

**PUBLIC HEALTH**

❖ **India's plan to eradicate measles, rubella**

➤ **CONTEXT:** India had set a target to eliminate measles and rubella (MR) by 2023, having missed the earlier deadline of 2020, due to a variety of reasons, exacerbated by disruptions due to the pandemic. An earlier target that was set for 2015 was also missed. It was in 2019 that India adopted the goal of measles and rubella elimination by 2023, anticipating that the 2020 goal could not be reached.

➤ **Why is this target crucial?**

- According to the World Health Organization (WHO) the measles virus is one of the world's most contagious human viruses that kills more than 1,00,000 children every year globally, and rubella is a leading vaccine-preventable cause of birth defects.
- Both measles and rubella can be prevented by just two doses of a safe and effective vaccine. Over the past two decades, the measles vaccine is estimated to have averted more than 30 million deaths globally, as per the WHO's statistics.
- In both diseases, the symptoms are a rash and fever. While measles has a high fatality rate, rubella infection in a pregnant woman will have an impact on the foetus, resulting in birth defects.

➤ **What happened in 2022?**

- From October 2022, an outbreak of measles in Maharashtra, particularly Mumbai, had the authorities worried. At least 15 children died among several hundreds who contracted the infection. Coming at the cusp of a year in which (2023) India had a crucial target to achieve, it perturbed authorities.
- Head of the India Experts Advisory Group for eliminating MR, equates it to a phenomenon similar to COVID-19 infections catching up in China end of 2022, since they had 'escaped the previous waves of infection.' "It is a similar phenomenon, because during the winter months of 2020 and 2021 (November to January when there is the usual spurt in cases of measles) there were no outbreaks.
- The 2022 outbreak was like epidemiological compensation. However, experts aver that this outbreak will contribute to ramping up herd immunity in the population which along with a robust vaccination programme will help achieve the necessary targets.

➤ **What has India done to achieve targets?**

- Expert explains though the pandemic led to poor immunisation rates, the paths India had taken in getting to where it stands now. During 2010–2013, India conducted a phased measles catch-up immunisation for children aged 9 months–10 years in 14 States, vaccinating approximately 119 million children.
- Mission Indradhanush was launched in 2014 to ramp up vaccinating the unvaccinated population. During 2017–2021, India adopted a national strategic plan for measles and rubella elimination, and introduced rubella-containing vaccine (RCV) into the routine immunisation programme, besides launching a nationwide measles-rubella supplementary immunisation activity (SIA) catch-up campaign. It also transitioned from outbreak-based surveillance to case-based acute fever and rash surveillance, and more than doubled the number of laboratories in the measles-rubella network.

➤ **Is the target to eliminate MR achievable?**

- According to experts the main concern is the under one-year population. But if India able to keep up the tempo of immunisation at 95 % the second dose coverage (which means the first dose coverage has to be higher), it will be possible. But the trick, is to do it district by district — give each district a target to achieve the required rate of immunisation, conduct a robust fever and rash surveillance programme, besides testing for MR.
- It is possible to be free of the disease as some other countries have recently demonstrated, including Sri Lanka, the Maldives and South Korea.
- It is important to provide full support to the ground level staff who implement the programme — the village health nurses, ASHA (accredited social health activists) workers, anganwadi and ICDS (Integrated Child Development Services) workers.
  - ✓ In fact expert suggests the only way to ensure a target driven approach is successful is to make sure that the people given the tasks are happy doing their job. It need to improve their service conditions.
- Targets will be easier to achieve in States such as Tamil Nadu and Kerala, because of the robust immunisation infrastructure, in the other States, additional efforts should be taken to work towards achieving the target.
- The WHO has expressed hope that it can reach MR elimination goals in India if it strengthen surveillance by finding, investigating, and collecting and testing a sample for every suspected case, in each district in every State and UT.
- Experts underlined the importance of being thorough in public health outreach. Experts says "A threat of infection anywhere is a threat everywhere."

**INTERNATIONAL RELATIONS**

❖ **Significance of Abdel Fattah El-Sisi visit, and India's ties with Egypt**

➤ **CONTEXT:** Egypt's President Abdel Fattah El-Sisi, the chief guest for the Republic Day celebrations 2023, landed in India. This is the first time that an Egyptian President has been invited as chief guest for the event.

