

GOVERNANCE**National Cancer Awareness Day**

National Cancer Awareness Day is observed on 7th November each year in the country to spread awareness about the need of early cancer detection to fight the deadly disease timely.

Key Points**Cancer:**

- It is a large group of diseases that can start in almost any organ or tissue of the body when abnormal cells grow uncontrollably, go beyond their usual boundaries to invade adjoining parts of the body and/or spread to other organs. The latter process is called metastasizing and is a major cause of death from cancer.
- A neoplasm and malignant tumor are other common names for cancer.
- Lung, prostate, colorectal, stomach and liver cancer are the most common types of cancer in men, while breast, colorectal, lung, cervical and thyroid cancer are the most common among women.

Cancer Burden:

- Cancer remains as one of the leading causes of adult illness and death due to chronic and Non-Communicable Diseases (NCD) world-over including in India.
- According to the World Health Organisation (WHO), cancer is the second leading cause of death globally and in 2018, there were approximately 18 million cases globally, of which 1.5 million were in India alone.
- There were around 0.8 million cancer deaths in India in 2018 against 9.5 million globally. The numbers of new cases are estimated to double in India by 2040.
- Deaths due to Cancer can be Prevented: Between 30% and 50% of cancer deaths could be prevented by modifying or avoiding the key risk factors. Key risk factors include tobacco use, alcohol use, diet, exposure to ultraviolet radiation, pollution, chronic infections, etc.
- Treatment: Options include surgery, cancer medicines and/or radiotherapy, administered alone or in combination.
- Palliative care, which focuses on improving the quality of life of patients and their families, is an essential component of cancer care.
- Global Initiative: The International Agency for Research on Cancer (IARC) was created in 1965 by a resolution of the World Health Assembly, as the specialized cancer agency of the World Health Organization.
- World Cancer Day is observed on 4th February every year.

Indian Initiatives:

- National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) is being implemented under National Health Mission (NHM) for up-to the district level activities.
- Under the ambit of Ayushman Bharat, Pradhan Mantri Jan Arogya Yojana (PM-JAY) is being implemented to reduce the financial burden for poor and vulnerable groups arising out of catastrophic hospital episodes and to provide access to quality health services.
- National Cancer Grid (NCG) is a network of major cancer centers, research institutes, patient groups and charitable institutions across India with the mandate of establishing uniform standards of patient care for prevention, diagnosis, and treatment of cancer, providing specialized training and education in oncology (study of cancer) and facilitating collaborative basic, translational and clinical research in cancer. It was formed in August 2012.
- National Pharmaceutical Pricing Authority (NPPA) had launched a Pilot on Trade Margin Rationalisation for 42 anti cancer drugs in february 2020 as a step towards making healthcare more affordable for the suffering patients. This led to reduction in prices of drugs.

INDIAN ECONOMY**WhatsApp UPI and NPCI Regulations**

- Recently, WhatsApp (a unit of Facebook) has introduced payments services in India following approval by the National Payments Corporation of India (NPCI).
- The NPCI approval also follows another recent direction imposing a cap of 30% of the total volume of transactions processed in Unified Payments Interface (UPI), applicable to all third-party app providers, effective from 1st January 2021.

- UPI is a single platform that merges various banking services and features under one umbrella and turns smartphones into a virtual debit card, allowing real-time bank-to-bank payments to be made using a mobile number or virtual payment address (UPI ID).

Key Points**WhatsApp UPI in India:**

- People can send money on WhatsApp to anyone using a UPI supported app.
- India is one of the biggest markets for WhatsApp, which first started testing its UPI-based payments system in 2018 and would now compete with existing players such as Paytm, Google Pay, Amazon Pay and PhonePe.
- It is working with five leading banks in India viz. ICICI Bank, HDFC Bank, Axis Bank, the State Bank of India, and Jio Payments Bank.
- However, not all users in India would be able to access payment features because NPCI had mandated expansion of WhatsApp's UPI user base in a graded manner starting with a maximum registered user base of 20 million.

