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Facilitator Guide



Sector
Apparel

Sub-Sector
Apparel, Made-Ups & Home Furnishing

Occupation
Pattern Making

Reference ID: AMH/Q1105, Version 4.0
NSQF level: 4

**Pattern
Master
— Apparel**

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This book is sponsored by Apparel, Made-Ups & Home Furnishing Sector Skill Council

Printed in India by AMHSSC

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Shri Narendra Modi
Prime Minister of India

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Skill development of the new generation is a national need and is the foundation of Aatmnirbhar Bharat

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Acknowledgements

Apparel, Made-ups & Home Furnishing Sector Skill Council would like to express its gratitude to all the individuals and institutions who contributed in different ways towards the preparation of this “Facilitator Guide”. Without their contribution it could not have been completed. Special thanks are extended to those who collaborated in the preparation of its different modules. Sincere appreciation is also extended to all who provided peer review for these modules.

The preparation of this facilitator guide would not have been possible without the Apparel Industry’s support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the industry.

This facilitator guide is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

About this Guide

This Facilitator Guide is designed for providing skill training and /or upgrading the knowledge level of the Participants to take up the job of an “Pattern Master - Apparel ” in the Management and Entrepreneurship Sector.

This Facilitator Guide is designed based on the Qualification Pack (QP) under the National Skill Qualification framework (NSQF) and it comprises of the following National Occupational Standards (NOS)/topics and additional topics.

1. AMH/N1105.Plan and Prepare for process of pattern making as per techpack received
2. AMH/N1106.Inspect and validate pattern
3. AMH/N1107.Maintain health, safety and security in the pattern making workplace with Gender & PwD Sensitization
4. AMH/N0310. Manage the workspace, operate tools, and handle machinery efficiently
5. AMH/N0311. Abide by industry, regulatory, and organizational mandates, while integrating environmentally friendly practices
6. DGT/VSQ/N0102:Employability Skills (60 hrs.)

Symbols Used



Ask



Explain



Elaborate



Notes



Objectives



Do



Demonstrate



Activity



Team Activity



Facilitation Notes



Practical



Say



Resources



Example



Summary



Role Play



Learning Outcomes



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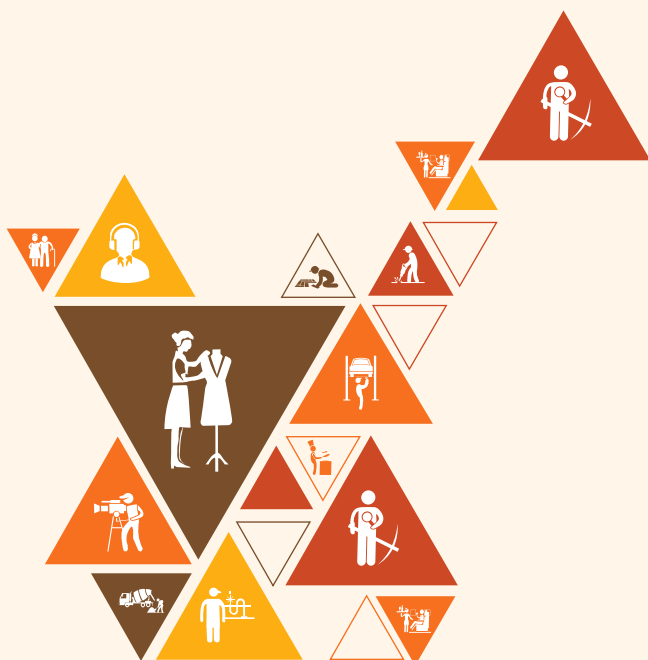


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1. Introduction

Unit 1.1 - Apparel Industry and the Role of a Pattern Master



AMH/N1105

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Describe the size and scope of the apparel industry.
2. Describe various employment opportunities for a 'Pattern Master – Apparel' in the apparel industry.
3. Explain roles and responsibilities of a Pattern Master – Apparel'.
4. Describe the apparel production process and the role that the 'Pattern Master – Apparel' plays in the process.

Unit 1.1: Apparel Industry and the Role of a Pattern Master

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the size and scope of the apparel industry.
2. Describe the roles and responsibilities of a pattern master.
3. Discuss career opportunities for a pattern master in the apparel sector.
4. Analyse the apparel production process and illustrate the pattern master's contribution.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet participants warmly and introduce yourself by sharing your experience in the apparel sector to create interest and build trust.
- Clearly explain the unit objectives and highlight what participants will achieve by the end of the session.
- Provide a quick overview of the session's agenda so learners are aware of the structure and key topics to be covered.
- Ensure every participant has their handbook, notepad, and pen ready before starting the session.
- Verify that all presentation slides are ready and the projector or screen setup is functioning properly.
- Encourage each participant to introduce themselves and share what they already know about the apparel industry.
- Inform the group that the session includes interactive discussions, real-life examples, and hands-on activities.
- Arrange classroom seating in a way that encourages visibility, communication, and collaboration for activities.
- Check that the internet connection is stable to support any reference to digital resources during the session.
- At the end of the session, summarise the main takeaways and invite participants to reflect on their learning and how it connects to career goals.

Say

- Welcome to today's session where we will explore the vast apparel industry and the important role of a pattern master within it.
- By the end of this session, you will understand how large and diverse the apparel sector is and the career potential it holds.

- We will learn how pattern masters contribute to creating clothing by interpreting designs into technical templates.
- A pattern master's job is technical yet creative, playing a crucial link between the designer's idea and the actual product.
- Let's also explore how you can grow in this profession and what pathways exist for pattern masters in the apparel industry.

Ask



- Can anyone share what they know about how garments are made in the industry today?
- What do you think a pattern master does once a designer finishes the sketch?
- Have you heard of any companies or roles where pattern masters are in high demand?
- Why do you think accuracy and attention to detail are essential in a pattern master's job?
- In your opinion, how important is the role of a pattern master in maintaining production timelines and quality?

