MDCAT Chemistry Chapter 11 S and P Block Elements Online Test

Sr	Questions	Answers Choice
1	The number of unpaired electrons present in Fe ions is	A. 1 B. 2 C. 5 D. 0
2	Which pair of transition elements shows abnormal electronic configuration?	A. Sc and Zn B. Cu and Sc C. Zn and Cu D. Cu and Cr
3	Zn has	A. Zero unpaired electrons B. Three unpaired electrons C. Five unpaired electrons D. One paired electrons
4	The element which shows highest binding energy	A. V B. T C. So D. Cr
5	Which of the following shows group IIIB	A. Zn, Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
6	The energy difference of d-orbitals varies from	A. Atom to atom B. Ion to ion C. Electron to electron D. proton to proton
7	Ti+3 shows minimum absorption (maximum transmittance) at-------and-------wavelength	A. Yellow, Green B. Red. Yellow C. Blue. Green D. Red. Blue
8	Variable Oxidation state of is related to transition elements	A. empty d-subshells B. Completely filled C. Partially filled d-subshell D. d-d transition
9	which one pair has the same oxidation state of-Fe?	A. FeSO4 and FeCl4 B. FeCl4and FeCl3 C. FeSO4 and FeCl2 D. Fe2(SO4)3 and FeSO4
10	Which of these has at least one d electron	A. Sc+3 B. Mn+7 C. Ti+4 D. Cr+3
11	Highest oxidation state af the transition elements is	A. +8 B. +7 C. +5 D. +1
12	Which ion has maximum number of unpaired electrons in 3d subshell and shows maximum paramagnetic behavior?	A. Cr+3 B. Ni+2 C. Co+2 D. Fe+3
13	Which of the following pair has the same no. of electrons in d- subshell	A. Sc+3,Ti+3 B. Mn+2,Fe+3 C. Ti+3,V+3 D. Cr+3.Co+2
14	Group of element belongs to IIB group	A. Zn. Cd. Hg B. Cu. Ag. Au C. Sc. Y. La D. Ni. Pd. Pt
15	The strength of binding energy of transition elements depends upon	A. Number of electron pairs B. Number of unpaired electrons C. Number of neutrons D. Number of protons

16	Which of the following is a non-typical transition element?	A. Cr B. Zn C. Mn D. Fe
17	At which oxidation state Cu achieves electronic configuration of Zn+2	A. 0 B. +2 C. +1 D. +3
18	A transition element X has a configuration [Ar) 4s3dd in its +3 oxidation state. Its atomic number is	A. 25 B. 26 C. 22 D. 19
19	Zine 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
20	Which of the followings has electronic configuration of Ar in +3 oxidation state	A. Sc B. Mn C. Ti D. Zn
21	which of the following d blocks element can showthe highest oxidation number is its ompound	A. Chromium B. iron C. Copper D. Manganese
22	Catalyst used for ammonia synthesis is	A. Cu B. Co C. Zn D. Fe
23	Group VIB of transition elements contains	A. Zn. Cd. Hg B. Cr. Mo, w C. Fe. Ru, Os D. Mn. Te. Re
24	The maximum oxidation state of Mn is	A. +6 B. +7 C. +5 D. +4
25	Stability of Cu-metal is due to filled of d-orbital	A. Half B. Completely C. Partially D. Quarterly
26	The highest oxidation state of manganese is	A. +7 B. -7 C. +6 D. +4
27	In [Ti (H2O)]3+ which colour is transmitted	A. Yellow B. Blue and red C. Blue and yellow D. red and yellow
28	No of unpaired electrons are maximum in	A. V+3 B. Mn+2 C. Fe+3 D. Cr+3
29	Which of the following transition metal forms colourless compounds in +4 oxidation state?	A. Ti B. Cr C. Cu D. Zn
30	Which of the elements has seven electrons in d-subshell?	A. Zn B. Co C. Cu D. Fe
31	Electrons in 5d energy level are filled up in case of	A. Lanthanides B. Transition metals C. Actinides D. Rare gases
32	When light is exposed to transtion element, then electrons jump from lower orbitals to higher orbitals in	A. Orbitals of s-subshell B. Orbitals of d-subshell C. Orbitals of p-subshell D. between different shells
		A. 1 B. 3

33	Number of electrons involved in d-d transition of [Ti(H2O)6]+3	C. 2 D. 4
34	d-d transition cannot be observed in	A. Cr B. Cu C. Mn D. Zn
35	The total number of 3d-series transition elements is	A. 10 B. 40 C. 14 D. 58
36	[Ti (H20)6]3+ ion isin colour.	A. Yellow B. Blue C. Violet D. Red
37	d-d transition cannot be shows by	A. Cu+1 B. Sc+3 C. Zn+2 D. All
38	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
39	which of the following is a typical transition metal?	A. Sc B. Y C. Ra D. Co
40	The oxidation state of transition elements is usually	A. Variable B. Single C. Constant D. Infinite
41	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 electron make Cr more paramagnetic
42	When light is exposed to a typical transition element, then electrons jumps from low orbitals to higher orbitals in	A. f-orbitals B. s-orbitals C. p-orbitals D. d-orbitals
43	Oxidation state of Mn' in KMnO4. K2MnO4, MnO2 and MnSO4 is in the order	A. +7.+6.+2,+4 B. +6,+7,+2,+4 C. +7. +6.+4.+2 D. +4, +6, +7,+2
44	TiCl4 is used as catalyst for manufacture of	A. Sulphuric acid B. Plastics C. Ethanol D. Tetraethyl lead
45	D-block elements are also called	A. Non-typical transition element B. Outer transition elements C. Abnormal transition elements D. Inner transition
46	Which of the following are responsible for the colour developed in transition elements compounds?	A. s-orbitals B. p-orbitals C. d-orbitals D. f-orbitals
47	Transition compounds which occur as tripositive ions have no	A. 4s-electron B. 3p-electron C. 3s-electron D. 2s-electron
48	Which of the folowing compound is expected to be colored	A. Na2SO4 B. ZnCl2 C. MgF₂ D. CuF₂
49	All 3d series elements show an oxidation state of oxidation state	A. +1 B. +2 C. +3 D. Zero

50	What is the sequence of electron take up and removal from 4s orbital a transition metal in 3d series?	A. Enters first, leaves after 3d electrons removal B. Enters after 3d electrons, leaves after 3d electrons C. Enters after 3d eleetrons, leaves first D. Enters first and leaves first