



**CLASS VIII: Science**  
**Chapter 3: Coal and Petroleum**

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**Questions and Solutions | Page 38 - NCERT Books**

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**Q1.** What are the advantages of using CNG and LPG as fuels?

**Sol.** The advantages of using CNG and LPG as fuel are:

- (i) They are non-polluting fuels for vehicles.
- (ii) They can be used for power generation.
- (iii) They can be used directly for burning in homes and factories.

**Q2.** Name the petroleum product used for surfacing of roads.

**Sol.** A petroleum product 'Bitumen' is used for surfacing of roads.

**Q3.** Describe how coal is formed from dead vegetation. What is the process called?

**Sol.** About 300 million years ago the earth had dense forests in low lying wetland areas. Due to natural process, like flooding, these forests got buried under the soil. As more soil deposit over them, they were compressed. The temperature also rose as they sank deeper and deeper. Under high pressure and high temperature, dead plants got slowly converted to coal.

As coal contains mainly carbon, the slow process of conversion of dead vegetation into coal is called carbonisation.

**Q4.** Fill in the blanks :

- (a) Fossil fuels are .....,..... and .....
- (b) Process of separation of different constituents from petroleum is called .....
- (c) Least polluting fuel for vehicle is .....

**Sol.** (a) Coal, petroleum, natural gas.

- (b) Refining
- (c) CNG.

**Q5.** Tick True/False against the following statements :

- (a) Fossil fuels can be made in the laboratory.
- (b) CNG is more polluting fuel than petrol.
- (c) Coke is almost pure form of carbon.
- (d) Coal tar is a mixture of various substances.
- (e) Kerosene is not a fossil fuel.

**Sol.** (a) False                      (b) False                      (c) True                      (d) False  
(e) False



**Q6.** Explain, why fossil fuels are exhaustible natural resources ?

**Sol.** Fossil fuels are limited in nature, and is used by human activities so called as exhaustible natural resources.

**Q7.** Describe characteristics and uses of coke.

**Sol.** It is a tough, porous and black substances. It is almost pure form of carbon. "Coke is obtained by heating soft coal in the absence or little supply of air".

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

**Q8.** Explain the process of formation of petroleum.

**Sol.** Petroleum occurs deep down in the earth between layers of non-porous rocks. Crude oil/ petroleum is formed by the decomposition of animal and plant remains over millions of years inside the earth. Natural gas occurs above the petroleum oil trapped under the rocks.

**Q9.** The following table shows the total power shortage in India from 1991-1997. Show the data in the form of a graph. Plot shortage percentage for the years on the Y-axis and the year on the X-axis:

| S.No.        | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|--------------|------|------|------|------|------|------|------|
| Year         | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| Shortage (%) | 7.9  | 7.8  | 8.3  | 7.4  | 7.1  | 9.2  | 11.5 |

**Sol.**

