

CLASS : XIth
DATE :

SUBJECT : CHEMISTRY
DPP No. : 8

Topic :- THE D-AND F-BLOCK ELEMENTS

- The matte obtained in the extraction of copper contains:
a) FeSiO_2 b) $\text{SiO}_2 + \text{FeS}$ c) $\text{FeS} + \text{Cu}_2\text{S}$ d) $\text{CuS} + \text{SiO}_2 + \text{FeO}$
- The electronic configuration of actinoids can to be assigned with degree of certainty because of
a) Overlapping of inner orbitals
b) Free movement of electrons over all the orbitals
c) Small energy difference between $5f$ and $6d$ levels
d) None of the above
- In Mac Arthur forrest method, silver is extracted from the solution of $\text{Na}[\text{Ag}(\text{CN})_2]$ by the use of
a) Fe b) Mg c) Cu d) Zn
- Transition elements are coloured
a) Due to unpaired d -electrons b) Due to small size
c) Due to metallic nature d) All of the above
- Which one of the elements with the following outer orbital configurations may exhibit the largest number of oxidation states?
a) $3d^24s^2$ b) $3d^34s^2$ c) $3d^54s^1$ d) $3d^54s^2$
- Lanthanide contraction occurs because
a) f -orbitals are incompletely filled
b) f -orbital electrons are easily lost
c) f -orbital do not come out on the surface of atom and are buried inside
d) f -orbital electron are poor shielders of nuclear charge
- Silver nitrate produces a black stain on skin due to:
a) Its corrosive action
b) Its reduction to metallic silver
c) Its strong reducing action
d) The formation of a complex compound

8. The most stable ion is:
 a) Mn^{2+} b) Sc^{4+} c) Fe^{2+} d) Mn^{3+}
9. The +3 ion of which one of the following has half-filled $4f$ sunshell?
 a) La b) Lu c) Gd d) Ce
10. Calomel may be freed from traces of metallic mercury by washing with:
 a) dil. HNO_3 b) dil. H_2SO_4 c) Water d) Aqua regia
11. One of the following is false for Hg:
 a) It can evolve hydrogen from H_2S
 b) It is metal
 c) It has high specific heat
 d) It is less reactive than H_2
12. Brass is an alloy of:
 a) Zn and Cu b) Cu and Sn c) Zn and Sn d) Cu, Zn and sn
13. Maximum paramagnetism in $3d$ -series is shown by:
 a) Mn b) Co c) Ni d) Fe
14. The metal used for making armoured steel for tanks and domestic safes is:
 a) Manganese b) Aluminium c) Lead d) Chromium
15. Which of the following metals has been used in making boats because it has resistance to corrosion by seawater?
 a) W b) Cu c) Ni d) Ti
16. Which ore contains both iron and copper?
 a) Cuprite b) Chalcocite c) Chalcopyrite d) Malachite
17. $\text{K}_2\text{Cr}_2\text{O}_7 \xrightarrow{\Delta} \text{K}_2\text{CrO}_4 + \text{O}_2 + X$. In the above reaction X is
 a) CrO_3 b) Cr_2O_7 c) Cr_2O_3 d) CrO_5
18. Blood red colour solution is produced when ferric chloride solution is treated with:
 a) KCN b) KSCN c) KCNO d) $\text{K}_3[\text{Fe}(\text{CN})_6]$
19. The group of metals which is known as ferrous metals is:
 a) Fe, Co, Ni b) Ru, Rh, Pd c) Os, Ir, Pt d) Cr, Mn, Cu
20. In the chemical reaction;
 $\text{Ag}_2\text{O} + \text{H}_2\text{O} + 2e^- \rightarrow 2\text{Ag} + 2\text{OH}^-$

a) Water is oxidised b) Electrons are reduce c) Silver is oxidised d) Silver is reduced

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