UPSC CURRENT AFFAIRS MCQS 13-12-2023

1. Consider the following statements regarding the Chief Minister:

1. The Governor can send back the proposal of Chief Minister to appoint a person a minister.
2. Governor has discretion in choosing a successor a chief minister who has just passed away.
3. Chief minister is the vice-chairman of interstate councils.

How many of the above statements are correct?

(A) Only one
(B) Only two
(C) All three
(D) None

Answer: (A)

Explanation:

The Chief Minister suggests ministers appointed by the governor and holds the authority to dissolve the council by resignation. As per Article 167, the Chief Minister acts as the liaison between the Governor and the state council of ministers. Importantly, there is no provision to send back proposals for ministerial appointments, highlighting the Chief Minister's pivotal role in state governance. Hence statement 1 is incorrect.
If the Chief Minister passes away without naming a successor, the Governor can choose someone using their own judgment. But if the ruling party suggests a candidate, the Governor has to appoint that person. This shows how leadership changes work in government, involving a mix of the Governor's discretion and the party's choices. Hence statement 2 is correct.
The Chief Minister serves in a rotational capacity as the vice-chairman of the pertinent zonal council, holding the position for one year at a time. Additionally, the Chief Minister assumes membership in both the Prime Minister's Inter-State Council and the NITI Aayog Governing Council. Hence statement 3 is incorrect.

2. Consider the following applications of Carbon Capture:

1. Production of artificial fuels
2. Mineral carbonation
3. Indoor agriculture
4. Preservation of perishables

How many of the above are correct?

(A) Only one
(B) Only two
(C) Only three
(D) All four

Answer: (D)

Explanation: One promising avenue for captured carbon is mineralization, where it undergoes a reaction with specific minerals to create stable carbonates. These carbonates can then be securely stored underground or utilized in the production of construction materials. This process, known as mineral carbonation, presents a reliable and enduring means of carbon storage.
Another application involves combining captured CO2 with hydrogen, often generated through electrolysis using renewable energy. This combination results in the production of artificial fuels like artificial natural gas, synthetic diesel, or even synthetic jet fuel. This method contributes to the development of sustainable alternatives in the fuel industry.
Additionally, captured carbon dioxide can find purpose in enhancing plant growth within greenhouses and indoor agriculture facilities. By supplying carbon dioxide to these environments, it becomes a valuable resource for optimizing plant conditions.
Furthermore, captured carbon dioxide serves a practical role in the production of dry ice—a solid form of carbon dioxide at extremely low temperatures. This versatile substance is widely used for shipping and transporting perishable goods, fulfilling medical and scientific needs, and creating special effects in the entertainment industry.

3. Which of the following statements is not correct?

(A) It is an international initiative aimed at promoting the responsible and human-centered development and utilization of Artificial Intelligence.
(B) In 2020, India joined GPAI as a founding member.
(C) The Secretariat of GPAI is hosted at the OECD.
(D) All G20 members are also members of GPAI.

Answer: (D)

Explanation: GPAI, the Global Partnership on Artificial Intelligence, is a collaborative initiative involving various stakeholders. Its primary goal is to narrow the divide between AI theory and practical implementation by endorsing advanced research and applied endeavors focused on AI-related priorities. Hence option (a) is correct.
Anchored in a collective dedication to the OECD Recommendation on Artificial Intelligence, which also hosts the secretariat, GPAI unites diverse perspectives and expertise from the realms of science, industry, civil society, governments, international organizations, and academia to promote global cooperation. Hence option (b) is correct.
India had joined GPAI in 2020 as a founding member and took over the presidency from France in 2022. Hence option (c) is correct. Members: Argentina, Australia, Belgium, Brazil, Canada, Czech Republic, Denmark, France, Germany, India, Ireland, Israel, Italy, Japan, Republic of Korea, Mexico, Netherlands, New Zealand, Poland, Senegal, Serbia, Singapore, Slovenia, Spain, Sweden, Türkiye, United Kingdom, United States, and the European Union. Hence option (d) is not correct.
Hence the answer is (d).

4. Dema Orchestia alanensis, recently seen in news, is a/an:

(A) Rare species of orchid
(B) Newly discovered planet
(C) Type of marine crustacean
(D) Endangered bird species

Answer: (C)

Explanation: Researchers at Berhampur University in Odisha have discovered a new species of marine amphipod in Chilika Lake on the east coast of India.
• The shrimp-like crustacean belongs to the genus Demaorchestia and has been

named Dema Orchestia alanensis in honor of Professor Alan Myers of University College Cork, Ireland, a global expert in marine amphipod studies. Hence option (c) is correct.

• Professor Myers has made significant contributions to the field, prompting the naming of the newly discovered species after him.

• Dema Orchestia alanensis is characterized by its white color and measures less than 15 millimeters in length, featuring 13 pairs of legs. Three pairs are adapted for swimming, eight for walking on land, and the remaining two pairs are used for capturing prey and feeding.

• The species can be distinguished from others in the genus by the presence of two to three strong, hair-like structures on the anterior margin of the propodus of the gnathopod.

• Demaorchestia alanensis belongs to the subfamily Platorchestiinae and is commonly found along the Indian coast.

5. Consider the following seas:

1. Red Sea
2. Yellow Sea
3. Black Sea
4. White Sea

Arrange the above given seas in order from South to North:

(A) 1,2,3,4
(B) 2,1,3,4
(C) 1,3,2,4,
(D) 1,4,2,3

Answer: (A)

Explanation:

1. Red Sea (between Africa and Arabia): A reference to the presence of sea sawdust (reddish bacteria) or a connection between the direction 'south' and the color 'red'
2. Yellow Sea (between China and Korea): A reference to the presence of sand particles blown east from the deserts of Mongolia
3. Black Sea (between eastern Europe and Anatolia): Possibly a reference to the storms of the Sea or to its stillness, or possibly deriving from a connection between the direction 'north' and the color 'black'
4. White Sea (in northern Russia, just east of Finland): A reference to the ice and the pale colors of the Arctic