

Type: DES

- Q1. With a neat sketch, explain briefly the production of Hydrogen using propane (5)
- Q2. List six industrial uses of Sodium Chloride (3)
- Q3. Explain the different methods employed in the production of oxygen (2)
- Q4. Explain with a neat flow diagram, the production of sulphur from Claus process (5)
- Q5. What are different methods available for the production of Hydrochloric acid? (2)
- Q6. Explain and analyse the different production routes for ethanol (3)
- Q7. With a neat process flow diagram, explain how sugar and molasses are produced from cane (5)
- Q8. Name the different methods for the production of synthesis gas and mention the H_2/CO ratio obtained in each method (2)
- Q9. Explain the different oil seed preparation techniques applied before oil extraction (3)
- Q10. Describe the soap manufacturing process with a neat sketch of a process flow diagram (5)
- Q11. Name the different components/ingredients added for the synthesis of detergents (2)
- Q12. Name the different petrochemical products obtained in the atmospheric distillation unit (ADU) in petroleum refinery. Write down the boiling ranges and uses of any three petrochemical products (3)
- Q13. Explain the major processing steps involved in chemical recovery from black liquor process. Name the products and by-products obtained during the chemical recovery (3)
- Q14. With a neat process flow diagram, explain the manufacturing process of ammonia (Haber's process). Clearly indicate the raw materials and catalysts used, operating conditions in terms of optimum temperature and pressure (4)
- Q15. Explain the xanthation process involved in manufacturing of viscose rayon (3)