

C 40528

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Name.....

Reg. No.....

SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2023

(CBCSS-UG)

Polymer Chemistry

PCH 6B 02 (E1)—POLYMER PROCESSING AND TECHNOLOGY

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answers)*Answer questions up to 20 marks.**Each question carries 2 marks.*

1. Give the chemical form of natural rubber.
2. What do you mean by TSR ?
3. What is Rayon ? How is it prepared ?
4. How is natural rubber chlorinated ? What is its advantage ?
5. What is meant by compounding ?
6. Describe Calendaring.
7. What is the use of a plasticizer ? Give an example for plasticizer.
8. What are accelerators ? Give one example.
9. What is meant by mastication ?
10. What is a single screw extruder ?
11. Name any two standard organisations for testing polymers.
12. Define scorch cure time.

(Ceiling 20 marks)

Section B (Paragraph)*Answer questions up to 30 marks.**Each question carries 5 marks.*

13. Write notes on cellulose nitrate polymer.
14. Explain the different modifications of natural rubber.

Turn over

15. What is lamination ? Describe the method of lamination.
16. Explain the function of antioxidants.
17. Write a note on fillers used in polymer processing.
18. Explain the different types of screw extruders.
19. Describe the Vicat Softening temperature test for polymers.

(Ceiling 30 marks)

Section C

*Answer any **one** question.*

The question carries 10 marks.

20. Explain the different methods of moulding in Polymer Processing.
21. Write notes on stress – strain properties of polymers.

(1 × 10 = 10 marks)