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BFW-040

B.Sc. FOOTWEAR TECHNOLOGY (BSCFWT)

Term-End Examination

December, 2011

00192

BFW-040 : MANUFACTURING TECHNIQUE - I

Time : 3 hours *Maximum Marks : 70*

Note : *All questions are* ***compulsory*** *and use of scientific calculator is permitted.*

1. (a) Choose correct option from the following. **5x1=5**

(i) A brogue shoe must have the following feature :

(A) Apron

(B) Folding

(C) Gimping and Punching

(D) Wing Cap

(ii) How many arches human feet have ?

(A) 3 (B) 5

(C) 4 (D) 2

(iii) Marking slots in patterns are opened for which margin.

(A) Underlay (B) Folding

(C) Seam (D) Trimming

(iv) How many bones a human foot has ?

(A) 28 (B) 24

(C) 52 (D) 26

(v) In English sizing systems, children size goes up to :

(A) 13 (B) 11

(C) 23 (D) 17

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

(i) Why do we reduce lining from upper in toe and heel part of shoe along the centre line ?

(ii) What do you understand from flexing line ?

(iii) State the difference between formal and casual footwear.

(iv) Name the basic shoe styles.

(v) What is lasting margin ? Why do we need it ?

(c) What is last ? List the types of last. Do suggest which last is best suited for making what style of footwear. **5**

2. (a) State *true* or *false* : **5x1=5**

(i) Line of tightness is also known as line of strength.

(ii) Back strap is the part of shoe upper.

(iii) Generally the goat skin has more defects then the calf leather.

(iv) High quality leather can be cut in layers.

(v) The percentage of defects in C grade leather is 18%.

(b) Explain in brief (*any five*) of the following : **5x1=5**

(i) Why the layout facing must be stronger ?

(ii) Why the inside Quarter can be taken up from the lower grade leather than the outside Quarter ?

(iii) Show the lines of tightness in calf skin.

(iv) What is area discrepancy ?

(v) Define the table run method of grading.

(vi) What is meant by sorting of leather ?

(vii) From which portion of the side you will trace the vamp ? Give reason.

(c) Answer *any four* of the following : **4x2.5=10**

(i) The leather procured from tannery had 6% of the area shortage and 6% of the grade waste whereas the leather procured from the other tannery had 5% of the area shortage and 7% of the grade waste. Which lot you will buy and why ?

(ii) What do you understand by purchase cost variance ? A shoe factory has received 7000 sq.ft of leather of TR grade. The price quoted as Rs.60/- per sq.ft. After arrival of the leather following result is observed on checking the lot :

Grade	Quantity
A	1575 sq.ft
B	2550 sq.ft
C	2925 sq.ft

Calculate purchase cost variance in terms of Profit (+) or loss (−)

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

(iv) Explain the purpose of leather grading explain the grading with reference to design.

(v) What are the recommended controlling parameters of leather storage ?

3. (a) State *true* or *false* : 1x4=4

(i) Strobel machine is used for decorative stitching.

(ii) Never use S point on a zig zag machine.

(iii) We use Z twist thread in closing department.

(iv) SDI Needle Point is not suitable for automatic M/C.

(b) Answer the following.

(i) Write down the thread consumption formula for lock stitch formation. 1

(ii) Describe 134 needle system. 1

(iii) Describe different types of thread used in closing department. 2

(iv) Write down the function of following needle parts. 2

(A) Shank
(B) Long groove
(C) Clearance cut
(D) Needle point.

(v) Write down different types of skiving with diagram. 2

(vi) Describe various needle points. 3

4. (a) State ***true*** or ***false*** : **1x5=5**

(i) Thermoplastic counter stiffner is used in hand lasting.

(ii) V.T. Leather are used for upper component making.

(iii) Half insole are used in good year welted construction.

(iv) Cellulose board are made of wood pulp, resin, and bonded with latex.

(v) Resin, alum and latex are fibres.

(b) Answer ***any five*** of the following : **1x5=5**

(i) What are the raw materials which are used for making fibre board ?

(ii) Write the four different materials used for making Toe-puff.

(iii) Define the following terms.

(A) Sole (B) Insole
(C) Steel shank (D) Heel

(iv) Write down at least 6 important parts and function of skiving machine.

(v) What are the important constituents of bonded synthetic fibre board ?

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

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

(c) Answer ***any two*** of the following.

(i) Write the various methods of making fibre board. Explain cylinder vat machine with diagram. **5**

(ii) How will you set travelling head cutting press machine for a particular die ? **5**

(iii) A company required 5000 pairs of Toe-Puff and counter stiffner each per day. For that component section of company provides 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 stiffner per sheet he cut 2 odds less from toe puff and 3 odds less from counter stiffner 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 stiffner sheet of Rs.300 respectively. **5**