

(AUTONOMOUS)

(Third Semester)

Branch - **COSTUME DESIGN AND FASHION**

TEXTILE TESTING AND APPAREL QUALITY EVALUATION

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

$$(10 \times 1 = 10)$$

Module No.	Question No.	Question	K Level	CO
1	1	_____ is the primary factor determining the tensile strength of natural fibers. a) Fiber fineness b) Fiber maturity c) Fiber length d) Moisture regain	K1	CO1
	2	_____ method is commonly used to assess the moisture content of fibers. a) Gravimetric method b) Tensile testing c) Microscopy d) Air permeability test	K2	CO1
2	3	_____ property of yarn is most directly affected by the level of twist. a) Color b) Hairiness c) Strength d) Shrinkage	K1	CO2
	4	_____ test is used to measure the evenness of yarn. a) Yarn count b) Tensile strength c) Uster Tester d) Abrasion resistance	K2	CO2
3	5	_____ property of fabric is directly linked to its ability to resist wear during use. a) Tensile strength b) Flexural rigidity c) Air permeability d) Abrasion resistance	K1	CO3
	6	_____ is the most important factor in determining the tear strength of a fabric. a) Thread density b) Yarn count c) Fabric weight d) Fabric thickness	K2	CO3
4	7	_____ factor most influences the air permeability of a fabric. a) Fiber fineness b) Yarn twist c) Fabric porosity d) Colorfastness	K1	CO4
	8	_____ property of a fabric is closely related to its thermal comfort. a) Yarn evenness b) Thermal conductivity c) Flexural rigidity d) Tensile strength	K2	CO4
5	9	_____ test is used to assess the shrinkage of fabrics during laundering. a) Dimensional stability b) Martindale c) Pilling d) Tensile strength	K1	CO5
	10	_____ test ensures that garments maintain their original color after repeated washing. a) Abrasion resistance b) Tear strength c) Crease recovery d) Colorfastness	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Compare and contrast two different methods used to evaluate fiber strength and explain their advantages in industrial testing.	K2	CO1
		(OR)		
	11.b.	Summarize the importance of staple length and its influence on yarn spinning and fabric production.		
2	12.a.	Show the relationship between yarn hairiness and fabric pilling, explaining the underlying mechanisms.	K3	CO2
		(OR)		
	12.b.	Discuss the significance of yarn evenness in maintaining fabric uniformity and how it's measured in testing labs.		
3	13.a.	Identify the role of fabric thickness in determining the mechanical properties of a fabric, using examples.	K3	CO3
		(OR)		
	13.b.	Identify the factors that influence tear strength in fabrics and their industrial relevance.		
4	14.a.	Justify the factors that influence fabric pilling resistance and their implications on garment appearance.	K4	CO4
		(OR)		
	14.b.	Outline the key factors determining thermal comfort in fabrics and their role in garment design.		
5	15.a.	Inspect the common causes of defects in fabric quality and their impact on garment production.	K4	CO5
		(OR)		
	15.b.	Analyze the role of final audit system in maintaining garment quality, particularly for outdoor textiles.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain how fiber maturity is determined and its effect on the mechanical properties of the fabric. Provide examples from cotton fiber testing.	K4	CO1
2	17	Distinguish the methods of measuring yarn tensile strength.	K4	CO2
3	18	Analyze the influence of fabric density and porosity on the functional properties of textiles used in protective clothing.	K4	CO3
4	19	Compare the relationship between fiber type, fabric structure, and thermal comfort, and how these factors are optimized in designing performance wear.	K4	CO4
5	20	Categorize the 4 point and 10 point fabric inspection system.	K4	CO5

Z-Z-Z

END