

## Online Class on 14<sup>th</sup> May

### 1. Define the following :

- a) Combustion : Combustion is the process of burning of a substance in the presence of Oxygen.
- b) Ignition Temperature : The Ignition temperature is the temperature at or above which a substance starts burning.
- c) Rapid combustion : If a combustion reaction takes at a high speed and a huge amount of heat and light are produced during the reaction is known as Rapid Combustion
- d) Spontaneous Combustion: When a substance suddenly burst into flame without any external heating is called spontaneous combustion.
- e) Explosion : The process in which a large amount amount of gas is evolved together with the production of tremendous amount of heat and light and sound is called an explosion.
- f) Flame : Flame is a visible gaseous part of fire.
- g) Fuel : Fuel are the substances that burn to produce heat and light energy.
- h) Calorific Value: The amount of heat energy released by a unit quantity of fuel on complete combustion in oxygen is called the calorific value of the fuel. It is expressed in kJ/Kg.
- i) Inflammable substances : The substance that have low ignition temperature and catch fire easily.

### 2. What are the Conditions necessary for burning ?

Ans. The three conditions necessary for combustion are :

- a) Presence of a combustible substances
- b) Presence of supporter of combustion
- c) Attainment of ignition temperature of the combustible substance.

3. What are the different types of combustion?

Ans. The different types of combustion are :

- a) Rapid Combustion
- b) Spontaneous Combustion'
- c) Explosion.

4. Name the three zones of a candle flame.

Ans. : The three zones of a candle flame are :

- a) Innermost Zone
- b) Middle Zone
- c) The Outer Zone.

5. What are the three kinds of fuel ?

Ans.: The three kinds of fuel are :

- a) Solid Fuel
- b) Liquid Fuel
- c) Gaseous Fuel

6. What are the Characteristics of a good Fuel.]

- It should be cheap and easily available
- It should have high calorific value
- It should neither burn too fast nor too slow but at a constant rate. In the other word, the ignition temperature of the fuel should be fairly low so that it can be burnt easily. The ignition temperature should not be less than the room temperature.
- The fuel, on combustion, should not produce shoot or a harmful gas or nay other residue.
- The fuel should be safe to handle, store and transport.

7. Name the compound used in Fire extinguisher

Ans. Sodium Bicarbonate and Potassium bicarbonate

**Homework: Explain three different zones of a candle flame with diagram.**