

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III(NEW) EXAMINATION – SUMMER 2023

Subject Code:3132605

Date:01-08-2023

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.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Define term: Latex Preservation (03)
(b) Name widely used preservative for NR latex. Write its basic characteristics. (04)
(c) Mention the process used for NR Latex Preservation and explain in detail. (07)
- Q.2** (a) Why Natural latex concentration is required? Give reason. (03)
(b) What is Creaming and Sedimentation? (04)
(c) Draw the schematic diagram of Centrifugation process for latex concentration and explain it in detail. (07)
- OR**
- (c) Draw the schematic diagram of Evaporation process for NR latex concentration and explain it in detail. (07)
- Q.3** (a) Write about importance of Thickeners in latex compounding. Give examples. (03)
(b) What is Dispersion? How it can be prepared? (04)
(c) Name the equipments used for preparation of Emulsion for latex compounding. Explain about any one. (07)
- OR**
- Q.3** (a) Name various Surface active substances used in latex compounding and write about its function. (03)
(b) What is Emulsion? How it can be prepared? (04)
(c) Describe working principal and function of Ball mill in latex industry with schematic diagram. (07)
- Q.4** (a) Mention basic causes and remedies for latex allergy. (03)
(b) Write about management of latex allergy at health care organizations. (04)
(c) What is Tapping? Explain about modern tapping system with schematic diagram. (07)
- OR**
- Q.4** (a) List the major types of latex allergic reactions. (03)
(b) Write about various latex allergy symptoms in detail. (04)
(c) Describe Vegetative propagation for Heavea Brasiliensis tree. (07)
- Q.5** (a) What is True solutions? (03)
(b) Write about preferred atmospheric conditions for Hevea tree cultivation. (04)
(c) Describe in detail about Acid gelation for NR latex. (07)
- OR**
- Q.5** (a) What is colloidal solutions? (03)
(b) Write about various factors affecting yield of NR latex. (04)
(c) Write in detail about Delayed action gelation. (07)
