B.Sc Part-I Honours Practical Exam
Subject: Chemistry
Paper-IV (New Syllabus)
F.M-60, Time: 11 a.m. to 4 p.m (5 Hours)

Answer all question

1. Discuss the preliminary test results expected from 4-amino benzoic acid. (3)

2. Explain all the reactions involved for the detection of special elements N, S, Cl (6)

3. Give the reaction details of aldehyde group with Felling's solution (3)

4. Why benzoin undergo positive Tollens Test (2)

5. Discuss the experiment, observation and inference for amide and anilido group explaining all the associated chemical reaction. (4)

6. Match the following considering the case of their suitable derivative during qualitative analysis (12)

(a) Benzamide	(i) Bromo derivative
(b) Catechol	(ii) Picrate derivative
(c) Benzophenone	(iii) Anilido derivative
(d) 2-nitroaniline	(iv) Reduction derivative
(e) Metadinitrobenezene	(v) Benzoyl derivative
(f) Salicylic acid	(vi) 2,4-DNP derivat
(g) Anthracene	(vii) Hydrolysis derivative
h) Cinnamic acid	(viii) Acetyl derivative

7. Complete the following reaction equation (2)
$RCOOH+NaHC^{*}O_3$ = ? +?+?

8. Discuss the Back Dye Test of phenolic OH group mentioning (i) Experiment (ii) observation (iii) Inference (iv) reaction (6)

9. How can you differentiate presence of 1^{o} aromatic amine group in a compound in presence and in absence of NO_2 group. Explain with reaction. (4)

10. Write reaction product of following compounds with $FeCl_3$ solution. (4)

(i) α-Naphthol (ii) β-Naphthol (ii) Quinol

11. Why conc. H_2SO_4 is taken in melting point bath for the determination of melting point of organic compound? (2)

12. How metadinitrobenezene is prepared from nitrobenzene? What is the melting point of metadinitrobenezene? (2)

13. Viva-voce (10)