Register No: ……

M.TECH. DEGREE EXAMINATIONS: JUNE 2011

Second Semester

APPAREL TECHNOLOGY AND MANAGEMENT

FTY507: Apparel Systems Engineering

Time: Three hours **Maximum Marks: 100**

Answer ALL Questions

PART A (10x2 = 20 Marks)

1. Define systems engineering.
2. Differentiate between “method study” and “work measurement”.
3. What is the purpose of process analysis?
4. Give a brief note on work design.
5. State the objectives of operation analysis.
6. Mention the purpose of work sampling.
7. What is the practical use of time study?
8. Mention the importance of time study allowances.
9. What is learning curve?
10. State the objectives of line balancing.

PART B (5 x 16 = 80 Marks)

11. a) Discuss the concept and application of systems engineering in apparel industry.

(OR)

b) Explain the causes for low productivity in apparel industry and suggest strategies for productivity improvement.

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12. a) Explain the application of process analysis with examples from apparel industry.

(OR)

b) Describe the important aspects of motion study.

13. a) Give a detailed account on work sampling procedure.

(OR)

b) Explain the application of operation analysis technique with an example from apparel manufacture.

14. a) Explain the concept and application of PTS system with an example from apparel industry.

(OR)

b) (i) Enumerate the steps involved in setting standard time for a sewing operation (8)

(ii) Calculate the total standard minutes value (SMV) for the following operation cycle carried out in a single needle lock stitch machine. (8)

S.No	**Element description**	**Basic time (minutes)**	**Occurrence/ Cycle**
1	Pick-up and position parts	0.26	1
2	Attach pocket	0.36	1
3.	Corner tacking	0.22	1
4.	Bundle handling	0.71	1/100

Note: Personal & Fatigue allowance – 19%; Machine Delay Allowance – 9%

15. a) Explain the principles for improving operation method in cutting and sewing departments.

(OR)

b) Describe the procedure of balancing sewing line with suitable example. Assume your own data.

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