

***Sincerity, Nobility and Service***

**WORKSHEET NO.7**

**GRADE: XII DATE: 19.09.19**

**SUBJECT: CHEMISTRY TOPIC: d and f-BLOCK ELEMENTS**

1. Write the electronic configuration of the following :
2. Cu+  b. Co2+ c. Cr3+ d. Mn2+
3. Calculate the magnetic moment of divalent and trivalent ion in aqueous solution if its atomic no. is 25. (Hint: µ={n(n+2)}1/2
4. Though both Cr2+ and Mn3+ have d4 configuration yet Cr2+ is reducing while Mn3+ is oxidising. Explain.
5. Scandium is transition but Zinc is not. Explain
6. Why do transition elements have high enthalpy of atomisation?
7. What is meant by disproportionate reaction? Give an example.
8. Out of Fe2+ and Fe3+ which is more paramagnetic? Why?
9. Why are Mn2+ compounds more stable?
10. Explain chromyl chloride reaction.
11. Out of oxides of Mn which is more acidic? Explain.
12. What is the reaction of potassium dichromate with a base and then with sulphuric acid? Write a balanced equation for the reaction.
13. Draw the structure of sulphur containing acids.