Class 8 Science - Combustion and Flame

Complete Board Pattern Study Material with 20 Questions in Each Section

Important Notes

• Combustion is the process of burning in the presence of oxygen.

• Substances that burn are called combustible substances.

• Oxygen supports combustion.

• Ignition temperature is the lowest temperature at which a substance catches fire.

• Flame is the visible gaseous part of fire.

• Fuel is a substance that produces heat on burning.

• LPG is a clean fuel.

• The outer zone of flame is the hottest.

• Fire can be controlled by removing oxygen.

• Burning fuels causes pollution.

20 MCQ Questions with Answers

1. What is combustion?

Answer: Burning process

2. Which gas supports combustion?

Answer: Oxygen

3. Lowest temperature to catch fire is called?

Answer: Ignition temperature

4. Which fuel is used in homes?

Answer: LPG

5. Which zone is hottest?

Answer: Outer zone

6. Coal is a:

Answer: Fuel

7. Which combustion occurs suddenly?

Answer: Explosion

8. Candle flame gives:

Answer: Heat and light

9. Which is a clean fuel?

Answer: CNG

10. Fire extinguisher controls:

Answer: Fire

11. Petrol is used in:

Answer: Vehicles

12. Which gas increases global warming?

Answer: Carbon dioxide

13. Wood is a:

Answer: Solid fuel

14. Which combustion occurs very fast?

Answer: Rapid combustion

15. Matchstick catches fire due to:

Answer: Friction

16. Fire needs:

Answer: Oxygen

17. Which zone has complete combustion?

Answer: Outer zone

18. Fuel should produce:

Answer: Large amount of heat

19. Which is non-combustible?

Answer: Stone

20. Burning of fuels causes:

Answer: Pollution

20 Short Questions with Answers

1. What is combustion?

Combustion is the process of burning.

2. Define fuel.

Fuel is a substance that produces heat on burning.

3. What is flame?

Flame is the visible gaseous part of fire.

4. What is ignition temperature?

It is the minimum temperature required to catch fire.

5. Name one liquid fuel.

Petrol.

6. Name one gaseous fuel.

LPG.

7. What is rapid combustion?

Combustion that occurs quickly is called rapid combustion.

8. What is explosion?

Sudden combustion producing heat and sound.

9. Why is LPG a good fuel?

Because it burns cleanly.

10. Which zone is least hot?

Inner dark zone.

11. Name one solid fuel.

Coal.

12. What supports burning?

Oxygen.

13. What causes pollution?

Burning of fuels.

14. What is fire extinguisher used for?

To control fire.

15. Name the hottest zone.

Outer zone.

16. What is spontaneous combustion?

Substance catches fire on its own.

17. Which gas is released during combustion?

Carbon dioxide.

18. Why should fuels be stored carefully?

To avoid accidents.

19. What is calorific value?

Amount of heat produced by fuel.

20. Why are forests protected from fire?

To save plants and animals.

20 Long Questions with Answers

1. Explain combustion.

Combustion is a chemical process in which substances react with oxygen to produce heat and light.

2. Explain conditions necessary for combustion.

Fuel, oxygen, and ignition temperature are necessary for combustion.

3. Describe the structure of candle flame.

A candle flame has three zones: outer zone, middle luminous zone, and inner dark zone.

4. Explain rapid combustion.

Rapid combustion takes place quickly and produces heat and light.

5. Explain spontaneous combustion.

Some substances catch fire automatically without external heat.

6. What is explosion?

Explosion is sudden combustion with heat, light, and sound.

7. Explain ideal fuel.

An ideal fuel burns easily, produces more heat, and causes less pollution.

8. Explain fire control methods.

Fire can be controlled by removing fuel, oxygen, or lowering temperature.

9. Explain harmful effects of burning fuels.

Burning fuels causes pollution and global warming.

10. Why is LPG preferred?

LPG is clean, efficient, and easy to use.

11. Explain global warming.

Increase in Earth’s temperature due to greenhouse gases.

12. Explain pollution caused by fuels.

Smoke and harmful gases pollute the environment.

13. Why should water not be used on oil fire?

Oil floats on water and spreads fire.

14. Explain calorific value.

It is the amount of heat produced by complete combustion of fuel.

15. Differentiate combustible and non-combustible substances.

Combustible substances burn while non-combustible substances do not.

16. Explain fuel efficiency.

Efficient fuels produce more heat with less pollution.

17. Describe uses of fuels.

Fuels are used in cooking, transport, and industries.

18. Explain importance of oxygen in burning.

Oxygen helps substances burn properly.

19. Explain safety measures during fire.

Use extinguishers, avoid panic, and cut oxygen supply.

20. Explain importance of clean fuels.

Clean fuels reduce pollution and protect the environment.