➤ **What is the significance of a Republic Day invite?**

- An invitation to be the Republic Day chief guest is highly symbolic from the Indian government's perspective. India has been weaving strategy with hospitality to decide its chief guest for the Republic Day.
- The choice of chief guest every year is dictated by a number of reasons — strategic and diplomatic, business interests, and international geo-politics.
- **What is the history of India-Egypt relations?**
- India and Egypt share close political understanding based on a long history of cooperation in bilateral, regional and global issues. The joint announcement of establishment of diplomatic relations at the Ambassadorial level was made on August 18, 1947.
- India's first Prime Minister Jawaharlal Nehru and Egypt's President Gamal Abdel Nasser signed the Friendship Treaty between the two countries, and they were key to forming the Non-Aligned Movement (NAM) along with Yugoslav President Josip Broz Tito.
- Since the 1980s, there have been four Prime Ministerial visits from India to Egypt: Rajiv Gandhi (1985); P V Narasimha Rao (1995); IK Gujral (1997); and Dr. Manmohan Singh (2009, NAM Summit).
- From the Egyptian side, President Hosni Mubarak visited India in 1982, in 1983 (NAM Summit), and again in 2008.
- High-level exchanges with Egypt continued after the 2011 Egyptian Revolution and then President Mohamed Morsi visited India in March 2013. India's External Affairs Minister (EAM) visited Cairo in March 2012 and the Egyptian Foreign Minister visited India in December 2013.
- After the new government led by President Sisi took over in June 2014, then EAM Sushma Swaraj visited Cairo in August 2015. PM Modi met President Sisi on the sidelines of the United Nations General Assembly (UNGA), New York, in September 2015. President Pranab Mukherjee and PM Modi met Sisi during the Third India-Africa Forum Summit in New Delhi in October 2015.
- President Sisi also paid a State visit to India in September 2016. A joint statement was issued, outlining the three pillars of political-security cooperation, economic engagement & scientific collaboration and cultural & people-people ties as the basis of a new partnership for a new era.
- **What were the recent engagements?**
- PM Modi held a phone conversation with Sisi on April 17, 2020 to discuss efforts to halt the spread of the corona virus, and again on April 26, 2020 to exchange Eid-ul-Fitr greetings. The PM expressed appreciation for the support extended by Egyptian authorities for the safety and welfare of Indian nationals in Egypt during the Covid crisis.
- President Sisi expressed sympathy and solidarity with India during the second wave of Covid-19, on April 30, 2021. Egypt dispatched three planes with medical supplies to India on May 9, 2021. In addition, the Embassy of India also signed an agreement to procure 300,000 doses of REMDESEVIR from M/s EVA Pharma, Egypt, which were provided well before schedule.
- **What's the state of bilateral trade relations?**
- Egypt has traditionally been one of India's most important trading partners in the African continent. The India-Egypt bilateral trade agreement has been in operation since March 1978 and is based on the most-favoured nation clause.
- The bilateral trade has increased more than five times in the past 10 years. In 2018-19, it reached USD 4.55 billion. Despite the pandemic, the volume of trade declined only marginally to USD 4.5 billion in 2019-20 and to USD 4.15 billion in 2020-21. Bilateral trade has expanded rapidly in 21-22 — climbing to 7.26 billion, a 75 per cent increase from FY 2020-2021.
- **What are the other areas of cooperation?**
- The two countries will be looking at a range of sectors, and agriculture will be one of the key areas of cooperation.
- Egypt, which is facing a shortage of food grains as its major sources were the warring Ukraine and Russia, wants to buy wheat from India.
- In May 2022, India — which had put a ban on sale of wheat — allowed export of 61,000 tonnes to Egypt. But the country wants more grains, in view of the shortages.
- Egypt's President is also coming at a time when the country is facing a massive economic crisis due to depleted forex reserves. While there has been no request for budgetary support, India is looking at increasing investments in the country, especially in major infrastructure projects in and around the Suez Canal, in terms of special economic zones in Alexandria and Cairo. Egypt is also keen to push for more tourism from India, and ease movement of people so that there is more forex inflow into their tourism-dependent economy.
- With Sisi being a former Army chief, Egypt is interested in procuring defence equipment from India, which includes LCA Tejas, missiles like Akash, DRDO's Smart Anti-Airfield Weapon, and radars. This is being developed as part of defence industry cooperation, and one of the markers was that Defence minister Rajnath Singh visited Cairo in 2022 when a defence pact was signed. Egypt has also been invited to participate in the Aero-India 2023 at Yelahanka Air Force Station, Bengaluru, in February 2023.
- A military contingent from the Egyptian Army will participate in the Republic Day parade.

