

## ENVIRONMENT

1. Coal is regarded as the worst environmental pollutant because when burnt it releases large amounts of

- |                    |                    |
|--------------------|--------------------|
| 1. Carbon dioxide  | 2. Sulphur dioxide |
| 3. Nitrogen oxides | 4. Methane         |

Select the correct answer.

- (a) 1 and 4  
(b) 1, 2 and 3  
(c) 1, 3 and 4  
(d) 1, 2, 3 and 4

2. Which of the following statements is/are true for greenhouse gases?

1. Greenhouse gases are green in colour.  
2. Greenhouse gases are responsible for global warming.

Select the correct answer using the codes given below.

- |             |             |
|-------------|-------------|
| (a) 1       | (b) 3       |
| (c) 1 and 3 | (d) 2 and 3 |

3. Which of the following are corrosive poisons?

- |                     |             |
|---------------------|-------------|
| 1. Sulphuric acid   | 2. Phosgene |
| 3. Sodium hydroxide | 4. Ozone    |

Select the correct answer using the codes given below

- |                |                   |
|----------------|-------------------|
| (a) 1 and 3    | (b) 1, 2, 3 and 4 |
| (c) 1, 2 and 4 | (d) 2 and 4       |

4. Carcinogenesis can be caused by

- |            |                    |
|------------|--------------------|
| 1. X-rays  | 2. Dyes and paints |
| 3. Benzene | 4. Soot and tar    |

Select the correct answer using the codes given below.

- (a) 1, 2, 3 and 4  
(b) 1 and 4  
(c) 3 and 4  
(d) 1 and 2

5. Match List I (Type of Toxin) with List II (Example) and select the correct answer using the code given below the lists:

**List I**

(Type of Toxin)

- A. Carcinogen  
B. Neurotoxin  
C. Hallucinogen  
D. Metabolic poison

**List II**

(Example )

1. Cyanide ion  
2. LSD  
3. Benzo ( $\alpha$ ) pyrene  
4. Atropine

**Code:**

- |       |   |   |   |
|-------|---|---|---|
| A     | B | C | D |
| (a) 4 | 3 | 2 | 1 |
| (b) 3 | 4 | 2 | 1 |
| (c) 4 | 1 | 3 | 2 |
| (d) 2 | 4 | 3 | 1 |

6. Which of the following statements about natural gas are true?
1. Natural gas is the cleanest fossil fuel.
  2. Saudi Arabia has the highest natural gas reserves.
  3. Methane is the major component of natural gas.
  4. Natural gas is a product of tiny plants and animals of past ages.
- Select the correct answer from the following:
- (a) 1 and 4
  - (b) 2 and 3
  - (c) 1, 2 and 3
  - (d) 1, 3 and 4
7. Excessive emissions of carbon dioxide are responsible for ocean acidification. It means that
1. Oceanic waters become acidic.
  2. Only the surface waters become acidic.
  3. The surface waters only become less alkaline.
- Select the correct answer from those given below:
- (a) 3 only
  - (b) 2 only
  - (c) 2 and 3
  - (d) 1 only
8. Some of the organic compounds have been found to be highly toxic to human health and are banned. They are known as persistent organic pollutants. This means that
1. These compounds cannot be broken down by plants or animals.
  2. Being water-soluble, they reach the water table through leaching, polluting ground water.
  3. They are readily absorbed by plants and reach man through the food chain.
  4. Being fat-soluble, their concentration increases manifold through the food web.
- Which of the above statement/s is/are true?
- (a) 1 and 4
  - (b) 2 and 3
  - (c) 1, 3 and 4
  - (d) only 2
9. Which of the following statement/s is/are true?
1. A majority of nuclear power plants in the world have light-water reactors.
  2. Unlike light-water reactors, the heavy water reactors require enriched uranium (U-235).
  3. Light-water is lighter than ordinary water.
  4. The spent fuel rods are not radioactive as the radioactive fuel has been used up.
- Select the correct answer from those given below:
- (a) 1 and 4
  - (b) 2 and 4
  - (c) 2 and 3
  - (d) only 1
10. A study by The Energy and Resources Institute (TERI) has found very high levels of ozone in Delhi, which is a cause of concern because
- (a) it is indicative of the depletion of ozone layer.
  - (b) it indicates that atmospheric oxygen ( $O_2$ ) is being converted into ozone ( $O_3$ ).
  - (c) it shows that there are high levels of pollutants like nitrogen oxides that react with hydrocarbons, in the presence of sunlight to produce ozone.

