

Quiz questions for sem (1)

Physical chemistry

Question 1: Na_2CO_3 is a weak or strong electrolyte.

Ans: Strong

Question 2: pH of pure water increases or decreases or remains constant with temp.

Ans: Constant

Question 3: An acidic solution is positively or negatively charged or neutral.

Ans: Neutral

Question 4: Common ion effect causes an increase or decrease in ionization of the weak or strong electrolyte.

Ans: Decrease in weak electrolyte

Question 5: The equilibrium is relevant to ----- electrolyte

(i) weak

(ii) strong

(iii) both

(iv) NoA

Question 6: A solution of a salt of WA and SB is alkaline or acidic in nature

Ans: Alkaline

Question 7: What is a titration curve?

Ans: pH vs V

Question 8: At equivalence point ----- of acid and base become equal

Ans: mole or g equ

Question 9: Ionization of a weak acid increases or decreases with conc.

Ans: Decreases

Question 10: Is it true that salt hydrolysis is the reverse of acid base neutralisation reaction?

Ans: True

Question 11: Ionic product is related to saturated solution or equilibrium.

(i) saturated solution

(ii) equilibrium

(iii) both

(iv) none

Question 12: True or false "at equivalence point $\text{pH} = 7$ for all acid base titration reactions"

Ans: False

Question 13: Between the pair WE-SE, and SE-SE which will show common ion effect?

Ans: WE-SE

Q. 1 At the critical temperature, the surface tension of the liquid

(a) Is zero

(b) Is infinity

(c) Is the same as that at the other temperature

(d) Cannot be determined

Answer: (a) Is zero

Q. 2 If common salt is dissolved in water, then the surface tension of saltwater is

(a) Increased

(b) Decreased

(c) Not changed

(d) First increases then decrease

Answer: (a) Increased

Q. 3 The rise of a liquid in a capillary tube does not depend upon

- (a) Angle of contact
- (b) Density of the liquid
- (c) Radius of the capillary tube
- (d) Atmospheric pressure

Answer: (d)

Q. 4 When there are no external forces, the shape of a liquid drop is determined by

- (a) Surface tension of the liquid
- (b) Density of liquid
- (c) Viscosity of liquid
- (d) Temperature of air only

Answer: (a)

Q. 5 If the surface of a liquid is plane, then the angle of contact of the liquid with the walls of container is

- (a) Acute angle (b) Obtuse angle
- (c) 90° (d) 0°

Answer: (d)

Q. 6 Which of these fluids has the highest viscosity?

- (a) Water
- (b) Honey
- (c) Blood
- (d) Air

Answer: (b) Honey

Q. 7 What happens to the viscosity of liquid with the increase in temperature

- (a) It increases
- (b) It decreases
- (c) It may increase or decrease
- (d) No change

Answer: (b) It decreases

Q. 8. What do we call the maximum velocity of a fluid in a tube for which the flow remains streamlined?

- (a) Hyper velocity
- (b) critical velocity
- (c) Stream velocity
- (d) Laminar velocity

Answer: (b) critical velocity

Q. 9 The viscosity of a fluid in motion is 1 Poise. What will be its viscosity (in Poise) when the fluid is at rest?

- a) 0
- b) 0.5
- c) 1
- d) 2

Answer c

Q. 10 What is Reynolds number?

Answer Ratio of velocity gradient Viscous force

Inorganic chemistry

1. What condition is required for the formation of the positive species in an ionic compound? Ans. Low ionization energy
2. Who proposed the rules for polarization? Ans. Fajan
3. Who first defined the term electronegativity? Ans. Pauling
4. In Allred-Rochow scale, electronegativity is a function of what? Ans. Size and charge
5. Which has higher melting point--- BeCl₂ or CaCl₂? Ans. CaCl₂
6. Bond moment may be zero but dipole moment cannot be zero---True or false? Ans. False
7. Which will have non-zero dipole moment--- CCl₄ or CH₃Cl? Ans. CH₃Cl
8. Madelung constant is present in which equation? Ans. Born-Lande equation
9. Which type of bond results from the combination of p_x orbitals? Ans. π -bond
10. Combination of s & p_z orbitals may occur in some elements---- True or false? Ans. True
11. Resonance structures are imaginary----True or False? Ans. True