



B.TECH DEGREE EXAMINATIONS: NOV/DEC 2024

(Regulation 2018)

Fifth Semester

TEXTILE TECHNOLOGY

U18TXE0009: Clothing Science

COURSE OUTCOMES

- CO1: Understand clothing concept for wear comfort
- CO2: Estimation of thermal and moisture transmission characteristics of various fabrics and their suitability of applications.
- CO3: Correlate the tactile property of the fabric with comfort to the wearer.
- CO4: Design of a fabric with suitable fibre type, yarn structure, fabric structure and finishes for various garment end uses.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

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|---|-----|------|
| 1. Recall the reasons for wearing clothing. | CO1 | [K1] |
| 2. List the different aspects of clothing comfort | CO1 | [K1] |
| 3. What does thermoregulation of the human body mean? | CO2 | [K1] |
| 4. Define Tog and Clo. | CO2 | [K1] |
| 5. Enumerate four factors that affect air permeability of clothing. | CO2 | [K1] |
| 6. How does contact angle affect wetting? Draw a simple diagram to depict the same. | CO2 | [K2] |
| 7. Name four mechanoreceptors present in the human skin. | CO3 | [K1] |
| 8. List the factors that increase the prickliness of garments. | CO3 | [K1] |
| 9. Show the difference between foundation, tight-fit, and loose-fit garments. | CO4 | [K2] |
| 10. Label the deficiencies of the traditional methods of body-size measurement. | CO4 | [K1] |

Answer any FIVE Questions:-
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

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|-----|----|---|----|-----|------|
| 11. | a) | Analyze four factors affecting selection of clothing by a software engineer and a farmer. | 10 | CO1 | [K4] |
| | b) | What do you understand by clothing comfort? | 6 | CO1 | [K2] |
| 12. | | Outline the working of two-plate and single-plate togmeter with the help of simple diagram. | 16 | CO2 | [K3] |
| 13. | a) | Explain the testing of vertical wicking with a simple diagram | 8 | CO2 | [K3] |
| | b) | Develop on the importance of clothing ventilation in relation to comfort. | 8 | CO2 | [K3] |
| 14. | | Describe two aspects of the FAST (fabric assessment by simple testing) System. | 16 | CO3 | [K3] |
| 15. | | Compare the fit and comfort requirements of garments worn by
1) firefighter and 2) motorcycle-race driver. | 16 | CO4 | [K4] |
| 16. | a) | Distinguish two non-thermal comfort variables. | 8 | CO1 | [K4] |
| | b) | Brief about the factors that can modify tactile characteristics of textiles. | 8 | CO3 | [K3] |
