Answer all question

1. What will be the structure of bromo derivative product of cinnamic acid?	(1)

2. Give the reaction scheme for the synthesis of "Aspirin" from salicylic acid. (1.5)

3. What will be the condensation product when phthalic anhydride is reacted with urea in presence of glacial acetic acid under refluxing condition? (1.5)

4. Calculate the %age of CY (Chemical yield) when 5.5 gm of benzoin is oxidized to 4.25 gm of benzil. (1.5)

5. Outline the steps for the synthesis of methyl orange. (2)

6. What is the difference between "crude product" and "pure product"? (1.5)

7. Why conc. H<sub>2</sub>SO<sub>4</sub> is usually used in melting point bath for the determination of melting point of organic compound. Give an example of alternative liquid which can replace conc. H<sub>2</sub>SO<sub>4</sub> for same purpose. (1.5)

8. Name of the following apparatus. Where it is used? (1.5)



9. Discuss two important points for recrystallization process.	(1.5)
10. Write the structure of the product. What type of reaction is it?	
H <sub>2</sub> N urea Ethyl aceto acetate benzaldehyde	
90 °C, 1h	