

**M.Sc. IN CREATIVE DESIGN CAD/CAM  
(MSCCRD)**

**Term-End Examination**

**December, 2013**

**MFW-044 : FOOTWEAR TECHNOLOGY - II**

*Time : 3 Hours*

*Maximum Marks : 70*

*Note : Attempt any ten questions.*

*Each question carry equal marks.*

1. Define the following terms : 2x3.5=7
  - (a) Sole
  - (b) Welt
2. (a) Write the sequence of operation for making skeleton insole. 7  
(b) Mention the names of the machines involved in manufacturing of skeleton insole.
3. State the dimension (L\*B\*H\*) of a cellulose board, shank board and steel shank. 7
4. Explain the following operations and their needs : 2x3.5=7
  - (a) Moulding
  - (b) Grooving
5. What are the various defects found in the vegetable tanned leather ? 7

6. What are the different tooling's required for edge pre - trimming operation and why ? 7
7. State the sequence of operations of veldcheon construction with a neat diagram. 7
8. (a) What is the purpose of heat setting ? 7  
(b) Mention the temperature and dwell time for sheep leather upper.
9. (a) Why sole preparation carried out before adhesive application? 2x3.5=7  
(b) Write down the preparation of the following sole material and also mention the need for attaching them with leather upper.  
(i) Microcellular Rubber  
(ii) EVA
10. What are the different links of adhesion? Give reason's of weakness in each links. 7
11. Create a flow chart diagram for sole attaching process for a shoe made of following substrate. 7  
(a) Leather upper and T.P.R. sole  
(b) PVC upper and leather sole
12. Draw a cross sectional diagram of a goodyear welted shoe and explain about its origin. 7
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