- The two countries will also look at the education sector, where Indian higher educational institutions can set up campuses in Egypt: a proposal for establishing an IIT in Egypt is in the works.
- **Is there a political significance of Sisi's visit?**
- An invitation to the Egyptian President is being considered significant, especially when India's ties with Muslim-majority countries were tested due to controversial remarks made by **BJP** spokesperson Nupur Sharma in June 2022. That Egypt was one of the few countries from the Arab world which did not react officially to the remarks was not lost on India.
- Top clerics — the Grand Mufti of Egypt and the Al Azhar university, the top seat of learning of Sunni Islam — had condemned those remarks. But India views Egypt as a moderate Islamic voice, which has made an attempt over the years to play a nuanced and positive role in the 57-member Organisation of Islamic Cooperation, where Pakistan has managed to get some India-centric condemnatory resolutions.

**PRELIMS**

**1. Norovirus**

➤ **CONTEXT: The Kerala Health Department recently confirmed two cases of the gastrointestinal infection norovirus in class 1 students in Ernakulam district. The two samples were tested after 62 persons developed symptoms such as diarrhoea, abdominal pain, vomiting, nausea, a high temperature, headache, and body aches.**

➤ **What is norovirus and how common are infections?**

- Norovirus is not new; it has been circulating among humans for over 50 years and is thought to be one of the primary causes of gastroenteritis.
- The virus is estimated to kill 200,000 persons globally every year, with most deaths occurring among those below the age of five years and those over the age of 65 years.
- The virus is capable of surviving low temperatures, and outbreaks tend to be more common during the winter and in colder countries — that is why it is sometimes referred to as “winter vomiting disease”.
- The reported cases of norovirus had seen a decline in the United Kingdom during the pandemic, likely due to lax surveillance, but numbers have since picked up. A 48% higher incidence of reported cases than expected was reported by the UK Health Security Agency (UKHSA) in 2022.
- A 2022 study says that norovirus infections are more frequently detected in high income countries, with almost 40% cases being seen in long-term care facilities. In contrast, the cases in India have mostly been detected in settings like schools and hostels, where people share food.

➤ **What is the incidence of infection in India?**

- Cases of norovirus are not as common in India as in many other places. The infection has been reported in previous years as well, mainly from Southern India, and especially from Kerala.
- A 2016 study by Christian Medical College-Vellore that followed a birth cohort of 373 for three years, detected 1,856 diarrhoeal episodes and 147 vomiting episodes. The study said that norovirus was detected in 11.2% of the diarrhoeal episodes and 20.4% of the vomiting episodes.
- A 2021 study from Hyderabad reported that norovirus was detected in 10.3% samples of children who came in with acute gastroenteritis.

✓ The reported cases of norovirus have been on the rise in recent years. “One of the reasons could well be that we were not looking for the virus previously. Now we have systems to detect not just this virus but several others.”

✓ The institute follows a syndromic approach to testing patient samples — making clinical decisions based on a patient's symptoms and signs — rather than testing for one viral infection that the treating doctor might suspect.

✓ The research team have a panel for detecting 83 different viruses. Instead of testing for, Covid-19 or flu, they will test for 12 viral infections that can cause respiratory symptoms. Or, if the physician says that a person has gastrointestinal symptoms, they will run a panel for six or seven viruses. That is how it end up picking up cases of norovirus.

✓ If institutes started doing genomic sequencing of the samples, more viruses were likely to be detected.

➤ **But why is the infection so common in Kerala, especially?**

It probably has more to do with Kerala's strengths than any weaknesses. The state has a strong public health system that is capable of picking up clusters of infection and getting them tested quickly.

