinate courts of the country through installation of case information software, hardware and local area network in courts.
- It is in line with the Digital India Programme of the Government of India.

#### 2) SAMADHAN Challenge

#### Why in News?

The Innovation Cell of the HRD Ministry and All India Council for Technical Education (AICTE) in collaboration with Forge and InnovatioCuris launched a mega online challenge - SAMADHAN - to test the ability of students to innovate.

#### **News in Detail:**

- The students participating in this challenge will search and develop such measures that can be made available to the government agencies, health services, hospitals and other services for quick solutions to the Coronavirus epidemic and other such calamities.
- Apart from this, through this "Samadhan" challenge, work will be done to make citizens aware, to motivate them, to face any challenge, to prevent any crisis and to

help people get livelihood.



#### 3) Measures by Textile Ministry Why in News?

 The Textiles Ministry has taken measures to protect the produce of wheat farmers by providing them alternate packaging bags during the lockdown period arising out of COVID-19 pandemic.

#### **News in Detail:**

- It has extended the limit for High-Density PolyEthylene/Polypropylene bags from 1.80 lakh bales to 2.62 lakh to tide over the crisis of packaging of foodgrains due to closure of jute mills due to lockdown.
- This move has been taken mainly to protect the interest of wheat farmers as grains are likely to be ready for packing mid of this month onwards.
- However, whenever the production of jute bags in the jute mills resumes after the

- lockdown period is over, priority will be given to the jute bags for packaging of food grains.
- Government is committed to protect the interest of the jute farmers and workers through provisions of the Jute Packaging Materials Act (JPM), 1987 and it provides about 100 percent reservation for packaging of foodgrains in jute bags.

#### 4) Small Industries Development Bank of India - SIDBI

#### Why in News?

The Small Industries Development Bank of India - SIDBI announced that the SIDBI Assistance to Facilitate Emergency response against Coronavirus (SAFE PLUS) will be offered collateral free and disbursed within 48 hours.

#### **News in Detail:**

- The loans will be offered at an interest rate of five per cent. the limit of SAFE loans has been enhanced from 50 lakh rupees to two crore rupees.
- The scheme was launched to provide financial assistance to MSMEs engaged in manufacturing of hand sanitizers, masks, gloves, head gear, bodysuits, shoe-covers, ventilators and goggles used in dealing with COVID-19.

#### **About SIDBI:**

- Small Industries Development Bank of India (SIDBI) set up in 1990 under an Act of Indian Parliament, acts as the Principal Financial Institution for Financing and Development of the Micro, Small and Medium Enterprise (MSME) sector.
- It is Headquartered in Lucknow, Uttar Pradesh. SIDBI aims to facilitate and strengthen credit flow to MSMEs and

- address both financial and developmental gaps in the MSME eco-system across the country.
- It co-ordinates functions of institutions engaged in similar activities.

#### 5) Integrated Government Online Training (iGOT) e-learning Platform

#### Why in News?

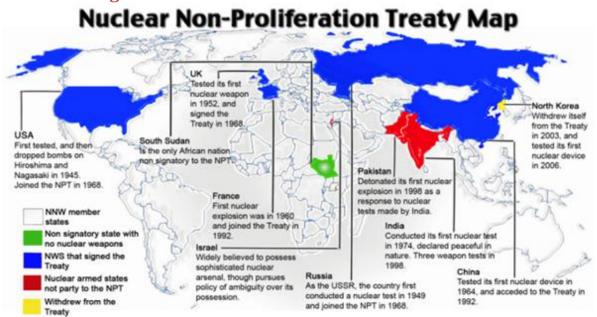
■ The Department of Personnel and Training has announced the launch of a learning platform (https://igot.gov.in) to combat COVID 19 for all front-line workers to equip them with the training and updates in coping with Pandemic.