Activity



1. **Name of the Activity:** The Perfect Fit Story
2. **Objective:** To help participants introduce themselves and connect with the core aspects of pattern making, precision, and garment construction through personal anecdotes.
3. **Type of activity:** Group activity
4. **Resources:** Participant handbook, notepad, pen, measuring tape (optional), small paper patterns or templates (optional), name tags, whiteboard, markers, overhead projector or large screen.
5. **Duration of the activity:** 15 minutes
6. **Instructions:**
 - Ask each participant to introduce themselves by stating their name, background, and any experience (or interest) they have related to pattern making, garment construction, or apparel production.
 - Then, ask them to share one personal story about a time they (or someone they know) experienced a "perfect fit" with a garment, or, conversely, a time a garment had a noticeably "bad fit".
 - Encourage participants to describe what made the fit perfect (e.g., comfort, style, how it made them feel) or what made it bad (e.g., too tight, too loose, awkward shape, specific detail).
 - If available, hand out small measuring tapes or paper pattern pieces and ask participants to briefly demonstrate or point to where the "perfect" or "imperfect" fit occurred on an imaginary garment.
 - After all introductions, summarise by connecting participants' stories to the crucial role of pattern masters in ensuring garment quality, comfort, and meeting design specifications, ultimately impacting customer satisfaction and brand reputation.
7. **Outcome:** Participants will feel more comfortable, appreciate the critical importance of accurate patterns, and begin thinking about their role in translating designs into well-fitting, high-quality garments.

Elaborate

- The apparel industry includes design, manufacturing, marketing, and distribution of garments across small units to global brands.
- Pattern masters create the technical blueprint that guides how a garment is cut and sewn, ensuring proper fit and design realisation.
- They interpret designers' sketches into practical patterns that can be efficiently produced with minimal fabric waste.
- Pattern masters work closely with sampling teams, cutting units, and tailors to ensure consistency across production.
- Their skill in drafting, grading, and adjusting patterns according to size charts and specifications is vital in mass production.
- They are often involved in product development, suggesting improvements to garment construction or fit based on their expertise.
- Knowledge of fabrics, garment construction, and technical drawing helps pattern masters make informed decisions.
- As the fashion industry moves faster, the demand for skilled pattern masters who can use both manual and digital tools has increased.
- Career opportunities for pattern masters span from boutique studios to large export houses, and even roles in fashion technology firms.
- A pattern master plays a key role in reducing production errors, saving costs, and maintaining garment quality, which is crucial for brand reputation.

Explain

- The apparel industry is a global sector that employs millions and serves consumer demand for various types of garments and fashion.
- A pattern master is responsible for turning a design into a production-ready pattern that ensures the garment fits and functions as intended.
- They use tools like pattern paper, measuring tapes, and drafting software to prepare and modify garment patterns.
- The role involves understanding body measurements, fabric properties, and production techniques to ensure accuracy and quality.
- Pattern masters work with cutting masters and sample tailors to test their patterns and make necessary adjustments.
- Their work starts once the design is approved and continues until the final pattern is ready for bulk production.
- They ensure that patterns are scalable into different sizes using grading techniques, which is essential in commercial apparel.
- The job requires strong mathematical, spatial, and analytical thinking along with creativity and fashion sense.
- With experience, pattern masters can advance into supervisory roles or specialise in niche areas like bridalwear, sportswear, or technical garments.
- Many pattern masters now use CAD (Computer-Aided Design) software, allowing them to create, modify, and store digital patterns more efficiently.

Demonstrate

Participants will use printed garment sketches and body measurement charts to practice identifying key measurements and develop a basic block pattern on pattern paper, helping them understand how design translates into production-ready templates.

Role Play

1. **Name of the Roleplay:** Garment Production Line Discussion
2. **Objective of the Roleplay:** To help participants understand how the pattern master collaborates with other roles in the apparel production process.
3. **Resources:** Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Assign participants roles such as designer, pattern master, fabric cutter, and quality checker in a mock apparel company.
 - Provide a sample garment sketch and ask the team to discuss the steps from design to pattern creation and cutting.
 - Each participant should speak about their responsibilities and how they communicate with others to maintain quality and efficiency.
 - Observe the group and provide feedback on how well they represent real workplace interactions and responsibilities.
 - End the role-play with a group discussion on the importance of teamwork in apparel production.
6. **Outcome:** Participants will understand the collaborative nature of apparel production and the central role of a pattern master.

Role Play

1. **Name of the Roleplay:** Pattern Master Career Counselling
2. **Objective of the Roleplay:** To help participants identify career opportunities and progression paths for pattern masters.
3. **Resources:** Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Pair participants into counsellor and trainee roles for a mock career guidance session.
 - The “trainee” will ask about growth options for pattern masters, industries they can work in, and required skills.
 - The “counsellor” will explain the career path, highlight skill-building opportunities, and suggest advanced roles.

- Switch roles after 10 minutes to ensure both participants get to practice.
 - Facilitate a debrief session to reflect on what they learned about career paths and how to plan for the future.
6. **Outcome:** Participants will become aware of professional growth options and necessary steps to build a successful career as a pattern master.

Notes for Facilitation

- Use visual examples of garments and patterns to make explanations relatable and easy to understand.
- Incorporate stories or real-life case studies from the apparel industry to maintain interest and inspire learners.
- Pause frequently to check for participant understanding and clarify any doubts they may have.
- Encourage participants to share their observations from any factory visits, internships, or personal experiences.
- Keep the session engaging with visual aids, interactive role-plays, and group work?
- Highlight how traditional techniques and modern digital tools are used together in the role of a pattern master.
- Adjust your explanation based on whether participants are familiar with garment making or are complete beginners.
- Provide hands-on opportunities with basic materials like pattern paper and measuring tools wherever possible.
- Reinforce each learning point with practical application to make the content more job-relevant.
- Summarise each key concept using simple language and link it back to the career goals of the participants.

Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. Clothing and textile production
2. b. Pattern master
3. c. Creating garment patterns
4. b. Garment factories
5. c. They ensure design accuracy and fit

Answer the following questions briefly.

