CHAPTER 14

ANSWERS

Multiple Choice Questions

1. (c) 2. (b) 3. (d) (a) **6.** (c) **5.** (b) **7.** (b) (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.

