

## Chapter 6

### MULTIPLE CHOICE QUESTIONS

- |       |       |       |       |
|-------|-------|-------|-------|
| 1. d  | 2. c  | 3. c  | 4. b  |
| 5. d  | 6. a  | 7. c  | 8. c  |
| 9. c  | 10. c | 11. d | 12. b |
| 13. d | 14. c | 15. c |       |

### VERY SHORT ANSWER QUESTIONS

16. (a) Chemical, oxygen; (b) fire, blanket (c) lowest, ignition; (d) low, inflammable (e) burning.
17. (a) diesel; (b) glass; (c) matchstick; (d) heat, flame; (e) calorific
18. In jar B, because oxygen is a supporter of combustion.
19. Anu should keep her test tube in the outermost zone which is the hottest part of the flame.
20. It is because CNG produces harmful products in very small amount and is a cleaner fuel.

### SHORT ANSWER QUESTIONS

21. (a) Combustible — charcoal, straw, card board, paper, candle wood,  
(b) Non-combustible — chalk, stone, iron rod, copper coin, glass.
22. (a), (c) are true statements.  
(b) Magnesium is a combustible metal  
(d) Calorific value of coal is higher than that of wood.
23. (a)–(iv), (b)–(vi), (c)–(v), (d)–(iii), (e)–(i), (f)–(ii)
24. (a)–(iii)–(x), (b)–(ii)–(z), (c)–(i)–(y)

25. Iron wire will become red hot and glow. It will not produce a flame.
26. (a) combustion, (b) combustible, (c) ignition, (d) petrol, (e) ignition, inflammable, (f) calorific value.
27. Due to insufficient availability of oxygen in the closed room carbon monoxide gas is produced which can kill persons sleeping in that room.
28. (a) False – A chemical process in which a substance reacts with oxygen to give off heat is called combustion.  
(b) False – Carbon dioxide is the best extinguisher for fires involving electrical equipment.  
(c) True.  
(d) False – Increased concentration of carbon dioxide in air is believed to cause global warming.  
(e) True.  
(f) False – outer zone is the hottest zone of a flame.  
(g) True.
29. **Hint:** Sudden formation of large amount of gas due to chemical reactions.
30. **Hint:** calorific value.

### LONG ANSWER QUESTIONS

31. **Hint:** Petrol will catch fire instantly because it is highly inflammable.
32. **Hint:**
- Water is not suitable for fires involving oil.
  - Manu should have switched off the flame of the burner and put a lid on the frying pan. By doing this the contact between fuel and oxygen is cut off and the flame will go off.
33. **Hint:** Three essential requirements.
- a. Fuel
  - b. Air
  - c. Heat to acquire the ignition temperature

The job of fire extinguisher is to cut off the supply of air or to bring down the temperature of fuel or both.

34. **Hint:**

Types of fuels

Solid fuel – Coal, wood, etc.

Liquid fuel – Kerosene oil, petrol etc.

Gaseous fuel – CNG, LPG etc.

Uses

Coal – cooking etc.

Kerosene oil – Fuel for stoves, lamps etc.

LPG – Fuel for industry etc.

Add more uses.

35. **Hint:** CNG, because the calorific value of CNG is higher than that of petrol. Therefore CNG will be more economical. At the same time it produces the least air pollutants.

36. **Hint:**

(i) Wood produces lot of air pollution.

(ii) Use of wood as fuel encourages cutting of trees leading to deforestation.

37. **Hint:**

- At high temperature, some times dry grass catches fire which spreads through out the forest.
- Camp fire may also be a reason.
- Human negligence.
- Lightening.

38.

