

Marking Scheme: Questions carry 10 marks each. Questions have 3 subparts each. Subparts (a) and (b) carry 3 marks each and subpart (c) carries 4 marks.

Question: 1

- A. Explain how carbon dioxide is able to control fires.
- B. Classify the substances into combustible and non-combustible substances: Wood, iron nail, charcoal, kerosene, matchsticks, glass, alcohol, straw
- C. Compare LPG and wood as fuels. Write the properties of an ideal fuel.

Question: 2

- A. Name the following:
 - a) What is commonly used to control fire?
 - b) The amount of heat energy produced on complete combustion of 1 kg of a fuel.
 - c) A liquid fuel, used in homes for cooking.
- B. Define the following terms;
- a. Rapid combustion b. Ignition temperature c. Explosion
- C. 4.5 Kg of a fuel was burnt to produce 180,000 KJ of heat. Calculate the calorific value of the fuel.

Question: 3

- A. Explain how the use of CNG in automobiles has reduced pollution in our cities.
- B. Define global warming. What are the consequences of global warming?
- C. If 9 kg of a fuel is burnt to produce 450,000 KJ of heat. Calculate the calorific value of a fuel.