

1. According to a recent study, India's Sulphur dioxide (SO₂) emission is among the highest in world. Which of the following are initiatives taken by government to reduce the emission of Sulphur dioxide?
 1. It is one of the pollutants being measured in Air Quality Index.
 2. Increasing cess on coal production to Rs. 400 per tonnes.
 3. Implementation of Bharat Stage Norms.
 4. Including Sulphur dioxide in the hazardous gas list.

Select the correct answer using the codes given below.

 - (a) 2 and 3 only
 - (b) 1 and 3 only
 - (c) 1, 2 and 3 only
 - (d) All the above
2. Negative Emission Technologies refer to a number of technologies, the objective of which is the large-scale removal of carbon dioxide from the atmosphere. Consider the following technologies
 1. Bio-energy with carbon capture and storage (BECCS).
 2. Biochar
 3. Carbon capture and storage
 4. Ocean fertilization

Which of the above is/are Negative Emission Technologies?

 - (a) 1 and 2 only
 - (b) 2 only
 - (c) 1, 3 and 4 only
 - (d) All the above
3. Recently the Pet Coke or Petroleum coke was in news. Consider the following statements about it.
 1. Pet coke is a solid carbon rich material derived from oil refining.
 2. It is cleaner alternative to coal and emits 11% less greenhouse gas.
 3. India is the world's largest producer of pet coke.
 4. It has the least sulfur content among fossil fuels.

Select the *incorrect* statements using the codes given below.

 - (a) 2 and 3 only
 - (b) 1, 2 and 3 only
 - (c) 2, 3 and 4 only
 - (d) None
4. Which of the following best defines the permaculture?
 - (a) Permaculture is a system of agriculture and aquaculture within the ecological carrying capacity of the region.
 - (b) Permaculture is a system of agricultural and social design principles centered on simulating or directly utilizing the patterns and features observed in natural ecosystems.
 - (c) Permaculture is a system of agriculture and agro based industry developing side by side.
 - (d) None.
5. Consider the following statements.
 1. An aerosol is a suspension of fine solid particles or liquid droplets, in air or another gas.
 2. Examples of anthropogenic aerosols are fog, dust, forest exudates and geyser steam.
 3. Examples of natural aerosols are haze, particulate air pollutants and smoke.
 4. Aerosol contributes to global warming.

Which of the given statements is/are correct?

 - (a) 1 only
 - (b) 2 and 3 only
 - (c) 4 only
 - (d) All the above

6. Any practice that affects the equilibrium of an aquatic environment may alter the temperature of that environment and subsequently cause thermal pollution. Consider the following statements regarding thermal pollution:
1. Thermal pollution comes in the form of dumping warm waters not cold waters into lake, river, or ocean.
 2. Volcanic eruption is one source of thermal pollution.
 3. Due to thermal pollution dissolved oxygen content in water increases.
- Choose the correct answer using the codes given below.
- (a) 1 and 3 only (b) 2 only
(c) 3 only (d) None
7. "Methanol has been promoted as an alternative transportation fuel from time to time over the past forty years". Which of the following statements regarding Methanol is *not* correct?
- (a) It can be produced from natural gas.
 - (b) It is a biodegradable fuel.
 - (c) Similar to hydrocarbon fuels, it is not soluble in water.
 - (d) It can be blended with ethanol and gasoline.
8. Consider the statements with regard to Energy Conservation and Building Code (ECBC), 2017.
1. It prescribes the energy performance standards for all new and old commercial buildings of India.
 2. To be considered ECBC-compliant building needs to demonstrate minimum energy savings of 25%.
- Which of the above statements are correct?
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
9. Which of the following is commonly known as "Terror of Bengal"?
- (a) Norway Maple
 - (b) Water Hyacinth
 - (c) Common Ivy
 - (d) Honeysuckle
10. The 'Kubuqi Model' has been praised by the UN Environment Programme for desertification control and being an "eco-pioneer" in greening the world. Which of the following statements regarding Kubuqi model are correct?
1. It was developed by Private firms with the help of local people.
 2. It is implemented in Egypt to promote livelihood and small industries in the region.
 3. The UNEP calls it Kubuqi Ecological restoration project.
- Select the code from following:
- (a) 1 and 2 (b) 2 and 3
(c) 1 and 3 (d) All of the above
11. Which statements are correct regarding 'Ganga Gram' project?
1. It aims for holistic sanitation development in villages on banks of river Ganga
 2. It was launched under Namami Ganga Programme
 3. It is initiative of Ministry of Environment, Forest and Climate Change
- Select the code from below:
- (a) 1 only (b) 1 and 2
(c) 2 and 3 (d) All of the above

12. Consider the following statement regarding Rhizofiltration:
1. Rhizofiltration refers to the approach of using hydroponically cultivated plant roots to remediate contaminated water.
 2. Rhizofiltration is used for treatment in soil remediation.
- Which of the above statements are correct?
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
13. Consider the following statements regarding Ozone hole
1. It is a region in the stratosphere where no ozone gas is present.
 2. It is caused by CFCs and bromine only
 3. Montreal protocol is related to substances that deplete ozone layer
- Which of the above statements are *incorrect*?
- (a) 1 and 3
 - (b) 2 and 3
 - (c) 1 and 2
 - (d) None of the above
14. Which of the following statements about ocean acidification are *incorrect*?
1. Ocean acidification is the ongoing increase in the pH of the Earth's oceans, caused by the uptake of carbon dioxide from the atmosphere
 2. It increases the concentration of hydrogen ions and decreases the concentration of carbonate ions.
 3. Ocean acidification leads to seawater pH go below 7
- Select the code from following:
- (a) 1 and 2
 - (b) Only 2
 - (c) 1 and 3
 - (d) Only 3
15. Consider the following in regard to Fly ash, a by-product of the thermal power plants:
1. They often contain pollutants such as heavy metals and organic compounds.
 2. They are used to produce high quality walling material and construct eco-friendly and cost-effective houses.
 3. They have potential to improve survival, growth and quality of plantation taken up in wasteland and hence transform barren wasteland into lush green forests.
- Which of the statements given above is/are correct?
- (a) 1 only
 - (b) 1 and 2 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3

ANSWER KEYS

01 c 02 d 03 c 04 b 05 a 06 b 07 c 08 b 09 b 10 c
11 b 12 a 13 c 14 c 15 d