Seat No.:	Enrolment No.
Seal No	Enrollient No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION - SUMMER • 2015

Subject code: 152602 Date: 05/05/2015 **Subject Name: Latex Technology** Time: 02.30pm-05.00pm **Total Marks: 70 Instructions:** 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks. **Q. 1** Answer the following. (14)What do you mean by Latex Concentration? (i) (ii) Draw the schematic diagram for Fabric coating process. Define the term: Straight Dipping" (iii) List the name of products manufactured by Latex Casting process. (iv) (v) Give any two advantages of Latex relative to Solid rubber. (vi) Write the chemical composition of NR Latex. (vii) Write the function of gelling agent in latex compounding. Why preservation of Natural latex is Required? Explain in detail. Q. 2 (a) (07)Q. 2 Short note on Coagulant Dipping. (b) (07)OR Draw the schematic diagram for Dipping Tank and explain the Dipping (b) (07)system in detail. Q. 3 Discuss about Rotational Casting process in detail. (07)(a) Draw the schematic diagram showing various methods of fabric coating by (b) (07)using latex compounds and explain it. Discuss about Latex Casting process using Non- Porous mould. 0.3 (07)(a) Explain the manufacturing process of Artificial Velvet in detail. (07)(b) Q. 4 Draw the schematic diagram for continuous manufacture of latex foam by (a) (07)the Dunlop process and explain it. Write in detail about characteristics and applications of Rubber thread. (b) (07)OR Write the name of equipment used for mechanical foaming method for O. 4 (a) (07)Natural latex and explain the process also. Discuss about manufacturing of Latex Thread. (b) (07)Q. 5 Write about Solution Emulsification technique for production of Artificial (05)(a) Write a brief note on Chloroform-coagulation test for assessment of degree (05)(b) of Sulfur Prevulcanisation. Write about the water sensitivity of deposits from synthetic lattices. How it (04)(c) can be reduced?

Q. 5 (a) Short note on Self – dispersion technique. (05)
(b) List the variable features of the sulfur Prevulcanisation process. (05)
(c) Write the difference between Natural latex and Synthetic lattices in terms of chemical composition. (04)
