[This question paper contains 2 printed pages.]

Sr. No. of Question Paper: 8386

C

Roll No.....

Unique Paper Code

: 217154

Name of the Paper

: CHCP-101 CHEMISTRY LAB

Name of the Course

: B.Sc. (Hons.) / Physics / Part I

(Admissions of 2010 and onwards)

Semester

: I

Duration

: 1 Hour

Maximum Marks

: 20

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.

- 2. Attempt All questions.
- 3. All questions carry equal marks.
- 1. How is Benedict solution prepared?
- 2. What is the effect of dilution on surface tension of detergent solution?
- 3. What is the reducing agent used in the reduction of Cu(II) to Cu(I) in gravimetric analysis of cuprousthiocyanate?
- 4. What is saponification? Write the chemical reaction.

the analysis of the control of the section

- 5. Define the order of reaction and write the unit of rate constant of 1st order reaction?
- 6. Define R, Value.
- 7. What is the colour of Phenolphthalein in acidic medium? Write the corresponding structure of Phenolphthalein.

- 8. Define relative and absolute viscosity.
- 9. Why is the excess of precipitating agent avoided in the gravimetric estimation of copper as thiocyanate?
- 10. Write the various steps for the preparation of p-bromoaniline from acetanilide.
- 11. What is conductometric titration? Draw the curve for titration of weak acid(CH₁COOH) and strong Base(NaOH).
- 12. What is structure of the complex tetramminecopper (II) sulphate?
- 13. Why drop number method gives more accurate result as compared to drop weight method by Stalagmometer?
- 14. What is oxidation state of Mn in MnPO4? Is MnPO4 stable?
- 15. What product is obtained when salicylic acid is treated with Acetyl Chloride in Pyridine? Write the chemical reaction involved and the structure of the product obtained.
- 16. Write chemical reaction when $K_2Cr_2O_7$ reacts with Mohr's salt in acidic medium.
- 17. What is the visualizing reagent used for the detection of Cu²⁺ and Cd²⁺ ions in paper chromatography?
- 18. How is Caffeine isolated from tea leaves?
- 19. Write SI unit of surface tension and viscosity.
- 20. What is the effect of nitro group in the electrophilic aromatic substitution of nitrobenzene?