1. Refer to Unit 1.1: Apparel Industry and the Role of a Pattern Master
Topic 1.1.1 Detailed Analysis of the Apparel Industry
2. Refer to Unit 1.1: Apparel Industry and the Role of a Pattern Master
Topic 1.1.2 Roles and Responsibilities of a Pattern Master in Apparel Manufacturing
3. Refer to Unit 1.1: Apparel Industry and the Role of a Pattern Master
Topic 1.1.3 Career Opportunities for a Pattern Master in the Apparel Sector
4. Refer to Unit 1.1: Apparel Industry and the Role of a Pattern Master
Topic 1.1.4 Analysis of the Apparel Production Process and the Pattern Master's Contribution
5. Refer to Unit 1.1: Apparel Industry and the Role of a Pattern Master
Topic 1.1.4 Analysis of the Apparel Production Process and the Pattern Master's Contribution



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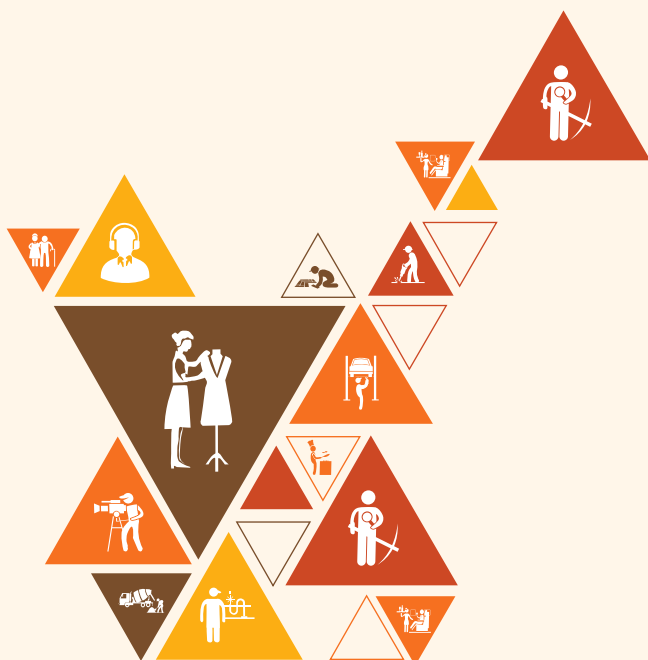
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2. Fabric Fundamentals

Unit 2.1 - Core Fashion and Fabric Expertise

Unit 2.2 - Technical and Operational Skills



AMH/N1105

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Identify the customer requirements in the context of the organisation's capability.
2. Describe different types of garments (tops, skirts, shirts, etc.), as well as made-up and home-furnishing articles.
3. Identify the different types of fabrics.
4. Identify the types of trims and accessories.
5. Explain the use of basic computer software like MS Excel, MS Word, CAD, etc.
6. Collect, comprehend and compile information from various sources, vis. designer/buyer/merchandiser.
7. Explain the properties of types of fabrics and their trade names.

Unit 2.1: Core Fashion and Fabric Expertise

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain customer requirements and organisational capabilities.
2. Describe various types of garments, made-ups, and home furnishing articles.
3. Illustrate different fabrics, their properties, and trade names.
4. List different types of trims and accessories.

Resources to be Used

Participant handbook, fabric swatch kit, garment samples, trims and accessories kit, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet the participants warmly and introduce yourself by sharing your background in fashion design and garment production.
- Clearly explain the unit's objectives and what the learners will achieve by the end of this session to align expectations.
- Provide a concise overview of the session agenda, including the topics to be covered and activities planned.
- Ensure all participants have access to their participant handbook and are equipped with notepads and pens for active note-taking.
- Check that the whiteboard and markers are functioning and the presentation slides are ready for display.
- Verify that the computer or laptop is connected to the projector and internet to support learning materials and videos.
- Invite each participant to briefly introduce themselves and mention their area of interest in fashion to build rapport.
- Inform participants that the session is interactive and involves activities, discussions, and group engagement to enhance learning.
- Arrange the seating to allow clear visibility of the screen and comfort during group activities and practical demonstrations.
- Close the session by summarising key points learned and encouraging participants to apply the knowledge in real-world scenarios.

Say

- Welcome to today's session on Core Fashion and Fabric Expertise which forms the foundation of the Pattern Master role in the apparel industry.
- By the end of this session you will be able to recognise customer demands and match them with appropriate fabrics and garment types.
- We will look closely at how different fabrics behave and explore their characteristics including their commercial names.
- Understanding garments, made-ups and home furnishing articles is key to working across the spectrum of the fashion industry.
- We will also explore the different trims and accessories used to enhance both utility and aesthetics of a garment.

Ask

- Can anyone share what comes to your mind when you hear customer requirement in terms of fabric or garment?
- What are the main differences between a made-up and a garment in terms of structure and use?
- Have you come across fabric trade names like Lycra or Rayon and can you identify what kind of fabric they refer to?
- Why do you think understanding trims and accessories is important for a Pattern Master?
- How do you think the type of fabric influences the design and construction of a garment?

Elaborate

- A Pattern Master must understand customer expectations and translate them into technical garment specifications considering fit and finish.
- Organisational capability includes the ability to work with specific machinery garment types and available workforce to meet demand.
- Garments are structured wearables like shirts and dresses while made-ups include items like aprons handkerchiefs and pillow covers.
- Home furnishing articles include bed linens curtains and upholstery which require knowledge of heavy-duty fabrics and finishes.
- Fabrics differ in weave texture weight and finish and each type suits specific garment needs like cotton for comfort and denim for durability.
- Trade names like Lycra Spandex or Viscose often indicate synthetic or blended fabrics with special properties such as elasticity or shine.
- Trims include elements like laces elastics and buttons that serve both functional and decorative purposes.
- Accessories range from zippers to hooks and even embellishments like sequins and beads that enhance design.

