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CLASS VIII (2018-19)
ASSIGNMENT
COAL AND PETROLEUM

Q1: What is PCRA?

Ans: PCRA stands for Petroleum Conservation Research Association, it advises people how to save petrol and diesel while driving by giving following tips:

- 1.) Drive at a constant and moderate speed as far as possible
- 2.) Switch off the engine at traffic lights or at a place where you have to wait
- 3.) Ensure correct tyre pressure
- 4.) Ensure regular maintenance of the vehicle

Q2: How burning of fossil fuels causes air pollution?

Ans: Pollutants that come from the combustion of fossil fuels include sulphur dioxide (SO₂), nitrogen oxides (NO_x), ground-level ozone, particulate matter (PM), carbon monoxide (CO), carbon dioxide (CO₂), volatile organic compounds (VOC) including benzene, some heavy metals and a number of other pollutants which contribute to smog, acid rain, climate change, and health, environmental and economic concerns.

Q3: What is Inexhaustible Natural Resource?

Ans: The resources which are present in unlimited quantity in nature and are not likely to be exhausted by human activities are known as Inexhaustible Resources. For Example: Sunlight, air

Q4: Define Exhaustible resources with few examples?

Ans: All resources which are found in a limited quantity in nature are known as Exhaustible resources. They can be exhausted by human activities. Example of these resources is Forests, Minerals, Coal, Petroleum, Natural Gas etc.

Q5: Define Refining of Petroleum?

Ans: Petroleum is a dark oily liquid. It has an unpleasant odour. It is a mixture of various constituents such as Petrol, Diesel, etc. and the process of separating these constituents from crude oil is called Refining.

Q6: What do you understand by Petrochemical products?.

Ans: Petroleum and natural gas provide many useful substances. These are termed as 'Petrochemicals'. These are used in manufacturing of detergents, fibres, polythene and other man made plastics

Q7: Why should we use some resources like coal and petroleum in limit?

Ans: As we know Coal and petroleum are fossil fuels. The dead organisms takes millions of years to get converted into these fuels, On the other hand the known reserves of these will last almost a few hundred years. A part from this since these products are not environmental friendly as burning of these fuels is a major cause of air pollution and their use is also linked to global warming therefore we should use these resources only when it is actually required.

Q8: What does CNG stand for and what are the benefits of using CNG as fuels?

Ans: CNG stands for Compressed Natural gas. In CNG compressed gas (which is mainly methane gas) is stored under high pressure as compressed natural Gas. Advantages of CNG:

(i) CNG is a very important fossil fuel because it is easy to transport through pipes.

(ii) CNG is also used for power generation and now used as fuel for transport vehicles because it is less polluting.

(iii) It is a cleaner fuel.

Q9: What does LPG Stand for and its uses?

Ans: LPG stands for "Liquefied Petroleum Gas", it is used as fuel for home and industry as it is less polluting and easy to transport and to use.

Q10: Why the layer containing petroleum and Gas is above the water?

Ans:The layer containing petroleum and Gas is above water because oil and Gas are lighter than water and can't get mix with it.

Q11: Why Coal, Petroleum and Natural Gas can't be prepared in Laboratory?

Ans:These natural resources can't be prepared in laboratory because their formation is a very slow process and it is not possible to create the conditions for their formation in the laboratory.

Q12: Explain few advantages and disadvantages of using petroleum?

Ans:Few advantage of using Petroleum as fuel and as raw materials are:

- Storage and transportation are simple
- Spills and leaks are controllable using existing technology
- As raw material in chemical synthesis it is extremely flexible

Disadvantages:

- Over use can create local and global problems
- It is limited resource which can be used up by wasteful procedures

Q13: What could be the potential risk using oil as fuel or source of energy?

Ans(a) Burning oil for energy can release large amounts of carbon dioxide, which can contribute to global warming. (b) In addition the risk of dependence on oil as energy source is that supplies are eventually going to be depleted.

Q14: Why is Petroleum known as Black gold?

Ans:Petroleum and its products are very important for us, and because of its great commercial importance, it is named as "Black gold"

Q15: Write the major characteristics of petroleum.

Ans: (1) Petroleum is thick oily liquid.

(2) It has a foul smell.

(3) It is insoluble in water and lighter than water therefore, it floats on water.