VIKASANA CHEMISTRY CET-2012
ASSIGNMENT QUESTIONS ON METALLURGY-2, INDUSTRIALLY IMPORTANT COMPOUNDS AND SOLIDS

1. **In the aluminothermic process, aluminium acts as**
   a.) oxidizing agent b.) reducing agent
   c.) complexing agent d.) dehydrating agent

2. **The impurities associated with mineral used in metallurgy are called**
   a.) slag b.) gangue c.) flux d.) ore

3. **The temperature of the slag zone in the metallurgy of iron using blast furnace is**
   a.) 400-700^{o}C b.) 800-1000^{o}C c.) 1200-1500^{o}C d.) 1500-1600^{o}C

4. **Magnetite is**
   a.) ferrous oxide b.) hydrated ferric oxide
   c.) ferric oxide d.) ferrosoferricoxide

5. **When conc H_2SO_4 is heated with P_2O_5 the acid is converted into**
   a) S b.) SO_2 c.) SO_3 d.) mixture of SO_2 and SO_3

6. **conc H_2SO_4 oxidises carbon to**
   a.) CO b.) CO_2 c.) CO & CO_2 d.) carbonate

7. **When formic acid is heated with conc H_2SO_4 we get**
   a.) CO b.) CO_2 c.) CO and CO_2 d.)SO_2

8. **Which one of the following forms oleum when dissolved in conc H_2SO_4**
   a.) sulphur dioxide b.) sulphur trioxide
   c.) sulphuryl chloride d.) thionyl chloride

9. **To dry ammonia the drying agent used is**
   a.) conc H_2SO_4 b.) P_2O_5 c.) CaO d.) anhyd $CaCl_2$

10. **In the process of manufacture of sulphuric acid by contact process, tyndall box is used to**
    a.) convert SO_2 to SO_3 b.) test the presence of dust particles
    c.) filter dust particles d.) remove impurities

11. **NaOH reacts with aluminium to evolve**
    a.) H_2 b.) O_2 c.) PH_3 d.) O_3

12. **The temperature and pressure for the optimum yield of ammonia by Haber's process are**
    a.) 210-260K, 1000-1200atm b.) 400-470K, 200-500atm
    c.) 720-770K, 200-900atm d.) 50-150K, 700-1000atm

13. **Sugar reacts with conc H_2SO_4 to give the smell of burning sugar. It is due to the formation** of
a.) CO_2 b.) SO_2 c.) C d.) both CO_2 and SO_2

14. A gas when passed through an acidified solution of $K_2Cr_2O_7$ turns it green. The gas is
a.) H_2 b.) Cl_2 c.) NH_3 d.) SO_2

15. Total number of lattice arrangements in different crystal system is
a) 7 b.) 3 c.) 8 d.) 14

16. In crystal of CsCl, the nearest neighbours of each Cs^+ ion
a.) 6 Cl^- ions b.) 8 Cs^+ ions c.) 6 Cs^+ ions d.) 8Cl^- ions

17. The best reducing agent for the extraction of chromium from chromite ore is
a.) C b.) CO c.) Fe d.) Al

18. The radius ratio of a substance is 0.32. The coordination number of the substance is
a.) 8 b.) 3 c.) 4 d.) 6

19. Iodine is an example of
a.) ionic crystal b.) metallic crystal c.) molecular crystal d.) covalent crystal

20. A compound of A and B crystallizes in a cubic lattice in which A atoms occupy the lattice points at the corners of the cube and B atoms occupy the centre of each face of the cube. The probable empirical formula of the compound is
a.) AB_2 b.) A_3B c.) AB d.) AB_3