

ECAT Chemistry Chapter 17 Transition Elements

Sr	Questions	Answers Choice
1	The lanthanides contraction is responsible for the fact that	A. Zr and Y have about the same radius B. Zr and Nb have similar oxidation state C. Zr and Hf have about the same radius D. Zr and Zn have the same oxidation state
2	All 3d series elements show variable oxidation states. The one shown by all 3d elements is	A. +2 B. +3 C. +4 D. +5
3	4-d series is in the period:	A. 4th B. 5th C. 6th D. 7th
4	Which element does not belong to 3d transition series	A. Ti B. V C. Mn D. Te
5	Choose the correct answer of transition elements?	A. Transition elements have low melting points B. Transition elements do not have catalytic activity C. Transition elements exhibit variable oxidation states D. Transition elements exhibit inert pair effect
6	The iron obtained from blast furnace is	A. Pig iron B. Wrought iron C. Soft iron D. Steel
7	A transition element is defined as an element of 3d series	A. Which is metal B. Which has one stable ion C. Which has two stable ions D. Which has at least one stable ion with incomplete d-orbital
8	3-d series elements are present in:	A. First period B. Second Period C. Third period D. 4th period
9	$[Zn(NH_3)_4]^{3+}$ possess geometry	A. Square planar B. Hexagonal C. Tetrahedral D. None of these
10	The less reactivity of transition metal is due to	A. High heats of sublimation B. High ionization energies C. Low heats of solvation D. All these
11	Which of the following has the maximum number of unpaired d-electrons?	A. Zn B. Fe^{2+} C. Ni^{3+} D. Cu^{+}
12	Series starting from ${}_{39}Y$ to ${}_{48}Cd$ is in period:	A. 4th B. 5th C. 6th D. 7th
13	Which is not a bidentate ligand	A. $ $
14	What is the name of the complex $[Ni(CO)_4]$	A. Tetracarbonylnickel (0) B. Tetracarbonylnickel C. Tetracarbonylnickel (II) D. Tetracarbonylnickel (IV)

15	Which is non typical transition element :	A. Ni B. Co C. Y D. Fe
16	The geometry of $[\text{Co}(\text{NH}_3)_6]^{3+}$ is	A. Tetrahedral B. Square planar C. Octahedral D. None of these
17	Rusting of iron is catalysed by	A. Fe B. O_2 C. Zn D. H^+
18	Which metal is used for catalytic hydrogenation of oils	A. Cu B. Pt C. Ni D. Pd
19	Which alloy contains 50% copper, 25% zinc and 25% nickel	A. German silver B. Gun metal C. Bell metal D. Brass
20	Maximum variable oxidation state is of:	A. Mn^{+2} B. Fe^{+3} C. Cr^{+1} D. a and b