

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. SEMESTER : VIII

TEXTILE PRODUCTION

Subject Name: **DYE HOUSE MANAGEMENT**

| Sr. No. | Course Contents | Total Hrs |
|----------------|---|------------------|
| 1. | Selection Of Site For Process House. An Over All Plan For The Building Of The Various Departments Like Grey Room, Singeing Room, Bleach House, Dye House, Printing Department, Finishing Laboratory, Folding, Stores, Boilers, And Power House Etc. | 05 |
| 2. | Planning / Programming For Every Day Production From Grey Dept. To Folding Dept. Dyes, Chemicals And Other Raw Materials Requirement For The Planned Productions Periodical Stock Checking. Water, Steam And Power Requirements For Planned Production. Quality Of Water, Water Treatments, Ion Exchange, Effluent Treatments, Recycling Etc. | 05 |
| 3. | Methods Of Calculations For Consumption Of Water, Steam & Electricity. | 04 |
| 4. | Maintenance Of Machinery - Preventive And Breakdown. Importance Of Preventive Maintenance. Functions Of Maintenance. | 04 |
| 5. | Energy Conservation Areas - Electrical Energy Conservation, Mechanical Energy Conservation, Optimization, And Minimization Of Consumption Of Dyes And Chemicals, Process Modification. Adoption Of Non Conventional Energy Sources, Fuel Consumption And Conservation. Heat Economy And Waste Heat Recovery. | 05 |
| 6. | Control And Assessment Of Pollution. Pollution Load Of Various Chemicals, Air Pollution, Water Pollution, Noise Pollution, Radiation Pollution, Oil Pollution Etc. - Causes And Remedies. | 05 |
| 7. | Hazard In The Process House. Fumes Of Chemicals, Electrical Hazards, Pressure Vessels-Safety Precautions. | 04 |
| 8. | Dye House Management: ERP, MIS, IT, TQM, M/C Auditing Implementations Of ISO 9000 Series Etc. | 04 |

Text Books:

| Sr. No. | Title | Author |
|----------------|---|-----------------|
| 1. | Industrial Organization | Teredesai P. L. |
| 2. | Energy Conservation In Textile Wet Processing | M. L.Gulrajani |

Reference Books:

| Sr. No. | Title | Author |
|----------------|---|---------------|
| 1. | Chemistry Of The Textile Industry | C.M. Carr |
| 2. | Occupational Health & Safety In Textile Mills | V. A. Shenai |
| 3. | Introduction To Management In Dyeing Industry | Park J. |