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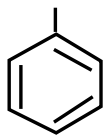
- P.T.O

- e) 0.2475 gm of organic substance on combustion gave 0.4950 gm of CO<sub>2</sub> and 0.2025 gm of H<sub>2</sub>O. Calculate the percentage of carbon and hydrogen in given substance. 2½
- f) Write note on Gabriel phthalimide synthesis. 2½
4. a) What are carbohydrates? Discuss the open chain structure of glucose? 5
- b) What are dyes. Give method of preparation and uses of congo red and Indigo dyes. 5

OR

- c) Write note on Mutarotation. 2½
- d) Give synthesis and applications of methyl orange. 2½
- e) Draw structure of Detol and give some uses of Detol. 2½
- f) What are antibiotics. How antibiotics are classified. 2½

Solve **any ten** questions.

5. 1) Draw structure of picric acid. 1
- 2) What is reductive amination of aldehyde? 1
- 3) Write the name of 1
- $$\text{NH}_2 \cdot \text{HCl}$$

- 4) What is organometallic compound? 1
- 5) Draw structure of Thiophene. 1
- 6) What is the action of sodium amide on pyridine (Reaction only). 1
- 7) What is peptide bond? 1
- 8) Give structure of Zwitter ion. 1
- 9) What is α-amino acid. 1
- 10) Draw structure of cellulose. 1
- 11) What are reducing sugars? 1
- 12) Give some side effects of paracetamol 1

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