APPENDIX-B

QUESTIONS FOR PRACTICE
LESSON 1 TO 14

1. Explain the term desertification. 1
2. Define the terms 'ecosystem' and 'niche'. 1
3. Name the following:
   (i) Pollutants responsible for Minamata disease.
   (ii) Describe the way of life of primitive humans. 1
4. Give two important reasons for human migration from villages to cities. 1
5. Write the formula used for measuring birth rate of a population. 1
6. State one point of difference between each pair of terms given below: 2
   (i) Contact transmission and vector transmission.
   (ii) Extinct species and threatened species.
7. Suggest two strategies methods for minimizing human impact on natural ecosystems. 2
8. State four major problems caused by increase in population. 2
9. Explain the significance of ozone layer in the earth's atmosphere. 2
10. Classify the following into natural and man made disasters: earthquake, famine, air crash, leakage from nuclear reactors, cyclone, flood. 2
11. "Earth is the only planet that is able to sustain life". Give four reasons to substantiate this statement. 4
12. Give one word for each for the following:
   (i) Each step in the food chain.
   (ii) Organisms feeding upon both plants and animals.
   (iii) A place where a river or a stream opens into the sea.
   (iv) A structure built in order to block the flow of river water. 4
13. "Urban life has its blessings and curses"- justify the statement giving four reasons for each 4
14. State any four major causes of land degradation. 4

15. When and why does sudden and extensive growth of phytoplankton impart green colour to a water body. What is this phenomenon known as? How does it harm the fish population? 4

16. What causes the following diseases:

    (i) Asbestosis

    (ii) Silicosis

    (iii) Methanologlobinimia 6

17. What is acid rain? Explain the phenomenon of acid rain in terms of – 6

    (i) chemicals present in the clouds.

    (ii) source of these chemicals

    (iii) major effects of the rain

    (iv) two methods of prevention

18. Name the main gases responsible for causing 'green house effect'. How is green house effect related to global warming? Explain. 6

19. State three main causes of loss of biodiversity and give three reasons for wild life conservation. 6

20. What may happen to: 6

    (i) blood pressure of humans when noise level in their neighbouhood exceeds 80 dB.

    (ii) body of the cells of when exposed to radiation dose around 100 rem.

    (iii) lungs of the coal miners working in coal mines for many years.

    (iv) drinking arsenic contaminated water for several years.

    (v) marine birds in case of an oil spill in the sea.

    (vi) fish when hot water is discharged into a pond.

APPENDIX-B

QUESTIONS FOR PRACTICE
LESSON 15 TO 26

1. Name the person who made this statement "The earth provides for every persons needs but not for every person's greed." 1
2. Name the person who is associated with "Chipko movement." 1
3. Economic and industrial development without damaging and destroying of the environment. What is this type of development known as? 1
4. Why is solar energy classified as a 'unconditionally renewable' resource and biodiversity as 'conditionally renewable' resource? 1
5. Mention the number of categories into which IUCN Red list lists the organisms according to the conservation status of species. 1
6. Explain the term "Cleaner technologies". 2
7. Conservation of plants and animals can be done by either in-situ or ex-situ methods. Explain the terms **in-situ** and **ex-situ** giving examples. 2
8. What are exotic species? What effects do they have on local species? 2
9. Mention the need for Environment Impact Assessment for any proposed developmental activity. 2
10. UN framework Convention of Climate Change (UNFCCC) in a landmark international treaty unvailed in Rio de Janerio in 1992. Describe its basic objectives. 2
11. Define "common property" and give four examples of such "common property". 4
12. Suggest four ways to check the depletion of mineral resources. 4
13. State any two agricultural technologies which can prevent soil degradation. 4
14. Define soil erosion. Name any three human activities which promote soil erosion. 4
15. Expand CSE. Mention the objectives and the activities of CSE for promoting conservation of environment. 4
16. What are GM crops? What is special about B_t cotton and 'Golden Rice'? 6
17. Explain the term "biomass". Explain how it can be used to meet our energy requirement. 6
18. Explain the role played by Sulabh International in conservation and improvement of environment. 6
19. a) Environmental ethics makes us to think on several issues. List any three such pressing issues of today.
    b) Explain the three different approaches to environmental ethics. 6

APPENDIX-B

QUESTIONS FOR PRACTICE

OPTIONAL MODULE - 8A

Water Resource Management

1. Mention one useful role of antitranspirant in an agricultural field. 1
2. What is meant by the term surface-water? 1
3. List one benefit each of a dam and a canal drawn from a river. 1
4. How does forest help in recharging ground water? 1
5. List two reasons as to why the fresh water in ice-caps is not available for use. 1
6. Many civilizations have grown and flourished on river-banks. Explain. 2
7. Name two methods for abstraction of ground water. Also, mention two risks of reduced water table. 2
8. How does alum helps in water treatment? 2
9. Mention any four characteristics of potable water. 2
10. What is grey water? Give two sources of grey water. 2
11. Why are chlorine compunds preferred over ozone gas for disinfection of drinking water? 2
12. How can ploughing help in reducing the loss of water in an agricultural field? 2
13. Describe the term "evotranspiration". 2
14. List any four reasons for the growing shortage of water in our country. Mention any two traditional methods used by Ancient India for water-harvesting. 4
15. "Water should be regarded as a raw material and not dumping ground for wastes". Justify. 4
16. Define hydrological cycle. Name the energy source that drives the water cycle. With the help of a diagram sketch the three main processes that are involved in water cycle. 4
17. "Ground water is constantly in motion". Explain. 4
18. List any four benefits of rain-water harvesting. 4
19. Differentiate between a cloud-droplet and precipitations? Describe the events for the fall of precipitation over the land. 6
20. What is meant by artificial recharge? List any four advantages of artificial recharge? 6

21. Highlight any four water quality issues in our country. 6

22. (i) Explain the methods used for removing arsenic from water.

(ii) What is the acceptable limit of arsenic in drinking water as prescribed by Bureau of Indian Standards (BIS).

(iii) List the harmful effects of arsenic to humans. 6

23. Suggest any six methods that a house-hold should employ to conserve water. 6

OPTIONAL MODULE - 8B
Energy and Environment

1. Define "energy auditing". 1
2. Name the unit that is used to measure radioactivity. 1
3. Differentiate between "energy" and "power". 1
4. Why should you replace the ordinary incandicent bulbs by CFL bulbs? 1
5. In a sail boat, which energy is used to push it through water? 1
6. What are 'wind-farms'? How does the term 'air' differ from 'wind'? 2
7. What is meant by bio-energy? Give any three examples. 2
8. Differentiate between 'reserve' and 'resource'. 2
9. Name the two methods which are used to release energy from radioactive minerals. 2
10. How is a bio-fuel obtained? Name any two plants which are used for production of bio-fuel. How does the bio-fuel reduce green-house emissions? 4
11. How is coal formed? 4
12. What are photovoltaic cells? How do they work? 4
13. Enumerate atleast eight measures that can be deployed to conserve energy at household level. 4
14. Describe the characteristics of an eco-house. 4
15. What is a car-pool? How can it help in conserving fuels/petrol? 4
16. Justify the statement: "the energy is the most important input for economic growth and human development". 6
17. Differentiate between conventional non-renewable, conventional renewable and non-conventional sources of energy. 6
18. What is fuel-cell technology? Comment on the future of this technology. 6
19. Mention the chemical constituents of natural gas. Describe the uses of natural gas. 6
20. Mention any four domestic appliances which consume large amounts of electricity. Suggest any four ways to save electricity while using a refrigerator. 6