Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V • EXAMINATION – SUMMER 2013

Subject Code: 152602 **Date: 16-05-2013**

Subject Name: Latex Technology

Time: 10:30 pm 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.**

Q. 1 Answer the following. **(14)**

(i) Write the composition of fresh NR latex.

(ii) Define the term "Dipping".

(iii) Write the basic difference between Latex casting and Latex dipping process.

(iv) List the name of latex foam products.

(v) Draw the schematic diagram for fabric saturation process by using latex.

(vi) What do you mean by Latex thread?

(vii) Explain the term "Synthetic lattices".

Q. 2 **(a)** List the N R Latex concentration methods. Explain any one in detail. **(07)**

(b) Short note on Dipping System. **(07)**

OR

(b) Explain the Coagulant dipping method in detail. **(07)**

Q. 3 **(a)** List the basic Latex casting processes and give comparison between them. **(07)**

(b) Short note on Mechanical Foaming. **(07)**

OR

Q. 3 **(a)** Discuss the Latex casting process by using non – porous mould. **(07)**

(b) Write about Mould characteristics for foam rubber products in detail. **(07)**

Q. 4 **(a)** Give the schematic diagram for Lick roll method for latex coating and explain it in detail. **(07)**

(b) Explain latex thread manufacturing process in detail. **(07)**

OR

Q. 4 **(a)** Write in detail about artificial velvet. **(07)**

(b) Give comparison between two basic types of Rubber thread. **(07)**

Q. 5 **(a)** "Chemical composition of Synthetic lattices is simpler than N R latex" Justify the statement. **(07)**

(b) Describe the mutual solvent technique for production of Artificial lattices. **(07)**

OR

Q. 5 **(a)** Explain any two basic differences between N R latex and Synthetic lattices. **(07)**

(b) Explain the Solution Emulsification technique for preparation of Artificial lattices. **(07)**