

2.8 30808 THEORY OF LEATHER MANUFACTURE-I

UNIT-1 INTRODUCTION

1.1 History of leather manufacture and its uses.

UNIT-2 PROTIENS

2.1 Nature and types of proteins, physical and chemical composition,

2.2 Properties of hide proteins.

UNIT-3 RAW HIDES

3.1 Raw stock: Mainly used raw hides and skins, General structural conditions for raw hides, Skin defects

3.2 Anatomical structure of hides and skins.

3.3 Chemical composition and constituents of hides and skins.

UNIT-4 WATER QUALITY

4.1 Classification according to sources,

4.2 Possible defects due to substances contained water.

UNIT-5 CURING AND PRESERVATION

5.1 Methods and chemistry of curing of hides and skins.

5.2 Merits and demerits of each method.

5.3 Code of practice for curing and preservation of cattle hides as per I.S. 7656(1995).

UNIT-6 PRETANNING OPERATIONS

6.1 Principles and objectives involved in (a) Soaking (b) Liming (c) DE liming (d) Bating

6.2 (e) Pickling (f) DE pickling (g) Bleaching (h) Degreasing.

UNIT-7 TYPES OF TANNAGES

1.1 Introduction of vegetable tannage, mineral tannage aldehyde and Crome Tanning, oil tannage, etc.

UNIT-8 TYPES OF LEATHER

8.1 Chrom tanned leather, vegetable tanned leather, Aluminium tanned leather,

8.2 Zirconium, tanned leather, Oil tanned leather, Iron tanned leather, and Sulphur tanned leather.

8.3 According to the nature of finishes/products, Aniline leather, semi aniline tanned leather,

8.4 Portant leather, Corrected arain leather, Nuckbuck leather, Suede leather, Nappa leather, Upper

8.5 Leather, Uphalestry leather, Belting leather, Saddlery leather, Harness, Bridle leather.

UNIT-9 CLEANING PROCESSES:

9.1 Hair shaving process, Sulphide free unharng process,

9.2 Cleaner process in Beam House/Tan Yard Practices,

9.3 Role of enzymes of pretanning operation.

Reference Books:

1. An Introduction to the Principles of Leather Manufacture - S. S .Dutta.
2. 2. Physical Chemistry Of Leather Making - Krysztof Bienkiewicz .

