

Register No:

M.TECH DEGREE EXAMINATIONS: JUNE 2011

Second Semester

TEXTILE TECHNOLOGY

TTX506: Yarn Quality Analysis

Time: Three Hours

Maximum Marks: 100

Answer All Questions:-

PART A (10 x 2 = 20 Marks)

1. Define index of irregularity
2. Find out the number of fibers in the yarn cross section for yarn 66.67 tex and fiber fineness 0.5 tex.
3. Define between length variations?
4. What is spectrogram?
5. Define normal and ideal spectrogram.
6. What do you mean by medium term periodic mass variation?
7. What is the influence of rate of extension of single yarn strength tester in the yarn strength?
8. What is creep?
9. Explain the influence of yarn imperfection in knitting performance.
10. State some comfort properties of apparels.

PART B (5 x 16 = 80 Marks)

11. a) Write in detail about interpretation and significance of U% and CV% for textile strand.

(OR)

- b) Elaborate the classification and analyze of yarn faults created by mass variation.

12. a) Write in detail how the mass variation measurement of textile strands is influenced by specimen length and total length.

(OR)

- b) How will you interpret V(L) curve and B(L) curves in analyzing the spinning process performance.

13. a) Explain the use of spectrogram in analyzing and rectifying yarn faults in yarn forming process.

(OR)

b) Compare and discuss the normal spectrum and ideal spectrum.

14. a) Explain in detail the influence of specimen length and test speed on yarn tensile strength testing.

(OR)

b) What is the influence of yarn evenness, strength and abrasion resistance on the performance of yarn during cone winding and weaving?

15. a) Discuss in detail the effect of yarn quality on fabric wear, appearance and comfort properties.

(OR)

b) There are various method of testing hairiness what are they? Comment on the interpretation of result in each method.
