

Gurudas College
Practical Examination, 2021
CHEMISTRY-HONOURS
Semester-VI
Paper-DSE B3
(Polymer Chemistry)

Full Marks: 30

Time: 1 h 30 min

Answer any five questions

6×5=30

1. Write down the chemical equations for the preparation of novolac and bakelite from formaldehyde phenol derivative.
2. Why Fe^{2+} salt is added into H_2O_2 solution for the polymerization of acrylamide by a redox system in an aqueous solution. Explain with necessary reaction.
3. What is meant by condensation polymerization? Write the necessary reaction for the preparation of nylon-66 by the condensation polymerization process.
4. Write the reaction between pyromellitic dianhydride (PMDA) and polyethylene glycol (PEG). Why water is added before the titration with NaOH for polymer end group analysis.
5. Urea-formaldehyde resin is prepared by what type of polymerization process. Write the chemical reactions for the preparation of Urea-formaldehyde resin.
6. How do you prepare resole resin? Distinguish between novolac and resole resin.