Department of Textile Technology

TTL362 Minor II

Weightage: 25%

4.10.2013

1. A plain woven 67:33 Polyester:Viscose fabric of same linear density in both warp and weft has the following particulars:

	Warp	Weft
Crimp Amplitude (mm)	0.16	0.20
Weave Angle (degrees)	28	37

Using the basic equations of Peirce's Geometry, calculate the cloth sett.

2. A plain woven cotton fabric has the following particulars:

	Warp	Weft
Linear Density (tex)	40	60
Crimp (%)	8	12
Threads/cm	22	18

Determine the cloth thickness after the fabric is pulled in warp direction until there 3% contraction in the weft direction.

3. Using rigid thread model, show that maximum curvature in the yarn depends on weave angle and thread spacing only.