

# **AMLT17 FOOTWEAR AND LEATHER GOODS TECHNOLOGY**

## **UNIT-1 INTRODUCTION**

- 1.1 History of footwear evolution.
- 1.2 Nomenclature of different types of footwear.
- 1.3 Different parts of footwear.

## **UNIT-2 ANATOMY OF HUMAN FOOT**

- 2.1 Bones, joints, muscles, ligaments, arches of skin of human foot.
- 2.2 Common foot defects and their remedies.
- 2.3 Internal & External changes of human feet from infant to adult stage.
- 2.4 Functions of human foot.
- 2.5 Analysis of human locomotion.
- 2.6 Foot measurement. Foot comfort and Foot care.

## **UNIT-3 LAST**

- 3.1 Definition, classification of last, different parts of last,
- 3.2 Methodology of seasoning of wood for wooden last;
- 3.3 Last measurement; Comparison of last with human foot.

## **UNIT-4 DESIGNING AND 'SHOE SIZES & FITTINGS'**

- 4.1 Introduction to Designing.
- 4.2 Elements of Design. Elements of Fashion.
- 4.3 Functions of a Designer.
- 4.4 Design procedure related to footwear & other leather products.
- 4.5 Design documentation. Limitations imposed by purpose, material and technical considerations. Concept of inside form, outside form and mean form.
- 4.6 Different techniques to get these three forms.
- 4.7 Concept of Biomechanical designing of shoe.
- 4.8 Relation between foot 'sizes & fittings' and shoe 'sizes & fittings'. English, American, French, Continental and Mondopoint shoe sizes and fittings system.

## **UNIT-5 PRE-CLOSING & CLOSING OPERATION**

- 5.1 Principle of clicking operation, different size & stitch marking system; skiving operation
- 5.2 Its objectives & different types; different types of edge –treatment; lock-stitch & chain-stitch; different types of seam; Construction:
- 5.3 Material selection, flow chart, methodology, advantages & disadvantages of Cemented construction,
- 5.4 Good-year wetted construction, Veldtschoen construction, D.V.P. construction, D.I.P(PVC) construction & D.T.P(PU) construction.

## **UNIT-6 FOOTWEAR MATERIALS:**

- 6.1 Upper & Lining Materials:

- 6.2 Different natural & synthetic materials;
- 6.3 Comparison between natural & synthetic materials.

### **UNIT-7 ADHESIVE**

- 7.1 Definition; different types of adhesion;
- 7.2 Different types of adhesive used in footwear industry and their relative advantages & disadvantages.
- 7.3 Sole, Insole, Toe-puff, Shank, Stiffner, Heel, Thread and Needle:
- 7.4 Required properties of these materials,
- 7.5 Different types of these material and their relatives advantages & disadvantages.

### **UNIT-8 LEATHER GOODS**

- 8.1 Classification of Leather Goods;
- 8.2 Different types of tool used for making of footwear and Leather-goods.
- 8.3 Designing and pattern cutting;
- 8.4 Fashion designing.
- 8.5 Selection criteria for manufacture of different types of articles.

### **Reference Books:**

1. Manual of Shoe Making - Clark.
2. Text book of Footwear Manufacture- J.H.Thronton.
3. Footwear Materials – Harvey. 4. Leather Work - I.P.Roseman ; The Manual Arts Press.

