

**Q: Consider the following statement:**

1. Earth's magnetic field protects us from high speed charged particles.
2. Unlike earth, Mars have intrinsic magnetic field.

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: a

Explanation:

- The Earth is a giant magnet, and its magnetic field protects us from high-speed charged particles that are continuously emitted from the Sun in the form of solar wind.
- Unlike Earth, the planet Mars do not have any intrinsic magnetic field. This allows the high-speed solar wind to interact directly with the Mars atmosphere, like an obstacle in flow.
- It has been suggested that even in a weak and thin magnetosphere as that of the Mars, one can observe frequent occurrences of solitary waves.
- However, despite several missions to Mars, the presence of solitary waves in the Martian magnetosphere has never been reported earlier.

**Q: Consider the following statement regarding "Exercise Varuna"**

1. This exercise is held between India and USA.
2. This exercise was first initiated in 2001.
3. This exercise is held between the navies of two countries.

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:

- The 21st Edition of the Bilateral Naval Exercise between India and France – Exercise Varuna commenced on the Western Seaboard recently.
- While the bilateral exercise between the two navies were initiated in 1993, it was christened as 'VARUNA' in 2001 and has become a hallmark of India – France strategic bilateral relationship.

**Q: Consider the following statement Coovax:**

1. It is manufactured through technology transfer from Novavax.
2. It was granted emergency-use listing by the World Health Organization (WHO).

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:

- Covovax is manufactured through technology transfer from Novavax.
- It has been approved by the European Medicines Agency for conditional marketing authorisation.
- It was granted emergency-use listing by the World Health Organization (WHO) on December 17, 2021.
- In August 2020, US-based vaccine maker Novavax Inc. had announced a licence agreement with the SII for the development and commercialisation of NVX-CoV2373, its COVID-19 vaccine candidate in India and low-and-middle-income countries

**Q: Consider the following statement:**

1. Japan and India will hold their first air-drill.
2. Japan is also a member of the Quad grouping that includes India, Australia and the US.
3. India is the fifth country Japan has hosted in this type of bilateral exercise.

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:

- Japan and India held their first joint air drills as both countries step up military exercises with other countries amid worries about China's assertiveness.
- Japan is also a member of the Quad grouping that includes India, Australia and the US and is seen as a check on Beijing's assertiveness in the Indo-Pacific.
- The joint drills with India grew out of a security meeting in New Delhi in November 2019 but had been put on hold due to the coronavirus pandemic.
- India is the fifth country Japan has hosted in this type of bilateral exercise after the US, Australia, Britain and Germany.

**Q: Consider the following:**

1. Uttarakhand
2. Ladakh
3. Gujarat

In which of the following places IMD has augmented the Doppler Weather Radar network?

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

Ans: a

Explanation:

- The IMD has augmented the Doppler Weather Radar network in Himachal Pradesh, Uttarakhand, Ladakh, and Jammu & Kashmir, which will help further predict extreme weather events more accurately.
- During the event, he dedicated 4 Doppler Weather Radar Systems to the Western Himalayan States of Jammu and Kashmir, Uttarakhand, and Himachal Pradesh.