| BFW-040 |

B.Sc. FOOTWEAR TECHNOLOGY (BSCFWT)
Term-End Examination
June, 2016

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BFW-040 : MANUFACTURING TECHNIQUE – I

Time : 3 hours   *Maximum Marks : 70*

Note : *All questions are* **compulsory***. Use of calculator is permitted.*

1. Fill in the blanks.   *5×1=5*

    (a) Lasting margin varies according to
         _____ and _____ .

    (b) Lining should be _____ mm shorter
         than the upper from the lasting margin.

    (c) Underlay margin in brogue shoe is
         _____ mm.

    (d) Unit of measurement in American size
         system is _____ .

    (e) Full form of SLL is _____ .

2. (a) State the difference between Formal and Casual footwear.

(b) Define the place where slits and round-off are given in pattern.

(c) What is Underlay Margin ? Why do we need it ?

(d) What is the use of Vamp Point and Ball Point while constructing upper standard ?

(e) How many bones do we have in a foot ? $5×1=5$

3. State whether the following assertions are *True* or *False* : $5×1=5$

(a) Offal area of leather can be used for cutting tongue pattern of shoes.

(b) The shape of Toe tightness runs from heel to toe while cutting.

(c) Pig leather can be used in shoe making.

(d) The thickness range of Goat leather is from 1 mm to 1·75 mm.

(e) Leather grading in a shoe factory is done by Table Run method.

4. Answer any *five* of the following : 5×1=5

(a) What is purchase cost variance ?

(b) What are the advantages of making layouts ?

(c) How do we sort the leather ?

(d) What is the lasting allowance ?

(e) What is nesting ?

(f) What is mean cutting ability coefficient ?

(g) Show the line of tightness in goat skin.

5. Answer any *four* of the following : $4 \times 2\frac{1}{2} = 10$

(a) A shoe factory has received 7000 sq.ft. of leather of TR-grade. The price is quoted as ₹ 60 per sq.ft. After arrival of leather the following result is observed on checking the lot :

GRADE	QUANTITY
A	1575 sq.ft.
B	2550 sq.ft.
C	2925 sq.ft.

Calculate the purchase cost variance in terms of profit (+) or loss (−).

(b) There are two tanneries, 1st tannery is supplying 'B' grade leather @ ₹ 65/sq.ft. with area discrepancy of 7% and the 2nd tannery is supplying 'A' grade leather @ ₹ 60/sq.ft. with area discrepancy of 10%. What will be the variance in cost, if 5000 sq.ft. material is purchased from both the tanneries separately ? Which tannery is giving the best value to the buyer ?

(c) Explain various types of random tests for selection of leather.

(d) What is the purpose of leather grading ? Explain different methods of grading.

(e) What are the important points which should be considered during storage of leather ?

6. Fill in the blanks. 5×1=5

(a) The diameter of a blade size 100 is _____ in metric system.

(b) We use _____ twist thread in the closing department.

(c) In shallow skiving, depth tapers down at _____ degree angle leaving 1/3 of material thickness at tapered edge.

(d) Skiving width for folding should be _____ the folding margin.

(e) Dressing tool is used for _____ machine.

7. (a) Write down the thread consumption formula for chain stitch formation.   *1*

     (b) Write a short note on construction of threads.   *1*

     (c) What do you mean by thread twist ?   *1*

     (d) What do you mean by skiving ? Explain about underlay skiving.   *2*

     (e) Describe various needle systems.   *2*

     (f) Describe the various needle points with diagrams.   *3*

8. State *True* or *False* for the following statements :   *5×1=5*

     (a) High quality cellulose board is bonded with Synthetic Neoprene.

     (b) Solvent activated toe-puff is used for machine lasting.

     (c) Texon boards are also known as insole boards.

     (d) Leather board is a natural material.

     (e) Resin, alum and latex are fibres.

9. Answer any *five* of the following :　　　*5×2=10*

(a) Write the two important requirements for insole forepart board and insole seat board each.

(b) Name the two different companies manufacturing insole board and shank board.

(c) Write the dimensions [L × B × H] of cellulose board, shank board and steel shank.

(d) Write down at least two important parts and functions of skiving machine.

(e) Write at least three binders used for making fibre boards.

(f) How will you minimize the wastage while cutting the insole board or shank board ?

10. Answer any *two* of the following :　　　*2×5=10*

(a) Write the various methods of making fibre board. Explain Fourdrinier machine with a diagram.

(b) Write ten important parts and functions of a travelling head cutter press machine.

(c) A company required 6000 pairs of Toe-puff and Counter stiffener each per day. For that, the component section of the company provides these components daily. At the end of the day the 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 odds less from Toe-puff and 3 odds less from Counter stiffener sheet. Find the loss incurred by the company on that particular day, if the company is using one Toe-puff sheet of ₹ 250 and Counter stiffener sheet of ₹ 300 respectively.

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