Imposition of 30% Cap:

- The guidelines stipulate any entity not exceeding 30% of the total transaction volume to be in compliance. However, entities exceeding the said market share have been given time till 2023 to comply.
- The cap will be calculated on the basis of total volume of transactions processed in UPI during the preceding three months on a rolling basis.
- Seeing the recent growth in UPI transaction volumes, NPCI analysed the risks in the UPI ecosystem and introduced the cap.
- The idea for a 30% cap on UPI transaction volumes was first brought up in a meeting of the NPCI's Steering Committee on UPI in 2019 after concerns of rising dominance with non-bank third-party app providers were raised.
- As of October 2019, Google Pay and PhonePe together had around 80% of transaction volumes in UPI on their platforms.
- The NPCI is yet to issue the risk assessment of the UPI ecosystem on the basis of which the new norms were brought in and the Standard Operating Procedure (SOP) for the newly introduced restrictions on transaction volumes.
- Another reason is banks' concerns about the sudden rise in transaction volumes and the subsequent load on their systems, especially after the introduction of WhatsApp UPI.
- The move could disincentivize platforms from on-boarding customers of a lower ticket size and in effect, could prevent the efforts to accelerate digital payments.

National Payments Corporation of India

- It is an umbrella organisation for all retail payments systems in India.
- It was set up with the guidance and support of the Reserve Bank of India (RBI) and Indian Banks' Association (IBA).

Objectives:

- To consolidate and integrate the existing multiple systems into a nation-wide uniform and standard business process for all retail payment systems.
- To facilitate an affordable payment mechanism to benefit the common man across the country and propel financial inclusion.

Way Forward

- Digital payments in India is still in its development phase and any interventions at this point should be made with a view to accelerate consumer choice and innovation. A choice based and open model is key to drive this momentum.
- The 30% cap has implications for hundreds of millions of users who use UPI for their daily payments and it could impact the further adoption of UPI and the end goal of financial inclusion.

SCIENCE AND TECHNOLOGY**Radio Burst in Milky Way**

Recently, the National Aeronautics and Space Administration (NASA) has spotted fast Radio Burst for the first time in the Milky Way.

Key Points**Fast Radio Burst:**

- FRB are bright bursts of radio waves (radio waves can be produced by astronomical objects with changing magnetic fields) whose durations lie in the millisecond-scale, because of which it is difficult to detect them and determine their position in the sky.
- It was first discovered in 2007.

Discovery of FRB in Milky Way:

- NASA observed a mix of X-ray and radio signals never observed before in the Milky Way.
- The X-ray portion of the simultaneous bursts was detected by several satellites, including NASA's Wind mission.
- NASA's Wind is a spin stabilized spacecraft launched on 1st November, 1994. After several orbits through the magnetosphere, Wind was placed in a halo orbit around the L1 Lagrange point in early 2004 to observe the unperturbed solar wind that is about to impact the magnetosphere of Earth.
- The radio component was discovered by the Canadian Hydrogen Intensity Mapping Experiment (CHIME), a radio telescope located at Dominion Radio Astrophysical Observatory in British Columbia, which is led by McGill University in Montreal, the University of British Columbia, and the University of Toronto.
- CHIME is a novel radio telescope that has no moving parts. Originally conceived to map the most abundant element in the universe - hydrogen - over a good fraction of the observable universe, this unusual telescope is optimized to have a high "mapping speed".

Source of FRB in Milky Way:

- The source of the FRB detected recently in the Milky Way is a very powerful magnetic neutron star referred to as a magnetar, called SGR 1935+2154 or SGR 1935, which is located in the constellation Vulpecula and is estimated to be between 14,000-41,000 light-years away.
- The FRB was part of one of the magnetar's most prolific flare-ups, with the X-ray bursts lasting less than a second.
- The radio burst, on the other hand, lasted for a thousandth of a second and was thousands of times brighter than any other radio emissions from magnetars seen in the Milky Way previously.
- It is possible that the FRB-associated burst was exceptional because it likely occurred at or close to the magnetar's magnetic pole.
- This flare-up, which lasted for hours, was picked up by NASA's Fermi Gamma-ray Space telescope and NASA's Neutron star Interior Composition Explorer (NICER).
- The Fermi Gamma-ray Space Telescope, formerly called the Gamma-ray Large Area Space Telescope (GLAST), is a space observatory being used to perform gamma-ray astronomy observations from low Earth orbit.
- NASA's Neutron star Interior Composition Explorer is an International Space Station (ISS) payload devoted to the study of neutron stars through soft X-ray timing.