- The correct selection of fabric and trim ensures durability proper fit and customer satisfaction in end garments.
- Understanding the full spectrum of fabrics and trims allows Pattern Masters to suggest cost-effective and production-friendly options.

Explain

- Customer requirements often include comfort aesthetics durability and budget which must be clearly understood before pattern development.
- Organisational capabilities cover machinery types production capacity fabric sourcing and finishing units available in-house.
- Garments can be classified as upper wear lower wear and one-piece outfits each requiring different construction methods.
- Made-ups are simpler than garments and often focus on finishing and durability rather than fit such as towels and tablecloths.
- Home furnishing articles often require flame resistance colourfastness and strength due to household use and laundering.
- Fabric properties include stretchability absorbency drape and strength all crucial in deciding suitability for a specific garment.
- Natural fabrics include cotton silk and wool while synthetic ones include polyester nylon and their blends each with unique properties.
- Fabric trade names often help in quick commercial identification and communication across suppliers' manufacturers and buyers.
- Trims and accessories must be chosen based on garment type usage frequency and fabric compatibility to avoid damage or discomfort.
- Understanding the interaction between fabric trims and garment type ensures a final product that meets functional and aesthetic needs.

Demonstrate

Participants will use a fabric swatch booklet along with labelled garment samples to identify fabric types based on texture weave stretch and drape and classify garments and made-ups according to their use construction method and fabric compatibility enabling them to apply theoretical knowledge in a hands-on context.

Activity

1. **Name of the Activity:** Fabric and Garment Identification Challenge.
2. **Objective of the activity:** To help participants differentiate between fabric types garments made-ups and home furnishing articles through visual and tactile learning.
3. **Resources:** Participant handbook fabric swatch kit sample garments and made-ups notepad pen whiteboard presentation slides projector computer with internet.
4. **Time Duration:** 20 minutes

5. **Instructions:**

- Display different fabric swatches and garment samples on a central table or presentation slide
- Divide participants into small groups and assign each group a mix of fabric and garment samples
- Ask groups to classify the items into garments made-ups and home furnishings and match the fabrics to likely uses
- Let each group explain their classification and the reasons behind their choice to reinforce learning through discussion
- Summarise with a recap of fabric types and typical applications in different garment and home furnishing segments.

6. **Outcome:** Participants will develop hands-on understanding of fabrics their suitable applications and differences between product categories.

Activity

1. **Name of the Activity:** Trim and Accessory Selection Match

2. **Objective of the activity:** To enable participants to identify different trims and accessories and select them based on fabric and garment type.

3. **Resources:** Participant handbook trims and accessories sample board notepad pen whiteboard presentation slides projector computer with internet.

4. **Time Duration:** 20 minutes

5. **Instructions:**

- Display a variety of trim and accessory samples including zippers laces buttons and hooks.
- Assign garments made from different fabrics to groups and ask them to select suitable trims or accessories for each.
- Encourage groups to explain their choice considering factors like fabric weight garment type and intended use.
- Facilitate a discussion on common mismatches in trim selection and their effects on garment durability and aesthetics.
- Wrap up with key points on how trim choice can elevate garment performance and customer satisfaction.

6. **Outcome:** Participants will be able to choose suitable trims and accessories based on garment needs and fabric characteristics.

Notes for Facilitation

- Encourage tactile exploration by allowing participants to touch and feel the fabric samples during demonstrations and activities.
- Use large visuals and real-world examples from fashion brands to illustrate differences between garments made-ups and home furnishings.
- Keep terminology simple and define trade names clearly to avoid confusion for participants unfamiliar with technical jargon.
- Provide supportive feedback during activities to reinforce correct classification and material selection.
- Summarise every section of the session with practical examples and relate it to the participants' future role as a Pattern Master in apparel production.

Unit 2.2: Technical and Operational Skills

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain basic computer software applications, including MS Excel, MS Word, and CAD.
2. Describe methods for gathering information from designers, buyers, and merchandisers.
3. Illustrate effective techniques for compiling and presenting industry data.

Resources to be Used

Participant handbook, Notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Welcome the participants warmly and introduce yourself with a focus on your professional background in the apparel and pattern-making industry.
- Present the session objectives clearly so that participants understand what they will learn during this unit.
- Ensure participants have their participant handbook, notepad, and pen ready to take notes and actively participate.
- Test the computer and projector setup to ensure seamless delivery of presentations and software demonstrations.
- Arrange the presentation slides on the screen with step-by-step visuals of software use and communication examples.
- Ask participants to introduce themselves and briefly share their familiarity with computer software or industry collaboration.
- Explain that the session will include interactive software tasks and discussions for a more hands-on learning experience.
- Prepare the seating arrangement to allow all participants to view the screen and work collaboratively during group activities.
- Guide the flow of learning so participants have ample time to absorb technical concepts and ask clarifying questions.
- Close the session by summarising main concepts and linking them to how participants can apply them in their future roles.

Say

- Welcome to today's session where we will explore how computer tools and communication methods are essential in your role as a Pattern Master in the apparel industry.
- Today's unit focuses on practical computer skills and operational techniques that connect you to designers, buyers, and merchandisers.
- You will gain insights into how tools like Excel, Word, and CAD support your technical documentation and how to communicate requirements efficiently.
- We will also see how compiling and presenting data to different teams ensures smooth workflow in garment production.
- By the end of this session, you'll feel more confident in applying software tools and professional communication in real work settings.

Ask

- Have you ever used MS Excel or Word before, and how do you think it can help in your daily work as a Pattern Master?
- How would you gather garment-related information from a designer to ensure accurate pattern development?
- Why do you think clear communication with merchandisers and buyers is important in the apparel production process?
- Can you think of examples where improper data presentation may affect production timelines or decisions?
- What are the challenges you face while using computer applications or communicating technical data at work?

