

Chapter - 14

Source of Energy

1. Which of the following is a non-renewable source of energy?

- a) Solar energy
- b) Wind energy
- c) Biomass energy
- d) Fossil fuel energy

Answer: d) Fossil fuel energy

2. Which of the following is a renewable source of energy?

- a) Coal
- b) Natural gas
- c) Solar energy
- d) Nuclear energy

Answer: c) Solar energy

3. Which of the following is a form of biomass energy?

- a) Geothermal energy
- b) Tidal energy
- c) Biogas energy
- d) Hydroelectric energy

Answer: c) Biogas energy

4. Which of the following is an example of a conventional source of energy?

- a) Solar energy
- b) Wind energy
- c) Coal
- d) Geothermal energy

Answer: c) Coal

5. The process of splitting the nucleus of an atom is called:

- a) Nuclear fusion
- b) Nuclear fission
- c) Combustion
- d) Condensation

Answer: b) Nuclear fission

6. Which of the following is a disadvantage of using fossil fuels?

- a) Abundant availability
- b) Low pollution emissions
- c) Depletion of resources
- d) Renewable nature

Answer: c) Depletion of resources

7. Which of the following is an advantage of using wind energy?

- a) High initial cost
- b) Limited availability
- c) Pollution-free operation
- d) Unpredictable power output

Answer: c) Pollution-free operation

8. Which renewable energy source is generated by the gravitational interaction between the Earth, the Moon, and the Sun?

- a) Solar energy
- b) Wind energy
- c) Tidal energy
- d) Geothermal energy

Answer: c) Tidal energy

9. Which of the following is the cleanest form of energy?

- a) Fossil fuels
- b) Nuclear energy
- c) Geothermal energy
- d) Solar energy

Answer: d) Solar energy

10. Which of the following is a fossil fuel?

- a) Natural gas
- b) Biogas
- c) Hydroelectricity
- d) Geothermal energy

Answer: a) Natural gas

11. Which of the following is an example of a non-conventional source of energy?

- a) Coal
- b) Natural gas

- c) Solar energy
- d) Nuclear energy

Answer: c) Solar energy

12. The process of harnessing energy from the Sun to generate electricity is known as:

- a) Solar power
- b) Geothermal power
- c) Tidal power
- d) Nuclear power

Answer: a) Solar power

13. Which of the following is an advantage of using biomass energy?

- a) High efficiency
- b) Low carbon emissions
- c) Limited availability
- d) High cost of production

Answer: b) Low carbon emissions

14. The primary source of energy in the Sun is:

- a) Nuclear energy
- b) Chemical energy
- c) Geothermal energy
- d) Wind energy

Answer: a) Nuclear energy

15. Which of the following is a renewable source of energy derived from the Earth's internal heat?

- a) Solar energy
- b) Wind energy
- c) Geothermal energy
- d) Biomass energy

Answer: c) Geothermal energy

16. The process of converting light energy into electrical energy using photovoltaic cells is called:

- a) Solar thermal power
- b) Solar photovoltaic power
- c) Tidal power
- d) Biomass power

Answer: b) Solar photovoltaic power

17. Which of the following is an example of a tidal power plant in India?

- a) Sardar Sarovar Dam
- b) Tehri Dam
- c) Bhakra Nangal Dam
- d) Gulf of Kutch Tidal Park

Answer: d) Gulf of Kutch Tidal Park

18. Which of the following is the most abundant fossil fuel?

- a) Coal
- b) Natural gas

c) Petroleum

d) Uranium

Answer: a) Coal

19. The process of converting biomass into biogas in the presence of microorganisms is called:

a) Combustion

b) Gasification

c) Fermentation

d) Carbonization

Answer: c) Fermentation

20. Which of the following is an advantage of using nuclear energy?

a) Low cost of production

b) Abundant availability

c) High safety standards

d) Large carbon footprint

Answer: c) High safety standards

21. Which of the following is an example of a non-renewable source of energy?

a) Wind energy

b) Solar energy

c) Biomass energy

d) Coal

Answer: d) Coal

22. Which of the following is a renewable source of energy derived from organic matter?

- a) Geothermal energy
- b) Tidal energy
- c) Biomass energy
- d) Nuclear energy

Answer: c) Biomass energy

23. The process of harnessing energy from the movement of water is known as:

- a) Solar power
- b) Geothermal power
- c) Hydroelectric power
- d) Nuclear power

Answer: c) Hydroelectric power

24. Which of the following is an advantage of using wind energy?

- a) High maintenance cost
- b) Limited availability
- c) Pollution-free operation
- d) Unpredictable power output

Answer: c) Pollution-free operation

25. The energy stored in the nucleus of an atom is known as:

- a) Chemical energy
- b) Thermal energy
- c) Nuclear energy
- d) Electrical energy

Answer: c) Nuclear energy

26. Which of the following is a disadvantage of using solar energy?

- a) High initial cost
- b) Limited availability
- c) Pollution emissions
- d) Unreliable output

