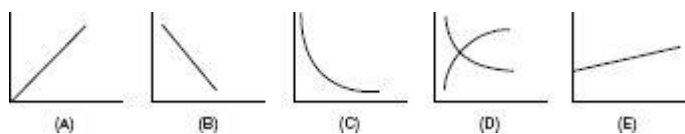


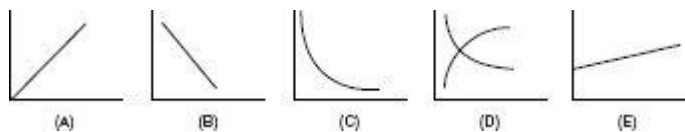
SAT Chemistry Practice- Paper 39



1.

The graph that best shows the relationship of gas volume to temperature, with pressure held constant

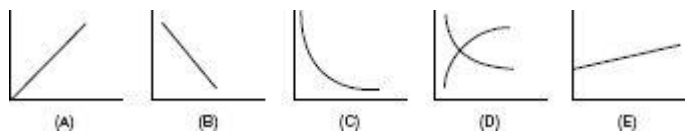
- A.
- B.
- C.
- D.
- E.



2.

The graph that best shows the relationship of gas volume to pressure, with temperature held constant

- A.
- B.
- C.
- D.
- E.



3.

The graph that best shows the relationship of the number of grams of a solid that are soluble in 100 grams of  $H_2O$  at varying temperatures if the solubility begins at a small quantity and increases at a slow, steady pace as the temperature is increased

- A.
- B.
- C.
- D.
- E.

4. The simplest unit of water that retains its properties

- A. A molecule
- B. A mixture of compounds
- C. An isotope
- D. An isomer
- E. An acid salt

5. A commercial cake mix


- A. A molecule
- B. A mixture of compounds
- C. An isotope
- D. An isomer
- E. An acid salt

**6.** An atom with the same number of protons as another atom of the same element but a different number of neutrons

- A. A molecule
- B. A mixture of compounds
- C. An isotope
- D. An isomer
- E. An acid salt

**7.** Classification of  $\text{Ca}(\text{HCO}_3)_2$

- A. A molecule
- B. A mixture of compounds
- C. An isotope
- D. An isomer
- E. An acid salt

**8.** The atomic number of an atom with an electron dot arrangement similar to 

- A. 1
- B. 6
- C. 9
- D. 10
- E. 14

**9.** The number of atoms represented in the formula  $\text{Na}_2\text{CO}_3$

- A. 1
- B. 6
- C. 9
- D. 10
- E. 14

**10.** The number that represents the most acid pH

- A. 1
- B. 6
- C. 9
- D. 10
- E. 14

**11.** Can be expressed in moles of solute per liter of solution

- A. Density
- B. Equilibrium constant

- C. Molar mass
- D. Freezing point
- E. Molarity

**12.** Can be expressed in grams per liter of a gas

- A. Density
- B. Equilibrium constant
- C. Molar mass
- D. Freezing point
- E. Molarity

**13.** Will NOT be affected by changes in temperature and pressure

- A. Density
- B. Equilibrium constant
- C. Molar mass
- D. Freezing point
- E. Molarity

**14.** At STP, can be used to determine the molecular mass of a pure gas

- A. Density
- B. Equilibrium constant
- C. Molar mass
- D. Freezing point
- E. Molarity

**15.** Resists a rapid change of pH

- A. Buffer
- B. Indicator
- C. Arrhenius acid
- D. Arrhenius base
- E. Neutral condition

**16.** Exhibits different colors in acidic and basic solutions

- A. Buffer
- B. Indicator
- C. Arrhenius acid
- D. Arrhenius base
- E. Neutral condition

**17.** At 25°C, the aqueous solution has a pH < 7.

- A. Buffer
- B. Indicator
- C. Arrhenius acid
- D. Arrhenius base
- E. Neutral condition

18. At 25°C, the aqueous solution has a pH > 7.

- A. Buffer
- B. Indicator
- C. Arrhenius acid
- D. Arrhenius base
- E. Neutral condition

19. In the stratosphere, screens out a large fraction of the ultraviolet rays of the sun.

- A. H<sub>2</sub>
- B. SO<sub>2</sub>
- C. CO
- D. HCl
- E. O<sub>3</sub>

20. Is a product of the incomplete combustion of hydrocarbons.

- A. H<sub>2</sub>
- B. SO<sub>2</sub>
- C. CO
- D. HCl
- E. O<sub>3</sub>

21. A gas produced by the heating of potassium chlorate

- A. H<sub>2</sub>
- B. SO<sub>2</sub>
- C. CO
- D. HCl
- E. O<sub>3</sub>

22. A gas that is slightly soluble in water and gives a weakly acid solution

- A. H<sub>2</sub>
- B. SO<sub>2</sub>
- C. CO
- D. HCl
- E. O<sub>3</sub>

23. Contributes to acid rain.

- A. H<sub>2</sub>
- B. SO<sub>2</sub>
- C. CO
- D. HCl
- E. O<sub>3</sub>

Question	Correct Answer
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1	A
2	C
3	E
4	A
5	B
6	C
7	E
8	C
9	B
10	A
11	E
12	A
13	C
14	A
15	A
16	B
17	C
18	D
19	E
20	C
21	E
22	C
23	B