Chapter 7
Kinetic Theory of Particles

MCQ 1: In liquids the particles

A. move randomly with unlimited space

B. move randomly with limited space

C. vibrate at a fixed position

D. vibrate randomly with unlimited space

MCQ 2: In gases the particles are

A. closely packed

B. not free to move

C. regularly packed

D. far apart

MCQ 3: Matter consists of tiny particles termed as

A. matter

B. atoms

C. ions

D. elements

MCQ 4: Gases have

A. low density and mass

B. high density and mass

C. high density but low mass

D. low density but high mass

MCQ 5: If the temperature of the gas is increased, the kinetic energy would

A. increase

B. decrease

C. remain same

D. increase and decrease both

MCQ 6: In gases, the pressure is

A. directly proportional to volume

B. inversely proportional to volume

C. directly proportional to friction

D. inversely proportional to heat

MCQ 7: Kinetic is a/an

A. Latin word

B. Roman word

C. Greek word

D. Arabic word

MCQ 8: The close packing of particles in solids results in

A. low density

B. ductility

C. brutality

D. high density

MCQ 9: Which one of the following have the highest volume?

A. Solid

B. Liquid

C. Gas

D. Gel

MCQ 10: Kinetic energy is

A. directly proportional to temperature

B. inversely proportional to temperature

C. directly proportional to friction

D. inversely proportional to heat

MCQ 11: Considering kinetic theory of particles, solids have

A. Fixed shape and volume

B. Variable shape and volume

C. Variable shape but fixed volume

D. Fixed shape but variable volume

MCQ 12: The three most common states of matter are

A. Solid, liquid and gas

B. Solid, gel and liquid

C. Gel, liquid and gas

D. Solid, gel and gas

MCQ 13: The movement of particles in liquids and gases is observed as

A. Bruneian motion

B. Brownian motion

C. blackian motion

D. randomium motion

MCQ 14: The continuous motion of these tiny particles (atoms) is termed as

A. potential model of atoms

B. kinetic model of matter

C. potential model of matter

D. kinetic model of atoms

MCQ 15: Gases have

A. low density

B. ductility

C. brutality

D. high density

MCQ 16: Liquids are

A. very compressible

B. very little compressible

C. incompressible

D. B and C both

MCQ 17: Gases are

A. very compressible

B. very little compressible

C. incompressible

D. B and C both

MCQ 18: Gases are highly compressible due to

A. unfixed shape and volume

B. collision of particles

C. high density

D. the distance of particles

MCQ 19: Intermolecular forces can be defined as

A. force between two solids

B. force between two substances

C. force between two atoms or molecules

D. force between liquid and gas

MCQ 20: The three states of matter depend on

A. temperature

B. force

C. potential energy

D. biomass

MCQ 21: The term fluids is used for

A. liquids only

B. gases only

C. liquids and gases both

D. gels only

MCQ 22: Atoms and molecules are

A. always in motion

B. always in a bond

C. always together

D. always opposite

MCQ 23: If we increase the pressure, the volume of the gas would

A. increase

B. decrease

C. remain same

D. vary

MCQ 24: All matters are made up of

A. atoms

B. molecules

C. atoms and ions

D. atoms and molecules

MCQ 25: Which of the following have the strongest intermolecular forces of attraction?

A. Solid

B. Liquid

C. Gas

D. Gel

MCQ 26: Gas occupies

A. volume

B. area

C. base

D. pressure

MCQ 27: Pressure of gas is due to the

A. random motion of gas molecules

B. collision of gas molecules with each other

C. collision of gas molecules with the wall of container

D. vibration of solid particles in the wall of container

MCQ 28: Solids are

A. very compressible

B. very little compressible

C. incompressible

D. B and C both

MCQ 29: Gases have

A. Fixed shape and volume

B. Variable shape and volume

C. Variable shape but fixed volume

D. Fixed shape but variable volume

MCQ 30: Why are liquids and gases termed as fluids? Because

A. they can flow

B. they have irregular shape

C. they have randomly moving particles

D. they are compressible

MCQ 31: In gases the particles

A. move randomly with unlimited space

B. move randomly with limited space

C. vibrate at a fixed position

D. vibrate randomly with unlimited space

MCQ 32: Solids have

A. low density and mass

B. high density and mass

C. high density but low mass

D. low density but high mass

MCQ 33: The Brownian Motion was discovered by the scientist

A. Albert Brown

B. John Brown

C. Robert Brown

D. Isaac Brown

MCQ 34: In liquids that particles are

A. firmly packed

B. regularly packed

C. irregularly packed

D. far apart

MCQ 35: If the car tires are hot, the pressure of gas molecules in them would

be

A. high

B. low

C. same as before heating

D. may be high or low

MCQ 36: Volume is

A. directly proportional to pressure

B. inversely proportional to pressure

C. inversely proportional to temperature

D. directly proportional to friction

MCQ 37: The word kinetic means

A. to move

B. force

C. pressure

D. thrust

MCQ 38: The volume of gas is

A. directly proportional to temperature

B. inversely proportional to temperature

C. directly proportional to friction

D. inversely proportional to heat

MCQ 39: The melting point of ice is

A. 0 °C

B. 100 °C

C. 200 °C

D. 50 °C

MCQ 40: In solid the particles are

A. closely packed

B. free to move

C. irregularly packed

D. far apart

MCQ 41: Liquids have

A. Fixed shape and volume

B. Variable shape and volume

C. Variable shape but fixed volume

D. Fixed shape but variable volume

MCQ 42: The close packing of particles in liquids results in

A. low density

B. ductility

C. brutality

D. high density

MCQ 43: As the volume is inversely proportional to pressure, we can conclude that

A. $p_1V_2 = p_2V_1$

B. $p_2/V_2 = p_1V_1$

C. $p_1V_1 = p_2V_2$

D. $p_1V_1 = p_2/V_2$

MCQ 44: In solid the particles

A. move randomly

B. vibrate about fixed position

C. vibrate and move randomly

D. move about fixed path

MCQ 45: Gas can exert

A. pressure on wall

B. force on the base

C. pressure in solids

D. force in liquids

MCQ 46: The boiling point of water is

A. 0 °C

B. 100 °C

C. 200 °C

D. 50 °C

MCQ 47: The random motion of smoke or gas particles in the air is termed as

A. Bruneian motion

B. Brownian motion

C. blackian motion

D. randomium motion

Answers:

1. **B**
2. **D**
3. **B**
4. **A**
5. **A**
6. **B**
7. **C**
8. **D**
9. **C**
10. **A**
11. **A**

12. **A**
13. **B**
14. **B**
15. **A**
16. **B**
17. **A**
18. **D**
19. **C**
20. **A**
21. **C**
22. **A**
23. **B**
24. **D**
25. **A**
26. **A**
27. **C**
28. **C**
29. **B**
30. **A**
31. **A**
32. **B**
33. **C**
34. **C**
35. **A**
36. **B**
37. **A**
38. **A**
39. **A**
40. **A**
41. **C**
42. **D**
43. **C**
44. **B**
45. **A**
46. **B**
47. **B**