

**VI Semester (CC –XI)
Knitting**

Major Divisions:

1. Basics of Knitting
2. Knit Structures
3. Weft Knitting
4. Warp Knitting
5. Modern Knitting Techniques

**Unit - I
Basics of Knitting**

Knitting – definition – classification – comparison between knitting and weaving – comparison between knitted and woven fabrics.

Important terms in knitting – course –Wales – gauze-face loop – back loop - loop length –texture.

Loop forming elements – needles latch, beard and compound needles – sinker –jack cam

**Unit - II
Knit Structures**

Structure of knitted fabrics – Plain – Detailed study of Single jersey, Double jersey structures.

Rib structure – various ribs and rib derivatives. Interlock structure and its features.

Purl structure and its features. Application of various structured knit fabrics.

Unit - III

Weft Knitting

Different types of weft knitting machines – plain , rib and inter lock. Passage of material through single jersey – weft knitting machine – knitting action of the same machine – passage of the material through double jersey weft knitting machine – knitting action of the same machine.

Weft knitted structures and their fabric characteristics – uses study of knit, miss tuck stitches.

Flat knitting – definition – passage of material through flat knitting machine.

**Unit – IV
Warp knitting**

Importance features – different types – warp knitting elements – knitting action of raschel warp knitting machine – comparison between raschel and tricot machine – comparison between warp and weft knitting.

Calculation pertaining to speed, production of the knitting machines. Knit fabric defects, causes and remedies.

Unit –V

Modern knitting Techniques

Modern developments in knitting – Figured patterns in knitted structures – Computerised Knitting machines. Salient features of computerized knitting machines. Merits and Limitations. Seamless knitted garments.

Reference Books:

1. Knitting Technology by David J.Spencer
2. An Introduction to weft knitting by J.A.Smirfitt
3. An Introduction to warp knitting by Thomson