

Q: Recently, scientists have found microplastics in freshly fallen Antarctic snow. Consider the following statement:

1. The most common microplastics being PET, commonly used to make soft drink bottles and clothing.
2. An average of 29 microplastic particles per litre reported from melted snow, which is higher than marine concentrations.
3. In Antarctica, the density of microplastics was nearly five times higher.

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:

- The plastic particles were also looked at under a microscope to identify their colour, size and shape.
- The researchers found an average of **29 microplastic particles per litre of melted snow**, which is higher than marine concentrations reported previously from the surrounding Ross Sea and in Antarctic sea ice.
- Just next to the scientific bases on Ross Island, Scott Base, and McMurdo Station, the largest station in Antarctica, the density of microplastics was **nearly three-times higher**, with similar concentrations to those found in Italian glacier debris.
- There were 13 different types of plastic found, with the most common being PET, commonly used to make soft drink bottles and clothing.

Q: Recently, Russia supplied TVS-2M nuclear fuel for Kudankulam Nuclear Power Plant. Consider the following statement:

1. The new fuel does not increase uranium capacity.
2. Due to its welded frame, the fuel assemblies in the reactor core retain their geometry.

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:

- Rosatom State Corporation of Russia has supplied the first batches of more reliable and cost-efficient nuclear fuel over the existing one, the TVS-2M nuclear fuel, to India for the Units 1 and 2 of Kudankulam Nuclear Power Plant (KNPP).
- Compared to the current fuel model, the TVS-2M fuel assemblies have a number of advantages making them more reliable and cost-efficient.
- Firstly, it is the rigidity of a bundle. Because of the welded frame, the fuel assemblies in the reactor core retain their geometry. The spacer grids protect the fuel rod cladding from fretting wear and the additional spacer grid makes the fuel assemblies more vibration-resistant.
- Secondly, the new fuel has increased uranium capacity, one TVS-2M assembly contains 7.6% more fuel material as compared to the earlier fuel bundles.

Q: Recently CCPA issued guidelines for Prevention of Misleading Advertisements and Endorsements. Consider the following statement:

1. It aims to curb misleading advertisements and protect the consumers.
2. Right to be safeguarded against potentially unsafe products and services.

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:

- Recently, the Central Consumer Protection authority (CCPA) under the Department of Consumer Affairs has notified 'Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022'.
- To curb misleading advertisements and protect the consumers, who may be exploited or affected by such advertisements.
- The guidelines seek to ensure that consumers are not being fooled with unsubstantiated claims, exaggerated promises, misinformation and false claims. Such advertisements violates various rights of consumers such as right to be informed, right to choose and right to be safeguarded against potentially unsafe products and services.

Q: Recently, the Organisation of Islamic Cooperation (OIC) was in new. Consider the following statement regarding OIC:

1. It was established at a 1969 summit in Rabat.
2. The OIC has consultative and cooperative relations with U. N. and other inter-governmental organisations to protect the interest of Muslims.
3. OIC plans to permanently move its headquarters to East Jerusalem once the disputed city is 'liberated'.

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 OIC claims to be the "collective voice of the Muslim world". It was **established at a 1969 summit in Rabat (Morocco)** after what it describes as the 'criminal arson' of Al-Aqsa Mosque in Jerusalem.
- The OIC endeavours to establish solidarity among member states, support restoration of complete sovereignty and territorial integrity of any member state under occupation; protect, defend and combat defamation of Islam, prevent growing dissension in Muslim societies and work to ensure that member states take a united stand at the U. N. General Assembly, Human Rights Council and other international fora.
- The OIC has **consultative and cooperative relations with U. N. and other inter-governmental organisations** to protect the interest of Muslims, and settle conflicts and disputes involving member states, among them being the territorial conflict between Armenia and Azerbaijan and the status of Jammu & Kashmir.
- **Presently based in Jeddah**, the organisation plans to permanently move its headquarters to East Jerusalem once the disputed city is 'liberated'. Moreover, it aspires to hold Israel accountable for 'war crimes' and violations of international law.

Q: Recently the Ministry of Coal released an action plan for 2022-23. Consider the following statement:

1. India target of sourcing 50 percent energy requirement from renewables energy by 2030.
2. India targeted 250 GW non-fossil fuel electricity capacity by 2030.

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:

- India has set itself stiff targets of sourcing 50 per cent energy requirement from renewables and installing 500 GW of non-fossil fuel electricity capacity by 2030.
- With coal here to stay, despite being a major source of air pollution, the push for renewable energy must be tempered by ground reality.
- The Commission for Air Quality Management's order banning the use of coal for industrial and domestic applications in the NCR from 2022 can make a visible difference only if viable alternatives are made available to the consumers.