

### **REVIEW QUESTIONS**

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#### A. MULTIPLE CHOICE TYPE

(Select the most appropriate option in each case)

- 1. Which one of the following is an example of pollutant?
- (a) A rat entering your kitchen.
- (b) CO<sub>2</sub> given out by the respiring organism.
- (c) The heat given out while cooking food.
- (d) The dust raised during road-cleaning.

Solution:-

(d) The dust raised during road-cleaning.

## 2. Which one of the following is a "dirty" practice contributing to pollution and seriously needs stoppage by educating public?

- (a) Too loud marriage musical bands
- (b) Disposing of corpses in rivers
- (c) Floating lighted earthen lamps ("deeyas") in rivers
- (d) Wearing scented/perfumed clothes

Solution:-

(b) Disposing of corpses in rivers

#### 3. One of the examples of radiation pollutants is

(a) Sulphur dioxide

(c) lodine – 131

Solution:-

(b) Ozone

- (b) Ozone
- (d) Discarded fused electric bulbs

- **B. VERY SHORT ANSWER TYPE**
- 1. Name the following pollutants:
- (i) A pollutant which is mainly responsible for causing acid rain.

#### Solution:-

Sulphur dioxide (SO<sub>2</sub>)

(ii) Any two chemicals leading to the formation of ozone holes.

Solution:-

Chlorofluorocarbons and Bromochlorodifluoromethane



## (iii) The chemical element which caused minimata disease in Japan. Solution:-

Mercury.

#### 2. Match the items in column I with the closely related ones in column II.

- Column I
- (i) Chlorofluocarbons (CFCs)
- (ii) Flyash
- (iii) Cow dung
- (iv) CO<sub>2</sub> and methane
- (v) Sulphur dioxide
- (vi) lodine 131

#### Solution:-

#### Column I

- (i) Chlorofluocarbons (CFCs)
- (ii) Flyash
- (iii) Cow dung
- (iv) CO<sub>2</sub> and methane
- (v) Sulphur dioxide
- (vi) lodine 131

- Column II
- (a) Global warming
- (b) Biodegradable
- (c) Nuclear radiation pollutant
- (d) acid rain
- (e) Industrial waste
- (f) Ozone depletion

#### Column II

- (f) Ozone depletion
- (e) Industrial waste
- (b) Biodegradable
- (a) Global warming
- (d) acid rain
- (c) Nuclear radiation pollutant

#### 3. Fill in the blanks:

#### (i) Rubber particles and dust raised by running motor vehicles are examples of

#### ..... pollutants.

#### Solution:-

Rubber particles and dust raised by running motor vehicles are examples of <u>vehicular air</u> pollutants

# (ii) Too frequent exposure to ..... in a medical diagnostic technique may damage chromosomes.

#### Solution:-

Too frequent exposure to <u>X-ray</u> in a medical diagnostic technique may damage chromosomes.

#### (iii) Thermal power plants give out a lot of ...... waste water. Solution:-

Thermal power plants give out a lot of hot waste water.



(iv) Sewage is a liquid waste from...... Solution:-

Sewage is a liquid waste from <u>domestic activities</u>.

#### 4. Identify biodegradable waste from the following:

peal of vegetables and fruits, metallic cans, broken plastic toys, broken glass cover, grass, paper, ball point pen refill.

#### Solution:-

The biodegradable waste are peal of vegetables and fruits, grass, paper.

#### 5. What is full form of 4 R's?

Solution:-

Reduce, Reuse, Recycle, Recover

#### **C. SHORT ANSWER TYPE**

#### 1. List two major harmful effects of each of the following:

#### (i) Rivers contaminated with sewage.

#### Solution:-

(1) When rivers are contaminated with sewage the animals living in rivers will die due to harmful substances.

(2) Too much harmful gaseous are released into atmosphere it leads air pollution and people will get respiratory problems

### (ii) Too much gaseous exhausts containing $CO_2$ and $SO_2$ .

#### Solution:-

(1) Sulfur dioxide affects human health when it is breathed in. It irritates the nose, throat, and airways to cause coughing, wheezing, shortness of breath, or a tight feeling around the chest

(2) Carbon dioxide emissions impact human health by displacing oxygen in the atmosphere. Breathing becomes more difficult as carbon dioxide levels rise.

#### (iii) Pesticides such as DDT used in agriculture.'

#### Solution:-

(1) DDT had an effect on wildlife such as birds due to eggshell thinning leading to a decrease in successful reproduction.

(2) More importantly Pesticides such as DDT has negative effects on human health as well due to its effect on the endocrine system.



### (iv) Prolonged noise such as the one produced by crackers Solution:-

(1) Firecrackers can cause hearing loss, high blood pressure, sleeping disturbances.

(2) Sudden exposure to loud noise can cause temporary or permanent deafness or even result in heart attack.

