

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

Term-End Examination

June, 2011

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

Time : 3 hours

Maximum Marks : 70

Note : All questions are compulsory and carry marks as indicated. Assume missing data if any.

(Designing - I)

1. (a) Fill in the blanks : (all answers are in m.m.) 4

(For Men's)	Length Increment	TOTAL Grith Increment	UPPER Grith Increment	LOWER Grith Increment
English size system	8.46	-----	4.2	-----
French size system	-----	4.5	-----	1.5

- (b) Answer the following : 5x1=5

- (i) Define 'Ossification.'
- (ii) What do you understand by Upper and Lining component ?

- (iii) Why do we reduce 7-8mm in Lining standard from Upper standard ?
 - (iv) Explain Brogue shoe ?
 - (v) Define the places where slit and Round off are given in pattern.
- (c) Why do we provide underlay margin in Vamp lining ? Give at least three reasons. **10**

(Cutting - 1)

2. (a) State whether the following assertions are true or false : **5x1=5**
- (i) Line of tightness is sometimes also known as line of strength.
 - (ii) Offal area of Leather can be used for cutting tongue pattern of shoes.
 - (iii) The shape of toe tightness run from heel to toe while cutting.
 - (iv) Back strap is the part of shoe upper .
 - (v) In nubuck leather snuffing is done on flesh side.
- (b) Explain in brief : (answer *any five*) **5x1=5**
- (i) Why the eyelet facing must be stronger ?
 - (ii) Why the inside quarter can be taken up from the lower grade leather than the out side quarter ?
 - (iii) Cutting plate of which material we use in clicking M/C & why ?

- (iv) How many dies we use at one time for Leather cutting and Why ?
 - (v) Write types of M/C cutting knives.
 - (vi) What is the lasting allowance ?
 - (vii) What is nesting ?
- (c) Answer *any two* of the following : **2x5=10**
- (i) Show :
 - (A) Lines of tightness in Oxford shoe parts.
 - (B) Different quality regions in Oxford shoe parts.
 - (ii) Write various types of defects found in leather & explain.
 - (iii) Why we are using leather for high quality shoes ? Explain.

(Closing -1)

3. (a) Write *True* and *False* (*any four*). **4x1=4**
- (i) While changing or replacing the needle machine should be switch on.
 - (ii) Short groove protects the thread while it is going inside the material.
 - (iii) Threading is always done in the needle from long groove to short groove.
 - (iv) While inserting the needle into needle bar long groove should face towards the hook.
 - (v) We should use 60 No. bottom threads and 40 No. top thread.

- (ii) Name the four different companies manufacturing Insole board and Shank board each.
 - (iii) Write the dimensions [L × B × H] of Cellulose board, Shank board and Steel Shank.
 - (iv) Write down at least 8 important parts and function of skiving M/C
 - (v) What are Ribbed insole and blended insole and where we use them ?
 - (vi) What are the different operations and why we do these operations ?
 - (1) Stamping (2) Riveting
 - (3) Moulding (4) Bevelling
 - (vii) How will you minimize the wastage while cutting the insole board or shank board ?
- (c) Answer *any two* of the following : **2x4=8**
- (i) What is continental insole ? Write the name of machines used for making continental insole.
 - (ii) If by mistake the cutting die gets struck inside the board, how will you ensure that the die will not struck again. Explain it by describing Setting Machine.

- (b) Define main stitching machine and ancillary machine used in closing department. 2
- (c) Write down about the safety points while working on machine. 2
- (d) Write down the function of following needle parts 2
- (i) Shank (ii) Long groove
- (iii) Clearance cut (iv) Needle point
- (e) Write down about five points of bench layout while working on the machine 3
- (f) Explain different machine parts and their function. 4

(Component - 1)

4. (a) State whether *True* or *False*. (answer *any four*) $4 \times \frac{1}{2} = 2$
- (i) High quality cellulose board is bonded with synthetic neoprene
- (ii) Solvent activated Toe-puff is used for machine lasting.
- (iii) Texon board are also known as shank board.
- (iv) Stamping is done after beveling in insole construction.
- (v) Resin, Alum and Latex are fibres.
- (b) Answer *any four* of the following : $4 \times 1 = 4$
- (i) Write the four important requirements for insole forepart board and insole seat board each.

- (iii) A company required 6000 pairs of Toe-puff and counter stiffener each per day. For that component section of company provide these components daily. At the end of the day manager finds that the cutter wasted the material and instead of cutting 156 odd from Toe-puff and 125 odd from counter stiffener per sheet he cut 2 oddless from Toe-puff and 3 oddless from counter stiffener sheet. Find the loss incurred by the company on that particular day if company is using one Toe-Puff Sheet of Rs. 250 and counter stiffener sheet of Rs. 300 respectively.
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