Magnetar

- As per NASA, a magnetar is a neutron star, "the crushed, city-size remains of a star many times more massive than the Sun."
- The magnetic field of such a star is very powerful, which can be over 10 trillion times stronger than a refrigerator magnet and up to a thousand times stronger than a typical neutron star's.
- Neutron stars are formed when the core of a massive star undergoes gravitational collapse when it reaches the end of its life. This results in the matter being so tightly packed that even a sugar-cube sized amount of material taken from such a star weighs more than 1 billion tons, which is about the same as the weight of Mount Everest, according to NASA.
- Magnetars are a subclass of these neutrons and occasionally release flares with more energy in a fraction of a second than the Sun is capable of emitting in tens of thousands of years.
- In the case of SGR 1935, for instance, the X-ray portion of the simultaneous bursts it released recently carried as much energy as the Sun produces in a month, assuming that the magnetar lies towards the nearer end of its distance range.

INTERNATIONAL AFFAIRS**India-Italy Bilateral Summit**

Recently, a virtual Bilateral Summit between India and Italy has been held to comprehensively review the broad framework of the bilateral relationship and also strengthen cooperation against common global challenges, including the Covid-19 pandemic.



Key Points

Both nations decided to adopt the Action Plan for an enhanced Partnership between India and Italy (2020-2024) to set up priorities, strategic goals and mechanisms of a bilateral partnership.

Economic Engagement:

- Agreed to coordinate closely at multilateral fora especially G-20.
- Italy will assume the Presidency of G-20 in December 2021 followed by India in 2022.
- Saudi Arabia is holding the current presidency of G20.
- Memorandum of Understanding (MoU) between Cassa Depositi e Prestiti (CDP), an Italian investment bank and National Infrastructure Investment Fund (NIIF) to promote innovative financial schemes capable of supporting bilateral investments.
- Italy is India's fifth-largest trading partner in the European Union (EU).

Defence Cooperation:

- Underscored the need to further expand defence engagement through greater two-way collaboration and technology cooperation, co-development and co-production.
- Recognised the opportunity to consolidate defence relations with the aim of enhancing the effectiveness of peacekeeping activities within the framework of the United Nations (UN).

Cooperation During Covid-19 Pandemic:

- Italy thanked India for extending support during the pandemic by supplying medicines and personal protection equipment (PPE).
- The Indian community in Italy is the second-largest community of Indians in Europe after the UK.
- Reiterated that the pandemic calls for an inclusive multilateral approach to health protection, especially in the framework of the UN and the World Health Organisation (WHO).
- Welcomed the World Health Summit, which will be held in Italy in 2021, in cooperation with the European Union (EU) Commission.
- The World Health Summit is one of the world's leading strategic forums for global health and is held in October every year.

Science, Technology and Research Collaboration:

- Welcomed the progress made under India-Italy Science and Technology Cooperation and the India-Italy Executive Programme of Cooperation.
- Welcomed the establishment of Thematic Working Groups as a method of work between the Italian Space Agency (ASI) and the Indian Space Research Organisation (ISRO) as well as the creation of the first joint ASI-ISRO working group in heliophysics.
- Heliophysics is the study of the effects of the Sun on the Solar System.

Cooperation for Counter-Terrorism and Security:

- Pledged to strengthen cooperation in the fight against terrorism and transnational crime both at a bilateral level and in multilateral fora and also agreed to hold the next meeting of the 'India-Italy Joint Working Group on Counter-Terrorism' to further advance cooperation, exchange of expertise and capacity building in 2021.

Regional Cooperation and Connectivity:

- India and Italy acknowledged the potential of new international organisations such as the Coalition on Disaster Resilient Infrastructures (CDRI) and the International Solar Alliance (ISA).
- India welcomed Italy joining ISA after it coming into force of the universalisation of ISA.
- India also welcomed Italy's engagement in the Indian Ocean Rim Association (IORA) and Italy's new status as Development Partner of ASEAN.

