



INDIAN SCHOOL AL WADI AL KABIR



Class: VIII	Department: SCIENCE-2022-23	Date of completion: 25-08-2022
TEXTBOOK- Q & A	Topic: COAL AND PETROLEUM	Note: A4 FILE FORMAT
Name of the student:	Class & Section:	Roll no.

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

Ans:

The advantages of using compressed natural gas (CNG) and liquefied petroleum gas (LPG) as fuels are:

(i) They can be burnt directly.

(ii) They can be transported easily through pipe lines.

(iii) They are clean fuels and do not give smoke when burnt. Hence they do not cause air pollution.

(iv) They have high calorific value.

(v) They do not leave behind any solid residue on burning.

2. Name the petroleum product used for surfacing of roads.

Ans: Bitumen

3. Describe how coal is formed from dead vegetation. What is this process called?

Ans:

About 300 million years ago the earth had dense forests in low lying wetland areas. Due to natural processes, like flooding, these forests got buried under the soil. As more soil deposited 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.

4. Fill in the blanks:

- (a) Fossil fuels are coal, petroleum and natural gas.
- (b) Process of separation of different constituents from petroleum is called Refining.
- (c) Least polluting fuel for vehicles is compressed natural gas (CNG).

5. Tick True/False against the following statements:

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

6. Explain why fossil fuels are exhaustible natural resources.

Ans:

Fossil fuels are present in limited quantity in nature. They can be exhausted by human activities. Fossil fuels require millions of years to form from the dead vegetation and animals that get buried deep inside the Earth. They require high temperature and pressure for their formation, which cannot be provided in the laboratory and their rate formation is very less in comparison to their rate of consumption so they will exhaust in near future due to current rate of consumption.

7. Describe characteristics and uses of coke.

Ans:

Characteristics of coke are:

- (i) Tough**
- (ii) Porous**
- (iii) Black in colour**

Uses of coke:

- (i) In manufacture of steel.**
- (ii) In the extraction of metals (as a reducing agent).**

8. Explain the process of formation of petroleum.

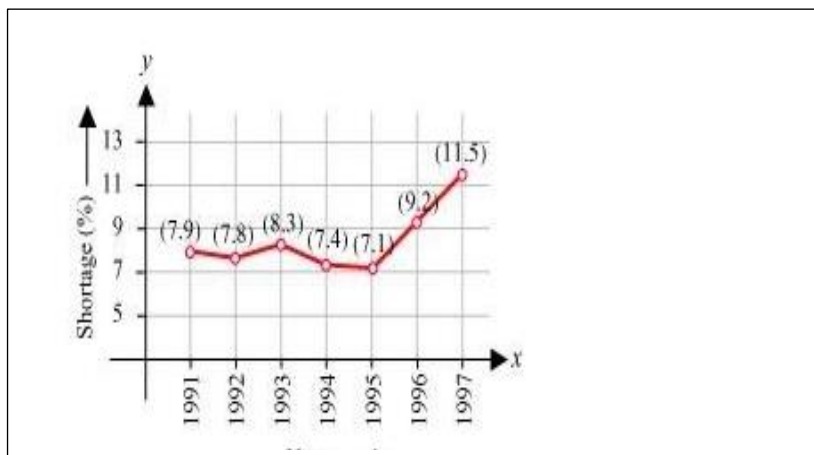
Ans:

Petroleum was formed from organisms living in the sea. As these organisms died, their bodies settled at the bottom of the sea and got covered with layers of sand and clay. Over millions of years, absence of air, high temperature and high pressure transformed the dead organisms into petroleum and natural gas.

9. 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.	Year	Shortage (%)
1	1991	7.9
2	1992	7.8
3	1993	8.3
4	1994	7.4
5	1995	7.1
6	1996	9.2
7	1997	11.5

Ans:



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