#### **News in Detail:**

- The target group is Doctors, Nurses, Central & State Govt. Officers, Civil Defence Officials, various Police Organisations, National Cadet Corps (NCC), Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme (NSS), Indian Red Cross Society (IRCS), Bharat Scouts & Guides (BSG) and other volunteers.
- The platform delivers curated, role-specific content, to each learner at his place of work or home.
- To begin with nine courses on iGOT have been launched on topics like Basics of COVID. Care and Ventilation ICU Management, Clinical Management, Infection Prevention through PPE. Quarantine and Isolation, Laboratory Sample Collection and Testing etc.

#### THE HINDU EDITORIALS

#### 1) NPT@50: The genesis of a flawed bargain



#### What is the context?

- Non-Proliferation of Nuclear Weapons (NPT) which is a legal instrument treated as the cornerstone of the global nuclear non-proliferation regime marked the 50th anniversary of the entry-into-force of the Treaty on 5th March, 2020.
- With many accomplishments and weathering many crises the NPT has had a roller-coaster ride.

#### What did the treaty institutionalise?

- It de-legitimised 'proliferation' (production and transfer) of nuclear weapons, fissile materials and related technology.
- This legitimation is by the non-nuclear weapon states (NNWS) while the recognised five nuclear weapon states (NWS) — namely the US, Russia, the UK, France and China—have continued to expand their respective arsenals without any constraints.

#### What are the associated issues?

- It is largely seen as a cold war era instrument that has failed to fulfil the objective of creating a pathway towards a credible disarmament process.
- With no reference to a test ban or to the freezing of production of either fissile materials or nuclear weapons the treaty

- proposes no tangible disarmament roadmap.
- It also omitted provisions for reductions and elimination.
- It allowed sustenance and expansion of arsenals by stipulating January 1, 1967 as the cut-off date to determine the NWS.
- The treaty is said to be discriminatory as it focuses on preventing only horizontal proliferation while there is no limit for vertical proliferation.
- Articles I & II of the treaty (prohibition of possessing nuclear weapons) did not prohibit nuclear weapons on allied territory of NWS.
- Under International Atomic Energy Agency (IAEA) protocols of nuclear safety, the NWS was allowed to maintain 'voluntary' safeguards while the rest were subjected to comprehensive safeguards, which seemed intrusive and discriminatory.

#### What do we understand by Peaceful Nuclear explosions?

- They are nuclear explosions conducted for non-military purposes.
- The Indian representatives consistently termed the US offer to prohibit PNE rights and instead offered to provide the technology on a commercial basis as

- 'atomic apartheid' and 'commercial supermonopoly,'
- India insisted that PNE rights need to be integral to all peaceful uses of nuclear energy.
- In 1974 in opposition to this discriminatory principle, India conducted its first PNE.

#### What is the way forward?

- In order to ensure a sustainable and dependable domestic energy supply, a growing number of countries are pursuing nuclear energy and many countries wish to be energy-independent.
- Reconciling states' desire for energy independence with their desire to both reduce the intrusiveness of <u>IAEA</u> safeguards and diminish the possibility of proliferation.
- More concrete actions need to be taken to reduce the role of nuclear weapons in

- national security doctrines with reducing alert levels and increasing transparency.
- More regions in the world v should enter into an arrangement of establishing Nuclear-weapon-free zones.
- Treaty on the Prohibition of Nuclear Weapons could be a right step towards nuclear disarmament.

#### Conclusion

- The treaty faces challenges of non compliance, violations and defiance by few state parties in the post-Cold war era.
- There have been raised concerns on the limitations of the treaty to address the challenges thrown up by the new strategic milieu with the emergence of non-state actors with declared intent to access weapons of mass destruction and the detection of a global nuclear black-market.

