Environmental Science

Common to all branches

Short Questions

1. Define biodiversity with example.
2. Name two photochemical oxidants and which parameter of the atmosphere is responsible for their formation.
3. What is Red data book and blue baby syndrome?
4. Give an account of indoor and outdoor air pollution.
5. Define air pollution.
6. What are the effects of air pollution?
7. Indicate the type of air pollutants (Primary or secondary) out of the following: CO2, NOx, PAN, acid mist, smog,
8. Draw a clear vertical temperature profile of earth’s atmosphere indicating the different region
9. What do you mean by criteria pollutants? Define and list out the criteria air pollutants.
10. Differentiate between Criteria and non criteria Pollutants?
11. Differentiate primary and secondary pollutants with suitable example.
12. Write any four examples of green house gases.
13. Mention one advantage and one disadvantage of greenhouse effect.
14. Write the example of any two compounds used as an alternative to Chlorofluoro carbon and Tetraethyl lead to reduce air pollution.
15. Though their concentrations are high, N2 and O2 do not act like green house gases while CO2 having low concentration, is considered as an important green house gas”. Write the reason behind this.
16. Why life on Venus and Mars is not possible?
17. How earth’s surface is able to maintain its average temperature at 33C?
18. List four major air pollutants for which the central pollution Board of India designated ambient air quality standards.
19. Write the influence of ozone gas in troposphere and stratosphere.
20. Vehicles are incorporated with catalytic converter as a control measure for air pollution. How does it help controlling air pollution?
21. Write the advantages of wet scrubbers over internal separator in air pollution control.
22. How a catalytic converter does reduce air pollution in vehicles?
23. What are oxygen demanding wastes?
24. Define BOD and COD.
25. List out the different pollutants responsible for causing water pollution. Also indicate the most serious pollutant among them with proper justification.
26. Define coagulation, flocculation, neutralisation, sedimentation, floatation, disinfection in water treatment.
27. Write the difference between sludge and activated sludge.
28. Define anaerobic digestion?
29. How Dissolved oxygen (DO) and Biological oxygen Demand (BOD) are related to each other?
30. Define the term noise?
31. How to measure noise?
32. Write some effects of noise pollution
33. Give a comparative sealing in decibels of the following noise cresting components (a) Jet plan , (b) Street traffic (c) Rock music
34. Write any four methods to control noise pollution.
35. What do you mean by acceptable noise level?
36. Write any two methods to control noise pollution in an industry.
37. Define the terms Incineration, combustion, gasification and paralysis of solid wastes?
38. Differentiate between energy recovery and material recovery.
39. What is “3R’s” of waste management?
40. Which is the preferred waste minimization technique between recycle and reuse? Justify
41. Differentiate between recycle and reuse with examples?

Long Questions

1. Define biodiversity. Explain genetic diversity, species diversity and ecosystem diversity.
2. What do you mean by consumptive use value, productive use? Value, social value, ethical value and option value of biodiversity?
3. Comment upon Indian biodiversity with special reference as amega diversity nation
4. What are hotspots of biodiversity? Which are the hotspots found? in India ? Discuss their salient features.
5. What are the major threats to biodiversity?
6. What are the main objectives of conservation of biodiversity? Discuss the strategies for the conservation of biodiversity?
7. Define the term biodiversity. Explain the types, benefits and protection measures of biodiversity with suitable example? Write some reasons of biodiversity loss and mention protection measures of biodiversity with suitable example?
8. Briefly discuss the effect of air pollution on plants &animals.
9. Write short notes on
10. Settling chamber
11. Cyclone
12. Filters
13. Electrostatic precipitators (ESP)
14. Scrubbers or wet collectotrs.
15. Enumerate five important biosphere reserves, national parks (with important wild life) and wild life sanctuaries (with major wildlife) of India. Also mention the state where they are located.
16. Draw a neat Schematic flow diagram of a modern effluent treatment plant and show various units on it and describe each briefly.
17. Write down the different steps involved in waste water treatment process with special reference to secondary treatment (trickling filter and activated sludge process).
18. What do you understand by biological treatment of waste water? Mention different types of biological treatment. Describe the activated sludge process with a schematic diagram mentioning its advantages and disadvantages.
19. What do you mean by noise pollution? Write down the sources, effect and control measures of noise pollution.
20. What is solid waste? Write the different types of such wastes with example? List out the different disposal methods of non-hazardous solid waste with a detailed description of composting.
21. Explain the cause effect and control measures of thermal pollution.
22. Explain the cause effect and control measures of nuclear pollution.
23. What is disasters Management? Highlight some significant to manage the Cyclone and flood.