

**S.Y. B.Sc. (Industrial Chemistry) Examination**

*Nov-2017*

**Paper- IC-202: Fundamentals of chemical engineering & analytical chemistry**  
**Paper Code: 8394**

**Time: 2.00 Hours**

**Maximum Marks: 75**

- Que.1 Find out the % of C and H in following. (any three) [18]
1. Anthranilic acid
  2. Phthalic acid
  3. Naphthalene
  4. Succinic acid
  5. Benzoic acid
- Que.2 (A) What is filtration? Write a note on filter press. [10]  
(B) What is extraction? Explain selection criteria for solvent in extraction operation. [09]
- OR
- Que.2 (A) What is mixing? Explain muller mill with neat sketch. [10]  
(B) Write a note on combustion and calorific values of fuels. [09]
- Que.3 (A) Give industrial application of  $\text{Na}_2\text{CO}_3$ ,  $\text{NaHCO}_3$  and  $\text{KHCO}_3$ . [10]  
(B) Give industrial application of Oxalic acid, Succinic acid and Perchloric acid. [09]
- OR
- Que.3 (A) Give industrial application of Lithium aluminium hydride, Sodium ethoxide and Methylene blue. [10]  
(B) Give industrial application of Ninehydrine, Methyl violet and Tetrazolium blue. [09]
- Que.4 (A) Discuss industrial production Vinyl chloride. [10]  
(B) Discuss industrial production Phthalic anhydride. [09]
- OR
- Que.4 (A) Write a note on DMF and THF [10]  
(B) Write a note on Dioxane and Diethyl ether. [09]