#### 2) Reforming Indian Agriculture

# National Land Reform Policy In July 2013 the ministry of rural development put forth a draft of a new National Land Reform Policy. The draft national land reform policy, released last month, has five goals: •Distribute land to all rural landless poor •Restore land unjustly taken from vulnerable communities such as the Dalits (untouchables) and Tribals •Protect the land of the Dalits and Tribals •Liberalize leasing laws •Improve land rights of women

#### What is the context?

 With multiple mandates like production imperative, consumer imperative and farmer welfare imperative in India's agriculture policies have resulted in costly, contradictory policies whose costs have been increasingly borne by farmers, the government purse, and the natural environment.

#### What is the background?

 In India's socio-economic order, Agriculture has played a significant role.  Considering that the government has set an agenda of doubling farmer incomes by raising productivity and cutting down costs, and going for diversification towards high value agriculture.

#### How is Agriculture significant in India?

- It is the highest employment provider both directly as well as indirectly.
- It plays a key role in addressing India's malnutrition problem and provides the population of the country with food security.
- It can augment India's economic growth by adding at least a percentage point to GDP.
- It increases exports and helps to improve India's trade deficit.
- With rise in agricultural incomes there is proportional economic transformation.
- With mounting scarcity of land, environmental degradation, and climate change, agricultural production assumes more significance.

#### What are the associated issues?

- Subsidies are inflicting significant damage on different aspects of the economy.
- There has been massive overuse of nitrogenous fertilisers which has led to damaged soils and pollution of local water bodies due to subsidised Urea.
- There has been an alarming overuse of groundwater which has severely damaged the health of power distribution companies due to power subsidies.
- There have been negative spillover effects on the economy due to credit subsidies like loan waivers which have weakened the Indian Banking Systems.
- With the government imposing restrictions on exports in order to protect Indian consumers, the farmers are hindered to

- take advantage of high prices in foreign markets.
- Indian farmers can only sell their produce at Farmgate or local market (haat) to village aggregators, APMC mandis and to the government at the minimum support price (MSP).
- Land fragmentation means that many Indian farmers are farming plots of such small sizes that even doubling their incomes would leave them with meagre earnings.

#### What is the way forward?

- Charging optimum cost pricing for the fertilisers, power, agri credit and canal water fees.
- Investments in R&D, irrigation, marketing infrastructure, involving Farmer Producer Organisations for building value chains.
- Linking farms to organised retail, food processing and export markets.
- Reduce leakages and pilferages through Direct income transfers.
- Promoting the usage of JAM trinity.
- Freeing up land lease markets.
- Rationalising electricity subsidy.
- Addressing the composition of its agriculture export basket.

#### Conclusion

- Farmers' income can improve substantially if they are able to capture a greater share in the supply chain from farm gate to consumer and the most sustainable way to augment farmers' real incomes over the long term is through investments in developing infrastructure.
- 3) The idea of a University in India

#### Regulatory Framework Of Higher Education In India



- · National Board of Accreditation
- National Assessment and Accreditation Council

#### What is the context?

 The universities of Calcutta, Bombay and Madras were all established in India in 1857 but these universities did not emerge to keep pace with the growth of knowledge but were objectified to fulfill the interests handpicked by the colonial lords.

#### What is the background?

- These universities were based on the idea of state welfarism and sought to grant equal opportunities to its citizens in accessing national resources.
- The university education was made not only accessible but was also converted into a mass product.
- With the LPG reforms in 1990-91, the massification of higher education went on to increase along with enrolments.

#### What is the status of higher education in India?

- The national enrolment ratio of the elite level is at 15%.
- The NER for the mass level ranges between 15-50%.
- In 2018-19, the Higher education in India stands out to be in a stage of initial massification with 26.3% Gross Enrolment Ratio (GER).
- Of the 903 universities, 37.98% of them are privately managed as per the 2018 All India Survey of Higher Education data.
- The Department of Higher Education says that the GER for the male population is 26.3% and for the female population it is 25.4%.

#### How does massification of Higher Education happen?

- There needs to be changing policy perspectives.
- There needs to be democratisation of higher education.
- There needs to be strong voices from the civil society.
- Endorsing accessibility and spread of higher education should be done.

