**Sardar Bhagwan Singh University Balawala, Dehradun (Uttarakhand)**

**Bsc Chemistry Honours Second Year (Fourth Semester)**

**Subject: Inorganic Chemistry: Paper Code (CHEM 241)**

**Even Semester Assignment-VIII (2020)**

**Time: Hours Max Marks:**

**Note: Attempt all questions all questions carry equal marks 02**

1. **Write a short note on oxidation properties of transition elements.**
2. **Why +4 oxidation state of Ti is more stable than +2.**
3. **Why +5 oxidation state of V is more stable than +2.**
4. **Why +3 oxidation state of V is more stable.**
5. **Why +2 oxidation state of Cu is more stable than +1.**
6. **Discuss the oxidation state of Mn.**
7. **Why +3 oxidation state of Sc is more stable than +2.**
8. **Why Zn forms only Zn2+ and not Zn3+.**
9. **Which should be a better oxidizing agent: Co2+ or Co3+ in water?**
10. **Which ion should exhibit a higher magnetic moment: Mn2+ or V2+?**

**(Dr. Neetu Pandey)**

**(Dept. of Applied chemistry)**