

PPSC Chemistry Full Book Test

Sr	Questions	Answers Choice
1	In which pair of species, the Lewis formula contain same number of Lone pairs and bond pairs but they are not iso electronci.	A. O ₂ B ₂ B. SO ₂ , O ₃ C. PCI ₃ , BF ₃ D. SOCl ₂ , COCl ₂
2	In the Lewis formula of which of the following species, the number of single double and dative bonds are equal.	A. N ₂ O ₃ B. HNO ₃ C. SO ₂ D. SOCl ₂
3	The total number of bond pairs around sulphur and total number of lone pairs around oxygen atoms in the Lewis structure of sulphate ion are respectively.	A. 4, 12 B. 8, 12 C. 12, 4 D. 6, 12
4	Which of the following element has six electrons in the valence shell but cannot exhibit a maximum co valency of six.	A. Sulphur B. Oxygen C. Selenium D. Both A and B
5	Which element out of the following can exhibit a maximum co valency of seven.	A. Chlorine B. Sulphur C. Fluorine D. both Cl and F
6	The Lewis formula of SOCl ₂ the total number of bond pairs and lone pairs of electrons around sulphur are.	A. 2, 1 B. 2, 2 C. 3, 1 D. 3, 0
7	In which pair of species, the Lewis formulae contain same number of ion pairs and bond pairs but they are not isoelectronic.	A. O ₂ , N ₂ B. SO ₂ , O ₃ C. PCI ₃ , BF ₃ D. SOCl ₂ , COCl ₂
8	In the Lewis formula of which of the following species, the number of single double and dative bonds are equal	A. N ₂ O ₅ B. HNO ₃ C. SO ₂ D. SOCl ₂
9	In the electronic structure of acetic acid, the total number of shared and unshared pair of electrons are respectively.	A. 16, 8 B. 8, 4 C. 12, 8 D. 8, 12
10	Pi bond is formed	A. By the overlapping of atomic orbitals on internuclear axis B. By transference of electrons C. By sidewise overlapping to half filled p orbitals D. By overlapping of s-orbitals with p orbitals
11	Which of the following is an example of super octet molecules.	A. C ₂ F ₄ B. IF ₇ C. PCI ₅ D. All the three
12	For covalent bond to form between two atoms A and B	A. Transference of electrons must take place from A to B B. A pair of electrons of A is shared by both A and B C. A and B contribute equal no. of electrons for mutual sharing by A and B D. One of the atom A or B must already have octet of electrons.
13	The force responsible for dissolution of ionic compounds in water are	A. Hydrogen bonds B. Ion dipole forces C. Ionic bonds D. Van Der Waal forces
14	Which element among the following cannot exhibit variable electronvalency	A. ^{29}Cu B. ^{50}Sn C. ^{82}Pb D. ^{80}Hg

	Which element among the following cannot exhibit variable oxidation state?	C. $^{25}_{25}$ Mn D. $^{38}_{38}$ Sr
15	Which of the following configuration of an ionic species represents pseudonoble gas configuration.	A. ns^2 B. $ns^2 np^6$ C. $ns^2 np^6 nd^{10}$ D. $ns^2 np^3$
16	The electrolysis of molten metal hydride will produce dihydrogen gas.	A. At cathode B. At anode C. At both the electrodes D. At none of the electrodes
17	Which name is associated with the rules which help in predicting the portability of anion.	A. Soddy B. Slater C. Fajan D. Linus Pauling
18	Which halide of cesium will be highly ionic in nature.	A. K^+ B. Ag^+ C. Rb^+ D. Ca^+
19	Which of the following parameter is not involved in calculations based on Born-Haber Cycle.	A. Ionization enthalpy B. Electron gain enthalpy C. Electronegativity D. Bond dissociation energy
20	The carbonate of which of the following will have highest lattice energy.	A. Barium B. Magnesium C. Calcium D. Strontium
21	Among sodium phosphate, sodium sulphate and sodium chloride the solubility in water increases as.	A. Chloride > Phosphate > Sulphate B. Sulphate > Phosphate > Chloride C. Chloride > Sulphate > Phosphate D. Phosphate > Chloride > Sulphate
22	The electronic configuration of sodium ($Z=11$)	A. $1s^2, 2s^2, 2p^4$ B. $1s^2, 2s^2, 2p^6, 3s^2, 2p^5$ C. $1s^2, 2s^2, 2p^6, 3s^1$ D. $1s^2, 2s^2, 2p^6, 3s^2$
23	Which among the following hydride is ionic in nature.	A. Ammonia B. Protium oxide C. Calcium hydride D. Sulphane
24	Ionic compounds in general possess both	A. High melting point and non-directional bonds B. High melting points and low boiling points C. Directional bonds and low boiling points D. High solubility in polar and non-polar bonds.
25	Solid sodium chloride does not conduct electricity because.	A. In solid NaCl, no ions are present B. Solid NaCl is covalent in nature C. In solid NaCl, there is no mobility of ions D. In solid NaCl, there are no electrons.
26	Ionic reactions mainly take place in.	A. Aqueous solutions and organic solvents of high polarity B. Non aqueous solvents of low polarity C. Gaseous state D. Solid state
27	Which of the following halide has lowest melting point.	A. NaCl B. NaF C. NaBr D. NaI
28	Which of the following has the highest melting point.	A. NaCl B. KCl C. MgO D. BaO
29	Among the solvents given below, with dielectric constant (E) given in parentheses which has highest solubility of KCl?	A. Benzene ($E=0$) B. Carbon disulphide ($E=0$) C. Methanol ($E=32$) D. Acetone ($E=21$)

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Which of the following will exhibit variable electro Valency due to inert pair effect.

- A. Fe
- B. Sn
- C. K
- D. Both Fe and Sn