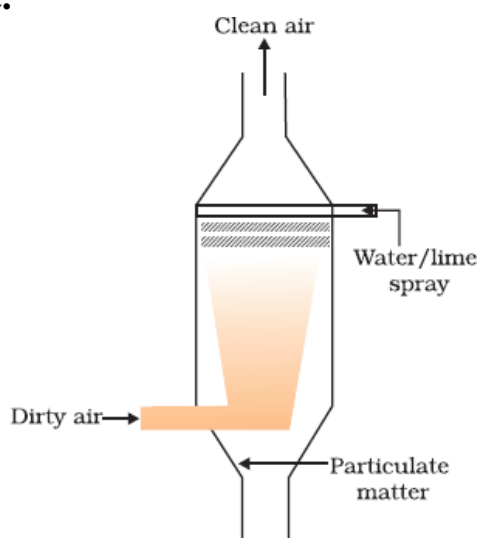


AIR POLLUTION

1. Name the act passed by Govt. of India to protect and improve the quality of our environment.
2. Expand CPCB? (1) (Model 2014)
3. Major pollutants present in automobile exhaust is-
a. CO b. CO₂ c. Cadmium d. Hydrogen
4. As head of the vehicle department, issue a notice to vehicle owners to observe any 2 measures to reduce vehicular air pollution and record the merit and demerits of CNG. (2) (SAY 2011)
5. Observe the figure given below. Identify the device and write its use.



(EDUMATE 2017)

6. Particulate matter in polluted air from thermal power plants is removed by the application of electrostatic precipitator. Explain the working principle of electrostatic precipitator. (2) (March 2017)
7. Catalytic converters may contain as catalyst.
a. Silver b. Palladium c. Gold d. Iron
8. Catalytic converters are fitted into automobiles for reducing emission of poisonous gases into the atmosphere.
a. Write its working in reducing pollution.
b. Motor vehicle equipped with catalytic converter should use only unleaded petrol. Why? (3) (EDUMATE 2017)
9. India had Euro III emission norm complaints and fuels by the year
10. In 1990s, Delhi ranked 4th among the most polluted cities of the world. But now air quality of Delhi has significantly improved mainly by switching vehicles from diesel to CNG.
a. Expand CNG
b. CNG is better than diesel. Comment.
c. What are the other initiatives were taken for reducing vehicular air pollution in Delhi? (2-March 2018, 2016, Model 2018, SAY 2010, NCERT)
11. We have got used to associating loud sounds with pleasure and entertainment not realising the noise causes psychological and physiological disorders in humans.
a. Comment on the various ill-effects of noise in human.
b. Briefly explain the different measures to reduce noise pollution.

WATER POLLUTION

12. What are the various constituents of domestic sewage? Discuss the effects of sewage discharge on a river. (NCERT)
13. A pond near to your home was with excessive algal bloom.
a) What are the possible reasons for this?
b) What will be the level of BOD?
c) Write the danger caused by this process. (4) (SAY 2014, 2012) (EDUMATE 2017)
14. Concentration of DDT in certain organisms of an ecosystem is given. Analyse and answer the questions:

| | |
|-------------------|-------------|
| Small fishes | - 0.5 ppm |
| Fish-eating birds | - 5 ppm |
| Zooplanktons | - 0.04 ppm |
| Large fish | - 2 ppm |
| Water | - 0.003 ppm |

a. Draw a flow chart showing biomagnification.
b. Which is the organism with the largest percentage of DDT content? Justify. (2) (SAY, Model 2013)
15. Increase in the concentration of toxicants at successive trophic level is called
(a) BOD (b) Biomagnification
(c) Eutrophication (d) Algal bloom (1) (March 2016)
16. Meena, an environmental activist, noticed a gradual decline in the population of birds in the open agricultural fields near her place. She has heard of excessive use of pesticides like DDT around that area.
a. What might have led to the decline of bird population in that area?
b. Name the process that has caused this phenomenon. (2) (March 2012)
17. Raju doesn't want to grow *Eichornia* plant in his locality. How does this plant affect the aquatic ecosystem (BOD)?
18. An aquatic ecosystem having luxuriant growth of cyanobacteria (algal bloom) leads to eutrophication.
a. What kind of pollutants cause algal bloom to colonise the aquatic ecosystem?
b. What are the consequences of eutrophication? (1) (March 2015)
19. Eutrophication leads to death of fish due to-
a. Increased O₂ content b. Increased algae
c. Decreased O₂ content d. none
20. Geetha resides in a city nearby a lake. Water from this lake was used for various domestic purposes earlier. Now-a-days, this water has become turbid and is with an unpleasant odour.
a. What can be the reason for this?
b. Name the scientific term that explain this effect. (2) (March 2011)
21. Pollutants from man's activities like effluents from the industries and homes accelerate the aging process of lakes.
a. Name this phenomenon.
b. Write any 4 harmful effects of this process. (3)(Model 2019, EDUMATE 2017)

