

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – SUMMER 2019****Subject Code: 2152606****Date: 03/06/2019****Subject Name: Latex Processing & its application****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.

- Q.1** (a) List type of materials of Formers for production of latex dipped articles. (03)
(b) Mention basic parameters which affect the manufacturing of latex thread. Write about any one. (04)
(c) Discuss about Coagulant Dipping process in detail. (07)
- Q.2** (a) What do you mean by chemical foaming of latex? (03)
(b) How latex foam is produced by Mechanical method? Explain process in brief. (04)
(c) Short note on Talaly process. (07)
- OR
- (c) Discuss in detail about Dunlop process for foam rubber production. (07)
- Q.3** (a) What do you mean by Non-Woven fabric? (03)
(b) Explain the term latex Combining with schematic diagram. (04)
(c) Discuss about Beater Addition process with advantages. (07)
- OR
- Q.3** (a) Mention the methods for production of Non-Woven fabric. (03)
(b) Explain about latex Doubling with schematic diagram. (04)
(c) Describe the paper saturation technique in detail. Write its advantages also. (07)
- Q.4** (a) What do you mean by quick grab property? (03)
(b) Draw the flow diagram for Massey process and write about it. (04)
(c) Discuss about importance of any two types of Adhesion modifiers. (07)
- OR
- Q.4** (a) Mention some additional additives used for latex based Adhesive formulation. (03)
(b) Draw the flow diagram for Champion on-machine process and write about it. (04)
(c) Discuss about advantages and disadvantages of latex-based adhesives relative to other types of adhesives. (07)
- Q.5** (a) What do you mean by latex modified cement mortars? (03)
(b) Write about the reasons for incorporation of lattices in cementitious composition. (04)
(c) Discuss about importance of polymer plasticizers in compounding of Latex based surface coating. (07)
- OR
- Q.5** (a) Mention some applications for latex based cement. (03)
(b) Which types of problems occurs during incorporation of lattices in cementitious composition? (04)
(c) Describe the function of following for latex based surface coatings formulation: (07)
(i) Corrosion Inhibitors
(ii) Biocides