Elaborate

- Computer applications like MS Word help in writing reports and documenting design specifications clearly for team communication.
- MS Excel is useful for maintaining measurement charts, cost sheets, and order tracking tables which streamline production planning.
- CAD software is essential for digital pattern making and allows for accurate design adjustments and layout efficiency.
- Effective communication with designers involves understanding their creative inputs and translating them into production-ready formats.
- Buyers often share feedback or modifications, and timely communication helps in avoiding delays and misinterpretations.
- Merchandisers coordinate timelines and order quantities, so understanding how to extract and share relevant data is vital.
- Gathering information from multiple stakeholders requires active listening and asking the right questions for clarity.
- Compiling data involves selecting useful information and organising it in charts, graphs, or written summaries.

- Presenting industry data may include showing trend boards, sample evaluations, or technical sheets during meetings.
- Proficiency in software and data presentation not only improves daily productivity but also enhances your value as a Pattern Master.

Explain

- MS Word allows you to create detailed reports, meeting notes, and technical write-ups that are clear and printable.
- MS Excel helps in managing numeric data like size specs, costing, and production status in a structured format using formulas and tables.
- CAD systems like AutoCAD or Gerber help in designing accurate garment patterns digitally, reducing paper usage and human error.
- To collect inputs from designers, you can use structured questionnaires or sample discussion checklists during design meetings.
- Communicating with buyers may involve writing formal emails, sharing digital swatches, or submitting technical feedback reports.
- Merchandisers provide production calendars and order specifications that must be accurately documented for smooth workflow.
- When compiling data, choosing only relevant figures or insights helps prevent information overload and keeps the focus clear.
- Visual presentation of data through pie charts or bar graphs can make size breakups and order plans easy to understand.
- Preparing presentation decks using Word or PowerPoint allows you to showcase trends or sample progress to stakeholders.
- All these technical and operational skills contribute to the Pattern Master's ability to ensure the product moves efficiently from design to delivery.

Demonstrate

Participants will use a pre-printed sample tech pack template to simulate how to gather information from a designer, record it using MS Word and Excel, and create a pattern layout using CAD elements to reflect how digital documentation supports coordination in the apparel production process.

Role Play

1. **Name of the Roleplay:** Designer Interaction Simulation
2. **Objective of the Roleplay:** To practice gathering technical inputs from a designer using structured communication techniques.
3. **Resources:** Participant handbook, pen, Notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Assign one participant to play the designer and another as the Pattern Master.
 - Provide a design brief with specific garment details to the 'designer'.
 - The Pattern Master asks questions to extract sizing, fabric, and detailing information.
 - Record the discussion notes using MS Word on the laptop.
 - After 10 minutes, switch roles and repeat with a new design brief.
6. **Outcome:** Participants will learn to ask relevant questions and record design information systematically to support pattern development.

Role Play

1. **Name of the Roleplay:** Data Presentation Meeting
2. **Objective of the Roleplay:** To practice presenting compiled data to a merchandiser and responding to queries professionally.
3. **Resources:** Participant handbook, pen, Notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Participants form pairs where one plays the Pattern Master and the other the merchandiser.
 - Using a sample Excel sheet of order quantities, the Pattern Master presents a brief production update.
 - The merchandiser asks questions based on order accuracy or missing data.
 - The Pattern Master updates or clarifies entries and summarises key points.
 - After 10 minutes, switch roles with a different data set.
6. **Outcome:** Participants will understand how to prepare and deliver data presentations confidently while handling professional feedback.

Notes for Facilitation



- Use real sample data from the garment industry to demonstrate how each software is used practically in pattern making.
- Encourage participants to share their own experiences with software or communication issues to make discussions relatable.
- Break down each software demo into small steps with clear visuals to accommodate varying levels of computer knowledge.
- Offer help to participants struggling with computer use by pairing them with more confident learners during group work.
- Keep energy levels high by alternating between software tasks and role-plays to maintain engagement and focus.
- Summarise each tool's purpose after its demonstration to reinforce understanding and application.
- Display printed templates of CAD outputs and tech packs to help participants visualise the end-use of the software.
- Invite participants to ask questions freely and remind them that no question is too small when learning new tools.
- Highlight how these operational skills contribute directly to job performance and collaboration in the fashion production cycle.
- Encourage note-taking and reflection after each activity to help participants internalise new concepts.

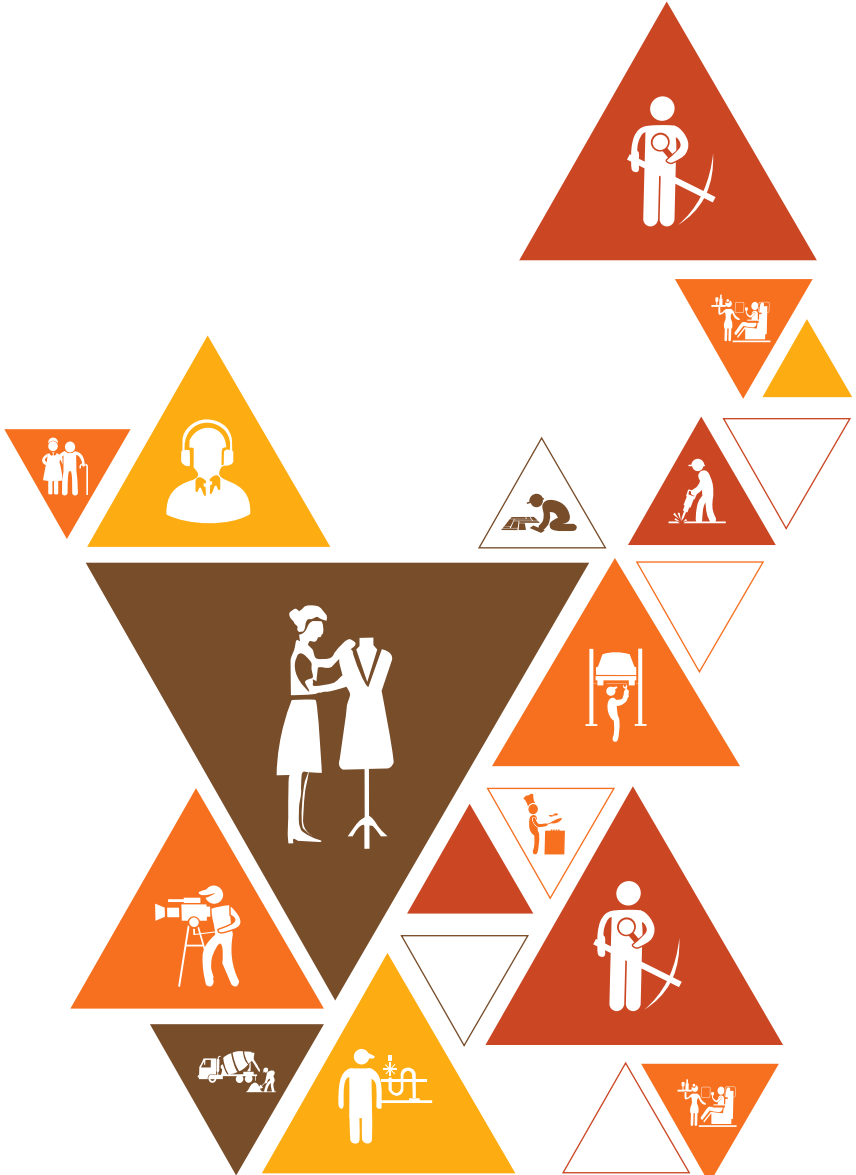
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. b. Customer requirements
2. b. Curtains
3. c. Data handling and analysis
4. c. AutoCAD
5. c. Decoration and functionality

