

**M.Sc. FOOTWEAR TECHNOLOGY  
(MSCFWT)**

**Term-End Examination**

**December, 2011**

**MFW - 027 : INTRODUCTION TO  
MANUFACTURING TECHNIQUE**

*Time : 3 hours*

*Maximum Marks : 70*

*Note : All questions are compulsory.*

**PART - A (Designing 1)**

**1. (a) TRUE / FALSE**

**5x1=5**

- (i) Lateral height is also termed as Back height. (T/F)
- (ii) The human foot has three Arches. (T/F)
- (iii) Length increment in U.K size system is 7.46 mm. (T/F)
- (iv) Gimping<sub>1</sub> is done for decorative purpose. (T/F)
- (v) 3 mm margin is added on the upper for a fold top line. (T/F)

(b) Answer the following : 5x1=5

- (i) State the difference between formal and casual footwear.
- (ii) What is Underlay Margin ? Why do we need it ?
- (iii) What is the use of Vamp point and Ball point while constructing upper standard ?
- (iv) Explain court shoe.
- (v) Name the three foot measuring devices.

(c) Answer the following : 4+2+4=10

- (i) Name the basic sizing systems.
- (ii) What is the length of smallest size in English Sizing System ?
- (iii) What is the girth increment given in English and French size systems ?

## PART - B (Cutting 1)

2. (a) State whether the following assertions are *True or False* : 5x1=5
- (i) The thickness range of goat leather is from 1 mm to 1.75 mm.
  - (ii) Pig leather can be used in shoe making.
  - (iii) Generally the goat skin has more defects than the calf leather.
  - (iv) High quality leather can be cut in layers.
  - (v) Shallow curve knives are used for cutting of thicker leather.
- (b) Explain brief ( *any five* ) : 5x1=5
- (i) What is the use of leather well ?
  - (ii) What is the minimum height required between aluminum plate and die ?
  - (iii) What is the difference between hide and skin ?
  - (iv) What is the use of leather horse ?
  - (v) What quality point is given to belly region of side ?
  - (vi) What are the tools used for hand cutting ?
  - (vii) What type of die on the basis of edges would you prefer while cutting leather ?

(c) Answer *any two* :

2x5=10

(i) Show :

(A) Lines of tightness in derby shoe parts.

(B) Different quality regions in Derby shoe parts.

(ii) What are the defects found on leather ? Briefly explain.

(iii) What are the advantages of making layouts ? Write 5 points to be kept in mind while making layout of cow full grain leather.

## PART - C (Closing 1)

3. (a) Fill in the blanks (*any four*) : 4x1=4

- (i) Threading is always done in the needle from short groove to \_\_\_\_\_.
- (ii) Do not make your own \_\_\_\_\_.
- (iii) \_\_\_\_\_ is the thickest part of needle.
- (iv) Clearance cut should always \_\_\_\_\_ towards hook.
- (v) We should use 60 no. Bottom thread and \_\_\_\_\_ No. Top thread.

(b) Write *true* and *false* (*Any four*) : 4x1=4

- (i) While changing or replacing the needle, machine should be switch off.
- (ii) Short groove protects the thread while it is going inside the material.
- (iii) Hook rotates 3 times before one stitch formation.
- (iv) While inserting the needle into needle bar, long groove should face towards the hook.
- (v) Strobel machine is used for chain stitching.

- (c) Define main stitching machine and ancillary machine used in closing department. 2
- (d) Write down about the safety points while working on the machine. 2
- (e) Write down about the five points of bench layout while working on the machine. 2
- (f) Explain different machine parts and its function. 2

## PART - D (Component 1)

4. (a) True and False (any four) : 4x1=4

- (i) Thermoplastic counter stiffener used in hand lasting.
- (ii) V.T. leather are used for upper component making.
- (iii) Half insole used in good year welted construction.
- (iv) Skiving is done after shank attaching in insole construction.
- (v) Resin, Alum and Latex are fibers.

(b) Answer any four of the following : 4x1½=6

- (i) What are Ribbed insole and continental insole and where do we use them ?
- (ii) Write the four different materials used for making Toe - puff.
- (iii) What are the Moulding and Grooving? Why we do these operations ?
- (iv) Write the procedure of selection of the shank length for a particular last.
- (v) What are important constituents of bonded synthetic fiber board ?
- (vi) What are the various steps for manufacturing fiber boards in cylinder vat machine ?

- (vii) While cutting shank board we tilt the die more than 45 degree but not on cutting other bottom components. Give reason of that.

(c) Answer *any one* of the following :

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- (i) What is Blended insole ? Write the sequence of operation for making Blended insole. (as given in handout)
- (ii) Write ten important parts and the function of Travelling head cutting press machine.
- (iii) A company required 5000 pairs of toe - puff and counter stiffner each per day. For that component section the company provides these components daily. At the end of the day manager finds that the cutter wasted the material and instead of cutting 156 odds from Toe puff and 125 odds from counter stiffner. Per sheet he cut 2 odd less from Toe puff and 3 odd less from counter stiffner sheet. Find loss incurred by the company on that particular day if the company is using one Toe - puff sheet of Rs.250/- per sheet and counter stiffner sheet of Rs.300/- per sheet respectively.
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