

VEER NARMAD SOUTH GUJARAT UNIVERSITY

B.E. IV (TEXTILE TECHNOLOGY) Semester -VIII

TT - 801 YARN STRUCTURE AND FABRIC GEOMETRY

Teaching Scheme : (No. Of Contact Hrs.)			Theory Exams		Prac./Quiz/Viva/Exam		Grand Total
Theory	Tut.	Pract.	Duration (Hrs)	Marks	Sem. End Exam.	Cont.Int. Evaluation	
4	-	-	3	100	-	-	100

Theory:

Yarn

1. Ideal yarn geometry, yarn structure.
2. Measurement of yarn diameter using different methods.
3. Different packing structure & its effect on yarn properties.
4. Contraction and Retraction factors, concentrating and disturbing factors.
5. Theory of Migration, Ideal migration, Tracer fibre technique, conditions for migration to occur.

Fabric

1. Fabric density and specific volume
2. Porosity, permeability and pore area
3. Fabric cover: Relationship between d/p & K
Reference standard for cover
Effect of yarn numbering system on cover
4. Crimp: Measurement, Crimp interchange
Relationship between cloth shrinkage, yarn shrinkage and crimp
5. Fabric Weaight
6. Geometry of plain woven fabric (Pierce Gemetry)
7. Fabric Sett.

References:

- (1) Pierce : Cloth Geometry, The Textile Instiute, U.K.1978
- (2) Goswami : Textile Yarns, Mahajan Publisher,1995
- (3) Greenwood : Control of Fabric structure, Merrow Publication U.K. 1975