Answer the following questions briefly.

1. Refer to Unit 2.1: Core Fashion and Fabric Expertise
Topic 2.1.1 Understanding Customer Requirements and Organisational Capabilities
2. Refer to Unit 2.1: Core Fashion and Fabric Expertise
Topic 2.1.2 Types of Garments, Made-Ups, and Home Furnishing Articles
3. Refer to Unit 2.1: Core Fashion and Fabric Expertise
Topic 2.1.3 Different Fabrics, Their Properties, and Trade Names
4. Refer to Unit 2.1: Core Fashion and Fabric Expertise
Topic 2.1.4: Types of Trims and Accessories in Apparel Manufacturing
5. Refer to Unit 2.2: Technical and Operational Skills
Topic 2.2.1 Basic Computer Software Applications: MS Excel, MS Word, and CAD





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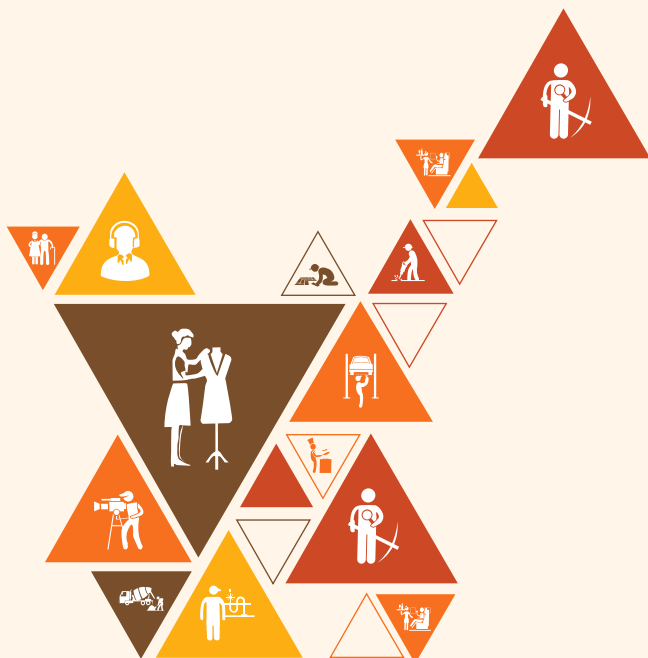


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3. Interpreting the Tech Pack

Unit 3.1 - Insights into Techpack Interpretation



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Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Clarify information in the Techpack from concerned designer and merchandiser in case of doubts.
2. Incorporate and accommodate review inputs alongside the Techpack.
3. Explain the notations and symbols used in the Techpack.
4. Explain how to interpret information contained in Techpack.

Unit 3.1: Insights into Techpack Interpretation

Unit Objectives

By the end of this unit, the participants will be able to:

1. Describe collaboration strategies with designers and merchandisers for clarity.
2. Integrate review inputs with tech pack specifications.
3. Explain the notations and symbols used in the Techpack.
4. Elaborate how to interpret the information contained in Techpack.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Greet the participants and introduce yourself while sharing your industry experience and setting a collaborative learning atmosphere.
- Clearly explain the objectives of the unit and provide an overview of the agenda so participants are aware of the topics that will be covered.
- Check that all participants have access to their handbook and materials such as a notepad and pen for effective engagement and note-taking.
- Test the presentation equipment including laptop, projector, and whiteboard to ensure all visual aids and tools are functioning.
- Display the presentation slides related to Techpack interpretation and confirm visibility for everyone in the room.
- Invite participants to introduce themselves and briefly share their familiarity with Techpacks or garment documentation.
- Inform the class that the session will be interactive with group discussions, practice examples, and reflection activities.
- Arrange the seating in a semi-circle or cluster format to support clear screen visibility and active group participation.
- Maintain an appropriate pace during content delivery to allow participants to process, reflect, and participate in the session.
- Conclude the session by summarising the key concepts and encouraging participants to consider how tech pack clarity improves their work quality.

Say

- Welcome to today's session on understanding and interpreting Techpacks in apparel manufacturing, a key responsibility for every Pattern Master.
- In this session, you will learn how to work closely with designers and merchandisers and accurately follow instructions within a Techpack.
- We will cover how to read the details, notations, and technical terms in a Techpack and how to integrate them into your pattern development tasks.
- By the end, you'll be confident in navigating a Techpack, spotting missing or unclear information, and knowing how to address such gaps through collaboration.
- Let's begin our journey toward mastering Techpack interpretation to ensure product quality, consistency, and teamwork in the apparel development cycle.

