

**B.Sc. FOOTWEAR TECHNOLOGY (BSCFWT)**

**Term-End Examination**

**December, 2013**

**BFW-040 : MANUFACTURING  
TECHNIQUE - I**

*Time : 3 Hours*

*Maximum Marks : 70*

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*Note : Section A is compulsory. Answer any ten (10) questions from Section - B and any seven (7) questions from Section - C.*

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**SECTION - A  
(Compulsory)**

**11x1=11**

1. (a) State whether the following questions are **True or False**.
- (i) Leather is a natural material obtained by tanning.
  - (ii) Leather is having poor thermal conductivity.
  - (iii) During cutting, line of tightness of components, should be perpendicular to the line of stretch of the skin.
  - (iv) Clicking force in machine cutting is directly proportional to the perimeter of the component.
  - (v) The percentage of defects in C grade leather is 18%
  - (vi) A last is reproduction of the approximate shapes of the human foot.

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- (vii) French binding is also known as U- binding.
  - (viii) The same last can take different heel heights.
  - (ix) Mule is a variation of sandal
  - (x) V.T. leather is a natural material.
  - (xi) Texon boards are also known as Shank boards.
- (b) Fill in the blanks. **4x1=4**
- (i) Court shoe is a \_\_\_\_\_footwear.
  - (ii) Standard back height of size 39 is \_\_\_\_\_mm.
  - (iii) Monk is a \_\_\_\_\_variation.
  - (iv) In oxford shoes quarter is \_\_\_\_\_ the vamp.

### SECTION - B

2. Explain in brief any ten questions : **10x2=20**
- (a) What is nesting ?
  - (b) Why topline of quarter should be strong ?
  - (c) Show the line of tightness in goat skin.
  - (d) Write down the formula of defective area percentage calculation.
  - (e) Define the shoe factory method of grading.
  - (f) What is sorting of leather?
  - (g) Name and explain four basic styles of footwear.
  - (h) Why do we provide the following margins ? Also give approx. measurements (in mm only) :
    - (i) Raw edge
    - (ii) Trimming

- (i) Differentiate between full grain and corrected grain leather.
- (j) Differentiate between open and closed seam.
- (k) Define the term insole, toe puff and Heal.
- (l) Write four major parts and their functions of skiving machine.

### SECTION - C

(Answer any seven question)

- 3. Explain the various types of random physical tests for the selection of leather. 7x5=35
- 4. What are the recommended controlling parameters for leather storage?
- 5. Describe in brief the following :
  - (i) Needle guard
  - (ii) Horizontal hook
- 6. Explain the different criteria of selecting a thread for closing of upper.
- 7. How will you set travelling head cutting press machine for a particular die?
- 8. What are the various methods for manufacturing fibre boards? Explain fourdrinier machine with diagram.
- 9. Write the dimensions (L xB x h) of cellulose board, shank board and steel shank.

10. What are the different types of Toe - puff and counter stiffener which are used in manufacturing of shoes ?
11. What do you understand by purchase cost variance ? A shoe factory has recieved 9000 sq.ft. of leather of TR - grade. The price quoted as Rs. 68 per sq.ft. After arrival of the leather following results an observed on checking a lot :

Grade	Quantity
A	1800 sq.ft
B	3850sq.ft
C	3350sq.ft

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

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