



B.TECH DEGREE EXAMINATIONS: NOV/DEC 2023

(Regulation 2018)

Fifth Semester

FASHION TECHNOLOGY

U18FTI5202:Textile and Apparel Quality Evaluation

COURSE OUTCOMES

- CO1:** Acquire knowledge in sampling techniques of fibers, yarns and fabrics and also in various method of measuring yarn number
- CO2:** Apply knowledge in principles of working of fiber & yarn testing instruments
- CO3:** Apply knowledge in principles of working of fabric testing instruments
- CO4:** Correlate knowledge in evaluation of fabric handle properties
- CO5:** Acquire knowledge on testing instruments used for accessories
- CO6:** Analyze knowledge in the measurement of fastness properties of fabrics

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. Differentiate random and biased samples. | CO1 | [K ₂] |
| 2. List the standard atmospheric conditions required for textile testing. | CO1 | [K ₁] |
| 3. State the principle of optical method of yarn evenness measurement. | CO2 | [K ₁] |
| 4. Illustrate the effect of yarn twist on the short staple yarn strength. | CO2 | [K ₃] |
| 5. What is the constant rate of specimen elongation? | CO3 | [K ₂] |
| 6. Give the standards used to test the fabric in Strip test method. | CO3 | [K ₂] |
| 7. What is fabric drape coefficient? | CO4 | [K ₁] |
| 8. Mention the advantage of strain gauge instrument in fabric testing | CO4 | [K ₂] |
| 9. Report the standard followed in measuring the seam strength with its features | CO5 | [K ₂] |
| 10. State the objective of button impact strength testing. | CO6 | [K ₁] |

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

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| 11. a) State and explain the process of zoning techniques used in the raw fiber sampling process | 8 | CO1 | [K ₃] |
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| | b) | Explain in detail the working of wet and dry bulb hygrometer with neat illustration. | 8 | CO1 | [K ₃] |
| 12. | a) | State and explain the working of single yarn strength tester with sketch | 8 | CO2 | [K ₃] |
| | b) | Evaluate the working of Stelometer used in fiber strength measurement. | 8 | CO2 | [K ₄] |
| 13. | a) | Illustrate and explain the working of hydraulic bursting strength tester | 8 | CO3 | [K ₃] |
| | b) | Outline the working of Martindale abrasion tester and discuss the weight loss calculation methods | 8 | CO3 | [K ₃] |
| 14. | a) | Detail the working of fabric air permeability tester with neat sketch | 8 | CO4 | [K ₃] |
| | b) | Analyse the working of Shirley stiffness tester. | 8 | CO4 | [K ₃] |
| 15. | a) | Explain in detail the working of peel bond strength tester with neat illustration | 8 | CO5 | [K ₄] |
| | b) | Outline the principle of zipper endurance tester machine with their working. | 8 | CO5 | [K ₄] |
| 16. | a) | Evaluate the colour fastness testing of textiles for washing and rubbing (dry and wet) with their standards | 10 | CO6 | [K ₄] |
| | b) | Summarise the role of fabric dimensional characteristics on quality of the product. | 6 | CO6 | [K ₃] |