Ask

- What kind of information have you commonly seen in a Techpack in your previous work or training experience?
- Why do you think clear communication with designers and merchandisers is essential when interpreting a Techpack?
- What challenges have you faced or expect to face when trying to understand technical notations or construction details in a Techpack?
- Can anyone share an example where incorrect interpretation of a Techpack caused production issues or delays?
- How can reviewing and confirming unclear areas in a Techpack improve the overall production process?

Elaborate

- A Techpack acts as a blueprint for apparel production and contains all the technical details required for accurate garment development.
- Each section of a Techpack such as measurement specs, stitching instructions, fabric codes, and labels must be clearly understood by the Pattern Master.
- Symbols and notations used in Techpacks may vary between brands or clients, making it essential to understand common industry practices and verify when in doubt.
- Collaboration with designers is critical to clarify unclear design elements, especially when sketches do not match specifications.
- The Pattern Master must match the technical drawings and garment descriptions with actual construction techniques to ensure feasibility.
- Techpack reviews must involve thorough checks of all measurements, tolerances, and construction details to prevent errors in sampling or production.
- Understanding the intent behind design decisions helps in interpreting ambiguous instructions and suggesting better construction methods.
- A well-interpreted Techpack supports efficiency by reducing trial-and-error, saving time and fabric waste in the development process.

- Timely communication and written clarification requests are essential when discrepancies arise within the Techpack documentation.
- Ongoing collaboration and review loops ensure that changes in the Techpack are captured and updated accurately in the pattern or sample.

Explain



- A Techpack is a detailed document that communicates the designer's vision and technical requirements for garment production.
- It typically includes components such as technical sketches, measurement charts, construction notes, material lists, and label placement guidelines.
- The Pattern Master's role is to interpret the Techpack accurately and translate the information into a workable pattern and production sample.
- Misinterpretation of notations like seam allowance, grainline direction, or fabric types can lead to production defects or sample rejection.
- Collaborating with the merchandising team helps in confirming fabric availability and cost constraints as outlined in the Techpack.
- Symbols like stitching notations or fold lines must be cross-referenced with the garment's construction method to ensure consistency.
- Each measurement in the Techpack includes tolerances that allow for minor variations, and these must be carefully followed during pattern development.
- Reading and understanding BOM (Bill of Materials) sections ensures that the right materials and trims are used as per the designer's intent.
- Revisions in a Techpack should be documented and versioned correctly so that only the most updated information is used in production.
- A complete understanding of a Techpack empowers the Pattern Master to foresee challenges and proactively communicate with the design team.

Demonstrate



Participants will use a sample Techpack document to simulate the interpretation of technical sketches, BOM entries, and measurement charts to identify potential issues and formulate questions to clarify missing or inconsistent information with a mock design team.

Activity



1. **Name of the Activity:** Techpack Deep Dive and Review
2. **Objective of the Activity:** To help participants understand and critically review the components of a Techpack used in apparel development.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes

5. Instructions:

- Distribute a printed sample Techpack to all participants.
- Guide them to identify and underline key sections such as measurement specs, material codes, and construction notes.
- Ask participants to mark any unclear or ambiguous parts and write questions they would ask a designer for clarification.
- Form small groups to discuss findings and share how they would approach these queries in a real work environment.
- Summarise the activity with a discussion on best practices for reviewing and interpreting Techpack documents.

6. **Outcome:** Participants will gain the ability to identify gaps in Techpack information and understand the importance of verification and collaboration.

Activity

1. **Name of the Activity:** Techpack Symbol Matching

2. **Objective of the Activity:** To improve familiarity with technical symbols, notations, and construction markings used in Techpacks.

3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

4. **Time Duration:** 20 minutes

5. Instructions:

- Display a chart of common Techpack symbols such as stitch types, seam directions, fold notations, and grainlines.
- Provide participants with handouts containing sketches with missing or mismatched symbols.
- Ask them to match correct symbols to each sketch and justify their selection based on construction logic.
- Discuss how misunderstanding symbols could impact garment construction and how to avoid such errors.
- Wrap up by creating a mini-reference guide as a takeaway for symbol recognition.

6. **Outcome:** Participants will enhance their ability to recognise and correctly interpret symbols, improving accuracy in pattern making and garment development.

Notes for Facilitation

- Encourage open sharing and include real Techpack examples from the industry to build relevance and interest.
- Break down each section of a Techpack slowly and use visual aids for better understanding of technical details.
- Ask probing questions during activities to ensure that participants are thinking critically about how they interpret information.
- Use simplified sketches and mock symbols to help beginners relate better and gradually build confidence.
- Ensure that each group gets time to present their interpretations and receive feedback, reinforcing the learning outcomes.