➤ **Can norovirus infection cause a large-scale outbreak?**

- Even though more cases of norovirus are being detected, experts say that this is unlikely to lead to a large-scale outbreak.
- Although it haven't studied the epidemiological co-relates of these cases, what experts have seen is that the norovirus cases are sporadic and found in small clusters in schools or hostels where people consume the same foods. The spread of the infection is also self-limiting. It is an individual problem, not a public health one.

➤ **What are the symptoms and how to prevent its spread?**

- Norovirus leads to diarrhoea, vomiting, nausea, and abdominal pain. Being a diarrhoeal disease, it can lead to dehydration, so drinking plenty of fluids is recommended.

- The infection can be transmitted through foods contaminated with the virus, touching surfaces that are contaminated with the virus and then touching the mouth, and being in direct contact with someone with the infection like taking care of them and sharing foods and utensils with them.
- Good hand hygiene is the best way to prevent infection. Wash hands with soap and water for 20 seconds. Hands sanitisers are thought to not work too well against norovirus.
- As the infection can be transmitted by foods, it is suggested that a sick person not prepare food for others. All food items should be carefully washed and cooked at high temperatures. The norovirus can survive temperatures as high as 60 degrees Celsius.
- Areas where a sick person has vomited or had diarrhoea should be cleaned using disinfectants or bleach.

## 2. **Green comet**

➤ **CONTEXT: Appearing near Earth after nearly 50,000 years, and next estimated to come close to us after as many years, it might be possible to see a recently discovered green comet in the next week ( between 29 jan- 5<sup>th</sup> feb 2023).**

• The comet is estimated to come closest to Earth around February 2 2023. Termed the C/2022 E3 (ZTF), the comet was named to refer to those who first spotted it – astronomers using the wide-field survey camera at the Zwicky Transient Facility (ZTF) in the US, in March 2022.

• NASA has said the comet could be visible with telescopes and binoculars, and might even be visible to the naked eye under a clear night sky.

➤ **What is the 'green comet'?**

• After approaching the sun in the middle of January, it is now moving away from it, along its own orbit. The orbit indicates it comes from the edge of our solar system, a distant reservoir of comets we call the Oort cloud.

• The Oort cloud is thought to be a big, spherical region of outer space enveloping our sun, consisting of innumerable small objects, such as comets and asteroids.

• NASA terms it “the most distant region of our solar system” and “Home of the Comets”. The green comet could be at a distance of 2.5 light minutes from Earth, meaning a “mere” 27 million miles.

➤ **When and where can the green comet be seen?**

• NASA stated that if this one continues its current trend in brightness, it'll be easy to spot with telescopes, binoculars, and in some cases even to the unaided eye under dark skies.

• Observers in the Northern Hemisphere will find the comet in the morning sky, as it moves swiftly toward the northwest during January. It'll become visible in the Southern Hemisphere in early February.

• In Indian skies, when looking in the northwest direction, one might spot it 16° above the horizon in the Bootes constellation. But with lights from buildings and streetlights on, it can be difficult to make it out without equipment.

• The Virtual Telescope Project will be hosting a free livestream of comet C/2022 E3 (ZTF) on Feb. 1 at 11:00 p.m. EST or 9:30 a.m. on January 31.

➤ **But why is it green in colour?**

• Comets are frozen rocky or gas-filled objects that are remnants of the formation of the solar system. Due to their composition, characteristics and the path they move in, they tend to leave a light “behind them”. Here, the comet itself is green (called the head of the comet) and emits a whitish light behind it (often called the tail of the comet).

• Just like other bodies in space, comets also have orbits. They are sometimes pulled in close to the sun because of the sun's gravity acting on them.

• NASA explains that as they orbit near the Sun, “They heat up and spew gases and dust into a glowing head that can be larger than a planet”. The remains of dust following this burning up, from a distance, look like a trail of light to humans on Earth. Comets, therefore, have often been seen giving out blue or whiteish light, or even green.

• In this case, the green glow “is thought to arise from the presence of diatomic carbon – pairs of carbon atoms that are bound together – in the head of the comet. The molecule emits green light when excited by the ultraviolet rays in solar radiation.”

