

M.TECH DEGREE EXAMINATIONS: NOV/DEC 2012

Third Semester

APPAREL TECHNOLOGY AND MANAGEMENT

FTY610: Lean Manufacture

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. Highlight the importance of 'commitment' in Total Quality Management.
2. Why over production and waiting time are categorized as waste in lean manufacture?
3. Bring out the significance of CTQ in designing apparel for skiing?
4. Give out the reasons for linking supplier, process and customer in SIPOC diagram.
5. Highlight the merits and demerits of single and double sampling plan
6. Give few examples of application binomial distribution and Poisson distribution in defects analysis.
7. What is meant by TAKT time and how does it vary from production cycle time?
8. Highlight the difficulties in implementing JIT concept in apparel manufacture in the Indian context.
9. Under what circumstances Kanban is useful in scheduling compared to conventional system?
10. Differentiate the application areas of DMAIC and DMADV..

PART B (5 x 16 = 80 Marks)

11. a) Explain internal factors contributing to Cost of Poor Quality in the context of apparel industry

(OR)

- b) Explain how lean manufacture is different from other management systems

12. a) Explain the process of determining customer requirements using CTQ

(OR)

- b) Discuss in detail the value stream mapping technique in lean manufacture

13. a) Explain double sampling method with suitable example.

Develop sampling plan for analyzing process variables in cutting operation

(OR)

b) Discuss on effectiveness of implementing zero defect programme using DMAIC

14. a) Discuss on effectiveness of Kanban system in production planning and control.

(OR)

b) Elaborate how Kaizen can be used to improve the manufacturing process continuously.

15. a) Enumerate the applications of Six Sigma in product development in apparel industry.

(OR)

b) Explain the influence of CAD and CAM in apparel product development and manufacture with respect to Six Sigma.
