

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-III Examination May 2012****Subject code: 132905****Subject Name: Basic Engineering in Textile****Date: 08/05/2012****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) Explain flow process chart. **07**
 (b) Explain critical path with example. **07**

- Q.2** (a) Explain about micro motion study. **07**
 (b) Write short note on SIMO chart. **07**

OR

- (b) Differentiate CPM and PERT network. **07**

- Q.3** (a) An operator was kept under observation for 10 days. He was found working on 400 occasions and abstaining including idle 100 times. He produced 200 jobs during these days. The observation per day was for 5 hours only and the total numbers of observations were 500. Take 120 as performance rating for operator and 20 % as allowance. Calculate standard time. **07**
 (b) Explain work sampling along with examples. **07**

OR

- Q.3** (a) Define and explain work measurement technique. **07**
 (b) Explain need for air conditioning and humidification in textile industry. **07**

- Q.4** (a) Information on the activities on the activities required for a project is as follows: **07**

Activity	Duration (days)
1-2	2
1-3	7
1-4	8
2-5	3
3-5	6
3-6	10
3-7	4
4-6	6
5-7	2
6-8	5
7-8	6

- (i) Draw the network. (ii) Compute E and L. (iii) Find the critical path.
 (b) Explain importance of preventive maintenance in textile mills. **07**

OR

- Q.4** (a) Explain DBT, WBT and RH. **07**
 (b) Explain in brief maintenance of humidification plants. **07**

- Q.5** (a) Explain factors to be considered when selecting a boiler. **07**
 (b) Enlist various feed water treatment. Explain any one of them. **07**

OR

- Q.5** (a) Explain in brief economics of steam generation. **07**

(b) Explain distribution of steam, water and compressed air in textile industries.

07
