

Ramananda College: Bishnupur: Bankura

B. Sc. 6th Semester (Honours) Practical Examination-2021

Subject: Chemistry

Course Code: UG/CHEM/604/DSE-4

Course Title: Polymer Chemistry (P4)

Full Marks: 15

Time: 2 Hours

(Figures in the right margin indicate marks. Candidates are required to give answers in their own words as far as possible)

1. Prepare a laboratory report on preparation of phenol-formaldehyde resin (Bakelite) based on the following points:
 - a) Principle with chemical reaction, (3)
 - b) Apparatus and Reagents required, (2)
 - c) Procedure for the preparation of the resin, (5)
 - d) Calculate the yield which can be obtained from 5mL of glacial acetic acid, 2.5 mL of 40% formaldehyde and 2.0 g of phenol taking 100% conversion, (3)
 - e) Mentioned two important applications of Bakelite. (2)

Or

2. Prepare a laboratory report on preparation of Nylon 66 from adipic acid and hexamethylene diamine based on the following points:
 - a) Principle and chemical reaction, (3)
 - b) Apparatus and Reagents required, (2)
 - c) Procedure for the preparation of the polymer, (5)
 - d) Calculate the yield which can be obtained from 2 g of adipic acid, 2.2 g hexamethylene diamine 100% conversion, (3)
 - e) Mentioned two important applications of Nylon 66. (2)