

Register No:

M.TECH. DEGREE EXAMINATIONS: JUNE 2011

Second Semester

TEXTILE TECHNOLOGY

TTX507: Fabric Quality Analysis

Time: Three hours

Maximum Marks: 100

Answer ALL Questions

PART A (10x2 = 20 Marks)

1. List the different modes of fabric failure.
2. Mention few yarn characteristics that influence the fabric failure.
3. What are the different transmission properties that retain thermal comfort in the fabric?
4. What do you mean by electrical conductivity of a fabric?
5. Inter relate the drape & fabric appearance.
6. How the yarn characteristics influence the fabric appearance?
7. What do you mean by buckling deformation?
8. How the low stress mechanical properties influence fabric handle?
9. What is the evaluation methods used for flammability?
10. What are the properties supposed to be evaluated in technical textile fabrics?

PART B (5x16 = 80 Marks)

11. a) Explain in detail about five different modes of fabric failure.

(OR)

- b) Briefly explain how the fabric failure is influenced by fibre, yarn and fabric structure characteristics.

12. a) Explain how thermal comfort is maintained by air & water permeability properties.

(OR)

- b) Explain the concept of heat flow resistance and electrical conductivity in maintaining thermal comfort.

13. a) Brief the concept of drape, crease & wrinkle recovery in fabric appearance.

(OR)

b) Briefly explain the various factors influencing the fabric appearance.

14. a) What do you mean by low stress mechanical properties and explain their behaviour in various deformations.

(OR)

b) Briefly explain about the fabric handle, tailorability and explain the influence of low stress mechanical properties in the above.

15. a) Explain the various methods of evaluating dimensional stability and flammability of fabrics.

(OR)

b) Briefly explain the various methods of evaluation of technical textiles fabrics.
