Register Number: …….

M.TECH DEGREE EXAMINATIONS: JANUARY 2011

First Semester

TEXTILE TECHNOLOGY (FASHION TECHNOLOGY)

FTY502: Clothing Comfort

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

Answer All Questions:-

PART A (10 x 2 = 20 Marks)

1. Define: Comfort
2. Classify mechanisms of thermal regulation.
3. State the significance of environmental buffering on clothing comfort.
4. What are the fabric properties that influence garment fit and pressure comfort?
5. Mention few methods used to calculate the subjective preference on clothing.
6. State the intrinsic and extrinsic attributes of an apparel to define overall comfort perception.
7. Define: Clo & Tog. Give their units.
8. What is MVTR? Give its formulae.
9. What are the fabric properties measured in KES-F?
10. What do you mean by hygral expansion?

PART B (5 x 16 = 80 Marks)

11. (a) Discuss the Human-Clothing-Environmental system in detail with reference to fabric comfort giving the relevant flow chart to describe the same.

(OR)

(b) Explain the concept behind moisture exchange between fibre and air with special reference to the mechanism of drying behaviour of fabrics? Highlight the same with necessary examples and graphs.

12. (a) With relevant example, explain the importance and factors influencing the body sensations such as coolness and warmth to touch towards achieving clothing comfort of garments.

(OR)

(b) Write briefly on the following Tactile sensations with reference to clothing comfort of apparels.

(i) Fabric prickliness

(ii) Fabric softness

(iii) Fabric stiffness

13. (a) Elaborate on the influence of different factors on overall comfort perception, highlighting the relationship between overall comfort perception and preference.

(OR)

(b) Discuss briefly on the three important dimensions of sensory comfort perceptions with respect to clothing comfort of garments.

14. (a) Explain the principle and working of **ALAMBETA** thermal conductivity tester with a neat sketch. Also give the properties measured and their significance with respect to thermal comfort.

(OR)

(b) Discuss briefly the four important mechanisms of water vapour transfer and describe a suitable method to evaluate the moisture comfort of apparels.

15. (a) Explain in detail the significance of measurement of Low stress mechanical properties and their influence on physical comfort of garments.

(OR)

(b) Discuss in detail the objective measurement of fabric handle properties using FAST. Draw the FAST chart also.

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