Multilateral Cooperation on Environment:

- Reaffirmed their commitment to the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement and their respective nationally determined contributions (NDCs).
- Highlighted the significance of cooperation in the run-up to the 26th Conference of Parties (COP26) of the UNFCCC, which will be organised in 2021 by the UK in partnership with Italy.

IMPORTANT FACTS FOR PRELIM**One Rank One Pension**

The central government has disbursed more than Rs. 42,700 crore to 20.6 lakh retired defence personnel under the One Rank One Pension (OROP) scheme, which was notified 5 years ago in 2015.

Key Points

- OROP means the payment of the same pension to military officers for the same rank for the same length of service, irrespective of the date of retirement.
- Before OROP, ex-servicemen used to get pensions as per the Pay Commission's recommendations of the time when they had retired.
- Uttar Pradesh and Punjab have the highest number of OROP beneficiaries.
- Armed Forces Personnel who had retired till 30th June 2014 are covered under it.
- The implementation of the scheme was based on recommendation of the Koshiyari committee, a 10 member all-party parliamentary panel formed under the chairmanship of Bhagat Singh Koshiyari.

DAILY ANSWER WRITING PRACTICE

Qns. In order to make a truly Atma Nirbhar Bharat, the economic stimulus needs to be complemented by bold reforms. Discuss. (250 words)

Ans.

The covid-19 pandemic has impacted the lives and livelihoods of the people. Thus, in order to revive the economic activity, the Government of India has announced an economic stimulus package of Rs 20 lakh crore.

- ❖ However, without bold reforms, especially in areas of 4L's: Land, Labour, Law and Liquidity, this economic package may not be able to put India's growth back on track.

Intended Goal and Associated Challenges

- The Rs 3 lakh crore collateral-free loan facility for MSMEs under the package will help this finance-starved sector and thereby provide a kickstart to the dismal state of the economy.
- Amid migrant workers crisis, lack of demand, this credit facility is unlikely to achieve its intended goal.
- A slew of measures related to agriculture marketing like amending Essential commodities Act, APMC Act, promoting contract farming, have been announced.
- Since Agriculture is a state subject, cooperation amongst states and union is critical to implement these reforms.
- Apart from it, without augmenting the agriculture supply chain, these reforms may not bring the desired result.
- The government also intends to boost domestic manufacturing, by further liberalising FDI policy in the defence and aviation sector.
- The issues of land acquisition, labour laws and lack of credit due to the incomplete transmission of monetary policy, have acted as a roadblock in the path of India becoming a manufacturing hub.

Way Forward

- Immediate measures should be taken to revive the aggregate demand in the Indian economy. In this pursuit, the policy of emergency basic income for a short time may be a good option.
- In order to have success in revamping agriculture and doubling farmers' income, there is a need for cooperative federalism and augmenting agricultural infrastructure.

- There is a need for holistic reforms like addressing skill deficit, establishing a land bank, introducing innovative financing tools like InVITS, bringing labour reforms and improving ease of doing business.

DAILY QUIZ

1. Consider the following statements about Fast Radio Bursts (FRBs):

1. In the Milky Way, the Fast Radio Burst was spotted for the first time in 2007.
2. In the recently spotted FRB, the radio component was detected by NASA's Wind Mission.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2**

2. Consider the following statements:

1. The Kepler mission was launched by European Space Agency (ESA).
2. Transiting Exoplanet Survey Satellite (TESS) is the new planet exploration satellite of NASA.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only**
- c) Both 1 and 2
- d) Neither 1 nor 2

3. Which of the following Protected Areas is/are not located in Arunachal Pradesh?

1. Talle Wildlife Sanctuary.
2. Orang National Park
3. Mouling National Park.
4. Sessa Orchid Sanctuary

Choose the correct answer using code given below:

- a) 1 and 4 only
- b) 2 and 3 only
- c) 2 only**
- d) 1, 2 and 4

4. Consider the following statements:

1. It was in Kartarpur where the foundations of Sikhism was laid.
2. The Kartarpur corridor connects the Darbar Sahib Gurdwara in India with the Dera Baba Nanak shrine in Pakistan.

Which of the above statements is/are correct?

- a) 1 only**
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

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