



UPSC CURRENT AFFAIRS MCQS 09-12-2023

1. With reference to GNoME, consider the following statements:

1. It is an Artificial Intelligence (AI) tool developed by Google's DeepMind laboratory.
2. It is designed for predicting the structures of new materials.
3. GNoME has significantly improved the accuracy of predicting material stability from 50% to approximately 80%.

How many of the above statements is/are correct?

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

Answer: (C)

Explanation: GNoME stands for Graph Networks for Materials Exploration. It is a Deep Learning AI tool developed by researchers at Google Deep Mind. It is designed for predicting the structures of new materials. It is a state-of-the-art Graph Neural Network (GNN) model. The input data for GNoME takes the form of a graph, representing connections between atoms. It employs "active learning," a technique that allows the model to scale up from a small specialized dataset. This technique involves introducing new targets, enabling machine learning to label new data with human assistance. GNoME's predictions have implications for various sectors, including renewable energy, battery research, semiconductor design and computing efficiency. GNoME has significantly improved the accuracy of predicting material stability from 50% to approximately 80%. It has increased the number of known stable materials. This could lead to the development of new technologies such as more efficient batteries and superconductors. It uses filters to narrow down the list of potential materials. This saves time and money by avoiding the need to synthesize and test materials that are unlikely to be stable. Hence, all statements are correct.

2. Consider the following statements regarding Dodo:

1. The dodo (*Raphus Cucullatus*) is an extinct flightless bird that was native to Maldives, an island in the Indian Ocean.
2. It is considered the ultimate symbol of human-induced extinction.



Which of the above statements is/are correct?

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: (B)

Explanation: Recently, the Geneticists and conservationists have joined forces to re-introduce the Dodo, extinct since the late 17th century, to its once native habitat in the island of Mauritius. The dodo (*Raphus Cucullatus*) is an extinct flightless bird that was native to Mauritius, an island in the Indian Ocean. It was part of the genus *brisson* and the *Columbidae* family. Dutch sailors who first arrived in Mauritius in 1598 hunted dodos for meat. It is considered the ultimate symbol of human-induced extinction. The dodo was about three feet tall and weighed 22–40 pounds. It was larger than a turkey and about the size of a swan. It had blue-gray plumage, brown feathers and a white tail plume. Hence, statement 1 is not correct.

3. Consider the following passage:

This river was formed by glaciers that melted 12,000 years ago. It originates from Lake Itasca in northern Minnesota, emerging as a small stream and ends in the Gulf of Mexico. It is the second longest river in North America. The major tributaries of this river are Arkansas, Illinois, Missouri, Ohio and Red river. It is the world's fourth longest river system after Nile, Amazon and Yangtze.

Which of the following river is discussed in the above passage?

- (A) Mississippi River
- (B) Missouri River
- (C) Colorado River
- (D) Columbia River

Answer: (A)

Explanation: Recently, the National Mission for Clean Ganga (NMCG) made a significant stride by signing a Memorandum of Common Purpose (MoCP) with the Mississippi River Cities and Towns Initiative (MRCTI). The Mississippi River was formed by glaciers that melted 12,000 years ago. It originates from Lake Itasca in northern Minnesota, emerging as a small stream and ends in the

Gulf of Mexico. It is the second longest river in North America. The Major tributaries of the Mississippi River are the Upper Mississippi, Arkansas, Illinois, Missouri, Ohio and Red rivers. It is the world's fourth longest river system after the Nile, Amazon and Yangtze. Hence, option (a) is correct.

4. Consider the following statements regarding Climate Change Performance Index 2024:

1. The Climate Change Performance Index (CCPI) published biannually since 2005 is an independent monitoring tool that tracks the climate protection performance of 63 countries and the EU.
2. The CCPI assesses each country's performance in three categories namely; GHG Emissions (40% of the overall ranking), Renewable Energy (20%) and Climate Policy (20%).
3. India secured the tenth rank in the 2022 Climate Change Performance Index (CCPI).

How many of the above statements is/are correct?

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

Answer: (D)

Explanation: The Climate Change Performance Index (CCPI) published annually since 2005 is an independent monitoring tool that tracks the climate protection performance of 63 countries and the EU. It aims to enhance transparency in international climate politics and enables comparison of climate protection efforts and progress made by individual countries. In the CCPI 2024, Denmark reached the best ranking. Again, no country performs well enough in all categories to achieve an overall “very high” rating in the index. Therefore, the first three ranks in the overall ranking remain empty. Denmark reaches the best ranking, followed by Estonia in 5th place and the Philippines in 6th place in this year's CCPI. The CCPI assesses each country's performance in four categories: GHG Emissions (40% of the overall ranking), Renewable Energy (20%), Energy Use (20%) and Climate Policy (20%). India has been ranked seventh in climate performance during 2022, shows the report Climate Change Performance Index (CCPI) 2024. Hence, all statements are not correct.



5. With reference to Advocates Amendments Bill, consider the following statements:

1. Its primary objective is to eradicate 'touts' from the legal system by repealing the antiquated Legal Practitioners Act, 1879, and amending the Advocates Act, 1961.
2. The new Bill inserts Section 45A into the 1961 Act, empowering High Courts and district judges to frame and publish lists of touts.

Which of the above statements is/are correct?

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: (C)

Explanation: The Advocates Amendment Bill, 2023, was passed in the Lok Sabha during the first day of the Parliament's Winter Session. The Advocates Amendment Bill, 2023, successfully passed in the Lok Sabha during the Parliament's Winter Session. Its primary objective is to eradicate 'touts' from the legal system by repealing the antiquated Legal Practitioners Act, 1879, and amending the Advocates Act, 1961. The new Bill inserts Section 45A into the 1961 Act, empowering High Courts and district judges to frame and publish lists of touts. Individuals' names won't be included without providing them an opportunity to contest the allegations. Alleged touts can be reported to subordinate courts for inquiry, with subsequent actions taken based on the findings. Conviction as a tout results in inclusion in a published list in every court, accompanied by potential imprisonment. A 'Tout' is a person, who induces/instigates, on the basis of falsity, any party of a court's case/complaint/matter to engage any particular lawyer for conduction of said case/complaint/matter in the court. Hence, both statements are correct.