

PPSC Chemistry Part III Inorganic Chemistry Online Test

Sr	Questions	Answers Choice
1	Pick out incorrect statement about $K_2Cr_2O_7$	A. It oxidizes acidified solution H_2SO_4 to S B. It oxidizes KI to I_2 C. It oxidizes HCl to Cl_2 D. It gives oxygen, when treated with cold conc. H_2SO_4
2	Pick out the incorrect statement about $K_2Cr_2O_7$	A. It is thermally stable B. It dissolves in alkali to form chromate C. It oxidizes acidified $FeSO_4$ solution to $Fe_2(SO_4)_3$ D. It is used as cleansing agent for glassware, etc. When mixed with cold con. H_2SO_4
3	The yellow colour of chromates changes to orange red on acidification, due to the formation of.	A. Cr^{3+} B. Cr_2O_3 C. $Cr_2O_7^{2-}$ D. CrO_3
4	Which one of the following oxides is basic.	A. MnO B. Mn_2O_3 C. MnO_2 D. Mn_2O_7
5	The first ionization energies of the elements of the first transition series. (Ti _____ Cu)	A. Increases as the atomic number increases B. decreases as the atomic number increases C. Do not show any change as the addition of electrons takes place in the inner (n-1) d-orbitals. D. Increases from Ti to Mn and then decreases from Mn to Cu
6	Which one of the following statements is not true.	A. Transition metals form alloys B. Transition metals form complexes C. Zn, Cd and Hg are transition metals D. $K_2[PtCl_6]$ is a well known compound but corresponding nickel compound is not known
7	Pick out the incorrect statements for transition metals.	A. They have low melting and boiling points B. 5d-element have higher energies than 3d or 4d elements C. Zr and Hf have almost identical atomic and ionic radii D. They form interstitial compounds.
8	The atomic number of Potassium is 19 and that of manganese is 25. Although the coloured of MnO_4 is dark violet yet the K^+ is colourless.. This is due to the fact that	A. Mn is a transition element while K^+ is not B. $[MnO_4]^-$ is negatively charged while K^+ has a positive charge C. The effective atomic number of Mn is $[MnO_4]^-$ is 26 while for K^+ the atomic number is 18 D. The Mn in a high positive oxidation state allows charge transfer transitions
9	Pick out the incorrect statement for transition metals.	A. Cu^+ is not a transition metal ion B. Transition metals do not exhibit variable oxidation states C. Transition metal ions are coloured D. Transition metals and majority of their compounds are paramagnetic
10	The electronic configuration of chromium is $4s^1, 3d^5$. The element tungsten (W) belongs to the same group and has atomic number 74. The configuration of its valence shell is.	A. $5s^1, 4d^5$ B. $6s^1, 5d^5$ C. $6s^1, 5d^6$ D. $6s^1, 5d^4$

11	Which of the following has maximum number of unpaired electrons.	A. Fe^{3+} B. Fe^{2+} C. Co^{2+} D. Co^{3+}
12	Of the molecules, SF_4 , XeF_4 and CF_4 which have square planar geometry.	A. SF_4 , XeF_4 and CF_4 B. SF_4 only C. CF_4 only D. XeF_4 only
13	Which of the following is not known.	A. KrF_6 B. XeF_6 C. XeO_3 D. KrF_2
14	Xenon reacts best with	A. The most electropositive elements B. The most electronegative elements C. The hydrogen halides D. Non metals
15	Which one of the following is not correct.	A. Ar is used in electric bulbs B. Kr is obtained during radioactive decay C. Boiling point of H_2 is lowest among all noble gases. D. Xe forms XeOF_4
16	Which one of the following is not formed when an electric discharge passes through helium.	A. HeH^+ B. HeH_2^+ C. He_2^+ D. He_2^-
17	The state of hybridization of Xe in XeF_6 are	A. sp^2 B. sp^3 C. $\text{sp}^3 \text{d}$ D. dsp^3
18	The geometry of XeF_2 is	A. Triangular planar B. Square planar C. Linear D. Trigonal bipyramidal
19	Xe reacts directly with	A. O_2 B. Cl_2 C. F_2 D. Br_2
20	The noble gases which does not form any clathrates is.	A. He B. Ne C. Argon D. Both He and Ne