- (d) it shows that there are high levels of pollutants in the atmosphere, such as carbon monoxide and carbon dioxide that react with hydrocarbons in the presence of sunlight to produce ozone.
11. LSD stands for
- Low sugar drugs
  - Lysergic acid diethylamide
  - Lithium sodium diodes
  - Low sodium dish
12. Which of the following are toxic air pollutants?
- Asbestos
  - Arsenic
  - Benzene
  - Betadine
- Select the correct answer.
- 2 and 4
  - 2 and 3
  - 1, 3 and 4
  - 1, 2 and 3
13. The harmful ozone in the lower atmosphere, which is a major part of smog, is formed when
- nitrogen oxides and volatile organic compounds mix in sunlight.
  - it rains in the presence of sulphur dioxide.
  - it rains in the presence of nitrogen dioxide.
  - particulate matter in the atmosphere decomposes.
14. Major soil pollutants are
- Radioactive waste
  - Pesticides
  - Nitrates
  - Dioxins
- Select the correct answer
- 1 and 4
  - 2 and 3
  - All of the above
  - None of the above
15. Which of the following statement/s about chlorofluorocarbons (CFCs) is/are true?
- They can destroy ozone in the stratosphere.
  - They work well as coolants.
  - They are malleable and ductile.
  - They are present in fire extinguishers.
- Select the correct answer from those given below:
- 1, 2 and 4
  - 1 and 2
  - 1, 2 and 3
  - only 3
16. Which one of the following statements is not true for monosodium glutamate (MSG)?
- MSG is a highly refined trans fat.
  - MSG is used as a flavor enhancer in soups.
  - MSG is found in Chinese food.
  - Regular consumption of MSG may result in depression and disorientation.
17. Which of the following statements about trans fats are true?
- They extend the shelf life of food products.
  - They increase LDL (bad) cholesterol levels.
  - They decrease HDL (good) cholesterol.
  - They are found in boiled vegetables.

Select the correct answer from those given below:

- (a) 1, 2 and 4
- (b) 1, 2 and 3
- (c) 2 and 3
- (d) only 4

18. Consider the following statements:

1. Butylated hydroxytoluene (BHT) is a preservative, which prevents foods from changing colour flavour.
2. High fructose corn syrup (HFCS) is a highly refined artificial sweetener.
3. Butylated hydroxyanisole (BHA) decreases HDL (good) cholesterol.
4. Aspartame is found in diet coke and coke zero.

Which of the above statement(s) is/are not true?

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

19. Which of the following solvents is used in refrigeration and is a known culprit of ozone layer depletion:

- (a) Benzene
- (b) Chlorofluorocarbon
- (c) Carbon tetrachloride
- (d) Chloroform

20. Polysaccharide polymers are better than most other polymers because

1. Their accident potential is negligible.
2. They are biodegradable after their useful life is over.
3. They are obtained from non-renewable feedstocks.
4. They have no significant toxic effects on human health and the environment.

Of the above, the correct statements are:

- (a) 1, 2
- (b) 2, 4
- (c) 1, 2, 4
- (d) 1, 2, 3

### EVALUATE YOURSELF

Total Marks :

Your Mark :

Topper's Mark :

### SCORE GRADE

30-40 : Outstanding

A

20-30 : Very Good

B

10-20 : Good

C

0-10 : Average

D

### ANSWER KEYS

- 01 b 02 d 03 b 04 a 05 b 06 d 07 a 08 c 09 d 10 c  
11 b 12 d 13 a 14 c 15 a 16 a 17 b 18 c 19 b 20 c

VANIK IAS