

Sovarani Memorial College
Chemistry Practical Examination- 2021
subject - Chemistry (Hons) Practical
Paper - CC-13-B, Sem - VI (H)

Time - 10-00-12-00

F.M - 30

Answer any 15 (fifteen) questions
Each question carries 2 (two) marks

1. Why group II (A+B) metallic ions are only precipitated as their sulphide salts with H_2S/HCl in presence of following group metallic ions?
2. Why NH_4Cl is added before adding NH_4OH to precipitate group III - A metallic ions as their hydroxides in presence of following group metallic ions?
3. How are Group II A and II B metal sulphides separated. Give chemical equations.
4. Why Group V has no general reagent?
5. Tests for borate, silicate, fluoride, phosphate are essential for qualitative analysis - explain
6. Write down a balanced chemical equation for the identification of any phosphate salt.
7. The presence of alkali is required for sodium nitroprusside test in dry test and in spot test - explain
8. How can we confirm Ni^{2+} ion in solution?
Give equation.
9. How can we separate Cu^{2+} from Cd^{2+} ?
10. How Pb^{2+} is confirmed. Give equation?
11. How can you identify insoluble Al_2O_3 (ignited)
Give equations.

12. Mention the principle of phosphate removal.
13. CoO-IV reagent is NH_4Cl , NH_4OH and $(\text{NH}_4)_2\text{CO}_3$
-explain
14. How gr-II B metallic sulphides are separated and confirmed?
15. Why BaSO_4 does not impart a green colour in flame when dipped into cone HCl?
How can Ba^{2+} be tested in BaSO_4 by flame test?
16. How fluoride salt is tested in a dry way? Give equations.
17. How cupric salt can be identified by Borax bead test? Give equations, with a cupric salt
18. Which sulphides when extracted by Na_2CO_3 do not respond to sodium nitroprusside test and why?
19. How a borate salt be identified. Give equation with ~~NaH_2BO_2~~ Na_3BO_3 .
20. How can you detect NO_3^- ion in presence of NO_2^- in a dry test. Give equations.

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