

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION – SUMMER • 2014

**Subject Code: 152602**

**Date: 13-06-2014**

**Subject Name: Latex Technology**

**Time: 10:30 am - 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.

- Q. 1** Answer the following. **(14)**
- (i) Define the term “Latex Preservation”.
  - (ii) Explain the function of Gelling agent in Latex compounding.
  - (iii) What do you mean by Co-agulant dipping?
  - (iv) Write the difference between Latex Dipping and Latex Casting.
  - (v) Draw the schematic diagram for Fabric saturation process.
  - (vi) Write the chemical composition of NR Latex.
  - (vii) List the basic methods for modification of paper by Latex.
- Q. 2** (a) List the NR Latex Concentration methods and explain any one. **(07)**  
(b) Short note on Straight Dipping. **(07)**
- OR
- (b) Draw the schematic diagram for Dipping Tank and explain its design. **(07)**
- Q. 3** (a) Discuss about Latex Casting process using Porous mould. **(07)**  
(b) Write the advantages of Latex Carpet Backing. **(07)**
- OR
- Q. 3** (a) List the basic types of Latex Casting process and give comparison between them. **(07)**  
(b) Draw the schematic diagram for Lick Roll method and explain it. **(07)**
- Q. 4** (a) Short note on Dunlop Process. **(07)**  
(b) Discuss about manufacturing process of Latex Thread. **(07)**
- OR
- Q. 4** (a) List the basic types of Foaming process and give difference between them. **(07)**  
(b) Write about the production of Cut thread and write its properties and applications. **(07)**
- Q. 5** (a) Write about Mutual solvent technique for production of Artificial lattices. **(05)**  
(b) Discuss about Wet gel Strength property of Synthetic lattices. **(05)**  
(c) Explain about Sulfur Pre Vulcanisation process of NR Latex. **(04)**
- OR
- Q. 5** (a) Short note on Solution Emulsification technique. **(05)**  
(b) Write about Mechanical stability of Synthetic Lattices. **(05)**  
(c) Write the basic tests carried out for assessment of degree of Sulfur Pre Vulcanisation. **(04)**

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