

## Very Short Answer Questions

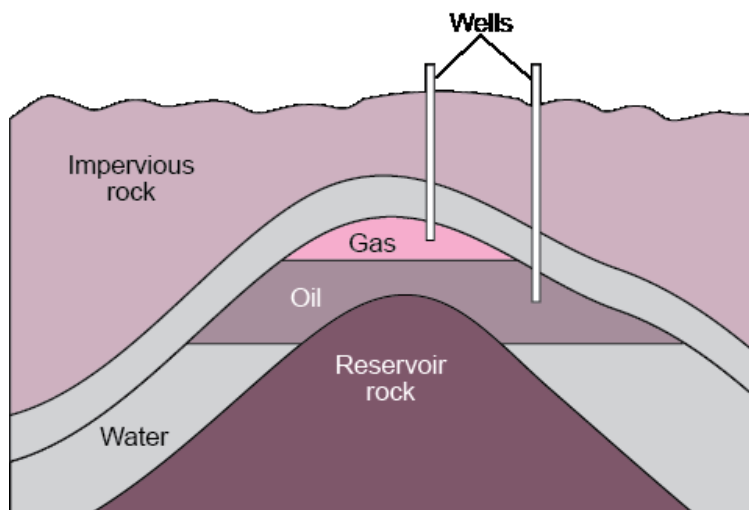
**Q. 1. You are provided with a mixture of petroleum and water. Can you suggest a method to separate the two? [NCERT Exemplar]**

**Ans.** Decantation

**Q. 2. What does CNG stand for and why is it considered to be a better fuel than petrol? [NCERT Exemplar]**

**Ans.** CNG stands for Compressed Natural Gas. It is considered to be a better fuel because it is less polluting.

**Q. 3. Look at the figure given below where petroleum and natural gas deposits are shown. Why do we find oil layer above water layer? [NCERT Exemplar]**



**Ans.** Oil is lighter than water hence floats over it.

**Q. 4. Name the petroleum product used as fuel for stoves, lamps and jet aircrafts. [NCERT Exemplar]**

**Ans.** Kerosene is used as fuel for stoves, lamps and jet aircrafts.

**Q. 5. Can coal, petroleum and natural gas be prepared in the laboratory from dead organisms?**

**Ans.** No, their formation is a very slow process and conditions for their formation cannot be created in the laboratory.

**Q. 6. Define carbonisation.**

**Ans.** The slow process of conversion of dead vegetation into coal is called carbonisation.

## Short Answer Questions

**Q. 1. Sunlight and air are inexhaustible natural resources. Comment.**  
**[NCERT Exemplar]**

**Ans.** These resources are present in unlimited quantity in nature and are not likely to be exhausted by human activities.

**Q. 2. Some natural resources are given in a box. Classify them into the exhaustible and inexhaustible natural resources.** **[NCERT Exemplar]**

air, coal, natural gas, sunlight, petroleum, minerals, forests, oxygen

**Ans. Exhaustible natural resources:** Coal, natural gas, petroleum, minerals, forests

**Inexhaustible natural resources:** Air, sunlight, oxygen

**Q. 3. Write two important uses of coke.** **[NCERT Exemplar]**

**Ans.** It is used for extraction of many metals and also for the manufacture of steel.

**Q. 4. Write the characteristics and some important uses of coal.** **[NCERT Exemplar]**

**Ans.** Coal is black in colour and hard as stone. It is one of the fuels use to cook food. Earlier it was used in railway engines to produce steam to run the engine. It is used as fuel in thermal power plants to produce electricity and in various other industries.

**Q. 5. What do you mean by refining of petroleum?**

**Ans.** Petroleum is a dark oily liquid and have unpleasant smell. It is a mixture of various constituents.

The process of separating various constituents like petroleum gas, petrol, diesel, lubricating oil, paraffin wax, etc. as fractions of petroleum is known as refining.

**Q. 6. What do you mean by fossil fuels?**

**Ans.** Exhaustible natural resources like coal, petroleum and natural gas were formed from the dead remains of living organisms. So these are called fossil fuels.

**Q. 7. We say fossil fuels will last only for a few hundred years. Comment.**

**Ans.** It takes a very long time for the formation of fossil fuels. It also requires specific conditions and it doesn't happen quite often. Therefore, their limited stock will last only for a few hundred years.

**Q. 8. Name different varieties of coal.**

**Ans.** Different varieties of coal are Peat, Lignite, Bituminous and Anthracite.

## 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.

## **Hots (Higher Order Thinking Skills)**

**Q. 1. Is walking short distances rather than going in a car, an effective way of saving fossil fuels?**

**Ans.** Yes, walking short distances is an effective way of saving fossil fuels. This is because walking short distance is feasible as well as convenient than using car.

**Q. 2. Expand PCRA.**

**Ans.** Petroleum Conservation Research Association (PCRA)