

PTX6J006 APPAREL TECHNOLOGY

Course Objectives:

Enabling students to :

- Acquire knowledge on processes involved in garment manufacturing.
- Gain knowledge on process parameters and quality control.
- Gain knowledge on machineries used in apparel production.

Course Outcomes

After successful completion of this course, the students will be able to:

- Describe the each stage of garment manufacturing process.
- Describe the concept and techniques of garment finishing.
- Illustrate the quality control aspects in garment manufacturing

Course Contents.

Module-I

Garment Manufacturing: Introduction, Indian apparel industry. Different garment production systems.

Selection of Fabrics: Garment from Woven and knitted fabrics, Various fabrics available in market, their characteristics and applications to suit to different purposes

Pattern making: Introduction to pattern making and garment, Construction. Different terminologies. Drafting, Basic bodies blocks, Muslin pattern. Commercial pattern, Methods of making basic pattern, grading of pattern, size, size charts.

Module-II

Marker Making : Objectives, Method of marker making.

Spreading and lay planning: Introduction to symmetrical and asymmetrical fabrics, criteria of spreading, methods of spreading, spreading m/cs. Principles of lay plan, types of lay plan.

Garment Cutting: Introduction to cutting room processes, cutting methods and their merit demerits.

Sorting/Bundling system : Introduction, need of Sorting/Bundling system, precautionary measure to be taken.

Module-III

Garment Sewing: Introduction to sewing m/c and its parts, sewing room processes and working details. Different types of sewing m/c and its suitability, Different sewing m/c driving system. Attachment of sewing m/c, Sewing needle and its sizes.

Sewing stitches and seams types: Stitch formation, types of stitches, seam classification, seam geometry seam strength and slippage, seam puckering. Thread calculation and its consumption

Trimming and Garment accessories: Definition, types, trimming methodologies and accessories application.

Module-IV

Garment finishing: Fasteners, thread tucking, care and size labeling system, checking, pressing, folding and packing, packing standards for domestic and export markets.

Quality Control in Garment manufacturing: Control in pattern making, grading, fabric laying, marking, sewing and finishing, control of garment defects.

Computer Application in Garment Manufacturing: Application in pattern making, grading, lay planning, sewing and finishing, computer aided embroidery designs. Concepts of computer integrated manufacturing (CIM) to the garment industry.

Books Recommended:

1. Carr H and Lantham B, "*The Technology of Clothing Manufacture*", Om Book Service, Delhi.
2. Mehta P V and Bhardwaj S K, "*Managing Quality in apparel industry*", Om Book Service, New Delhi
3. Aldrich W, "*Metric Pattern Cutting*", OM Book Service, New Delhi (1998).
4. Cooklin Gerry, "*Garment Technology for Fashion Designers*", OM Book Service, New Delhi (1997).
5. Eveleyn M and Ucas, "*Clothing Construction*", 2nd Ed., Hughton Mifflin Co, Boston (1974).