

Q: Recently, Australian scientists have come up with a model that will help researchers quickly identify soft corals most vulnerable to bleaching from marine heatwaves. Consider the following statement:

1. Soft coral attach themselves to older skeletons built by their ancestors.
2. Soft corals also add their own skeletons to the hard structure.
3. Hard corals extract Magnesium carbonate from the seawater to build hard, white coral exoskeletons.

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:

- Hard corals, also called hermatypic or 'reef building' corals extract calcium carbonate (also found in limestone) from the seawater to build hard, white coral exoskeletons.
- Soft coral polyps, however, borrow their appearance from plants, attach themselves to such skeletons and older skeletons built by their ancestors.
- Soft corals also add their own skeletons to the hard structure over the years and these growing multiplying structures gradually form coral reefs. They are the largest living structures on the planet.

Q: Recently, the Global Electric Mobility Readiness Index (GEMRIX 2022). Consider the following statement:

1. China has emerged as the electric vehicle (EV) adoption leader across the globe.
2. GEMRIX has been calculated for 15 countries in terms of market readiness for EV adoption.

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: b

Explanation:

- GEMRIX has been calculated for 15 countries of which India holds the 11th rank in terms of market readiness for EV adoption.
- An EV readiness score of 100 means that in a given country, it is equally beneficial to buy and operate an electric vehicle as one with an internal combustion engine.
- Norway has emerged as the electric vehicle (EV) adoption leader across the globe.
- Norway has a Global Benchmark score of 115, indicating that EVs are emerging as the popular choice for mobility among citizens in that country.
- This is followed by three other distinct groups of countries comprises 'Ambitious Followers' **China** (Score 83), **Germany** (76), the **UK** (74) and **Singapore** (74), which possess all prerequisites for EV mobility and where EVs are on the verge of becoming mainstream.

Q: BIS in fulfilling 6 out of 17 United Nations Sustainable Development Goals (SDGs). Which among the following is not among them?

- a) No poverty
- b) Zero hunger
- c) Quality Education
- d) Gender equality

Ans: c

Explanation:

- BIS standard specifies the construction and performance requirements of a cooling cabinet made out of clay, which operates on the principle of evaporative cooling.
- These cabinets may be used to store perishable foodstuff without the need of electricity.
- This standard helps BIS in fulfilling 6 out of 17 United Nations Sustainable Development Goals (SDGs) like No poverty, Zero hunger, Gender equality, Affordable and clean energy, Industry, innovation, and infrastructure, and Responsible consumption and production.

Q: Bitcoin has lost more than two-thirds of its value since it hit a peak in November 2021. Consider the following statement:

1. Fall in prices of stocks and other assets.
2. Popping of the bubble that has driven the prices of cryptocurrencies
3. Driven more by speculative fervour fuelled by easy monetary policy

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:

- The fall in the price of cryptocurrencies is **in line with the fall in prices of stocks and other assets** as central banks such as the U.S. Federal Reserve tighten monetary policy to fight price rise. As central banks withdraw liquidity from the market, there's less money chasing assets, which in turn causes the prices of assets to drop.
- Others believe that the crash could also mark the **popping of the bubble that has driven the prices of cryptocurrencies** to stratospheric levels.
- Sceptics have long argued that the price of cryptocurrencies seems **driven more by speculative fervour fuelled by easy monetary policy** than by any fundamental factors.

Q: There was much debated mystery over the place of origin of Black Death. Consider the following statement:

1. The disease was caused by bacterium Yersinia pestis and was spread by fleas that were carried by rodent hosts.
2. Black Death refers to the bubonic plague that spread across Northern Africa only.

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 term Black Death refers to the bubonic plague that spread across Western Asia, Northern Africa, Middle East and Europe in 1346-53.
- Most scholars agree that the Black Death, which killed millions, was caused by bacterium Yersinia pestis and was spread by fleas that were carried by rodent hosts.