

Energy Resources

EXERCISE [PAGE 59]

Exercise | Q (A) . (1) | Page 59

What resource will have to be used for the following work –

Rohan wants to fly a kite.

Solution: Wind

Exercise | Q (A) . (2) | Page 59

What resource will have to be used for the following work –

People in an Adivasi hamlet have to be protected from the cold.

Solution: Wood

Exercise | Q (A) . (3) | Page 59

What resource will have to be used for the following work –

Cooking on a picnic.

Solution: Wood or Coal

Exercise | Q (A) . (4) | Page 59

What resource will have to be used for the following work –

Salma wants to iron her clothes.

Solution: Coal or Electricity

Exercise | Q (A) .(5) | Page 59

What resource will have to be used for the following work –

Starting a railway-engine.

Solution: Coal or Electricity

Exercise | Q (A) .(6) | Page 59

What resource will have to be used for the following work –

Heating water for a bath.

Solution: Biogas, Wood, Solar heater or Electric heater

Exercise | Q (A) . (7) | Page 59

What resource will have to be used for the following work –

After sunset, making light available inside the house.

Solution: Kerosene, Wood or Electricity

Exercise | Q (B) . (1) | Page 59

Answer the following question.

Which energy resource does man use the most? Why?

Solution:

1. Coal and mineral oil are the energy resources which are used the most by man.
2. Since, mineral oil is expensive, while coal is easily available and less expensive, mineral oil is used mostly by industries whereas, coal is extensively used by individuals.

Exercise | Q (B) . (2) | Page 59

Why are energy resources needed?

Solution:

1. Energy resources are needed to satisfy the day-to-day as well as long-term needs of human beings.
2. It is used for several purposes such as cooking, generating electricity, driving cars, running factories, and industries, etc.

Exercise | Q (B) . (3) | Page 59

Why do we need to use environmentfriendly energy resources?

Solution:

1. Substance-based energy resources cause pollution and can cause damage to the environment.
2. Damages caused to the environment have undesirable effects on the human beings also.
3. The entire eco-system is disturbed due to the harmful effects of pollution.
4. On the other hand, process-based energy resources are natural and pollution-free. It is therefore important, that we use environment-friendly resources to preserve the environment and live a better quality of life.

Exercise | Q (C) . (1) | Page 59

Explain the differences using the points in the brackets.

(availability, environment-friendliness, advantages, and drawbacks)

Mineral oil and solar energy

Solution:

Points	Mineral Oil	Solar Energy
Availability	Mineral oil is found under the surface of the earth and below the ocean floor. Its availability is limited.	Solar energy is obtained from the sun and hence its availability is unlimited.
Environment - friendliness	The usage of mineral oil is not environment-friendly.	Usage of solar energy is environment-friendly.
Advantages and Drawbacks	It is used in thermal power generation. It causes pollution.	It is used in solar power generation. It is pollution free.

Exercise | Q (C) . (2) | Page 59

Explain the differences using the points in the brackets.

(availability, environment-friendliness, advantages, and drawbacks)

Hydel power and power from geo-thermal source

Solution:

Points	Hydel Power	Geo-thermal Power
Availability	Hydel power can be generated from running water, hence is easily available.	Geothermal power can be generated from hot water springs, hence is not easily available.
Environment friendliness	It is a relatively environment-friendly resource	It is a relatively less environment-friendly resource
Advantages and Drawbacks	The water used to generate power can be reused. The cost of developing technology is lower as compared to the development of a geothermal power plant.	The heat from the earth's interior is utilised, which would otherwise not be used. The cost of developing the technology is higher as compared to the development of a hydel power plants.