

Board – CBSE

Class – 10th

Topic – Sources of energy

1. What is geothermal energy? Write its advantages?
2. Hydrogen has been used as rocket fuel; would you consider it a clear fuel than CNG?
Why or why not?
3. Can any source of energy be pollution-free? Why or why not?
4. (a) Distinguish between renewable and non-renewable sources of energy?
(b) Choose the renewable source of energy from the following list: coal, biogas, sun, natural gas.
5. (a) Name the device used to convert
 - (i) Solar energy in to heat and
 - (ii) solar energy in to electricity.(b) Explain the working of windmill
6. Name three forms in which energy from ocean is made available for use. What are OTEC power plants? How do they operate?
7. Compare and contrast bio-mass and hydro-electricity as source of energy. The production cost of hydroelectricity is cheaper than the electricity produced in a thermal power station. Explain why?
8. What are the advantages of nuclear energy?
9. Give the names of two energy sources that you would consider to be exhaustible. Give reasons for your choices.
10. How difference in temperature helps to harness energy from ocean?
11. (i) What is biogas? Name two main combustible components of biogas?
(ii) What is the use of spent slurry in a biogas plant?
(iii) Name the microorganisms responsible for the fermentation of slurry in the digester?
12. What are the limitations of extracting energy from:
 - (i) the wind? (ii) waves? (iii) tides?
13. On what basis would you classify energy sources as
 - (a) renewable and non-renewable?
 - (b) exhaustible and inexhaustible?Are the options given in (a) and (b) the same.

14. What are the environmental consequences of the increasing demand for energy?
What steps would you suggest to reduce energy consumption?
15. Hydro power is a renewable source of energy. Justify.