

Q: Consider the following statement regarding R21/Matrix-M Vaccine and choose the incorrect option:

- a) It was developed by the University of Oxford only.
- b) It is a new vaccine approved for the prevention of malaria in children.
- c) It has already been approved for use in Burkina Faso, Ghana, and Nigeria.
- d) It is the first malaria vaccine to reach the WHO's target of 75% efficacy.

Ans: a

Explanation:

- R21/Matrix-M Vaccine is a new vaccine approved for the prevention of malaria in children.
- It was developed by the University of Oxford and the Serum Institute of India with support from the European and Developing Countries Clinical Trials Partnership ('EDCTP'), the Wellcome Trust, and the European Investment Bank ('EIB').
- It is the first malaria vaccine to reach the WHO's target of 75% efficacy.
- It has already been approved for use in Burkina Faso, Ghana, and Nigeria.
- The vaccine will be rolled out in those African countries in early 2024 and will be available in mid-2024 in other countries.

Q: Consider the following statement regarding Sanwariya Seth Temple:

1. It is a Hindu temple dedicated to Lord Shiva.
2. The temple follows the traditional architecture of Rajasthan.
3. The temple features multiple domes that are adorned with decorative elements.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: b

Explanation:

- Sanwariya Seth Temple is a Hindu temple dedicated to Lord Krishna, specifically to his beloved child form known as "Sanwariya Seth" or "Shyam Seth."
- It is located in the village of Mandaphia in the Chittorgarh district of Rajasthan.
- It was built in 1840 A.D.
- The temple follows the traditional architecture of Rajasthan, known for its intricate carvings, domes, and vibrant colors.
- The main structure of the temple is built using white marble.
- The temple is adorned with intricate carvings on the walls, pillars, and ceilings. These carvings depict scenes from Hindu mythology and various motifs.
- The temple features multiple domes that are adorned with decorative elements.

Q: Consider the following statement regarding United Nations Conference on Trade and Development (UNCTAD):

1. It is the UN's leading institution dealing with trade and development.
2. It supports developing countries to access the benefits of a globalised economy more fairly and effectively.

Choose the correct option from the codes given below:

- a) 1 Only
- b) 2 Only
- c) 1 and 2
- d) None of the above

Ans: c

Explanation:

- United Nations Conference on Trade and Development (UNCTAD) is the UN's leading institution dealing with trade and development.
- It is a permanent intergovernmental body established by the United Nations General Assembly in 1964.
- It supports developing countries to access the benefits of a globalised economy more fairly and effectively.
- It provides economic and trade analysis, facilitates consensus-building and offers technical assistance to help developing countries use trade, investment, finance, and technology for inclusive and sustainable development.

Q: Consider the following statement regarding Green Ammonia:

1. It is produced by using hydrogen from water electrolysis and nitrogen separated from the air.
2. Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.
3. It can be used in fuel for engines such as locomotives and shipping, replacing diesel and marine fuel oil.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: d

Explanation:

- Green Ammonia is produced by using hydrogen from water electrolysis and nitrogen separated from the air.
- These are then fed into the Haber process (also known as Haber-Bosch) which is powered by sustainable electricity.
- In the Haber process, hydrogen and nitrogen are reacted together at high temperatures and pressures to produce ammonia, NH₃.
- Green ammonia production is where the process of making ammonia is 100% renewable and carbon-free.
- It can be used in
 - ❖ Fuel for engines such as locomotives and shipping, replacing diesel and marine fuel oil
 - ❖ Fuel source for electricity and power generation
 - ❖ Building block to make fertilisers for use in agriculture;
 - ❖ Feedstock for industrial and manufacturing applications ranging from water purification through to pharmaceuticals

Q: Consider the following statement regarding Kaimur Wildlife Sanctuary:

1. Durgawati river systems is an important part of this sanctuary.
2. It is connected with Chandraprabha Wildlife Sanctuary.
3. It is the largest sanctuary located Jharkhand.

Choose the correct option from the codes given below:

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) 1, 2 and 3

Ans: a

Explanation:

- Kaimur Wildlife Sanctuary is the largest sanctuary located in the Kaimur District of Bihar.
- It is nestled in the Vindhayachal hill ranges.
- The sanctuary forms a very important catchment for the Kav, Sone, and Durgawati river systems, with important tributaries.
- It is connected with Chandraprabha Wildlife Sanctuary of UP, which again has links with Sanjay Dubri Tiger Reserve and Panna landscape in Madhya Pradesh through stepping stone forests of Marihan, Sukrit, Chunar ranges and wildlife sanctuaries of Ranipur (UP).
- This region has a thick covering of mosaic prairie, tropical dry deciduous backwoods, and swampy bogs.

