

## PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	The equivalent conductance of a 1 N solution of an electrolyte is nearly	A. The same as its specific conductance B. $10^{+3}$ times more than its specific conductance C. 10-3 times its specific conductance D. 100 times its specific conductance.
2	According to the Debye-Huckel theory of strong electrolytes, and ion moving in an atmosphere of oppositely charged ions experience a drag This effect is known as	A. Aaymmetric effect B. Electrophoretic effect C. Inter ionic effect D. Concentration effect
3	During the titration of weak acid against NaOH the conductance of the solution after the neutralization point.	A. Is constant B. Decreases C. Varies irregularly D. Increase
4	When a concentrated solute of an electrolyte is diluted.	A. Its specific conductance increases B. Its equivalent conductance decreases C. The specific conductance decreases and equivalent conductance increases D. Both specific and equivalent conductance increase
5	If for a solution of an electrolyte. It is the transport number of the cation, then the transport number of the anion $t_-$ is equal to	A. $t/2$ B. $1 - t_+$ C. $1 + t_+$ D. $(i - t) / 2$
6	The fraction of the total current carried to an ion is called its.	A. Ionic mobility B. Transport number C. Limiting ionic conductance D. None of these
7	Equivalent conductance is expressed in the units.	A. S cm <sup>-1</sup> eq <sup>-1</sup> B. S cm eq <sup>-1</sup> C. S cm <sup>2</sup> eq <sup>-1</sup> D. S cm <sup>2</sup> eq
8	Which of the following statements is not correct.	A. The conductance of one cm <sup>3</sup> of a material is called specific conductance B. Specific conductance increase while equivalent conductance decreases on progressive dilution C. The limiting equivalent conductance of weak electrolytes cannot be determined by extrapolation of the plot of A against concentration D. The conductivity of metals is due to the movement of electrons.
9	Which of the following statement is not correct with reference to cell constant.	A. The dimensions of cell constant is cm <sup>-1</sup> B. It is used to determine the specific conductance C. It is measured with KCl solution D. Specific conductance does not vary with concentration.
10	Which of the following expressions represent the equivalent conductance.	A. $A = I \times 1000/V$ B. $A = L \times 1000/C$ C. $A = L \times I/A$ D. $A = L \times V$
11	The conductance of 1 cm <sup>3</sup> of an electrolytes solution is called its.	A. Specific resistance B. Specific conductance C. Molar conductance D. Equivalent conductance

12	The unit of specific conductance will be	B. Ohm cm C. Ohm cm <sup>-1</sup> D. Mho cm
13	The expression of specific conductance is given by	A. $L_s = I/R$ , I/A B. $L_s = L \ I/A$ C. $L_s = I/L$ , A/I D. $L_s = r \ I/A$
14	Which of the following statements is not true with reference to ionic conductors.	A. Ionic conductance is due to movement of the ions B. It involves the transfer of matter C. It involves oxidation reduction reactions D. It decreases with rise in temperature.
15	The blue colour of CuSO <sub>4</sub> disappears on adding Zn granules to it . it is because of .	A. Oxidation of Cu atom B. Oxidation of Zn <sup>2+</sup> C. Oxidation Cu <sup>2+</sup> D. Oxidation of Zn <sup>2+</sup>
16	When some quantity of electricity is passed through two electrolytic cells. The ratio of the mass of the products obtained at the cathode is the same as the ratio of their	A. Densities B. Atomic masses C. Equivalent masses D. Atomic numbers
17	Which of the following relation corresponds to Faraday law of electrolysis.	A. $m = ZIt$ B. $E = mc^2$ C. $E = hv$ D. None of the above
18	The device that convert the chemical energy of fuel directly into electrical energy is called.	A. Galvanic cell B. Electrolytic cell C. Fuel cell D. Concentration cell
19	The branch of chemistry which is concerned with the interrelation of electrical and chemical energy is called.	A. Reaction dynamics B. Electrochemistry C. Surface chemistry D. Kinetics
20	Which of the following solids is a better conductor of electricity.	A. Pure NaCl crystal B. Diamond C. Graphite D. Marble pieces
21	The point group of XeOF <sub>4</sub> is.	A. C <sub>6v</sub> B. C <sub>4h</sub> C. D <sub>4h</sub> D. D <sub>2h</sub>
22	How many planes of symmetry are present in benzene.	A. 1 plane B. 3 planes C. 5 planes D. 7 planes
23	Ethylene belongs to.	A. C <sub>2v</sub> group B. D <sub>2h</sub> group C. C <sub>2</sub> group D. D <sub>ah</sub> group
24	CO belong to which group.	A. C <sub>2v</sub> B. D <sub>2h</sub> C. C <sub>av</sub> D. D <sub>ah</sub>
25	Which of the following molecules belongs to C <sub>av</sub> point group.	A. H <sub>2</sub> O B. H <sub>2</sub> S C. NH <sub>3</sub> D. BF <sub>3</sub>
26	Which of the following statement is not correct with respect to group theory.	A. Two elements of a group combine to form a third element of a group B. An element combines with itself to form another element of the group. C. Each element of the group obey associative law of combination D. Each group element has no reciprocal
27	Which of the following molecules have centre of symmetry.	A. H <sub>2</sub> O B. HCl C. CO <sub>2</sub> D. H <sub>2</sub> SO <sub>4</sub>
28	Linear molecules have _____ axis of rotation	A. C <sub>1</sub> B. C <sub>2</sub> C. C <sub>∞</sub>

✓ ✓  
D. C3

29 In C4-axis of rotation, an object is rotated through an angle of.

- A.  $120^\circ$
- B.  $180^\circ$
- C.  $100^\circ$
- D.  $90^\circ$

30 In proper rotation ( $C_n$ ) an object is rotated through an angle of.

- A.  $a/n$  radians
- B.  $2\pi/n$  radians
- C.  $3\pi/n$  radians
- D.  $4\pi/n$  radians