➤ **Is the green comet rare?**

• Coming under the category of long-period comets, which take more than 200 years to orbit the Sun, the green comet is not easily spotted.

• With a highly elliptical orbit, the comet will head back to the Oort cloud and make its next appearance roughly 50,000 years later. But given their orbits, it's not unique for comets to reappear close to Earth only after many, many years.

## 3. **Law on lawyers advertising their work**

➤ **CONTEXT: The Supreme Court Advocates-on-Record Association (SCAORA) condemned business magazine Forbes India's decision to publish a 'Legal Powerlist' of the top 25 Advocates-on-Record.**

➤ **About**

• The SCAORA unanimously passed a resolution denouncing the list as “misleading” and “unauthorized information” after its executive committee received a complaint.

- SCAORA said the list was a clear case of misrepresentation, and undermined the interests of Supreme Court AORs.
- **What is the law on lawyers advertising their work?**
- In India, lawyers and legal practitioners are not allowed to advertise their work.
- The Advocates Act, 1961 empowers the Bar Council of India (BCI) to make rules with respect to the standard of professional conduct and etiquette to be observed by advocates.
- The BCI Rules published in 1975 prohibits lawyers from advertising their work.
- The signboard/ nameplate or stationery should not indicate that:
  - ✓ he is or has been President or Member of a Bar Council or of any Association or
  - ✓ that he has been associated with any person or organisation or with any particular cause or matter or
  - ✓ that he specialises in any particular type of worker or
  - ✓ that he has been a Judge or an Advocate General.
- An advocate who violates this rule can face punishment for professional or other misconduct under the Advocates Act.
- Following a challenge in the SC to the constitutional validity of Rule 36 of the Act in 'VB Joshi vs Union of India', the restrictions were somewhat relaxed.
- In 2008, Rule 36 was amended, and advocates were allowed to provide their names, contact details, post qualification experience, enrollment number, specialisation, and areas of practice on their websites, as approved by the Bar Council of India.
- **What is the situation in other countries?**
- Lawyers can legally advertise their services in the United States, the United Kingdom, Australia, and the European Union.

**ANSWER WRITING**

**Q. Examine the influence of Indian art and culture on Southeast Asian civilizations. (150 words)**

**Introduction**

- Indian art and culture have had a significant influence on the civilizations of Southeast Asia. The spread of Indian culture to Southeast Asia can be traced back to the ancient maritime trade routes between India and Southeast Asia, which led to the exchange of goods, ideas, and cultural practices. Indian art and culture have had a lasting impact on the development of Southeast Asian civilizations, particularly in the areas of religion, architecture, and literature.
- Influence of Indian art and culture on Southeast Asian civilizations:
  - **Religion:**
    - One of the most significant ways in which Indian culture has influenced Southeast Asia is through religion.
    - Buddhism: The spread of Buddhism from India to Southeast Asia is well-documented and had a profound impact on the development of Southeast Asian civilizations.
    - The earliest Buddhist kingdoms in Southeast Asia, such as those in present-day Myanmar and Thailand, were heavily influenced by Indian Buddhism, and the kings of these kingdoms were patrons of Buddhism and built many Buddhist temples and monasteries.
    - Hinduism: Hinduism was also introduced to Southeast Asia through Indian traders and monks, and it had a significant impact on the religious beliefs and practices of many Southeast Asian nations.
    - The temples and shrines of Southeast Asia also display Indian-inspired motifs and designs, and many Southeast Asian kings and rulers were also heavily influenced by Indian Hinduism.
  - **Architecture:**
    - Indian architecture also had a significant influence on Southeast Asian civilizations.
    - The use of Indian architectural styles and techniques can be seen in the construction of temples and other religious buildings in Southeast Asia.
    - For example, the architecture of Angkor Wat in Cambodia is heavily influenced by Indian styles and techniques, and the temple complex is considered to be one of the greatest examples of Indian-influenced architecture in Southeast Asia.
  - **Literature and Artistic Influence:**
    - Indian literature also had an impact on Southeast Asian civilizations. The Ramayana and Mahabharata, two great Indian epics, have been widely adapted in Southeast Asia, and versions of these stories can be found in many Southeast Asian countries.
    - The stories have been adapted to reflect the local culture and beliefs, but the influence of Indian literature can still be seen in the themes and characters used in these adaptations.