#### What are the associated issues?

- The higher education institutions have been primarily visualised as an applicationoriented enterprise as per the National Knowledge Commission (NKC) Report (2009).
- These institutions are not even to inculcate scientific and innovation-led outlook amongst the students.
- They are focussed on input and rote learning.

- They neglect skilling which includes critical thinking, analytical reasoning, problemsolving and collaborative working.
- They suffer from issues like lack of adequate skills and jobs leading to underemployment.

#### What is the way forward?

- Boost India's research capacity.
- Substantially increase expenditures on public education.
- Invite top ranked institutions to operate in India
- Evolution of multi disciplinary institutions.
- Focussing on market based skill development and curriculum methods.
- Adopting a more liberal arts-oriented form of undergraduate education.
- Improving faculty autonomy.
- Developing a robust and merit-based tenure track, promotion and salary structure for the faculty.
- Increasing institutional autonomy.
- Establishment of a National Research Foundation.

#### **Conclusion**

The draft education policy seems very challenging and includes a wide range of proposals like moving away from rote learning in curriculum and pedagogy etc and proper implementation of it would be the need of the hour.

#### 4) Facts fight fear

#### What is the context?

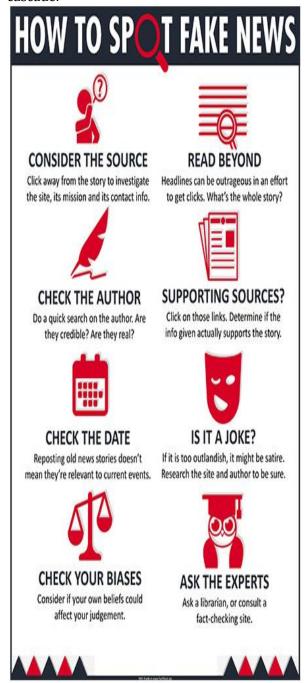
- The Covid-19 pandemic has created a worrisome situation causing social and economic disruptions all around the globe.
- The ease at which fake news has been spreading around it has made WHO admit that humanity is fighting two foes i.e., a pandemic and an infodemic.

#### What do we understand by Infodemic?

- It is an overabundance of information that makes it difficult for people to identify truthful and trustworthy sources from false or misleading ones.
- A barrage of information on the virus has deluged the traditional and social media space and the recent exodus of migrant labourers from NCR is an example of this.
- The social media has been acting as a fertile ground for dangerous rumour mongering and can act as an indispensable source of vital information.

#### What are the negative sides of the issue?

- The online platforms have no filtering mechanisms for negating any authenticity.
- They have the ability to amplify a message through endorsements and forwards.
- It can reach a potential audience without needing substantial resources or access to expensive media technology.
- It provides the tools for an information cascade.



pandemic like the PM-CARES Fund.
 Social media is used as a tool to collaborate by the scientists, researchers etc.

It gave birth to a fair share of online

fundraisers in the backdrop of the Covid-19

- The coronavirus genome was openly published early on during the outbreak, allowing thousands of researchers to brainstorm possible solutions, cures and
- It helps in displaying strength and solidarity at times like the PM 's call for lighting lamps or clapping at 5 pm.
- It helps in spreading preventive steps that one can take to fight Covid-19.

#### What is the way forward?

explanations.

- Verifying the authentic source of fact.
- Double checking with some fact checking website.
- Asking some expert opinion on that particular issue.
- Applying rational thinking while going through forwarded news on social media.
- Applying these ideas before sharing the same.

#### **Conclusion**

- The Supreme Court of India v issued a directive that a daily bulletin system with regard to the COVID-19 pandemic be made active by the government through all media avenues, including social media and forums to clear people's doubts and to check fake news.
- These websites are actively fighting this misinformation and fear mongering and with a welcome change they have taken the lead in busting the myths about coronavirus.

What are the positive sides of the issue?

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