

[This question paper contains 3 printed pages.]

3148.

Your Roll No. ....

M.E

J

**POLYMER TECHNOLOGY**

Paper – CH.552

(Latex Technology)

Time : 3 Hours

Maximum Marks : 100

*(Write your Roll No. on the top immediately  
on receipt of this question paper.)*

*Attempt any five questions.*

*All questions carry equal marks.*

1. (a) Discuss natural and synthetic latexes. Explain their applications in latex industry. (10)
- (b) How do you get natural rubber? Write at least five names of the rubber producing flora. (10)
2. (a) Explain the process of preservation of latex often tapping it from the rubber plant. (10)
- (b) How can you make the latex thread? Illustrate the process with diagram. (10)

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3. (a) What is dipping? Explain dipping process in detail. (10)
- (b) Suggest a suitable formulation for industrial gloves and balloons. (10)
4. (a) Explain the steps involved in the preparation of aqueous dispersions to be added to latex. (10)
- (b) What do you mean by S45? Explain in detail. (10)
5. (a) How do you prepare artificial velvet? Discuss it with suitable formulation. (10)
- (b) Discuss the physico-chemical properties of latex. (10)
6. (a) Discuss various methods used for concentrating the natural rubber latex. (10)
- (b) Illustrate a manufacturing process used for latex treated coir. (10)
7. (a) Discuss various defects encountered in latex foam production. Write all possible causes and their remedies. (10)
- (b) Discuss the role of various ingredients. Which are used for latex compounding. (10)

8. Write short notes on any **four** of the following:

- (a) Latex adhesives and cement
- (b) Latex paints and coatings
- (c) Future prospects of latex products
- (d) Latex allergy
- (e) Use of latex in roads, pavements and flooring
- (f) Need of emulsions in latex industry
- (g) Effect of pH on latex (5×4)