



B.TECH DEGREE EXAMINATIONS: MAY 2015

(Regulation 2009)

Sixth Semester

FASHION TECHNOLOGY

FTY116 : Clothing Science

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The basic and universal needs of consumers in clothing are
 - a) Cost and touch
 - b) Aesthetic and color
 - c) Good feel and comfort
 - d) Water absorbency and wicking
2. The physical processes provide different signals or stimuli to the _____ organs of the human body.
 - a) Sensory
 - b) Moisture
 - c) Heat
 - d) Tactile
3. _____ is the interface between the body and its environment and to sense different external stimuli.
 - a) Skin
 - b) Moisture
 - c) Heat
 - d) Air
4. _____ Protection characteristics of clothing are essential function in most of the environmental conditions in various parts on the earth.
 - a) Thermal
 - b) Air
 - c) Water
 - d) Moisture
5. The wearer's attitudes towards clothing are influenced by the sensory attributes of the clothing such as
 - a) Softness and warm touch
 - b) Coolness
 - c) Touch performance
 - d) Moisture absorbency
6. Identify the type of comfort concerns about the heat and moisture transmission characteristics through clothing.
 - a) Tactile comfort
 - b) Moisture comfort
 - c) Thermo-physiological comfort
 - d) Air permeability comfort

7. Thermal conductivity of the woven fabric clothing mainly depends on
 - a) Air permeability
 - b) Tensile
 - c) Wicking
 - d) Tearing
8. The woven fabrics made out of staple twist less and hollow yarns have great impact on the comfort related properties such as
 - a) Air permeability, thermal conductivity and water vapor permeability
 - b) Tensile, tear and wicking
 - c) Wicking, wetting and moisture vapour permeability
 - d) Snagging, shear and bias extension
9. KES-F3 mode in Kawabata Evaluation System refers to
 - a) Compression
 - b) Shear
 - c) Tensile
 - d) Air permeability
10. FAST refers to
 - a) Fabric Accuracy by simple testing
 - b) Fashion Assessment by Stimulation Testing
 - c) Fabric Assurance by Simple Testing
 - d) Fashion Assessment by Simple Testing

PART B (10 x 2 = 20 Marks)

11. How will you select fibre for high performance wears? Justify.
12. List out any four fabric properties influencing pilling effect on knitted fabric surface.
13. What is snagging test? State its importance.
14. Differentiate between static and dynamic friction.
15. What is hygral expansion? How is it measured?
16. Compare relaxation shrinkage and swelling shrinkage.
17. What is tailorability?
18. Compare crease recovery and crease resistance of textile fabrics.
19. What is thermal conductivity?
20. Differentiate between wetting and wicking tests.

PART C (5 x 14 = 70 Marks)

21. a) (i) Discuss in detail on selection of fibre and yarn quality properties for aesthetics and appearance of fabrics. (10)
- (ii) How does fabric construction affect appearance of woven fabrics? (4)
- (OR)**
- b) (i) Discuss in detail on basic quality requirements of knitted fabric properties such as pilling, fastness, lusture and shade variation.. (10)

- (ii) What are aesthetic properties of textile fabrics? How is it measured? (4)
22. a) (i) Give an account on determination of serviceability of woven fabrics with regard to snagging and tensile strength. (8)
- (ii) What is crock resistance? How is it tested? Brief the testing procedure. (6)
- (OR)**
- b) (i) Correlate the fabric serviceability assessment with abrasion, tearing and seam strength. (8)
- (ii) How will you test corrosive strength of textile material? (6)
23. a) (i) Explain the determination of hygral expansion and relaxation shrinkage of single jersey knitted fabrics and brief their testing procedure. (10)
- (ii) What is dimensional shrinkage? State any two causes and remedial measures. (4)
- (OR)**
- b) (i) Discuss in detail on measurement of dimensional stability to dry cleaning and dry heat with respect to fibre properties and chemical treatment on fabric properties. (10)
- (ii) What is felting shrinkage? How is it measured? (4)
24. a) (i) Critically analyse the fabric construction and measurement of handle properties. (10)
- (ii) Give an account on testing procedure of FAST instrument. (4)
- (OR)**
- b) (i) Discuss the determination of fabric handle and tailorability using KAWABATA testing instrument with suitable data. (10)
- (ii) How will you measure textile fabric friction? Give an example. (4)
25. a) (i) Critically analyse the basic quality and properties requirements of designing summer wear for children's apparel. (7)
- (ii) Give an account on measurement of water vapour permeability of textile fabrics. (7)
- (OR)**
- b) (i) What is thermal comfort? How is it measured? Explain any one testing procedure for textile fabric thermal conductivity characteristics. (10)
- (ii) Correlate fabric air permeability with respect to fabric construction parameters. (4)