22. Industrial effluents and domestic sewage seriously affects fresh- water bodies. For protecting aquatic life, Govt. of India recently declared an animal as national aquatic animal.

- a. Identify the animal.
- b. Distinguish *biomagnification* and *eutrophication*.

(2) (March 2010)

23. Algal bloom and eutrophication are two effects of water pollution. Write the difference between the two.

(2) (EDUMATE 2017)

24. Arrange the following words into suitable categories in the given table.

Algal bloom, catalytic converter,
Eichornia, Electrostatic precipitator

| Air pollution | Water pollution |
|---------------|-----------------|
| | |

(2) (March 2011)

25. People in the town of Arcata created an integrated waste water treatment within a natural system. Explain the method.

(3) (EDUMATE 2017)

26. Ecological sanitation is a sustainable system of handling human excreta, using dry composting toilets. Write the advantages of this method.

(2) (EDUMATE 2017)

SOLID WASTES

27. Solid waste can create a major problem in metro cities.

- a. What are municipal solid wastes and e-wastes?
- b. In which way the safe disposal of solid waste can be done?

28. Match the items given in column A and B:

| Column A | Column B |
|--------------------------------|-----------------------------|
| (a) Catalytic converter | (i) Particulate matter |
| (b) Electrostatic precipitator | (ii) CO and nitrogen oxides |
| (c) Earmuffs | (iii) High noise level |
| (d) Landfills | (iv) Solid wastes |

(NCERT)

AGRO-CHEMICALS

29. Now a days many farmers are interested in organic farming.

- a. What is meant by organic farming?
- b. Can you suggest any 2 advantageous of organic farming?

(2) (March 2014)

30. Observe the relationship between the first two and fill up the blanks.

- a. Mr. Ahmed Khan : Remedy for plastic waste
- Ramesh Chandra Dagar :

RADIOACTIVE WASTE

31. Radiation by nuclear waste is extremely dangerous to organisms.

- a. Write any 3 danger.
- b. Write the recommendations for the storage of nuclear wastes.

(3)(Model 2019, EDUMATE 2017)

GREEN HOUSE EFFECT & GLOBAL WARMING

32. Greenhouse effect is a naturally occurring phenomenon that is responsible for heating of earth's surface and atmosphere.

- a. Explain greenhouse effect
- b. What will happen if there is absolutely no greenhouse effect over the earth's surface?

(2) (SAY 2010)

33. Temperature is generally increasing making the earth a hot plate. Mention any 2 measures to control global warming.

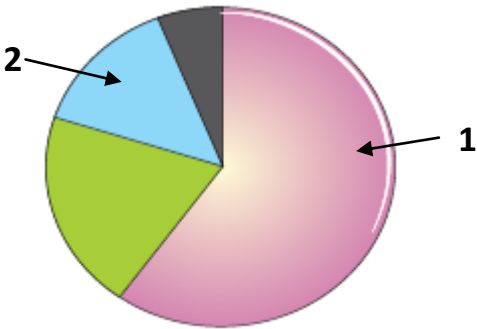
(1) (March 2018, 2016)

34. Prakash parked his car in bright sunlight for a few hours, with glass windows fully raised. After some time inside the car was very hot.

- a) Name the phenomenon
- b) How can you correlate this phenomenon with global warming?

(2) (SAY 2012)

35. Observe the figure given below.



- a. Identify the green house gases 1 and 2 and write the % of contribution to total global warming.
- b. Name the lowest contributor of global warming.
- c. Write any 4 measures to control global warming.

(EDUMATE 2017)(1) (SAY 2011)

36. The temperature at New Delhi during April 2013 is 44.5°C. The earth's temperature was regularly increasing.

- a. What are the reasons for this?
- b. Write your suggestions to control this phenomenon?

