

# **AMLT02 PRINCIPLES AND THEORY OF PRE-TANNAGE AND PRE-TANNING MATERIALS**

## **UNIT-1 CURING**

- 1.1 Definition;
- 1.2 Necessity;
- 1.3 Principles and different state of cured hides and skins.

## **UNIT-2 SOAKING**

- 2.1 Physico- Chemical explanation of wetting;
- 2.2 Objectives and different controls in soaking operation .

## **UNIT-3 LIMING**

- 3.1 Chemistry of unhearing; unhearing by different methods;
- 3.2 Objectives of liming;
- 3.3 Effects of liming on collagen;
- 3.4 Controls in liming operation to achieve different physical properties of leather.

## **UNIT-4 DELIMING AND DRENCHING**

- 4.1 Objectives,
- 4.2 Principles and controls of deliming and drenching.

## **UNIT-5 BATING**

- 5.1 Chemistry of Proteolysis enzymes used for bating;
- 5.2 Necessity of bating; its preparation and controls for desired properties of leather.

## **UNIT-6 PICKLING**

- 6.1 Acid binding capacity of collagen;
- 6.2 Use of organic acids or salts in pickling;
- 6.3 Its necessity and controls;
- 6.4 Concept of Depickling.

## **UNIT-7 DEGREASING**

- 7.1 Objectives and necessity of Degreasing;
- 7.2 different degreasing systems and methods.

## **Reference Books**

1. Introduction to the Principles of Leather Manufacture- S. S. Dutta, 4th Edn. I. L. T. A., Calcutta.
2. Chemistry & Technology of Leather-Roddy, O` Flaherty & Lollar, Vol. 2 & 3. Robert E. Kreiger Publishing Co., N. Y.
3. Chemistry of Tanning Processes – K. H. Gustavson, Academic Press N. Y.