

CLASS : XIth
DATE :

SUBJECT : CHEMISTRY
DPP No. : 3

Topic :- THE D-AND F-BLOCK ELEMENTS

- The compound which gives oxygen on moderate heating is:
a) Zinc oxide b) Mercuric oxide c) Aluminium oxide d) Ferric oxide
- The form of iron having the highest carbon content is
a) Cast iron b) Wrought iron c) Stainless steel d) Mild steel
- An ore of silver is:
a) Argentite b) Stibnite c) Haematite d) Bauxite
- Roasting of HgS in air produces:
a) HgO b) HgSO₃ c) HgSO₄ d) Hg
- Transuranic elements begins with
a) Np b) Cm c) Pu d) U
- A solution when diluted with H₂O and boiled gives a white ppt. On addition of excess NH₄Cl/NH₄OH, the volume of precipitate decreases due to dissolution leaving behind a white gelatinous precipitate. The precipitate which dissolves in NH₄OH/NH₄Cl is:
a) Zn(OH)₂ b) Al(OH)₃ c) Mg(OH)₂ d) Ca(OH)₂
- Which of the following is not correct about transition metals?
a) Their compounds are generally coloured. b) They can form ionic or covalent compounds.
c) Their melting and boiling points are high. d) They do not exhibit variable valency.
- Which one of the following does not decolourise an acidified KMnO₄ solution?
a) SO₂ b) FeCl₃ c) H₂O₂ d) FeSO₄
- Which of the following pairs of elements cannot form an alloy?
a) Zn, Cu b) Fe, Hg c) Fe, C d) Hg, Na

10. Which is known as purple of Cassius?
a) Colloidal silver solution
b) Colloidal gold solution
c) Aqueous solution of soap
d) As_2S_3 colloidal solution
11. Which of the following ionic species will impart colour to an aqueous solution?
a) Cu^+ b) Zn^{2+} c) Cr^{3+} d) Ti^{4+}
12. The outer electronic configuration of Gd (At. No 64) is
a) $4f^3 5d^5 6s^2$ b) $4f^8 5d^0 6s^2$ c) $4f^4 5d^4 6s^2$ d) $4f^7 5d^1 6s^2$
13. Mercury is a liquid metal because
a) It has a completely filled *s*-orbital.
b) It has a small atomic size.
c) It has a completely filled *d*-orbital that prevents *d – d* overlapping of orbitals.
d) It has a completely filled *d*-orbital that causes *d – d* overlapping.
14. Composition of azurite mineral is
a) $\text{CuCO}_3 \cdot \text{CuO}$ b) $\text{Cu}(\text{HCO}_3)_2 \cdot \text{Cu}(\text{OH})_2$ c) $2\text{CuCO}_3 \cdot \text{Cu}(\text{OH})_2$ d) $\text{CuCO}_3 \cdot 2\text{Cu}(\text{OH})_2$
15. What would happen when a solution of potassium chromate is treated with an excess of dilute nitric acid?
a) Cr^{3+} and $\text{Cr}_2\text{O}_7^{2-}$ are formed
b) $\text{Cr}_2\text{O}_7^{2-}$ and H_2O are formed
c) CrO_4^{2-} is reduced to + 3 state of Cr
d) None of the above
16. Zn gives H_2 gas with H_2SO_4 and HCl but not with HNO_3 because:
a) Zn acts as an oxidising agent when react with HNO_3
b) HNO_3 is weaker acid than H_2SO_4 and HCl
c) In electrochemical series Zn is above hydrogen
d) NO_3^- ion is reduced in preference to hydronium ion
17. Which of the following is also known as “Fools gold”?
a) Wurtzite b) Iron pyrites c) Chalcocite d) Silver glance
18. When steam is passed over heated iron, one of the products is:
a) FeO b) Fe_2O_3 c) Fe_3O_4 d) FeSO_4
19. In the electrolytic refining of zinc

- a) Graphite is at the anode. b) The impure metal is at the cathode.
c) The metal ion get reduced at the anode. d) Acidified zinc sulphate is the electrolyte.
20. Which pair of lanthanides is used in glass, blowers, goggles?
a) Np, Pu b) Pu, Gd c) Fm, Ho d) Pr, Ho

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