

**Gurudas College**  
**Internal Examination, 2020**  
**Chemistry (General)**  
**B.Sc. Part - II (1+1+1)**  
**Paper - 3 F.M. - 50**  
**Subject - CEMG(Practical) Time - 2:00 - 3:30 PM**

Each question carries Equal marks

Answer any TEN questions

1. Write down Red-dye test for the detection of aromatic  $-\text{NH}_2$  group in an organic compound.
2. What is Tollen's reagent? How it is prepared.
3. Which group is detected by using  $\text{NaHCO}_3$ ? Write the equation.
4. Name the functional group that is detected by using the DNP test. Describe the test with necessary reaction.
5. Describe Lassaigne's method for the detection of nitrogen in an organic compound.
6. Name the test used for the detection of aromatic Nitro group in presence of aromatic amino group in an organic compound. Explain the test with proper reagent.
7. How can you detect the presence of phenolic  $-\text{OH}$  group in an organic compound?
8. Write down the fusion tests for  $\text{Cr}^{3+}$  and  $\text{Mn}^{2+}$  radicals.
9. How  $\text{Ni}^{2+}$  radical can be detected in solution. Write down the chemical reaction involved.
10. How would you differentiate between  $\text{BO}_3^-$  and  $\text{H}_3\text{BO}_3$  in an inorganic sample?
11. What is Nessler reagent? Write down the formula of the compound it forms with  $\text{NH}_3$ .
12. What is Prussian blue?
13.  $\text{AgCl}$  is insoluble in  $\text{HNO}_3$ ; but it dissolves in  $\text{NH}_4\text{OH}$  – why?
14. Write down the spot test for  $-\text{NO}_2^-$ .