

# ONE YEAR VOCATIONAL SKILL DIPLOMA COURSE IN FOOTWEAR PRODUCTION

VOCATIONAL COURSE IN FOOTWEAR PRODUCTION (Skill Diploma)								
Sl. No.	CONTENTS	CREDITS	MARKS	Classes Hrs./wk req.	Total contact Hrs req. in a semester			
<b>1<sup>st</sup> Semester</b>								
<b>THEORY</b>								
1	Communication Skills in English	3	50	3	18hrs/wk = 18hrs/wk *12 wks/sem = 216hrs/sem			
2	Anatomy of human foot, Footwear tools & materials	3	50	3				
3	Operations of footwear pattern making	3	50	3				
4	Operations of cutting process	3	50	3				
<b>LAB / PRACTICALS</b>								
5	Practice of free hand sketching & cutting operation	1.5	100	3	Additional 10hrs/wk (for personality development)			
6	Practice of stitching	1.5		3				
<b>On Job Training(OJT)/ Qualification Packs</b>								
A	Cutter	Any One	15	200			30	30hrs/wk*12 wks/sem = 360hrs/sem (at a stretch for 50 days)
B	Skiving & Splitting Operator							
C	Attaching & Folding Operator							
D	Stitching Operator							
E	Lasting & Bottoming Operator							
<b>Total contact hrs required in 1<sup>st</sup> sem = 576hrs</b>								
<b>2<sup>nd</sup> Semester</b>								
<b>THEORY</b>								
1	Operations of footwear upper Pre-closing	3	50	3	18hrs/wk = 18hrs/wk *12 wks/sem = 216hrs/sem			
2	Operations of footwear upper closing	3	50	3				
3	Operations of footwear lasting & bottoming	3	50	3				
4	Operations of footwear finishing	3	50	3				
<b>LAB / PRACTICALS</b>								
5	Pre-closing & Closing	1.5	100	3	Additional 10hrs/wk (for personality development)			
6	Full shoe making & Finishing	1.5		3				
<b>On Job Training(OJT)/ Qualification Packs</b>								
7	One more QP to be opted from the QPs mentioned in Level 3 First semester.	Any One	15	200			30	30hrs/wk*12 wks/sem = 360hrs/sem (at a stretch for 50 days)
<b>Total contact hrs required in 2<sup>nd</sup> sem = 576hrs</b>								
<b>TOTAL CONTACT HRS REQUIRED FOR THE COURSE (1<sup>ST</sup> SEM &amp; 2<sup>ND</sup> SEM) = 576HRS * 2 = 1,152 HRS.</b>								

## **COURSE DETAILS & SCHEDULES**

Classroom contact hours classes	=	90 days
Examinations	=	20 days
On Job Training (OJT)	=	50 days
Admissions/ Orientation/ Sports/ Cultural activities	=	20 days
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Total no. of days	=	180 days/ Semester

### **As per credit structure:**

Total Classroom contact hours in each semester =  $18 \text{ Hrs/wk} \times 12 \text{ wks/ sem} = 216 \text{ Hrs/ sem}$

On Job Training (OJT) hours in each semester =  $30 \text{ Hrs/wk} \times 12 \text{ wks/ sem} = 360 \text{ Hrs/ sem}$   
(at a stretch for 50 days)

Total Contact hours per semester for each semesters =  $(216 + 360) \text{ Hrs/ sem} = 576 \text{ Hrs/ sem}$

So, Total Contact hours for both the semesters in an year =  $576 \text{ Hrs/ sem} \times 2 \text{ sems} = 1,152 \text{ HRS.}$

### **On Job Training (OJT) :**

Under 50 days nearly 45 days as working days.

Considering 8hrs/ day working hours in factory so total working hours covered in OJT in 45 days

$$= 45 \text{ days} \times 8 \text{ Hrs/day} = 360 \text{ Hours.}$$

# ONE YEAR VOCATIONAL SKILL DIPLOMA COURSE IN FOOTWEAR PRODUCTION

## COURSE - CURRICULUM

### SEMESTER-I

#### THEORY

#### 1. COMMUNICATION SKILLS IN ENGLISH

Credits: 03

**English Grammar:** Skills by using the following grammatical components in writing and verbal communication:

- Parts of speech
- Auxiliaries
- Articles
- Tenses
- Active and Passive voice
- Prepositions
- Question Tags and Short form answers
- Prefixes and Suffixes
- Subject-Verb Agreement
- Homonyms/Homophones/ Synonyms /Antonyms

**Comprehension:** Comprehend the given passage and able to answer the linked questions.

**Communicate an idea in series:** Logically connected sentences by describing an event such as objects, people, places, processes, expanding proverbs and also conducting activity such as group discussion, presentation, reporting and documentation.

**Letter writing:** Application for leave, Application for jobs.

**Note Writing:**

#### 2. HUMAN FOOT AND RAW MATERIALS & TOOLS USED IN FOOTWEAR

Credit: 03

**Basic structure of human foot:** Bones, Joints, Ligaments, Muscles, Arches of the foot - **Abnormalities of human foot:** Due to growth, due to weight bearing, due to movement – Baby, Infant, teenage - **Various foot abnormalities:** Trouble of the skin, troubles of the toe, troubles of arches - **Last:** Definition, Relationship between human foot & last, classification of last, various measurements in last - **Sizing system:** Introduction, various kinds of sizing systems, relation between different sizing systems - **Footwear materials:** Leather & non-leather materials, **Footwear accessories:** materials used in Insole, sole, threads, etc. - reinforcement materials - **Tools used in footwear:** for manual full shoe fabrication - Lasting pincers, hammers, tack nails, prickling awl, nail puller, etc., - tools used in finishing of footwear - Brushes, polishing tools, etc. – Emery belts, edge roughening tools, adhesive brushes, etc.

