

9. What are the sources of the following air pollutants:

a) Carbon Dioxide

Complete combustion of fossil fuels

b) Carbon monoxide

Incomplete combustion of fossil fuels

c) Methane

Decomposition of vegetation and as a waste gas from digestion

d) Oxides of nitrogen

Car engines

e) Sulphur dioxide

combustion of fossil fuel containing sulfur (5)

10. Explain how carbon dioxide and methane cause global warming.

The absorb heat from earth's surface and reflect it back to earth (e.g. trapping heat)

(2)

11. Explain how planting trees and the increased use of wind turbines can reduce the effect of global warming.

Trees absorb CO_2 during photosynthesis

Wind turbines produce electricity without burning fuels

(2)

12. a) Explain how oxides of nitrogen form in car engines

Heat in the engines causes N_2 and O_2 gases to react and produce nitrogen oxides (2)

b) Write a chemical equation for the reaction that takes place in catalytic converters to remove carbon monoxide and nitrogen II oxide NO



(2)

13. Write the symbol equation for photosynthesis.



(2)

TOTAL = 30 MARKS