

PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	Which of the following statement is not related to applications and limitations of first law of thermodynamics.	A. This law explains why chemical reactions proceed to completion B. It is silent about the source of heat C. It is silent about the direction of heat D. It does not tell us about the reversible process.
2	In an isochoric process	A. Energy remains constant B. Volume remains constant C. Pressure remains constant D. Temperature remains constant
3	A process in which no heat enters leaves the system is called.	A. Isochoric B. Isobaric C. Adiabatic D. Reversible
4	Which of the following is not an extensive property.	A. Work B. Entropy C. Free energy D. Volume
5	Which of the following is not an intensive property.	A. Melting point B. Refractive index C. Entropy D. Density
6	Any property whose magnitude is independent of the amount of substance present is called a/an	A. Extensive property B. Colligative property C. Structural property D. Intensive property
7	A closed system is one which can exchange with surrounding.	A. Matter but not energy B. Energy but not matter C. Both matter and energy D. Neither matter nor energy
8	A system which can exchange energy as well as matter with its surrounding is said to be a/an	A. Closed system B. Inert system C. Open system D. All of above
9	Branch of chemistry that deals with the basic principles governing energy changes during various processes is called.	A. Wave mechanics B. Chemical kinetics C. Chemical thermodynamics D. Electro chemistry
10	The compound contains two types of X and Y its crystal structure is a cubic lattice with X-atoms at the corners of the unit cells and Y-atom at the body centre, The simplest formulae of this compound is.	A. X ₂ Y B. XY C. XY ₂ D. X ₈ Y
11	In sodium chloride type lattice, the ratio of coordination number of cation to anion is.	A. 6:6 B. 7:7 C. 4:8 D. 4:4
12	The particle would be stationary in a lattice only at.	A. 273 K B. 0 K C. 298 K D. 373 K
13	Which of the following has the highest lattice energy	A. LiCl B. NaCl C. KCl D. CaCl
14	The number of vibrational degree of freedom for CO ₂ is	A. 2 B. 3 C. 4 D. 5
		A. Carbon tetrachloride

15	Which of the following should have the largest dipole moment.	B. Cis-stibene C. Trans-stibene D. Cis-dichloroethylene
16	Which of the following regions of the spectrum would be used to determine the structure of the crystalline solids.	A. Microwave B. X-rays C. Visible D. Infrared
17	Which substance has the greatest lattice energy.	A. CuBr B. MgO C. KI D. NaF
18	Which of the following is not true for metalloids.	A. They are borderline elements B. They usually act as electron acceptors with non metals. C. B, Si, and Ge D. They are all solids at room temperature.
19	Layer of the C -atom in graphite are held together by	A. Covalent bonds B. Free electrons C. Ionic bond D. Van Der Waals forces
20	The height to which a liquid will rise in an open capillary tube is inversely proportional to.	A. Temperature of the liquid B. Surface tension C. Density of the liquid D. Air pressure
21	Brass is an alloy of	A. Copper and tin B. Copper and zinc C. Aluminium and nickel D. Lead and tin
22	The addition of As to Ge makes the latter a	A. Metallic conductor B. Ionic conductor C. Intrinsic conductor D. Extrinsic semiconductor
23	When Si is doped with As, it becomes	A. Superconductor B. p-type conductor C. n-type conductor D. None of these
24	The phenomenon of x-ray diffraction was studied by	A. Huygen B. Bragg C. Max Planck D. None of above
25	Which of the following type of lattice has maximum number of atoms per unit cell.	A. Simple cubic B. Body centred cubic C. Face centred cubic D. All of them
26	Which of the following statement is incorrect about rock salt type	A. It has the arrangement of Na ⁺ B. Na ⁺ and Cl ⁻ ions have coordination number of 6:6 C. A unit cell of NaCl crystals has rock salt type structure. D. None of them
27	The coordination number of atoms in a hexagonal close packed structure is	A. 2 B. 6 C. 12 D. 4
28	Out of seven crystal systems, how many can have body centered unit cell.	A. 3 B. 4 C. 2 D. 7
29	The total number of crystal systems and the number of Bravais lattices are.	A. 7, 7 B. 7, 14 C. 14, 7 D. 14, 28
30	Which of the following has cubic structure.	A. Sodium chloride B. Potassium Chloride C. Diamond D. All of above