

Q: Consider the following statements with respect to Messenger RNA (mRNA) Vaccines:

1. mRNA is a type of single-stranded RNA involved in protein synthesis.
2. mRNA vaccines are made by using a protein DNA of the virus.
3. Gemcovac-Om is the only mRNA vaccine currently approved in India

How many of the above statement(s) is/are correct?

- a) All three
- b) Only two
- c) Only one
- d) None of the above

Ans: a

Explanation:

- Messenger RNA (mRNA) is a type of single-stranded RNA involved in protein synthesis.
- mRNA is made from a DNA template during the process of transcription.
- mRNA vaccines work by introducing a piece of mRNA that corresponds to a viral protein, usually a small piece of a protein found on the virus's outer membrane.
- By using this mRNA, cells can produce the viral protein.
- As part of a normal immune response, the immune system recognizes that the protein is foreign and produces specialized proteins called antibodies.
- Once produced, antibodies remain in the body, even after the body has rid itself of the pathogen, so that the immune system can quickly respond if exposed again.
- Antibodies help protect the body against infection by recognizing individual viruses or other pathogens, attaching to them, and marking the pathogens for destruction.
- If a person is exposed to a virus after receiving mRNA vaccination for it, antibodies can quickly recognize it, attach to it, and mark it for destruction before it can cause serious illness.
- Individuals who get an mRNA vaccine are not exposed to the virus, nor can they become infected with the virus by the vaccine.

Q: Consider the following statements:

1. TRAFFIC is an organization established by WWF and IUCN to administer wildlife trade.
2. Kolkata is the highest-ranked node in the tortoise and hard-shell turtle trafficking network.

Which of the above statement(s) is/are incorrect?

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

Ans: b

Explanation:

- Chennai is the highest-ranked node in the tortoise and hard-shell turtle trafficking network fuelling the global pet trade.
- Mumbai, Kolkata, Bengaluru, Anantapur in Andhra Pradesh, Agra, and two districts of West Bengal, North 24 Parganas and Howrah, close to the India-Bangladesh border also rank high.
- The most frequent trafficking links in the soft-shell turtle trafficking network were from Jaunpur in Uttar Pradesh to unspecified districts in West Bengal and from North 24 Parganas to unspecified districts in Bangladesh.
- TRAFFIC is an organization that was established in 1976 by WWF and IUCN.
- It is a wildlife trade monitoring network to undertake data collection, analysis, and provision of recommendations to inform decision making on wildlife trade.
- TRAFFIC became an independent non-profit organization in 2017, with WWF and IUCN sitting on its Board of Directors along with independent Board members.

Q: Consider the following statements:

1. Bonn declaration aims to reduce environmental risks from chemicals and waste.
2. Industries also pledged to manage chemicals in order to reduce pollution and its adverse impacts.

Which of the above statement(s) is/are correct?

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

Ans: c

Explanation:

- Delegates at UN Bonn summit adopt new framework to reduce risks from hazardous chemicals.
- Countries also committed to phase out the most harmful chemicals at the fifth International Conference on Chemicals Management or ICCM5.
- The Global Framework on Chemicals sets concrete targets and guidelines across the lifecycle of chemicals.
- The framework is based around 28 targets, designed to improve responsible management of chemicals and waste.
- These targets also aim to establish stronger connections with other important global agendas, including climate change, biodiversity, human rights and health.
- National governments committed to formulating policies and regulations in order to reduce chemical pollution by 2030 as well as promoting safer alternatives.
- Industries also pledged to manage chemicals in order to reduce pollution and its adverse impacts.
- The aim of the framework is to phase out lethal agricultural pesticides by 2035.
- The Declaration aims to prevent exposure to harmful chemicals, and phase out the most harmful ones, where appropriate, and enhance the safe management of such chemicals where they are needed.
- It also encourages countries to support the transition to circular economies and to develop substitutes for chemicals.

Q: Consider the following statements:

1. The Moscow format is one of the several dialogue platforms on Afghanistan before the Taliban takeover of Kabul.
2. Both China and India are part of the Moscow Format.
3. The Kazan Declaration deals with the well-being of the Afghan People.

How many of the above statement(s) is/are incorrect?

- a) Only one
- b) Only two
- c) All three
- d) None of the above

Ans: d

Explanation:

- The Moscow format is one of the several dialogue platforms on Afghanistan, which began before the Taliban takeover of Kabul.
- It consists of Russia, China, Pakistan, Iran, Kazakhstan, Tajikistan, Kyrgyzstan, Uzbekistan, Turkmenistan and India.
- As part of its initiatives to encourage a peaceful conclusion to the violence and instability in Afghanistan, the Russian government initially started it in 2017.
- The key objective of the Moscow format of consultations is to facilitate the national reconciliation process in Afghanistan to establish peace.
- The Kazan Declaration is a document that resulted from the fifth regional consultation on Afghanistan, known as the Moscow Format, which took place in Kazan, Russia.
- The Kazan Declaration underscores the call for the Afghan authorities to create conditions that improve the well-being of the Afghan people, deter further migration, and facilitate the return of refugees.

Q: Consider the following statements with respect to Project Udbhav:

1. The project is carried out by Indian army in collaboration with the United Service Institution (USI) of India.
2. It is an initiative of the Ministry of Ports, Shipping and Waterways.
3. This initiative is in synergy with the Ministry of Culture's Project Mausam.

How many of the above statement(s) is/are correct?

- a) Only one
- b) Only two
- c) All three
- d) None of the above

Ans: a

Explanation:

- The Indian Army has started an initiative, named Project Udbhav.
- The project aims to rediscover the profound Indic heritage of statecraft and strategic thoughts derived from ancient Indian texts of statecraft, Warcraft, diplomacy and grand strategy.
- The project is carried out in collaboration with the United Service Institution (USI) of India.
- Beyond rediscovery, the project aims to develop an indigenous strategic vocabulary deeply rooted in India's philosophical and cultural heritage.
- The project aims to bridge the gap between historical and contemporary knowledge.