#### 2. List the three major constituents of sewage.

#### Solution:-

(i) Agricultural wastes

- (ii) Kitchen waste
- (iii) Sanitary waste

### 3. What are the common sources of oil spills, and how do they affect sea life. Solution:-

Oil spills are the accidental discharges of petroleum in oceans or estuaries. The sources of spills are the overturned oil tankers, offshore oil mining, oil refineries. Oil pollution kills a lot of marine life.

#### 4. Mention any two measures to minimise noise pollution.

#### Solution:-

- (i) Prohibiting blowing of horns.
- (ii) Restriction on loud speakers, specially during night.
- (iii) Not to burn fire crackers.

# 5. Briefly mention about "Swachh Bharat Abhiyan". When it was launched and what are its objectives?

#### Solution:-

The Swachh Bharat Abhiyan is a significant cleanliness campaign started by the Government of India. It was officially launched on 2<sup>nd</sup> October 2014 by our Prime Minister Shri Narendra Modi, who took the cleanliness pledge at India Gate in Delhi. He wanted to fulfil Mahatma Gandhi's dream of a clean and hygienic India and emphasized that people should neither litter, nor let others litter.

Some objectives of the campaign are,

(i) to clean the streets, roads and infrastructure of the country's cities and towns.

(ii) to eliminate open defecation though the construction of individuals, cluster and community toilets.

(iii) to establish an accountable mechanism of monitoring latrine use.



#### D. STRUCTURED/APPLICATION/SKILL TYPE

### **1.** A lot of fish are dying near a sea shore. Describe any two possible causes. Solution:-

(i) Sewage:

Sewage is the liquid waste from domestic activities. It consists of kitchen wastes, toilet and other household waste water. Small towns and villages releasing their fluid wastes directly into some nearby large water body.

(ii) Oil Spills:

Oil Spills are the accidental discharges of petroleum in oceans or estuaries. The sources of spills are the overturned oil tankers, offshore oil mining, oil refineries. Oil pollution kills a lot of marine life.

(iii) Industrial Waste:

A large number of industries produce waste water which contains various types of chemical pollutants. Such wastes are commonly discharged into the rivers.

#### 2. Look at the cartoonist's presentation of a kind of pollution given below and



(i) Name the kind of pollution. Solution:-Noise Pollution

#### (ii) List the sources of pollution. Solution:-

Major sources of noise pollution are the industrial machines, workshops, trains, automobiles on the streets, jet aircrafts landing and taking off in the air, loud

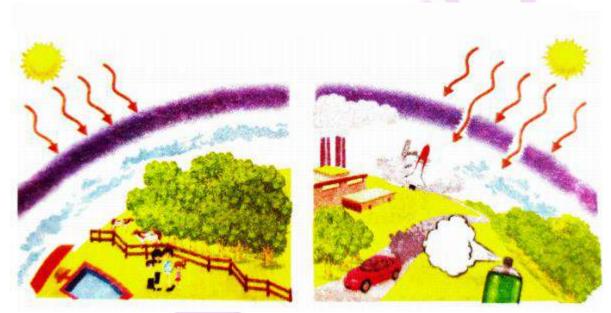


conversation and the radio or television inside houses, the loudspeakers and musical bands in public places and so on.

### (iii) Mention any two harmful effects of this pollution. Solution:-

- (i) Interferes in communication
- (ii) Interrupts concentration of thought and disturbs peace of mind.
- (iii) Lowers efficiency of work
- (iv) Bird life gets disturbed by aircrafts landing or taking off from airports.

#### 3. The following picture depicts a certain phenomenon.



## (i) Name the phenomenon and explain it. Solution:-

The phenomenon is Ozone Layer depletion.

Certain gaseous compounds such as CFCs (chlorofluorocarbons) released from refrigerators, aerosol-sprayers and packing material Styrofoam, rise into the atmosphere. There they break down into chlorine atoms which in turn breakdown ozone ( $O_3$ ) into oxygen ( $O_2$ ) and O.

## (ii) Enlist the sources that are responsible for the above mentioned phenomenon. Solution:-

Certain gaseous compounds such as CFCs (chlorofluorocarbons) released from



refrigerators, aerosol-sprayers and packing material Styrofoam, etc., rise into the atmosphere are responsible for the above mentioned phenomenon.

#### (iii) List out the effects of the above phenomenon on humans.

#### Solution:-

(i) Water pollution may lead to several diseases like cholera, jaundice and typhoid.

- (ii) Sun burn
- (iii) Skin burn

#### 4. The picture below shows a campaign recently started by the Indian Government.



#### (i) Who launched this campaign and when? Solution:-

The Swachh Bharat Abhiyan is a significant cleanliness campaign started by the Government of India. It was officially launched on 2<sup>nd</sup> October 2014 by our Prime Minister Shri Narendra Modi.

#### (ii) Mention some chief objectives of this campaign.

#### Solution:-

Some objectives of the campaign are,

(i) to clean the streets, roads and infrastructure of the country's cities and towns.

(ii) to eliminate open defecation though the construction of individuals, cluster and community toilets.

(iii) to establish an accountable mechanism of monitoring latrine use.



Selina Solutions for Class 10 Biology Chapter 16 Pollution – A Rising Environmental Problem

