

Long Answer Questions

Q. 1. Name the products obtained and their uses when coal is processed in industry.

[NCERT Exemplar]

Ans. Coal when processed in industry gives coke, coal tar and coal gas.

Coke is used in the manufacture of steel and in extraction of many metals.

Coal tar is used as starting material for manufacturing various substances such as synthetic dyes, drugs, explosives, perfumes, paints, etc.

Coal gas is used as a fuel.

Q. 2. We read in newspapers that burning of fuels is a major cause of global warming. Explain why.

[NCERT Exemplar]

Ans. Fossil fuels are generally the mixtures of carbon based compounds. On burning fossil fuels such as coal, petroleum and natural gas, they produce carbon dioxide gas which is a greenhouse gas. The increase in levels of carbon dioxide in the atmosphere cause global warming.

Q. 3. Why petrol is exhaustible natural resource, whereas sunlight is not? Explain.

[NCERT Exemplar]

Ans. Sunlight is present in unlimited quantity in nature and is not likely to be exhausted by human activities. So, it is an inexhaustible natural resource. Whereas petrol takes millions of years to form. It is called exhaustible natural resource because it is formed at extremely slow rate in the Earth's crust and once depleted, take a long time to replenish.

Q. 4. Write some important uses of the various constituents of petroleum.

[NCERT Exemplar]

Ans. Petroleum gas in liquid form (LPG)—Used as fuel for home and industry.

Petrol—Used as fuel for automobile and aviation.

Kerosene—Used as fuel for stoves, lamps and for jet aircrafts.

Diesel—Used as fuel for heavy motor vehicles, electric generators.

Lubricating oil—Used for lubrication.

Paraffin wax—Used in ointments, candles, vaseline, etc.

Bitumen—Used in paints and road surfacing.

Q. 5. While driving what are the tips we must follow to save petrol/diesel/natural gas? [NCERT Exemplar]

Ans. (a) Ensure correct tyre pressure.

(b) Ensure regular maintenance of the vehicle.

(c) Drive at a constant and moderate speed.

(d) Switch off the engine at traffic lights or at a place where you have to wait.

Q. 6. (a) What will happen if all the coal and petroleum reserves are depleted?

(b) What can be done by you to prevent depletion of coal and petroleum?

Ans. (a) If all the coal and petroleum reserves are depleted, we will not have fuels for our vehicles, factories and houses as they take a very long time to replenish.

(b) In following ways we can prevent the depletion of coal and petroleum:

(i) Use alternative fuels.

(ii) Use public transport and bicycles for short distances.

(iii) Use car pools to go for work or to school.