

MDCAT Chemistry Chapter 11 S and P Block Elements Online Test

Sr	Questions	Answers Choice
1	Zinc does not show variable oxidation state, because	A. Its d-subshell is incomplete B. Its d-subshell is complete C. It is relatively soft metal D. It has two electrons in outermost shell
2	Paramagnetic behaviour is caused by the presence of	A. Unpaired electrons B. Paired electrons C. Paired protons D. Paired electrons in an atom, molecule or ion
3	Number of electrons involved in d-d transition of $[Ti(H_2O)_6]^{3+}$	A. 1 B. 3 C. 2 D. 4
4	which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
5	$[Ti(H_2O)_6]^{3+}$ ion is in colour.	A. Yellow B. Blue C. Violet D. Red
6	Transition compounds which occur as tripositive ions have no	A. 4s-electron B. 3p-electron C. 3s-electron D. 2s-electron
7	When light is exposed to a typical transition element, then electrons jump from low orbitals to higher orbitals in	A. f-orbitals B. s-orbitals C. p-orbitals D. d-orbitals
8	which one pair has the same oxidation state of Fe?	A. $FeSO_4$ and $FeCl_4$ B. $FeCl_4$ and $FeCl_3$ C. $FeSO_4$ and $FeCl_2$ D. $Fe_2(SO_4)_3$ and $FeSO_4$
9	Electrons in 5d energy level are filled up in case of	A. Lanthanides B. Transition metals C. Actinides D. Rare gases
10	Group of element belongs to IIB group	A. Zn, Cd, Hg B. Cu, Ag, Au C. Sc, Y, La D. Ni, Pd, Pt
11	In the electronic configuration of Cr one electron from 4s sub-shell is transferred to 3d sub-shell because	A. The 3d orbital is of lower energy than 4s B. The half-filled d-subshell is more stable than 4 electrons having d-subshell C. The 4s orbital is of equal energy to 3d orbital D. 6 unpaired electrons make Cr more paramagnetic
12	The maximum oxidation state of Mn is	A. +6 B. +7 C. +5 D. +4
13	Which of the following compound is expected to be colored	A. Na_2SO_4 B. $ZnCl_2$ C. MgF_2 D. CuF_2
14	Variable Oxidation state of is related to transition elements	A. empty d-subshells B. Completely filled C. Partially filled d-subshell D. None of these

D. d-d transition

15 The oxidation state of transition elements is usually

- A. Variable
- B. Single
- C. Constant
- D. Infinite

16 d-d transition cannot be shown by

- A. Cu⁺¹
- B. Sc⁺³
- C. Zn⁺²
- D. All

17 The energy difference of d-orbitals varies from

- A. Atom to atom
- B. Ion to ion
- C. Electron to electron
- D. Proton to proton

18 No of unpaired electrons are maximum in

- A. V⁺³
- B. Mn⁺²
- C. Fe⁺³
- D. Cr⁺³

19 At which oxidation state Cu achieves electronic configuration of Zn⁺²

- A. 0
- B. +2
- C. +1
- D. +3

20 Which of the following d-block elements can show the highest oxidation number in its compound

- A. Chromium
- B. Iron
- C. Copper
- D. Manganese