**Conclusion**

Indian art and culture have had a significant influence on Southeast Asian civilizations. The spread of Indian culture to Southeast Asia can be traced back to ancient maritime trade routes and has had a lasting impact on the development of Southeast Asian civilizations. Indian culture has influenced Southeast Asia in the areas of religion, architecture, and literature, and its influence can still be seen in the region today.

**MCQs**

1. Consider the following statements regarding Measles and Rubella:
  1. Rubella is a contagious, generally mild viral infection that occurs most often in children and young adults.
  2. Measles is a highly contagious viral disease and is a cause of death among young children globally.
  3. Bhutan is the first country in the WHO Southeast Asia region to eliminate Measles.
 Which of the statements given above is/are correct?  
 a) 1 and 2 only      b) 2 and 3 only      c) 1 and 3 only      **d) 1, 2 and 3**
2. With reference to 'India by the Nile' festival" consider the following
  1. It is a cultural festival celebrated annually in Egypt.
  2. The festival is produced by Indian government and supported by all the countries which Nile river flows through.
 Which of the above statement/s is/are not correct?  
 a) 1 only      **b) 2 only**      c) Both 1 and 2      d) Neither 1 nor 2
3. With reference to the norovirus often mentioned in news, consider the following statements:
  1. It is an animal-borne disease transmitted through contaminated water and food.
  2. It causes gastrointestinal illness, including inflammation of the lining of the stomach and intestines, severe vomiting and diarrhoea.
  3. No vaccine is available against the virus.
 Which of the statements given above is/are correct?  
 a) 1 and 3 only      b) 2 and 3 only      c) 1 and 2 only      **d) 1,2 and 3**
4. Which reference to comets, consider the following statements?
  1. They revolve around the Sun along a circular orbit.
  2. The tail of the comet always points towards the Sun during its revolution due to Sun's gravitational force.
  3. Halley's Comet completes one revolution around the Sun in 76 years.
  4. Green comets are categorised as long-period comets, which take more than 200 years to orbit the Sun.
 Which of the statement/s is/are correct?  
 a) 1 only      **b) 2 and 3 only**      c) 3 and 4 only      d) 1,2,3 and 4
5. Consider the following statements
  1. A Senior Advocate is not entitled to appear without an Advocate-on-Record in the Supreme Court
  2. The Court can designate any Advocate, with his consent, as Senior Advocate.
 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
6. Hundreds of vulnerable Olive Ridley turtles (*Lepidochelys olivacea*) have washed ashore along the coastline between Kakinada and Antarvedi in the Godavari region of Andhra Pradesh during the ongoing annual breeding season. With reference to this turtle consider the following
  1. Their peculiar behavior of synchronized nesting in mass numbers is known as Arribada'.
  2. Gahirmatha Beach in Orissa is one of their few nesting grounds in the world.
 Which of the above statement/s is /are correct?  
 a) Only 1      b) Only 2      **c) Both 1 and 2**      d) Neither 1 nor 2
7. Which of the following became the top district to provide 100 days of employment under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)?  
 a) Wayanad, Kerala      b) Kachchh, Gujarat      c) Jaisalmer, Rajasthan      **d) Ganjam, Odisha**
8. Oil palm plantations raised on the Andaman and Nicobar Islands in the past have proven to be a total commercial failure, With reference to 'palm oil', consider the following statements:
  1. The palm oil tree is native to Southeast Asia.
  2. Palm oil is a raw material for some industries producing lipstick and perfumes.
  3. Palm oil can be used to produce biodiesel.
 Which of the statements given above are correct?  
 a) 1 and 2 only      **b) 2 and 3 only**      c) 1 and 3 only      d) 1, 2 and 3
9. Global Gender Gap (GGG) Report and Index are released by which of the following?  
**a) World Bank**  
 b) International Monetary Fund  
 c) World Economic Forum (WEF)  
 d) UN Women
10. The term 'SB Gangadhar' often mentioned in news recently is related to which of the following?  
**a) Marine vessel**  
 b) Mini satellite  
 c) Drone  
 d) Mobile application