

Q: Consider the following:

1. Eurasian Curlew
2. Lesser Sand Plover
3. Kingfishers

Which among the following is the threatened bird species of Sundarban?

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

Ans: a

Explanation:

- Recently, 145 different bird species were sighted during the first Sundarban bird festival.
- The first-ever festival was organised by the Sundarban Tiger Reserve (STR) division of West Bengal Forest Department, where six teams visited different areas inside the Sundarban Biosphere Reserve.
- The species recorded during the bird festival included 78 forest birds and 42 species of waders, raptors etc.
- The two-day exercise also recorded six species of waterfowl.
- The total number of birds spotted during the exercise was 5,065.
- Two threatened bird species of the Sundarbans, Eurasian Curlew and Lesser Sand Plover, were also spotted.
- Birders were able to spot seven of the 12 species of kingfishers found in the Sundarbans.

Q: Consider the following statement regarding Lithium:

1. It does not react with water.
2. The element was first discovered in 1817 by Johan August Arfvedson.
3. Scientists have suggested that this is a cosmic element that formed from the bright stellar explosions called novae.

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:

- Lithium, which is an element on the periodic table, is one of the most sought-after minerals globally. The element was first discovered in 1817 by Johan August Arfvedson and the word lithium comes from lithos in Greek, which means stone.
- The metal with the lowest density, lithium, reacts vigorously with water and is toxic in nature.
- But lithium did not naturally form on the planet. Scientists have suggested that this is a cosmic element that formed from the bright stellar explosions called novae.

Q: Consider the following statement:

1. Malaria is a mosquito-borne disease caused by parasite.
2. The parasite grows in the red blood cells.

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:

- The mosquito-borne disease, malaria, is caused by a parasite, which grows and multiplies first in the liver cells and then in the red cells of the blood. The parasite grows in the red blood cells, multiplying and further invading.
- Four kinds of malaria parasites infect humans: Plasmodium falciparum, P. vivax, P. ovale, and P. malariae.

Q: Which among the following is/are part of India-ASEAN Digital Work Plan 2023?

- a) Artificial Intelligence in Cyber Security
- b) Sustainable Data and Transport Network for Future
- c) 5G technologies for IoT and future trends
- d) All the above

Ans: d

Explanation:

India-ASEAN Digital Work Plan 2023:

- The Ministers meeting approved the India-ASEAN Digital Work Plan 2023.
- The workplan includes the capacity building and knowledge sharing in emerging areas in the field of Information and Communication Technologies such as
 - a) Artificial Intelligence in Cyber Security
 - b) Application of IoT & AI in Next Generation Smart City & Society 5.0,
 - c) Sustainable Data and Transport Network for Future: Standards and Applications,
 - d) 5G technologies for IoT and future trends,
 - e) Role of ICT in implementation of Digital Health and Security protection and assessment for future network, etc.

Q: Consider the following:

1. Stanley Whittingham
2. John Goodenough
3. John F. Clouser

Which among the following scientist had been awarded Noble prize for their work on lithium-ion battery?

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

Ans: a

Explanation:

- The emergence and dominance of lithium-ion batteries are due to their higher energy density compared to other rechargeable battery systems, which is further enabled by the design and development of high-energy density electrode materials.
- The development is so life-changing that Stanley Whittingham, John Goodenough, and Akira Yoshino were awarded the 2019 Nobel Prize in Chemistry for their work on the lithium-ion battery.