

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2025
(Fourth Semester)

Branch - **COSTUME AND FASHION DESIGN**

TEXTILE TESTING & STANDARDS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

| Module No. | Question No. | Question | K Level | CO |
|------------|--------------|--|---------|-----|
| 1 | 1 | The standard atmosphere for textile testing is maintained at: a) 27°C and 60% RH b) 20°C and 65% RH c) 30°C and 70% RH d) 25°C and 50% RH | K1 | CO1 |
| | 2 | Moisture regain in fibers is important because: a) It increases yarn twist b) It influences strength, flexibility, and processing c) It reduces fiber fineness d) It eliminates shrinkage in fabrics | K2 | CO1 |
| 2 | 3 | Which instrument measures yarn twist? a) Quadrant Balance b) Twist Tester c) Lea Strength Tester d) Uster Classimat | K1 | CO2 |
| | 4 | Yarn irregularity is evaluated using: a) Pressley Tester b) Quadrant Balance c) Uster Classimat d) Shirley Analyzer | K2 | CO2 |
| 3 | 5 | GSM of knitted fabric indicates: a) Grains per Square Meter b) Garments per Sewing Machine c) General Stitch Measurement d) Gauge Stitch Method | K1 | CO3 |
| | 6 | Why is colour fastness to perspiration important in textiles? a) It prevents spirality b) It maintains durability against abrasion c) It ensures dye stability when in contact with sweat d) It reduces crease formation | K2 | CO3 |
| 4 | 7 | Fabric stiffness can be evaluated by: a) ISI Pilling Tester b) Stiffness Tester c) Crease Recovery Tester d) Air Permeability Tester | K1 | CO4 |
| | 8 | Why is abrasion resistance testing important for woven fabrics? a) It measures the thickness of fabric b) It evaluates fabric's durability in use c) It improves crimp in yarns d) It reduces shrinkage in washing | K2 | CO4 |
| 5 | 9 | Which is inspected under accessories inspection? a) Fabric crimp b) Sewing threads, zippers, and buttons c) Yarn count d) Fabric GSM | K1 | CO5 |
| | 10 | Quality standards for sewing threads are set to ensure: a) Higher fabric GSM b) Better stitch performance and seam durability c) Reduced yarn hairiness d) Increased crease recovery | 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. | How do you measure fiber length with Baer Sorter? | K3 | CO1 |
| | | (OR) | | |
| | 11.b. | Which instrument is used to test fiber fineness? | | |
| 2 | 12.a. | What is yarn count in the English system? | K2 | CO2 |
| | | (OR) | | |
| | 12.b. | Why is Quadrant Balance used in yarn testing? | | |
| 3 | 13.a. | What is spirality in knitted fabrics? | K4 | CO3 |
| | | (OR) | | |
| | 13.b. | Name two tests used for measuring colour fastness. | | |
| 4 | 14.a. | Which instrument measures tearing strength of woven fabric? | K3 | CO4 |
| | | (OR) | | |
| | 14.b. | How is fabric stiffness tested? | | |
| 5 | 15.a. | What does AQL mean in apparel quality control? | K2 | CO5 |
| | | (OR) | | |
| | 15.b. | Why is final inspection necessary in apparel production? | | |

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 the working of Pressley Tester for measuring fiber strength. | K3 | CO1 |
| 2 | 17 | Describe the relationship between yarn count and yarn strength. | K2 | CO2 |
| 3 | 18 | Analyze the effect of loop length on fabric GSM and fabric comfort. | K4 | CO3 |
| 4 | 19 | Apply the working principle of tensile strength tester in woven fabric analysis. | K3 | CO4 |
| 5 | 20 | Explain the role of quality standards for yarn and fabric in garment production. | K2 | CO5 |