

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2020****Subject Code:2172604****Date:30/01/2021****Subject Name:Rubber Products Manufacturing****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1**
- (a) Explain the difference between Vibration & Shock. **03**
  - (b) Which properties are required for Pharmaceutical Closures? Which rubber is used for manufacturing of Pharmaceutical Closures? Why? **04**
  - (c) What do you mean by Dock Fender? Write its applications & properties. Draw the profile chart of dock fender and explain the stepwise manufacturing process. **07**
- Q.2**
- (a) Define the term cellular rubber. Compare the different classes of cellular rubber. **03**
  - (b) Which points should be kept in mind while designing a slipper sole? **04**
  - (c) Explain in detail the relationship of Mooney viscosity & degree of expansion. **07**
- Q.3**
- (a) Give the difference between ebonite & semi ebonite rubber. **03**
  - (b) Draw the section of Squeeze type and Lip seals. **04**
  - (c) Write in detail about manufacturing process of Rubber band from Solid rubber. **07**
- Q.4**
- (a) Discuss about types of Seals. **03**
  - (b) Discuss in detail about the curing process for Ebonite Rod. **04**
  - (c) Write in detail about manufacturing process of Tennis Ball. **07**
- Q.5**
- (a) Write the importance of Lining for Acid Storage Tank. Discuss the tank cleaning process before applying a lining. **03**
  - (b) Why hospital sheeting manufactured from rubber? Discuss the compound design for hospital sheeting and state the manufacturing steps. **04**
  - (c) How Cores for Rubber Rollers can be prepared for Bonding Procedure? Discuss the bonding methods for manufacturing of Rubber Rollers. **07**
- Q.6**
- (a) Write the finishing process for Rubber Rollers. **03**
  - (b) Discuss the lining & curing process for acid storage tank. **04**
  - (c) Discuss in detail about manufacturing process of Hot water bottle. **07**
- Q.7**
- (a) Explain the importance of current carrying capacity & selection of conductor c/s area for cable design. **03**
  - (b) Describe the Curing Process for manufacturing of Printing Blanket. **04**
  - (c) Discuss in detail about XLPE Cable. **07**

- Q.8 (a) State problems occurred during manufacturing of Rubber Printing Blankets. Discuss the remedies for those problems. **03**
- (b) List out the applications and properties for manufacturing of Printing Blanket. Suggest the formula for manufacturing of Printing Blanket. **04**
- (c) Discuss in detail about the curing process for Elastomeric Cable. **07**

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