

Q: Consider the following statement regarding Methanol:

1. It is also called wood alcohol, or wood spirit.
2. This fuel is generally produced by steam-reforming natural gas to create synthesis gas.
3. It does not mix with water.

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:

- Methanol is also called methyl alcohol, wood alcohol, or wood spirit.
- It is the simplest of a long series of organic compounds called alcohols, consisting of a methyl group (CH₃) linked with a hydroxy group (OH).
- It completely mixes with water.
- This fuel is generally produced by steam-reforming natural gas to create synthesis gas.
- Feeding this synthesis gas into a reactor with a catalyst produces methanol and water vapour.

Q: Consider the following statement regarding Adaptation Gap Report:

1. The report is published by UNESCO.
2. The aim of the reports is to inform national and international efforts to advance adaptation.
3. It complements the Emissions Gap Report series.

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:

- Adaptation Gap Report has been published annually by the United Nations Environment Programme (UNEP) since
- The aim of the reports is to inform national and international efforts to advance adaptation.
- It provides an update on the global status and progress of the adaptation process across three elements: planning, financing, and implementation.
- It complements the Emissions Gap Report series and explores the implications of failing to close the emissions gap.
- It is co-produced by the UNEP Copenhagen Climate Centre (UNEP-CCC) and the World Adaptation Science Programme (WASP).

Q: Consider the following statement regarding Kaleshwaram Lift Irrigation project:

1. It is a multipurpose irrigation project on the Godavari River.
2. It is claimed to be the world's largest multi-stage and multi-purpose lift irrigation project.

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:

- Kaleshwaram Lift Irrigation project (KLIP) is a multipurpose irrigation project on the Godavari River, e., at Kaleshwaram village in Telangana.
- The Pranhita-Godavari River confluence is the location of KLIP.
- The Wardha, Painganga, and Wainganga rivers, which together make up the seventh-largest drainage basin on the subcontinent, come together at the confluence of the Pranahita River.
- It is claimed to be the world's largest multi-stage and multi-purpose lift irrigation project.

Q: Consider the following statement regarding Twin Engine Deck Based Fighter (TEDBF):

1. Designed specifically for carrier-based operations.
2. It will be equipped with various homegrown Indian weapon systems and avionics.
3. It will be a single engine aircraft carrier.

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 TEDBF's twin engines will enable shorter take-offs from the Indian Navy's Short Take-Off Barrier Arrested Recovery (STOBR) aircraft carriers.
- It will have a maximum take-off weight of between 24 and 26
- The TEDBF fighters will be able to reach Mach 1.6 speeds.
- Designed specifically for carrier-based operations, the TEDBF will feature foldable wings for more compact storage, enhancing the flexibility of carrier operations.
- It will be equipped with various homegrown Indian weapon systems and avionics.
- It is intended to perform various missions, including air supremacy, air interdiction, anti-access/area denial (A2/AD), anti-ship warfare (ASW), and electronic warfare (EW) missions.

Q: Consider the following statement regarding Energy Efficiency Services Limited:

1. It was formed to create and sustain market access to energy efficient technologies.
2. It is also leading the market-related activities of the National Mission for Enhanced Energy Efficiency (NMEEE).
3. It is promoted by the Ministry of Environment, Forest and Climate Change (MoEFCC).

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:

- Energy Efficiency Services Limited is promoted by the Ministry of Power, Government of India, as a Joint Venture of four reputed public-sector undertakings NTPC Limited, Power Finance Corporation Limited, REC Limited and POWERGRID Corporation of India Limited.
- It is registered under the Companies Act, 1956 on 10th December 2009.
- It was formed to create and sustain market access to energy efficient technologies, particularly in public facilities like municipalities, buildings, agriculture, industry etc. and to implement several schemes of the Bureau of Energy Efficiency, Ministry of Power and Ministry of New & Renewable Energy, Government of India.
- It is also leading the market-related activities of the National Mission for Enhanced Energy Efficiency (NMEEE).

