

Q: Consider the following statement regarding Spy Balloons:

- 1) It is similar to weather balloons.
- 2) These balloons operate 24,000-37,000 meters above the ground.
- 3) It has the ability to target limited area and cannot spend more time in a particular targeted area.

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:

- The high-altitude balloons are the same as weather balloons deployed across the world to monitor changes in the local weather of the region. However, when it comes to spy balloons, their purpose is changed. These balloons operate 24,000-37,000 meters above the ground.
- The altitude that these balloons fly at is well above where commercial air traffic flies. Airliners almost never fly higher than 40,000 feet. The highest-performing fighter aircraft typically do not operate above 65,000 feet, although spy planes such as the U-2 have a service ceiling of 80,000 feet or more.
- The advantages of balloons over satellites include the ability to scan wide swathes of territory from closer in, and to be able to spend more time over a target area.
- Unlike satellites, which require space launchers that cost hundreds of millions of dollars, balloons can be launched cheaply.

Q: Recently, the researchers have successfully split seawater to produce green hydrogen. Consider the following statement:

- 1) Sea water is not considered as natural feedstock electrolyte.
- 2) The researchers split natural seawater into oxygen and hydrogen to produce green hydrogen by electrolysis.
- 3) It is not practical for regions where seawater is scarce.

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 researchers split natural seawater into oxygen and hydrogen with nearly 100 per cent efficiency, to produce green hydrogen by electrolysis.
- They used a non-precious and cheap catalyst in a commercial electrolyser. A typical non-precious catalyst is cobalt oxide with chromium oxide on its surface.
- Seawater is an almost infinite resource and is considered a natural feedstock electrolyte. This is more practical for regions with long coastlines and abundant sunlight.
- However, it is not practical for regions where seawater is scarce.
- Seawater electrolysis is still in early development compared with pure water electrolysis because of electrode side reactions, and corrosion arising from the complexities of using seawater.

Q: Consider the following statement:

- 1) Ministry of Commerce & Industry is the nodal agency for One District One Product (ODOP).
- 2) Its efforts is to promote the growth of micro, small and medium enterprises (MSMEs).

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:

- Recently, the ODOP-DEH (One District One Product- Districts as export hubs) Invest India, DPIIT, Ministry of Commerce & Industry, Delhi, in collaboration with the Industries Department, Punjab, organized a nationwide

awareness campaign for the initiative and interacted with manufacturers, artisans, state govt. officials and media persons, in Jalandhar.

- This is the first such event in Punjab to promote district wise local products.
- This initiative is part of the Government of India's efforts to promote the growth of micro, small and medium enterprises (MSMEs) and to support the development of indigenous products.

Q: Recently, Ministry of Fisheries, Animal Husbandry and Dairying has launched the 'Sagar Parikrama' program. Consider the following statement regarding its objectives:

- To facilitate interaction with fishermen.
- To promote responsible fisheries with focus on sustainable balance between the utilization of marine fisheries resources for food security of nation.
- Protection of marine ecosystems
- All the above

Ans: d

Explanation:

The main objectives of 'Sagar Parikrama' are

- to facilitate interaction with fishermen, coastal communities and stakeholders so as to disseminate information of various fisheries related schemes and programs being implemented by the Government;
- demonstrating solidarity with all fisher folk, fish farmers and concerned stakeholder as a spirit of Aatmanirbhar Bharat;
- to promote responsible fisheries with focus on sustainable balance between the utilization of marine fisheries resources for food security of nation and livelihoods of coastal fisher communities and
- protection of marine ecosystems.

Q: Consider the following statement regarding The National Adaptation Fund:

- It has seen a constant decline in funding.
- It is administered by RBI.

Choose the correct option from the codes given below:

- 1 Only
- 2 Only
- 1 and 2
- None of the above

Ans: a

Explanation:

- India is expected to be among the countries worst affected by climate change.
- The National Adaptation Fund set up in 2016 has seen a constant decline in funding. In 2023, the Fund seems to have been ignored completely with no new allocation, in contrast to INR 350 crore in FY16 and INR 60 crore assigned last year.
- The fund is administered by NABARD and is utilised for implementing high priority resilience building projects related to water management, forestry, climate-resilient agriculture, among others.