

- b. Explain Reimer Tiemann reaction with mechanism. (5)
 c. Write the reaction of ether with HI, PCl₅ and acetyl chloride. (4)
Q-5 **Attempt all questions** (14)
 a. Complete the following reactions (5)

- b. Give the preparation of 1,2,3-tribromo benzene from p-nitro toluene (5)
 c. Give the reasons for high and low quantum yield. (4)
Q-6 **Attempt all questions** (14)
 a. Explain Nernst Equation and its applications (5)
 b. Write a note on Galvanic cell (5)
 c. Mention the types of reversible electrodes (4)
Q-7 **Attempt all questions** (14)
 a. Explain Grotthus-Draper law and Stark-Einstein law. (5)
 b. Explain Enzyme Catalysis. (5)
 c. Write a note on intermediate compound formation theory. (4)
Q-8 **Attempt all questions** (14)
 a. What is common ion effect explain giving appropriate examples. (5)
 b. How to measure temporary hardness of water? (5)
 c. 200 ml of 1.3×10^{-3} m AgNO₃ is mixed with 100 ml of 4.5×10^{-5} m Na₂S solution will precipitations occur? ($K_{sp}=1.6 \times 10^{-49}$) (4)

