

CHAPTER 14

ANSWERS

Multiple Choice Questions

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|---------|---------|---------|---------|
| 1. (c) | 2. (b) | 3. (d) | 4. (a) |
| 5. (b) | 6. (c) | 7. (b) | 8. (c) |
| 9. (c) | 10. (a) | 11. (c) | 12. (a) |
| 13. (b) | 14. (b) | 15. (c) | |

Short Answer Questions

16. **Hint—** (i) Our demand for energy is increasing to improve quality of life and growth of population. (ii) Fossil fuels are limited.
17. **Hint—** Tidal, Wave, OTEC etc.
18. (i) Use of smokeless appliances.
(ii) Afforestation
19. **Hint—** Plane mirror acts as a reflector,
Glass sheet results in green house effect.
20. **Hint—** (i) Solar cells have no moving parts
(ii) Requires little maintenance
(iii) They can be set up in remote areas
21. **Hint—** Biomass: Plant and animal wastes. Explain the working of a biogas plant with a labelled diagram.
22. Because of it being erratic, energy cannot be harnessed continuously. Large areas are required for wind farms.

Long Answer Questions

23. **Hint—** Nuclear Fission. Explanation must include all the steps starting from splitting of uranium nuclei to disposal of nuclear waste.
24. **Hint—** Your answer must include: working of a solar device using reflectors/solar cell. Limitations: Available during day time/sunny

days. Requires huge installations and costly. To overcome limitation: Use of solar cell.

- 25. Hint—** Conventional: Fossil fuels, water, wind, Biomass etc.
Non Conventional: Nuclear, Solar, Energy from ocean, Geothermal etc. Explain the use of one of Non conventional source of energy.
- 26. Hint—** (i) Fossil fuels are depleting, Population is increasing, Quality of life is to be improved etc.

(ii) Tidal/wave/OTEC

- 27. Hint—** Air pollution, Green house effect, Environment consequences: Acid rain, global warming etc. Steps: Use of smokeless appliances, Refined technology, Judicious use of energy etc.
- 28. Hint—** Sun is the ultimate source of energy. Justify by explaining the direct or indirect dependence of different sources of energy on Sun.
- 29. Hint—** Biomass: Plant and animal wastes. Give description of biogas plant with the help of a labelled diagram.

