

21. The solid particles only possess

- A. Translational motion B. Vibrational motion
C. Rotational motion D. All of above motions

Answer: Option B

22. For a gas where volume and pressures are 1dm^3 and 2 atm respectively what should be its new volume when pressure is increased to 6 atm at constant temperature?

- A. $1/2\text{dm}^3$ B. $1/3\text{dm}^3$
C. $1/4\text{dm}^3$ D. $2/3\text{dm}^3$

Answer: Option B

23. If $1/V$ is plotted on X-axis and pressure on Y-axis at constant temperature what should appear

- A. Straight line parallel to x-axis B. Straight line parallel to y-axis
C. Straight line D. Curve

Answer: Option c

24. Which one is the right value for R?

- A. $0.0821\text{ atm dm}^3\text{k}^{-1}\text{mol}^{-1}$ B. $0.0821\text{ atm m}^3\text{k}^{-1}\text{mol}^{-1}$
C. $2\text{ cal k}^{-1}\text{ mol}^{-1}$ D. $8.314\text{ Nm}^2\text{k}^{-1}\text{mol}^{-1}$

Answer: Option A

25. One mole of an ideal gas at 546.5 K under 2 atm pressure has a volume of

- A. 22.414 m^3 B. 44.828 dm^3
C. 22.414 dm^3 D. 11.212 cm^3

Answer: Option c

-
26. The partial pressure exerted by the water vapours is called
- | | |
|---------------------------|------------------------------|
| <u>A.</u> Surface tension | <u>B.</u> Aqueous tension |
| <u>C.</u> Vapour pressure | <u>D.</u> Hydraulic pressure |

Answer: Option B

-
27. Which one is not the partial pressure of oxygen in the lungs?
- | | |
|----------------------|------------------------|
| <u>A.</u> 0.1526 atm | <u>B.</u> 116 mm of Hg |
| <u>C.</u> 116 torr | <u>D.</u> 1 atm |

Answer: Option D

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28. The spreading of fragrance or scent in air is due to
- | | |
|-------------------------------|-----------------------|
| <u>A.</u> Diffusion | <u>B.</u> Effusion |
| <u>C.</u> Attraction with air | <u>D.</u> Low density |

Answer: Option A

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29. The kinetic molecular theory of gases was put forward in 1738 by
- | | |
|--------------------|---------------------|
| <u>A.</u> Boltzman | <u>B.</u> Maxell |
| <u>C.</u> Clausius | <u>D.</u> Bernoulli |

Answer: Option D

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30. The highest temperature at which a substance can exist as a liquid is called its
- | | |
|--------------------------------|---------------------------------------|
| <u>A.</u> Critical temperature | <u>B.</u> Standard temperature |
| <u>C.</u> Absolute temperature | <u>D.</u> Upper consulate temperature |

Answer: Option A