

LESSON PLAN

SUB: Textile Chemical Processing-I (Theory)

BRANCH: - TEXTILE ENGG.

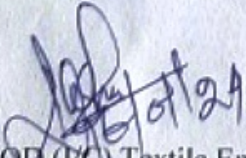
SEMESTER:3rd

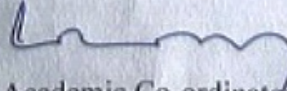
SESSION: 2023-24

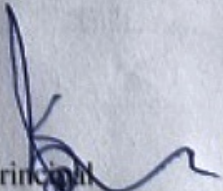
NAME OF FACULTY: Birendra Meher (Lect. in Textile Tech.)



**GOVERNMENT POLYTECHNIC,
BHADRAK**


HOD (I/C) Textile Engg.


Academic Co-ordinator


Principal
Govt. Polytechnic, Bhadrak

LESSON PLAN

DEPARTMENT OF TEXTILE ENGG, GOVT. POLYTECHNIC, BHADRAK
SUBJECT: Textile Chemical Processing - I Periods: 3 per week **SEMESTER: 3rd**

NAME OF FACULTY: BIRENDRA MEHER **ACADEMIC YEAR: 2023-2024**

Semester From date: 01.08.2023 To Date: 30.11.2023 No. of weeks: 15

| Week | Class Day | Theory / Practical Topics |
|------|-----------|--|
| 1st | 1st | Pre-cleaning, Mending, Stamping, stitching, Shearing and cropping. |
| | 2nd | Brief idea on Shearing and cropping M/c. |
| | 3rd | Singeing, Different methods of singeing (Plate Singeing), drawbacks and advantages. |
| 2nd | 1st | Singeing, Different methods of singeing (Roller Singeing), drawbacks and advantages. |
| | 2nd | Singeing, Different methods of singeing (Gas Singeing), drawbacks and advantages. |
| | 3rd | Object & types of desizing |
| 3rd | 1st | Methods of desizing |
| | 2nd | Mechanism of removal of starch. |
| | 3rd | Efficiency of desizing. |
| 4th | 1st | Class for revision |
| | 2nd | Objectives of scouring, mechanism of removal of impurities |
| | 3rd | recipe and controlling parameters. |
| 5th | 1st | Scouring of textile |
| | 2nd | Scouring of textile |
| | 3rd | evaluation of scouring efficiency. |
| 6th | 1st | Class for revision |
| | 2nd | Scouring of natural textiles. |
| | 3rd | Scouring of man - made textiles. |
| 7th | 1st | Scouring of blended textiles. |
| | 2nd | Degumming of silk. |
| | 3rd | Classification of Kier |
| 8th | 1st | working mechanism of Industrial Kier |
| | 2nd | working mechanism of Industrial Kier |
| | 3rd | Souring |
| 9th | 1st | Class for revision |
| | 2nd | Objectives of bleaching & classification of bleaching agents. |
| | 3rd | Mecahnism of Hypochlorite, peroxide and chlorite bleaching. |
| 10th | 1st | Mecahnism of Hypochlorite, peroxide and chlorite bleaching. |
| | 2nd | Field of application - Bleaching of cotton by suitable bleaching agent. |
| | 3rd | Field of application - Bleaching of silk by suitable bleaching agent. |
| 11th | 1st | Field of application - Bleaching of wool by suitable bleaching agent. |
| | 2nd | Field of application - Bleaching of man - made textile by suitable bleaching agent. |
| | 3rd | Field of application - Bleaching of blended textile by suitable bleaching agent. |
| 12th | 1st | Principles and application of optical brightening and blueing agents. |
| | 2nd | Class for revision |

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|------|-----|---|
| | 3rd | Classification of dyes and pigments used in textile industry. Comparison between natural and synthetic dyes. |
| 13th | 1st | general properties of dyes (solubility, affinity toward, Properties), principles of dyeing. |
| | 2nd | Dyeing of textiles of natural fibres [(Cotton by direct dye)] |
| | 3rd | Dyeing of textiles of natural fibres [(Cotton by reactive dye)] |
| 14th | 1st | Dyeing of textiles of natural fibres [(Cotton by vat dye)] |
| | 2nd | Dyeing of textiles of natural fibres [(Cotton by azoic & sulphur dye)] |
| | 3rd | Dyeing of textiles of natural fibres [(Silk and Wool by acid dye)] |
| 15th | 1st | Working principles of Winch, Jet, Beam dyeing machine. |
| | 2nd | Working principles of Hank and Package dyeing machine, Jigger, J-Box. |
| | 3rd | Class for revision |

Signature of
Lect. Textile Engg.

Signature of
HOD (I/C) Textile Engg.

Signature of
Academic co-ordinator.