(2) (March 2015) (4) (OR SAY 2014)

OZONE DEPLETION

1. Ozone acts as a shield for absorbing UV radiations from the sun.

- a. Name the region of atmosphere where ozone is seen.
- b. Write the unit to measure ozone layer.

(2)(March 2018)

37. A small fraction of the UV reaches the earth. On the basis of wavelength, 3 types of UV radiations are distinguished, viz. UV-A, UV-B and UV-C. Which one is lethal to organisms?

(March 2007)

38. There is balance between production and degradation of ozone in the stratosphere.

- a. Name a gas that disrupts this balance.
- b. Explain how this balance is disrupted.
- c. Expand DU

(EDUMATE 2017)

39. An article in the news paper reports that -

'Refrigerants like CFCs pose threat to the environment'.

How CFCs are harmful to the environment?

(2) (March 2014, 2012)

40. Why does ozone hole form over Antarctica? How will enhanced ultraviolet radiation affect us?

(NCERT)

41. Inflammation of cornea due to high dose of UV-B radiation is called

42. Match the following.

| A | B |
|-------------------------------|--------------------|
| a. Montreal protocol | 1. Air pollution |
| b. Chipko movement | 2. Water pollution |
| c. Electrostatic precipitator | 3. Ozone depletion |
| d. BOD | 4. Deforestation |

IMPROPER RESOURCE UTILISATION

DEFORESTATION

43. Deforestation is highly dangerous to our environment.

- a. Write a few of human activities contributes such activity.
- b. Write down the consequences of deforestation.
- c. Suggest 2 methods to control deforestation.
- d. Name a traditional agro-forestry practiced in the North-Eastern region of India.

(EDUMATE 2017)

44. A common cause of deforestation is slash and burn agriculture.

- (a) What is the common name attributed to such type of cultivation?
- (b) Explain how this type of cultivation is practised? (2) (March 2017)

45. Destruction of forest leads to the increase of CO₂ in atmosphere. Recently Govt. of India instituted an award for individuals or communities from rural areas that show extraordinary courage and dedication in protecting wildlife.

- a. Identify the award. (1) (Model 2019)
- b. Comment on deforestation and reforestation. (2) (March 2010)

46. Discuss the role of women and communities in protection and conservation of forests. (NCERT)

47. In 1980s, the Govt. of India has introduced JFM to conserve forests.

- a. Expand JFM.
- b. Write its significance. (3) (EDUMATE 2017)



48. Match the following.

| A | B |
|-----------------------|------------------------------------|
| a. Snow blindness | 1. <i>Agrobacterium</i> |
| b. Immune system | 2. Low O ₂ availability |
| c. Altitude sickness | 3. UV radiation |
| d. Crown gall disease | 4. ADA |

(2) (Model 2014)

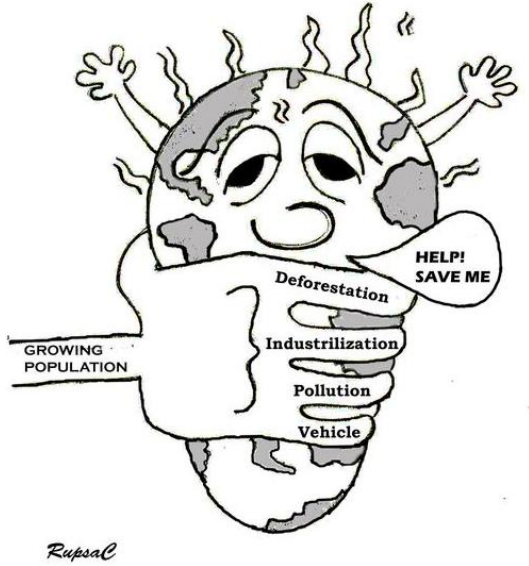
48. Match the following.

| A | B |
|-------------------------------|----------------------------|
| a. Catalytic converter | 1. Thermal power plant |
| b. Electrostatic precipitator | 2. Ozone depletion |
| c. Montreal protocol | 3. Deforestation |
| d. Jhum cultivation | 4. Platinum-palladium |
| | 5. Joint Forest Management |

(2) (Model 2018)

49. “Man has lost his capacity to foresee and foresight; he will meet his own end by destroying the earth”. Evaluate this statement and write your opinion.

50. Comment on the following poster prepared by group of students as a part of their seminar.



(March 2009)

51. June 5th celebrated as ‘World Environment Day’. What are your suggestions regarding the conservation of nature on this day?