

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY

Bachelor of Engineering - SEMESTER - III EXAMINATION - SUMMER 2025

Subject Code: 3132605

Date: 06-06-2025

Subject Name: Latex Technology

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

	Marks
Q.1 (a) Write the chemical composition of fresh Natural Rubber latex after Tapping.	03
(b) Show the Seed germination for Heavea tree by schematic diagram.	04
(c) Mention different parts of Hevea Brasiliensis tree. Write about their function with diagram.	07
Q.2 (a) Write about the reason for preservation of Natural latex.	03
(b) List the basic characteristics for NR latex preservatives.	04
(c) Describe the Natural latex preservation by Ammoniation with diagram.	07
OR	
(c) Explain about VFA number and its influence on NR latex with graphical representation.	07
Q.3 (a) Write about requirement of Concentration for Natural latex.	03
(b) Write the basic principal of Creaming process.	04
(c) Describe the Centrifugation process in detail with schematic diagram.	07
OR	
(a) What is Electrodecantation? Explain in brief.	03
(b) Write about advantages of Concentration process for NR latex.	04
(c) Describe the Evaporation process with schematic diagram.	07
Q.4 (a) What is Destabilization for latex?	03
(b) Write the difference between True solution and Colloidal solution.	04
(c) Describe the various types of latex allergies and their symptoms.	07
OR	
(a) Write about Acid Gelation.	03
(b) Explain the principal of Heat sensitized Gelation.	04
(c) Write about Causes, preventive measures of Latex allergies. Write about management at workplace for same.	07

- Q.5 (a)** Brief about Dispersions and its preparation. **03**
- (b)** Write about function of Thickeners and Tackifiers for latex compounding. **04**
- (c)** Explain about working mechanism of Ball mill with schematic diagram. **07**

OR

- (a)** Write about Emulsion and its preparation. **03**
- (b)** Write about function of Dispersing agents. Give examples. **04**
- (c)** Write about various factors affecting function of Ball mill. **07**
