

Q: Consider the following statement regarding the new mineral discovered by China from Moon:

1. The new mineral is Changesite-(Y).
2. Changesite-(Y) is a phosphate mineral found in lunar basalts
3. China is the only country to discover mineral from moon.

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:

- Recently, China announced the name of the new mineral as Changesite-(Y).
- It was found in rock and dust samples retrieved from the moon by China's Chang'e-5 mission.
- China has become only the third country to discover a new mineral on the moon.
- U.S. and Russia are the other two countries to have done so till date.
- It is the sixth new mineral humans have discovered on the moon.
- The particle was about 10 microns in diameter, or about one-tenth of a human hair.
- Changesite-(Y) is a phosphate mineral found in lunar basalts.

Q: Consider the following statement regarding Sea Turtle:

1. Nearly all species of sea turtles are now classified as Vulnerable.
2. Hawksbill, Loggerhead, Leatherback, Green and Olive ridley turtle are from family of Sea turtle.
3. They are mainly found in tropical and subtropical waters.

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 sea turtle family includes the hawksbill, loggerhead, leatherback, green and olive ridley turtle.
- These five species are found worldwide, mainly in tropical and subtropical waters.
- The species that faced the most exploitation in the 30-year-period were green (56 per cent) and hawksbill sea turtles (39 per cent).
- Other than the five species, there are two more types of sea turtles that have restricted ranges.
- Kemp's Ridley is found mainly in the Gulf of Mexico and the flatback turtle around northern Australia and southern Papua New Guinea.
- Nearly all species of sea turtles are now classified as endangered, with three of the seven existing species being critically endangered.

Q: Consider the following statement regarding Phosphate:

1. It provides nutrient to plants for their growth.
2. Excess of it can damage human body.

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:

- Phosphate is the natural source of phosphorous and is also found on Earth.
- It is an element that provides a major chunk of the nutrients plants need for their growth.
- While excess of it is damaging to the human body, it would play a key role in helping space faring heroes farm on the lunar surface.

Q: Which among the following ship was launched under Project 17A?

- a) Taragiri
- b) Nilgiri
- c) Udaygiri
- d) All the above

Ans: d

Explanation:

- ‘Taragiri’, the third stealth frigate of the Indian Navy's Project 17A, was launched in Mumbai recently.
- This ship has been built using an integrated construction methodology which involves hull block construction in different geographical locations and integration and erection on the slipway at the Mazagon Dock Shipbuilders (MDL).
- The first ship of Project 17A, ‘Nilgiri’, was launched on 28 September, 2019, and is expected for sea trials in the first half of 2024.
- The second ship of the ‘Udaygiri’ class under the project was launched on 17 May, 2022. It is expected to start sea trials during the second half of 2024.

Q: Consider the following statement regarding Windfall Tax:

1. It is designed to tax the profits a company derives from unprecedented event.
2. One area where such taxes have routinely been discussed is oil markets.
3. India, UK, Italy and Germany had not yet imposed such Tax.

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:

- Windfall taxes are designed to tax the profits a company derives from an external, sometimes unprecedented event— for instance, the energy price-rise as a result of the Russia-Ukraine conflict.
- The United States Congressional Research Service (CRS) defines a windfall as an “unearned, unanticipated gain in income through no additional effort or expense”.
- Governments typically levy a one-off tax retrospectively over and above the normal rates of tax on such profits, called windfall tax. One area where such taxes have routinely been discussed is oil markets, where price fluctuation leads to volatile or erratic profits for the industry.
- There have been varying rationales for governments worldwide to introduce windfall taxes, from redistribution of unexpected gains when high prices benefit producers at the expense of consumers, to funding social welfare schemes, and as a supplementary revenue stream for the government.
- Besides India, a wave of countries including the United Kingdom, Italy, and Germany have either already imposed a windfall profit tax on super normal profits of energy companies or are contemplating doing so.