

LESSON PLAN

DEPARTMENT OF TEXTILE ENGG, GOVT. POLYTECHNIC, BHADRAK

SUBJECT: Fabric Manufacture - III **Periods:** 3 per week **SEMESTER:** 5th

NAME OF FACULTY: BIRENDRA MEHER **ACADEMIC YEAR:** 2022-2023

Semester From date: 15.9.2022 **To Date:** 22.12.2022 **No. of weeks:** 15

| Week | Class Day | Theory / Practical Topics |
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| 1st | 1st | Defination of knitting, Courses & Wales, Types of Knitting. |
| | 2nd | Defination of knitting, Courses & Wales, Types of Knitting. |
| | 3rd | Comparision between Weaving and Knitting. |
| 2nd | 1st | Comparision between warp and weft knitting. |
| | 2nd | Class for revision |
| | 3rd | Types of basic weft knitted structures. |
| 3rd | 1st | Types of basic weft knitted structures. |
| | 2nd | Representation of basic knitted structures in the form of loop diagrams and in the form of stitch notations. |
| | 3rd | Representation of basic knitted structures in the form of loop diagrams and in the form of stitch notations. |
| 4th | 1st | Representation of basic knitted structures in the form of loop diagrams and in the form of stitch notations. |
| | 2nd | Characteristics basic knitted structures and end uses. |
| | 3rd | Characteristics basic knitted structures and end uses. |
| 5th | 1st | Characteristics basic knitted structures and end uses. |
| | 2nd | Defination of float and luck stitches,Effects of tuck and float stitches. |
| | 3rd | Defination of float and luck stitches,Effects of tuck and float stitches. |
| 6th | 1st | Class for revision |
| | 2nd | Passage of material through circular weft knitting machine. |
| | 3rd | Passage of material through circular weft knitting machine. |
| 7th | 1st | Function of the machinery parts: Creels, stop motions, positive feeders, yarn guides, take-up and winding mechanism. |
| | 2nd | Function of the machinery parts: Creels, stop motions, positive feeders, yarn guides, take-up and winding mechanism. |
| | 3rd | Arrangement of knitting elements, State the knitting action of stitch forming elements in single jersey and double jersey knitting machines (rib, inter lock and purl machines) |
| 8th | 1st | Arrangement of knitting elements, State the knitting action of stitch forming elements in single jersey and double jersey knitting machines (rib, inter lock and purl machines) |
| | 2nd | Arrangement of knitting elements, State the knitting action of stitch forming elements in single jersey and double jersey knitting machines (rib, inter lock and purl machines) |
| | 3rd | Arrangement of knitting elements, State the knitting action of stitch forming elements in single jersey and double jersey knitting machines (rib, inter lock and purl machines) |
| 9th | 1st | Class for revision |
| | 2nd | Warp Knitting loop structures. |
| | 3rd | Warp Knitting loop structures. |

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| 10th | 1st | Warp Knitting loop structures. |
| | 2nd | Warp Knitting loop structures. |
| | 3rd | Differentiate warp knitting machines –Tricot & Rasset. |
| 11th | 1st | Differentiate warp knitting machines –Tricot & Rasset. |
| | 2nd | Differentiate warp knitting machines –Tricot & Rasset. |
| | 3rd | Differentiate warp knitting machines –Tricot & Rasset. |
| 12th | 1st | Differentiate warp knitting machines –Tricot & Rasset. |
| | 2nd | Class for revision |
| | 3rd | Defination of machine gauge , tightness factor and yarn number. |
| 13th | 1st | Calculation of weft knitting machine production, Calculation of loop length, fabric widths, weigh per square yard |
| | 2nd | Calculation of weft knitting machine production, Calculation of loop length, fabric widths, weigh per square yard |
| | 3rd | Calculation of weft knitting machine production, Calculation of loop length, fabric widths, weigh per square yard |
| 14th | 1st | Class for revision |
| | 2nd | Introduction to non-woven technology. |
| | 3rd | Types of fibres used and end uses of nonwovens. |
| 15th | 1st | Methods of web preparation & Orientation of fibres in the web. |
| | 2nd | Methods of bonding of web, Brief idea on non-woven fabrics by needle punching, stitch bonding, spun bonding, thermal bonding, Adhesive bonding techniques etc. |
| | 3rd | Class for revision |