### 3. PATTERN MAKING & DESIGNING

Credit: 03

**Various footwear styles:** Basic styles of footwear - Derby, Oxford, Moccasin, Boot, Court Shoe, Sandals, Pantafola - basic components involved in each footwear styles - **Pattern making methodology** - functions of a footwear designer, various terminologies of last used in pattern designing - **Designing methodologies:** Designing of various upper material & bottoming soles, various design equipments & raw materials - **Mean-forme making methodology:** Masking of last, preparation of mean-forme, standards & stencils - **Preparation of various components:** insole pattern, socks, and stiffener.

### 4. OPERATIONS OF CUTTING

Credit: 03

**Clicking:** Introduction of clicking, types of clicking machines, clicking of leather - defects in leather, sorting - **Terminologies used in clicking of footwear:** Cutting of various parts of shoe upper & bottom parts from leather – roles & responsibilities of a good clicker, importance of light & humidity in clicking - **Consumption of leather:** Assessment of leather consumption in clicking, Russ and small method to calculate the consumption of leather.

## PRACTICAL

### 5. FREE HAND SKETCHING & CUTTING OPERATIONS ON FOOTWEAR DESIGNS

1. Various types of free hand sketching of lines, curves, shapes, etc.
2. Various types of shades and effects of French curves, perforated designs, etc.
3. Free hand sketching of seven basic styles of footwear: Derby, Oxford, Pantafola, Moccasin, Court shoe, Boots & Sandals.
4. Handling of knife for manual cutting, various directions for cutting: Horizontal, vertical, circular, etc.
5. Cutting of various components & designs based on the designs of footwear. Practice of cutting the footwear components.

### 6. STITCHING PRACTICE ON FOOTWEAR

1. Familiarizing with the various types of stitching machines & their maintenance: Flat bed, Post bed & cylindrical bed sewing machines.
2. Speed control practice on stitching machines.
3. Practice on stitching practice book (reference book with lines, curves, etc.)
4. Stitching practice on non-leather materials.
5. Understanding the quality of stitching in footwear.

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## SEMESTER-II

### THEORY

#### 1. OPERATIONS OF FOOTWEAR UPPER PRE-CLOSING

Credit: 03

**Pre-closing of Footwear:** Introduction of pre-closing, process of skiving, splitting, folding, marking, reinforcement attaching, etc. - **Skiving:** skiving of footwear components, skiving machine, types of skiving – raw edge, overlap, seam edge, folding, corner, etc. - **Splitting:** Splitting of leather, splitting machine, types of splitting – matrix, grain side and flesh side - **Folding/Binding:** Folding of leather, folding machine, types of folding – binding, gimping, etc - **Pre-closing quality:** Various processes involved in pre-closing to achieve a good quality shoe upper (Maintenance of work area)

#### 2. OPERATIONS OF FOOTWEAR UPPER CLOSING

Credit: 03

**Stitching/ Sewing:** Introduction of stitching/ sewing, sewing on leather, types of stitching, types of stitching machines - **Stitching machines:** Types of stitching machines, post bed sewing machine, cylindrical bed sewing machine and flat bed sewing machine - **Threads:** Threads, S & Z types of threads, classification of threads based on materials, quality parameters on threads, numbering of yarns & threads - **Stitching needle:** Introduction to sewing needle, basic construction of needle, classification of needles used in stitching - **Stitching quality:** Roles & responsibilities of an stitcher, quality parameters followed in stitching.

#### 3. OPERATIONS OF FOOTWEAR LASTING & BOTTOMING

Credit: 03

**Footwear Fabrication:** Introduction of full shoe making, lasting and bottoming operations - **Footwear lasting:** Lasting operations – toe lasting, seat lasting & side lasting - **Lasting quality:** Quality control measure in lasting operation – toe lasting, seat lasting & side lasting – **Bottom Making operations:** Process of heat setting, bottom roughing, application of adhesive and attachment of sole – **Quality requirements in Bottom Making:** Quality control measure in bottoming operation – heat setting, bottom roughing, application of adhesive and attachment of sole.

#### 4. OPERATIONS OF FOOTWEAR FINISHING

Credit: 03

**Footwear finishing:** Introduction of footwear finishing, cleaners, conditioners, fillers, various types of finishing based on the type of leather or materials - **Types of finishing:** Shoe dressing, wax finishing, bottom finishing - **Rectifications in footwear:** Repairing & renovation of shoe, handling of finishes/dressing - **Finishing ingredients:** Various ingredients for formulations of shoe finishing, various types of cleaners for various types of leathers - **Finishing machines:** Machines used for finishing process, importance of shoe finishing.

## **PRACTICAL**

### **5. PRE-CLOSING & CLOSING OF FOOTWEAR**

**Credit: 1.5**

1. Basic skills required in pre-closing operations: Handling of tools for various operations (hammering, folding, attaching, etc.).
2. Handling of skiving machine: Various adjustments of skiving machine & tools.
3. Practice of various types of skiving: Underlay, folding, Seam, Corner skiving, etc.
4. Practice of various pre-closing operations: Folding, binding, gimping, etc.
5. Understanding the quality of skiving required in footwear.

### **6. FULLSHOE MAKING & FINISHING OF FOOTWEAR**

**Credit: 1.5**

1. Familiarizing with the various machines used in full shoe making: Toe lasting machine, seat lasting machine & side lasting machine, sole pressing machine, heat reactivation machine, etc.
  2. Handling & control of finishing machines: Brushing machine, polishing machine, buffing machine, etc.
  3. Various techniques followed in finishing of footwear: Polishing, effect of shining, etc.
  4. Understanding by practice the importance of lasting & bottom making in footwear.
  5. Understanding by practice the importance of finishing operation required in footwear.
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