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Enrolment No. Seat No.: \_\_\_\_ GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV(NEW) - EXAMINATION - SUMMER 2019 Subject Code:2142605 Date: 09/05/2019 **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. 0.1 (a) What do you mean by Latex Tapping? (03)**(b)** Why Preservation of Natural latex is necessary? Explain in brief. (04)(c) Discuss about Ammoniation process with schematic diagram. (07)**Q.2** (a) Write about the theory of Creaming process. (03)**(b)** Write about any one method for gelation of latex. (04)(c) Discuss about latex concentration by Centrifugation technique in detail. (07)OR (c) Describe the mechanism of Electrodecantation. (07)Q.3(a) Write the function Colloid mill. (03)**(b)** Write about the importance of Ball Mill by schematic diagram. (04)(c) Mention basic ingredients for latex compounding. Explain about any one in detail. (07)OR (a) Give the difference between Dispersions and Solutions. 0.3 (03)**(b)** Draw the schematic diagram of Ultrasonic mill and write its function. (04)(c) Give a detailed note on N-nitrosoamine problem. (07)(a) Write about possible causes of NR latex allergy. 0.4 (03)**(b)** Mention some symptoms of latex allergy. (04)(c) Discuss about Rotational moulding in detail. (07)(a) Write about remedies of NR latex allergy. 0.4 (03)(b) List out the basic types of latex allergy. Write about any one. (04)(c) Discuss about Slush moulding by using porous moulds. (07)**Q.5** (a) Name the equipment used for latex foam preparation. Write its working principle. (03)**(b)** How Coagulum content of NR latex can be found? Write the procedure. (04)(c) Discuss in detail about Mechanical Stability Time for Natural latex. How it can be (07)carried out? OR (a) Write about the importance of Flex resistance test for foam rubber sheet. **Q.5** (03)**(b)** Give the difference between Dirt content and Sludge content. (04)(c) How Compression Set test can be carried out for latex foam rubber? Write its (07)significance.

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