



#### Question-1

What is a good source of energy?

Solution:

A good source of energy would be one,

- i) Which would do a large amount of work per unit volume or mass.
- ii) Be easily accessible.
- iii) Be easy to store and transport, and
- iv) Perhaps most importantly, be economical.

#### Question-2

What is a good fuel?

Solution:

A good fuel would be one,

- i) Which is easily available.
- ii) It should not produce too much of smoke.
- iii) On burning should release less amount of heat.

#### Question-3

If you could use any source of energy for heating your food, which one would you use and why?

Solution:

Solar energy can be used for heating food because it is easily available, it will not produce smoke and it will not release any amount of heat.

#### Question-4

What are the disadvantages of fossil fuels?

Solution:

Fossil fuels are non-renewable. Burning of coal or petroleum products causes the air pollution. The oxides of carbon, nitrogen and sulphur that are released on burning fossil fuels are acid oxides. These lead to acid rain, which affects water and soil resources.

#### Question-5

Why are we looking at alternate sources of energy?

Solution:

The fossil fuels are non-renewable sources of energy. So we need to conserve them. If we were to continue consuming these sources at such alarming rates, we would soon run out of energy. In order to avoid this, alternate sources of energy were explored.

#### Question-6

How has the traditional use of wind and water energy been modified for our convenience?

Solution:

The wind possesses kinetic energy. This energy was harnessed by windmills in the past to do mechanical work. Today, wind energy is also used to generate electricity.

Another traditional source of energy was the kinetic energy of flowing water or the potential energy of water at a height.

Hydropower plants convert the potential energy of falling water into electricity.

