

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – SUMMER 2013****Subject Code: 172603****Date: 28-05-2013****Subject Name: Rubber Plant and Process Engineering****Time: 02.30 pm - 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) Write the benefits of Good Housekeeping. **07**
 (b) Discuss the health hazard from carbon black. **07**

- Q.2** (a) Define the term “toxicity”. Explain chronic toxicity and acute toxicity in detail with examples. **07**
 (b) The annual data for ABC Ltd. is given below: **07**

S.No.	Particulars	Amount Rs.
1.	Sales 1,50,000 units at Rs. 200/- each	
2.	Raw material cost	80,00,000
3.	Utility cost	15,00,000
4.	Labour cost (daily wages)	9,00,000
5.	Salaries	20,00,000
6.	Administrative expenses	5,00,000
7.	Rent, Insurance	2,00,000

Calculate variable cost, fixed cost, contribution and break even point as percent installed capacity.

OR

- (b) List various component of total cost of project. Explain any one in detail. **07**

- Q.3** (a) Explain different forms of plant maintenance. **07**
 (b) Discuss air and land pollution in rubber industry **07**

OR

- Q.3** (a) Write a note on personal protective equipments. **07**
 (b) Discuss about inerting and sprinkler system. **07**

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- Q.4** (a) Draw the plant layout diagram for oil seal industry. **07**
 (b) Describe the features of suburban site. **07**

OR

- Q.4** (a) List the obstacles of an entrepreneur desiring to set up a small industry. How the government is helping entrepreneurs in solving these obstacles? **07**
 (b) Why plant layout is required? Explain any three reasons in detail. **07**

- Q.5** (a) Explain time study procedure. **07**
 (b) Discuss on energy conservation in rubber industry. **07**

OR

- Q.5** (a) Discuss the benefits of motion economy. **07**
 (b) Write a note on “Just In Time” and “Right First Time”. **07**