K Education Centre

GCSE Chemistry - Edexcel

Hydrocarbons -1

Assignment Questions

Hydrocarbons -1

Q1: What are hydrocarbons? Explain why octane is a hydrocarbon ?

Q2: Explain why crude oil is a finite resource.

Q3: a) What is the molecular formula of Octane.

b) Write a balanced equation for complete combustion of octane is oxygen.

c) Describe the chemical test for carbon dioxide.

Q4: Describe how crude oil is separated using fractional distillation.

Q5: a) What is difference between complete and incomplete combustion?

Propane C_3H_8 is used in camping gas cylinders.

b) Write a balanced equation for complete combustion of Propane.

c) Write a balanced equation for in complete combustion of Propane.

Q6: a) Sulfur dioxide dissolves in rain water to produce an acidic solution. Write a balance equation to show the reaction of formation of acid .

b) Describe problems caused by acid rain.

Q7: What is cracking ? Give example of cracking.

Q8: Explain why an oil refinery may crack the fractions containing larger alkanes.

Q9: Complete the following cracking reaction:

$$C_8H_{18} \longrightarrow \text{.......} + C_2H_4$$