Answer: a) High initial cost

27. The process of converting sunlight directly into electricity using a solar cell is called:

- a) Solar thermal power
- b) Solar photovoltaic power
- c) Tidal power
- d) Biomass power

Answer: b) Solar photovoltaic power

28. Which of the following is a renewable source of energy derived from the motion of waves in the ocean?

- a) Solar energy
- b) Wind energy
- c) Tidal energy
- d) Geothermal energy

Answer: c) Tidal energy

29. Which of the following is an example of a fossil fuel?

- a) Hydroelectricity

- b) Biogas
- c) Natural gas
- d) Geothermal energy

Answer: c) Natural gas

30. Which of the following is a disadvantage of using nuclear energy?

- a) High cost of production
- b) Abundant availability
- c) Radioactive waste disposal
- d) Low power output

Answer: c) Radioactive waste disposal

31. Which of the following is a renewable source of energy derived from the heat stored within the Earth's crust?

- a) Geothermal energy
- b) Biomass energy
- c) Wind energy
- d) Nuclear energy

Answer: a) Geothermal energy

32. The process of converting biomass into a solid fuel by heating it in the absence of air is called:

- a) Combustion
- b) Gasification
- c) Fermentation
- d) Carbonization

Answer: d) Carbonization

33. Which of the following is a disadvantage of using hydropower?

- a) High maintenance cost
- b) Limited availability
- c) Pollution emissions
- d) Environmental impact

Answer: d) Environmental impact

34. Which of the following is an advantage of using tidal energy?

- a) High initial cost
- b) Limited availability
- c) Predictable power output
- d) Unreliable source

Answer: c) Predictable power output

35. The process of converting the chemical energy stored in fossil fuels into heat energy is called:

- a) Combustion
- b) Gasification
- c) Fermentation
- d) Carbonization

Answer: a) Combustion

36. Which of the following is a renewable source of energy derived from the movement of air masses on Earth?

- a) Solar energy

- b) Wind energy
- c) Tidal energy
- d) Geothermal energy

Answer: b) Wind energy

37. Which of the following is a non-renewable source of energy obtained from the remains of ancient plants and animals?

- a) Geothermal energy
- b) Wind energy
- c) Solar energy
- d) Fossil fuel energy

Answer: d) Fossil fuel energy

38. Which of the following is an advantage of using biomass energy?

- a) High efficiency
- b) Low carbon emissions
- c) Limited availability
- d) High cost of production

Answer: b) Low carbon emissions

39. The process of converting biomass into a gaseous fuel by heating it in the presence of air or oxygen is called:

- a) Combustion
- b) Gasification
- c) Fermentation
- d) Carbonization

Answer: b) Gasification

40. Which of the following is a disadvantage of using solar energy?

- a) High maintenance cost
- b) Limited availability
- c) Pollution emissions
- d) Unreliable output

Answer: d) Unreliable output

41. Which of the following is a renewable source of energy derived from the decay of organic matter over millions of years?

- a) Geothermal energy
- b) Wind energy
- c) Fossil fuel energy
- d) Nuclear energy

Answer: c) Fossil fuel energy

42. The process of converting biomass into a liquid fuel through a chemical process is called:

- a) Combustion
- b) Gasification
- c) Fermentation
- d) Liquefaction

Answer: d) Liquefaction

43. Which of the following is an advantage of using solar cookers?

- a) High initial cost
- b) Limited availability

c) Environmental impact

d) No fuel cost

Answer: d) No fuel cost

44. Which of the following is a non-renewable source of energy formed from the remains of marine organisms?

a) Geothermal energy

b) Wind energy

c) Tidal energy

d) Petroleum

Answer: d) Petroleum

45. The process of harnessing energy from the heat stored within the Earth's interior is known as:

a) Solar power

b) Geothermal power

c) Tidal power

d) Nuclear power

Answer: b) Geothermal power

46. Which of the following is an advantage of using hydropower?

a) High maintenance cost

b) Limited availability

c) Large-scale power generation

d) High carbon emissions

Answer: c) Large-scale power generation

47. Which of the following is a renewable source of energy derived from the movement of oceanic waves?

- a) Solar energy
- b) Wind energy
- c) Tidal energy
- d) Geothermal energy

Answer: c) Tidal energy

48. Which of the following is an advantage of using biogas as a source of energy?

- a) Limited availability
- b) Low pollution emissions
- c) High cost of production
- d) Unreliable source

Answer: b) Low pollution emissions

49. The process of converting the kinetic energy of wind into mechanical or electrical energy is called:

- a) Solar power
- b) Wind power
- c) Tidal power
- d) Biomass power

Answer: b) Wind power

50. Which of the following is a disadvantage of using nuclear energy?

- a) Limited availability

- b) High maintenance cost
- c) Radioactive waste generation
- d) Low power output

Answer: c) Radioactive waste generation