

**M.Sc. FOOTWEAR DESIGN AND
PRODUCTION (MSCFDP)**

Term-End Examination

December, 2016

00863

**MFR-001 : PRODUCT KNOWLEDGE AND
MATERIAL FOUNDATION**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any seven questions. All questions carry equal marks.

1. Fill in the blanks : 10×1=10

- (a) Neoprene is the trade name of _____ .
- (b) TPU is the abbreviation of _____ .
- (c) For micro-rubbers _____ adhesives are recommended.
- (d) Polyamides have the generic name _____ .
- (e) Leather can breathe because of its _____ .
- (f) Slink is a skin of _____ .
- (g) Burnish leather gives _____ on hard brushing.
- (h) _____ toe-puffs are used for heavy army boots.
- (i) By roughing and scouring we increase _____ .
- (j) Felts are generally prepared from _____ .

2. How do we measure the thickness of yarn ?
What is ply ? What is the impact of ply on stitching ? Which type of (material and ply) thread is used for upper stitching ? 10
3. What do you understand by mechanical and chemical bonding ? Discuss with suitable examples. 10
4. Write short notes on the following : $4 \times 2 \frac{1}{2} = 10$
 - (a) Reverse Side Suede Leather
 - (b) PU Film Coated
 - (c) Primer
 - (d) Hot Melt Adhesive
5. Explain various types of reinforcement used in footwear. 10
6. Draw the flow diagram of shoe making process and explain each operation in brief. 10
7. Explain various sizing systems in brief. 10
8. How will you differentiate between TPR, PU and PVC ? Discuss in brief. 10
9. Write down three types of shoe accessories, which can enhance the appearance of the shoe, and provide comfort as well. 10
10. What is the difference between injection moulding and vulcanization in footwear making ? 10