

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Subject Code: 172604

Date: 28-11-2013

Subject Name: Rubber Products Manufacturing

Time: 10:30 TO 01:00

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) What do you mean by cellular rubber? Compare the different classes of cellular rubber. (07)

(b) Discuss the manufacturing of rubber band from solid rubber. State its limitation also. (07)

Q.2 (a) List the steps involved for doing tank lining. Describe all in detail. (07)

(b) Write the application of rubber in Defense field. (07)

OR

(b) Discuss the application of rubber products in electrical & civil engineering field. (07)

Q.3 (a) Define the term “Ebonite.” Write the properties of ebonite rubber. (07)

(b) Write about the properties, application, formulation & dough preparation for printing blanket. (07)

OR

Q.3 (a) List the properties desired for pharmaceutical closures. Discuss in detail about the post curing process for pharmaceutical closures. (07)

(b) Explain in detail about solvent recovery, testing & curing process for printing blanket. (07)

Q.4 (a) Discuss the different methods used for cross linking the polyethylene used as insulating materials for manufacturing of power cable. (06)

(b) Write about the properties, formulation and moulding process for manufacturing of Hot water bottle. (04)

(c) Describe in detail about Vibration & Shock. (04)

OR

Q.4 (a) Discuss the manufacturing technology for vibration isolators & shock mounts. (07)

(b) Explain the importance of current carrying capacity & selection of conductor c/s area for cable design. (04)

(c) Why rubber should be used for manufacturing of Hospital sheet? List the problems occurred during manufacturing of Hospital sheet. (03)

Q.5 (a) Discuss about design of rubber rollers & choice of materials. (06)

(b) Explain about compressed air inflation method used for manufacturing of Tennis ball. (05)

(c) Write about the types of seals. (03)

OR

Q.5 (a) Explain the importance of roll balance for rubber roller. (06)

(b) List the different methods for manufacturing of liquid center for wound golf ball. (04)

(c) Write about the selection of rubber for oil seals. (04)
