

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS .

MARKS 16*5=80

1. a) Explain the principle of measuring evenness by cutting and weight method. Give the warp lengths used for sliver, rovings and yarns.
b) What do understand variance – length curve?
c) Explain with principle, working of any electronic yarn evenness tester along with their output or reports.
2. a) Illustrate with any one example, the importance of yarn friction.
b) What are densimeters? How it is used? What are its limitations?
c) Discuss the developments which have taken place in online quality control systems in any yarn forming machines.
3. a) State the principle used to measure continuously the width of any one continuous Width measuring instrument for fabrics.
b) A fabric roll of 20m, weights 5.4kg. Given the width of fabric as 1.5m, find the GSM.
c) Explain the method of test to measure yarn crimp removed from fabric, with sketch.
4. a) Define air resistance of a fabric and thermal insulation value of a fabric.
b) Distinguish between ‘Drop penetration testing’ and ‘water repellence testing’ of fabrics.
c) Explain the working of Drape tester (Cusick’s model) and state the importance of drape.
5. a) Distinguish between serviceability and wear as applicable to fabric.
b) A.B.F.T. tester gave a ball abrasion of 10.8, flex abrasion 24 and flat abrasion of 80. Find the ‘figure of merit’.
c) Explain the working of hydrostatic pressure head tester with sketch.
6. a) What is an acceleration error in ‘Pendulum-lever’ strength testers ?
b) State the principle and working of ‘Tear strength tester’.
c) Explain the principle and working of hydraulic bursting strength testers for fabric with sketch.
7. a) What is 4-point system of grading fabrics?
b) How colour fastness to rubbing is measured on fabrics ?
c) Explain the test method for shrinkage of fabric.
8. Write short notes on the following :
 - i) Fabric handle
 - ii) Tearing strength
 - iii) Uster fabrication
 - iv) Uster quantum clearers