Coal and Petroleum

ORAL QUESTIONS

A. Answer these questions orally.

- 1. Which of the following are exhaustible natural resources: air, coal, natural gas, sunlight, soil, minerals, water.
- 2. Name any three natural resources.
- 3. Is coal combustible?
- 4. Name the fossil fuel that was used to power steam engines.
- 5. How long does it take to form coal?
- 6. Name the products formed on heating coal in the absence of air.
- 7. Name two gases which contribute to acid rain.
- 8. Name any two constituents of petroleum.

B. Fill in the blanks.

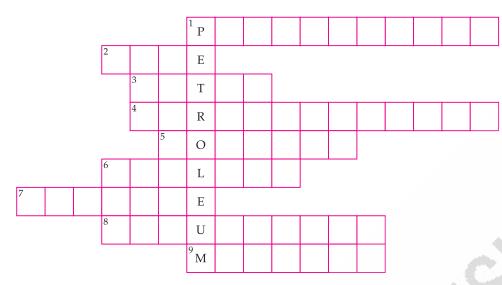
Coal, thin, lived, absence, silt, millions, natural gas, pressure, sea, heat, temperature, buried, sand presence, liquid, thick, clay, petroleum

was formed	d from the remains of	very tiny animals and	plants that lived	
in the and	died	of years ago. After	they died, their	
bodies sank and got	at the bot	tom of the sea. Over	time, they were	
covered by layers of	,	and	Over	
millions of years, the layers of sand, silt and clay became very and the				
remains buried deeper and deeper. Due to enormous and				
from these layer and also due to of air, the dead organisms slowly changed				
into petroleum and				

PUZZLE/QUIZ

C. Complete the following word ladder with the help of the given clues.

- 1. A fuel gas.
- 2. A greyish-black solid fuel formed by heating coal in the absence of air.



- 3. An inexhaustible resource.
- 4. The slow conversion of dead trees and other plants into coal.
- 5. A dark, black, oily liquid with very unpleasant smell, also obtained by heating coal in the absence of air.
- 6. One of the constituents of petroleum, used in power plants to generate electricity.
- 7. A type of coal.
- 8. A clean fuel obtained from the remains of tiny plants and animals that lived in sea millions of years ago.
- 9. The main constituent of natural gas.

CLASS TEST

D. MCQ – Tick (\checkmark) the correct option.

- 1. Which of the following is not formed when coal is heated in the absence of air?
 - (a) Coke
 - (c) Biogas

(b) Coal gas(d) Coal tar

- 2. Which of these statements in correct?
 - (a) Fossil fuels are unlimited.
 - (b) Burning of petroleum products does not cause air pollution.
 - (c) Transporting petroleum may cause oil spills.
 - (d) Coal tar has a pleasant smell.
- 3. Which of these is incorrect?
 - (a) Coal is used as a fuel in the thermal power plants.

- (b) Coal is a better fuel than coke.
- (c) Coke is used in the preparation of water gas.
- (d) Petroleum is a mixture of various hydrocarbons.
- 4. Which of this is not a type of coal?
 - (a) Anthracite (b) Paraffin

(d) Lignite

- (c) Bituminous
- 5. Which of these is not a major air pollutant?
 - (a) Nitrogen dioxide
 - (b) Compressed natural gas
 - (c) Particulate matter
 - (d) Carbon monoxide

E. Very short answer questions.

- 1. Which other gases are present in natural gas, other than methane?
- 2. What is petroleum?
- 3. Name the products formed when coal is heated in the absence of air.
- 4. What is the slow conversion of dead tress and other plants into coal called?
- 5. Name a fuel which does not produce any smoke or ash on burning.
- 6. Name two exhaustible natural resources.
- 7. Name two inexhaustible natural resources.
- 8. What is destructive distillation?

F. Short answers questions.

- 1. What are natural resources?
- 2. What are fossils fuels?
- 3. What is a fossil?
- 4. What is the chemical composition of coal?
- 5. What are the various uses of coal?
- 6. How is coal classified on the amount of carbon present in them?
- 7. What happens when coal is heated in the absence of air?
- 8. What is coke? What is the approximate percentage of carbon present in coke?

9. What are the uses of coke?

10. Is coke a better fuel than coal? 11. How is coal gas obtained? 12. What are the various uses of coal gas? 13. What is coal tar? 14. What are the uses of coal tar? 15. What is petroleum? 16. Name the useful substances found in petroleum. 17. What do you understand by petroleum refining? 18. Do burning of petroleum products cause air pollution? 19. What is the composition of natural gas? 20. What are the advantages of using natural gas? 21. What is CNG? How is it useful? 22. Why should fossil fuels be used judiciously? G. Long answer questions. 1. What are the various ways by which we can save fossil fuels? 2. How can petroleum production affect the environment?

3.	How was petroleum formed?
	C
4.	How was coal formed?
5.	What happens when coal is burnt?

HOME ASSIGNMENT

H. Think and answer.

- 1. Can petroleum and coal be obtained from dead plants and animals in a laboratory?
- 2. Petroleum is called a fossil fuel. Why?

WORKSHEET

I. Give reasons for the following.

- 1. Coal gas is used as an important industrial fuel.
- 2. Burning of coal is a serious problem.
- 3. Fossil fuels are considered as exhaustible natural resources.