



B.TECH DEGREE EXAMINATIONS: NOV/DEC 2024

(Regulation 2018)

Fifth Semester

TEXTILE TECHNOLOGY

U18TXT5002: Textile and Apparel Quality Evaluation

COURSE OUTCOMES

CO1: Describe the concepts of quality and statistical application in textiles.

CO2: Explain the measurement of fibre properties.

CO3: Explain the measurement of yarn properties.

CO4: Summarize the working Principle of fabric testing instruments.

CO5: Summarize on the Garment test procedures.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

1. Pen down the Six Sigma approaches that are applied in the textile industry, explaining their significance. CO1 [K₂]
2. Differentiate between quality control and quality assurance in the context of textile production. CO1 [K₁]
3. Summarize the working principles of the Baer Sorter, Maturity Tester, ATIRA Fineness Tester, and the length and strength module of HVI. CO2 [K₁]
4. Pen down the properties measured by the AFIS instrument, explaining their importance. CO2 [K₂]
5. Explain the numbering systems used in yarns, and how they relate to yarn quality. CO3 [K₁]
6. Summarize the Uster Classimat system for analyzing yarn faults, focusing on its key features. CO3 [K₂]
7. Summarize the primary hand evaluation terminologies used in the Kawabata Evaluation System, explaining their relevance to textile quality. CO4 [K₁]
8. Enumerate the basic formulas used to measure fabric shrinkage, providing examples. CO4 [K₁]
9. Outline the factors that influence seam strength testing in textiles, discussing how these factors impact garment durability. CO5 [K₂]
10. Appraise the testing methods used for fusible interlinings, describing their role in garment production. CO5 [K₂]

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

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| 11. | Appraise the seven quality control tools used in the textile industry, highlighting their importance in maintaining product standards. | 16 | CO1 | [K ₂] |
| 12. | Discuss the Baer Sorter method of measurement with a neat sketch, explaining the procedure and its relevance. | 16 | CO2 | [K ₂] |
| 13. | Explain in detail, with a neat sketch, the Uster Classimat system for fault analysis in yarns. | 16 | CO3 | [K ₃] |
| 14. | Explain the analysis of permeability properties in textile fabrics, detailing the factors involved. | 16 | CO4 | [K ₃] |
| 15. | Explain the methods for testing buttons and sewing threads, focusing on the techniques used to ensure their durability. | 16 | CO5 | [K ₂] |
| 16. | Discuss in detail the low-stress mechanical properties of fabrics as measured by the Kawabata Evaluation System, including necessary diagrams. | 16 | CO4 | [K ₂] |
