



**B.E/B.TECH DEGREE EXAMINATIONS: DEC 2022**

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 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**

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

- |  |     |                   |
|--|-----|-------------------|
| 1. Find out the yarn count in Tex system if a yarn count is 40 <sup>s</sup> Ne | CO1 | [K <sub>4</sub> ] |
| 2. Analyze the factors affecting yarn sampling.                                | CO1 | [K <sub>4</sub> ] |
| 3. Compare random variation and periodic variation.                            | CO2 | [K <sub>4</sub> ] |
| 4. Classify frequently occurring yarn faults.                                  | CO2 | [K <sub>2</sub> ] |
| 5. Analyze the parameters which influences fabric crimp properties.            | CO3 | [K <sub>2</sub> ] |
| 6. Knitted fabrics are not suitable for testing tensile strength. Justify?     | CO3 | [K <sub>3</sub> ] |
| 7. What is drop penetration test?  | CO4 | [K <sub>2</sub> ] |
| 8. How will you measure air permeability? State the formula.                   | CO4 | [K <sub>2</sub> ] |
| 9. Analyze the factors which affects seam strength.                            | CO5 | [K <sub>4</sub> ] |
| 10. Define shrinkage & various types of shrinkage?                             | CO6 | [K <sub>2</sub> ] |

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

- |     |   |    |     |                   |
|-----|---|----|-----|-------------------|
| 11. | Discuss in detail the direct and indirect yarn numbering systems. Explain any three systems in each category. | 16 | CO1 | [K <sub>2</sub> ] |
| 12. | Explain the method of measuring yarn twist through a continuous twist tester.                                 | 16 | CO2 | [K <sub>3</sub> ] |
| 13. | Explain the following with respect to fabric testing instruments  |    |     |                   |
|     | a) Abrasion resistance measurement through abrasion tester  | 8  | CO3 | [K <sub>3</sub> ] |
|     | b) Method of measuring bursting strength of fabrics   | 8  | CO3 | [K <sub>3</sub> ] |
| 14. | Demonstrate the following with respect to evaluation of fabric handle properties                              |    |     |                   |
|     | a) Measurement of water permeability of fabrics through anyone method   | 6  | CO4 | [K <sub>3</sub> ] |
|     | b) Assessment of fabric stiffness through cantilever principle  | 10 | CO4 | [K <sub>3</sub> ] |
| 15. | Outline the following with respect to testing instruments used for accessories                                |    |     |                   |
|     | a) Assessment of peel bond strength for fusible interlinings  | 8  | CO5 | [K <sub>3</sub> ] |
|     | b) Measurement of seam strength   | 8  | CO5 | [K <sub>3</sub> ] |
| 16. | Summarize how the fastness properties of dyed fabrics are evaluated through rubbing & light fastness tester.  | 16 | CO6 | [K <sub>3</sub> ] |

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Please indicate knowledge level (K<sub>1</sub>toK<sub>6</sub>) and Course Outcome level (CO1 to CO5) against each question for each subdivision.