

Enrolment No./Seat No_____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-III (NEW) EXAMINATION – SUMMER 2024

Subject Code:3132605

Date:06-07-2024

Subject Name:Latex Technology

Time:10:30 AM TO 01:00 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) What is latex coagulation? Explain its mechanism. (03)
(b) Write in brief about Latex Tapping system. (04)
(c) Name various NR latex preservatives. Explain the process of preservation with schematic diagram. (07)
- Q.2** (a) Write about principle of Electrodecantation process. (03)
(b) Write advantages of Concentration of NR latex. (04)
(c) Draw the schematic diagram of Centrifugation process for latex concentration and explain its mechanism (07)
- OR**
- (c) Give schematic representation of Evaporation process for NR latex concentration and explain the method in detail. (07)
- Q.3** (a) Name various Accelerators for latex compounding and write its significance. (03)
(b) What is Solution? How it can be prepared? (04)
(c) Draw the schematic diagram showing working of Ball mill and also explain the process. (07)
- OR**
- Q.3** (a) Name various fillers used in latex compounding and write about any one. (03)
(b) What is Dispersion? How it can be prepared? (04)
(c) Draw the schematic diagram for any two types of Emulsifier used for latex compounding. (07)
- Q.4** (a) Mention the causes of latex allergy. (03)
(b) Write about basic types of latex allergy. (04)
(c) Describe the Bud grafting technique for propagation of Hevea tree. (07)
- OR**
- Q.4** (a) Write about basic remedies for latex allergy. (03)
(b) How latex allergic reactions can be prevent at workplace. (04)
(c) Explain about Seed germination in detail with schematic representation. (07)
- Q.5** (a) Give differences between True solutions and Colloidal solutions. (03)
(b) Write in brief about particle size of Natural latex. (04)
(c) Write in detail about Gelation by Acids. (07)
- OR**
- Q.5** (a) Mention basic types of Colloidal solution. (03)
(b) What is ZOA process? Write in brief. (04)
(c) Explain about Gelation by Salts in detail. (07)