

# CHAPTER 16

## ANSWERS

### Multiple Choice Questions

- |         |         |         |         |
|---------|---------|---------|---------|
| 1. (c)  | 2. (b)  | 3. (b)  | 4. (a)  |
| 5. (b)  | 6. (a)  | 7. (d)  | 8. (c)  |
| 9. (a)  | 10. (b) | 11. (d) | 12. (a) |
| 13. (b) | 14. (c) | 15. (c) | 16. (d) |
| 17. (c) | 18. (b) | 19. (a) | 20. (d) |
| 21. (c) | 22. (c) | 23. (d) | 24. (b) |

### Short Answer Questions

25. Paper, rexin bag, blade, pen, plastic box, scale, eraser, compass and dividers (metallic), steel lunch box, steel spoon.

Paper, blade, plastic box, eraser, compass, steel lunch box and steel spoon can be recycled

26. **Hint—** (a) The ground water level increases due to recharging of wells.

(b) Ground water keeps the layers of soil above it moist and prevents loss of water by evaporation.

(c) The water can be stored during rainy season and can be used when required

27. Since people used excessive fertilisers in the fields, they were carried down to the lake during rains. As many fertilisers contain phosphates and nitrates, the water body became enriched with these chemicals. These chemicals promote excessive growth of aquatic plants and the surface of water was completely covered with plants. (eutrophication)

Depletion of light in the water body and insufficient availability of dissolved oxygen and nutrients resulted in the death of fish.

28. **Hint—**

(a) Put off the fans and lights when they are not required.

(b) Maximum use of solar radiation.

(c) Use of solar water heating system. during winters.

(d) Use of fluorescent tubes or CFL

29. Both the energy sources coal and petroleum take millions of years for their formation. As these resources are being utilised at a much faster rate than their formation, they will be exhausted in the near future, hence they need to be conserved.
30. **Hint—** (a) Reduce the consumption of petrol in the automobiles.  
(b) Use of CNG or clean fuel  
(c) Instead of burning litter prepare manure out of it.  
(d) Treatment of smoke to remove harmful gases before discharging into atmospheric  
(e) Plant more trees
31. (A) The water reservoir is a pond in Figure 16.1 (a) and underground water body in the Figure 16.1 (b).  
(B) Figure 16.1 (b) has more advantage than Figure 16.1 (a), because the advantages of water stored in the ground are many. For example  
(a) It does not evaporate  
(b) It spreads out to recharge wells.  
(c) Provides moisture for vegetation over a wide area.  
(d) It is protected from contamination by animal and human wastes.  
(e) It prevents breeding of insects.

### Long Answer Questions

32. **Reduce** means to use a material/commodity in lesser quantity, e.g electricity and water  
**Recycle** means a material that is used once is collected and sent back to a manufacturer so that they can make some other useful material from it:  
e.g., plastic cups and buckets, glass tumbler, paper, metal objects  
**Reuse** means using a thing over and over again instead of throwing it away. It does not involve the process of recycling either in small or large scale: e.g., used envelopes, plastic carry bags, bottles of jam.
33. **Hint—** (a) Unused water in the water bottle may be used for watering plant  
(b) Close all the taps before you go to sleep.  
(c) Avoid using a hose pipe for watering plants  
(d) Wash vehicles only when they are dirty  
(e) Use fan and light only when required  
(f) Use solar water heating devices  
(g) Use CFL in place of conventional bulbs/tubes

- 34. Hint—** The total amount of fresh water is more than enough to meet the needs of human beings. But due to its uneven distribution, wide seasonal as well as yearly fluctuation in rainfalls and wastage water shortage is a chronic problem in most parts of the world.
- 35. Hint—** Waste water can be used for
- (a) recharging the ground water
  - (b) can be used for irrigation
  - (c) treated municipal water can be used for washing cars, watering the gardens
  - (c) certain pollutants in sewage water can become fertiliser for various crops.
- 36. Hint—** Forests are renewable resources which provide
- (a) Habitat, food, protection to wild life.
  - (b) Help in balancing  $\text{CO}_2$  and  $\text{O}_2$  of atmosphere.
  - (c) Improves water holding capacity of soil.
  - (d) Regulates water cycle.
  - (e) For human being, they are the source for all essential commodities like, fuel wood, timber pulp and paper etc.
  - (f) It provides useful products like fruits, resins, gums, essential oils, bidi wrapper etc.
- 37. Hint—** The forest department developed a strategy in which the villagers were involved in the protection of the forest. In return for the labour, the villagers were paid and also had some benefit in harvesting operations. They were allowed to collect wood and fodder on payment of nominal fee. In this way, by the active and willing participation of the local people, the sal forests of Arabari were conserved.

