

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 energy source from the following list: coal, biogas, sun, natural gas.
5. (a) Name the device used to convert
 - (i) Solar energy into heat and
 - (ii) Solar energy into electricity.(b) Explain the working of a windmill
6. Name three forms in which energy from the ocean is made available for use. What are OTEC power plants? How do they operate?
7. Compare and contrast bio-mass and hydroelectricity as a 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 the difference in temperature helps to harness energy from the 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 energy demand? What steps would you suggest to reduce energy consumption?
15. Hydropower is a renewable source of energy. Justify.