

CH-4 COMBUSTION AND FLAMEI. SHORT ANSWER TYPE QUESTIONS:

1. Which one do you think will give maximum heat on burning and why? [BA-3].

Fuel	Calorific value kJ/g	value kJ/kg
Dung cake	7	7000
Bio gas	35-40	35000-40000
Methane	55	55000
Wood	17-22	17000-22000

Ans Methane will give maximum heat on burning because it has the highest calorific value among all the fuels in the table. We know that the calorific value is the amount of heat produced when one unit mass of a fuel is completely burnt in air (or oxygen).

2. Complete the given flow chart to replace X, Y and Z.

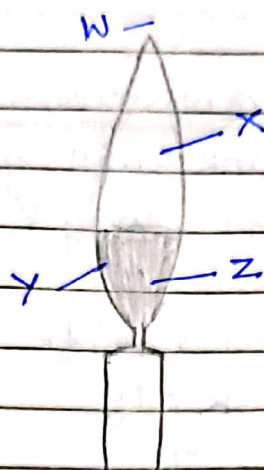
Fuels

X	Y	Gaseous
Example : Bagasse	Example : Alcohol	Example : Z

Ans:

- X - Solid
- Y - liquid
- Z - LPG, CNG, Natural gas

II LONG ANSWER TYPE QUESTIONS:



In the given figure of candle flame, name -

(a) The hottest zone

(b) Luminous zone

(c) The zone where no combustion takes place

(d) The zone created by the burning of carbon monoxide

Ans: (a) The hottest zone is W

(b) Luminous zone is X

(c) The zone where no combustion takes place is Z

(d) The zone created by the burning of carbon monoxide is Y

III HIGHER ORDER THINKING SKILLS:

1. Name a fuel that burns without giving off water vapour. Give reason.

Ans: charcoal burns without giving off water vapour because it does not vaporise on burning.

2. Why does a flame always point upwards?

Ans: A flame always points upwards because the gases produced in a flame are hot and lighter than the surrounding air. The gases

move up and the surrounding air pushes the flame upwards.

2. What will happen if the ignition temperature of a substance is lower than the room temperature?

Ans: If the ignition temperature of a substance is lower than the room temperature ~~where~~ it is, then that substance can easily catch fire.

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