



B. TECH DEGREE EXAMINATIONS: NOV/DEC 2023

(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 1 = 10 Marks)

1. Consider the elements in List I and List II and choose the correct alternatives from amongst CO1 [K₄]
a, b, c, and d

List I	List II
A. Zoning technique	i. Slubs
B. Manufacturing-based quality	ii. Fibres
C. Value-based quality	iii. Trigger
D. Quality of design	iv. SITRA

	A	B	C	D
a)	ii	i	iii	iv
b)	iii	iv	ii	i
c)	ii	iv	iii	i
d)	iii	i	ii	iv

2. Judge, the yarn strength for longer gauge length that are tested in tensile tester will be CO3 [K₁]
_____.

- a) depends on tensile tester b) is lower
c) remains the same d) is higher

3. Identify the statements which are CORRECT about, “Dimensional stability and shrinkage CO4 [K₃]
concepts” in Textile fabrics.

- It discusses about the extent to which fabric keeps its original dimensions subsequent to its manufacture
- Moisture regain of the fibres and Twist level in the yarn does not influence Dimensional Stability of the Fabrics

19. Outline the factors that are influenced in testing of seam strength. CO5 [K₂]
20. Appraise on the testing of snap fasteners. CO5 [K₂]

**Answer any FIVE Questions:-
PART C (5 x 14 = 70 Marks)
(Answer not more than 350 words)**

21. a) Explore on the sampling methods/techniques used for fibre, yarn and fabric. (07) CO1 [K₂]
 b) Explore on the Quality systems and statistical tools used in Textile industries. (07) CO1 [K₃]
22. a) List the methods used to determine the fibre length characteristics of staple fibre and explain any one of them (07) CO2 [K₂]
 b) Summarize in detail the various principles used in AFIS with a neat sketch. (07) CO2 [K₂]
23. a) Elucidate the principle used in Yarn Evenness tester with a neat sketch. (07) CO3 [K₂]
 b) Elucidate about the Yarn Twist tester with a neat sketch. (07) CO3 [K₂]
24. a) Discuss in detail about the testing of Water Repellency for the fabrics. (07) CO4 [K₂]
 b) Discuss in detail about the low stress mechanical properties of fabrics by KES. (07) CO4 [K₃]
25. a) Explain on the testing of zippers with the necessary diagram. (07) CO5 [K₂]
 b) Explain on the testing of sewing thread. (07) CO5 [K₂]
26. a) Discuss in detail about the different Fabric Inspection systems followed in Textile Industries with necessary examples. (07) CO4 [K₃]
 b) Discuss in detail about the AQL quality standards in Garment Industries with a necessary table. (07) CO5 [K₃]