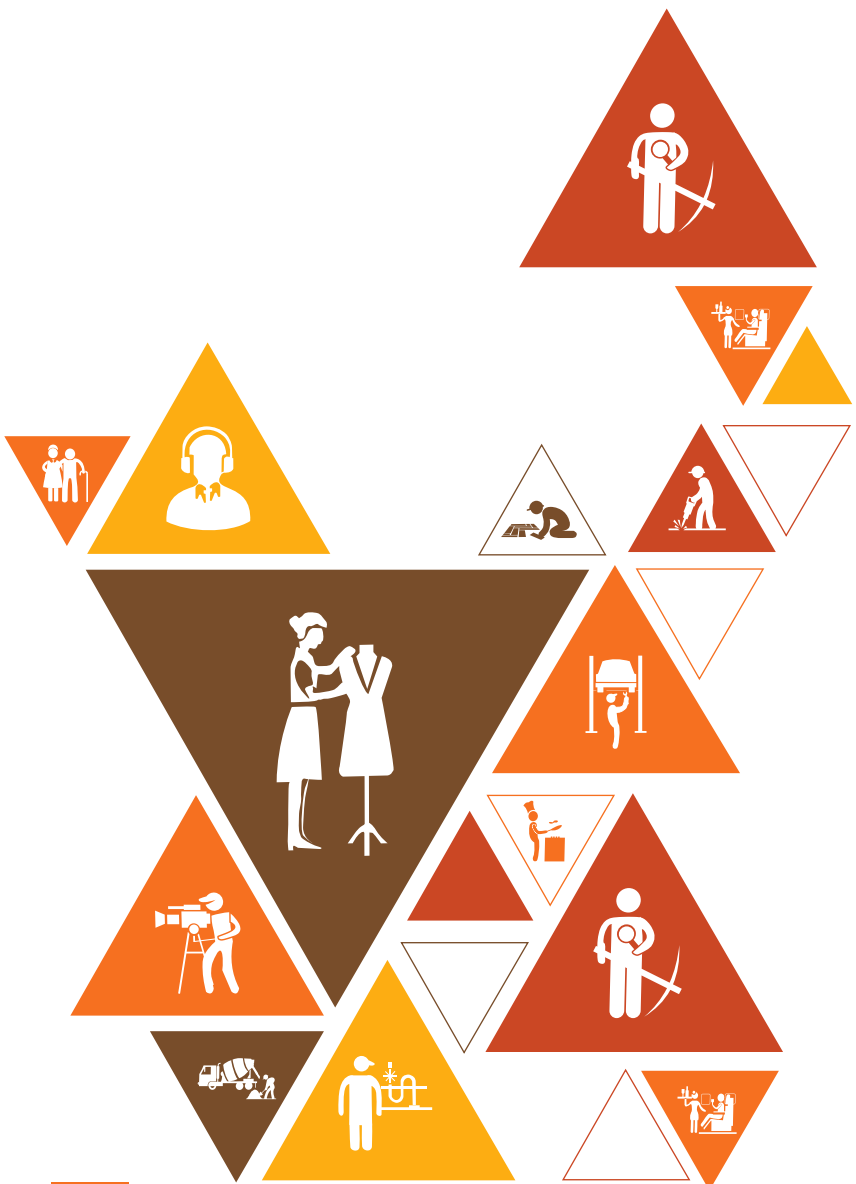
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. b. To ensure clarity in product development
2. c. To maintain consistency and accuracy
3. b. Understanding manufacturing instructions
4. c. Product specifications and diagrams
5. c. It ensures everyone understands the product details clearly

Answer the following questions briefly.

1. Refer to Unit 3.1: Insights into Tech Pack Interpretation
Topic 3.1.1 Collaboration Strategies with Designers and Merchandisers for Clarity
2. Refer to Unit 3.1: Insights into Tech Pack Interpretation
Topic 3.1.2 Review Inputs with Tech Pack Specifications
3. Refer to Unit 3.1: Insights into Tech Pack Interpretation
Topic 3.1.3 Notations and Symbols Used in the Techpack
4. Refer to Unit 3.1: Insights into Tech Pack Interpretation
Topic 3.1.4 Interpreting Information Contained in Techpack
5. Refer to Unit 3.1: Insights into Tech Pack Interpretation
Topic 3.1.4 Interpreting Information Contained in Techpack





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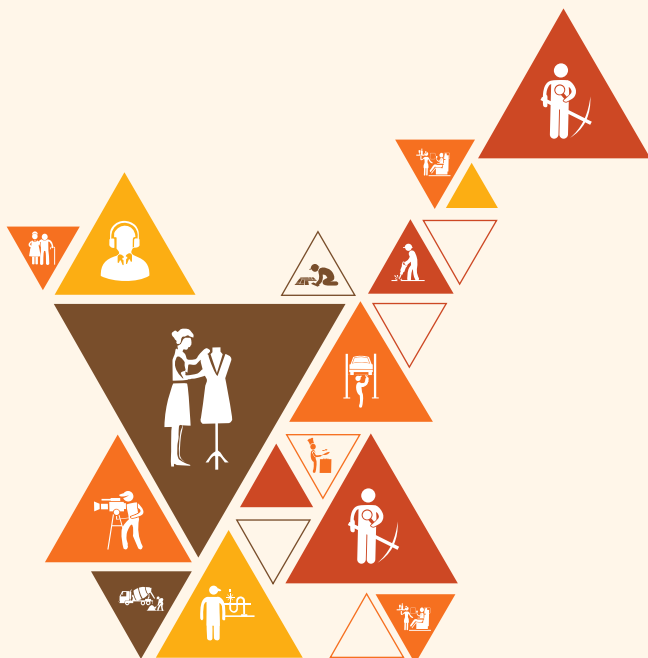
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4. Prepare for Making Patterns as per Techpack

Unit 4.1 - Tools, Techniques, and Fabric Handling

Unit 4.2 - Pattern and Grading Essentials



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Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain how cutting and marking tools and equipment are handled.
2. Demonstrate accurate methods for taking measurements.
3. Describe various sewing operations and techniques.
4. Illustrate different pattern-making methods, including flat pattern, draping, drafting, and reverse engineering.
5. Identify and describe types of grain lines on fabric and patterns.
6. List and explain the functions of different cutting equipment.
7. Discuss the use of grading devices according to standard-size charts.
8. Explain the methods and principles of grading.
9. Assess the relationship between grain lines, patterns, and fabric alignment.

Unit 4.1: Tools, Techniques, and Fabric Handling

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the functions of cutting, marking, and sewing tools and equipment.
2. Describe methods for taking and recording accurate measurements.
3. Illustrate key sewing techniques and operations.
4. Analyse various pattern-making methods, including flat, draping, drafting, and reverse engineering.
5. Identify and apply grain lines correctly on fabric and patterns.
6. Assess the types and functions of cutting equipment used in garment production.

Resources to be Used

Participant handbook, fabric swatches, measurement tape, chalk, sewing kit, sample patterns, scissors, marker pens, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet the participants warmly and introduce yourself with your background in garment construction and pattern making
- State the unit's objectives clearly and explain what participants will learn and practice in this session
- Give an overview of the session structure including demonstration, discussion, and role-play activities
- Ensure every participant has access to fabric swatches, sample patterns, measuring tape, and cutting tools
- Verify the functioning of projector or screen and all learning materials including chalk, markers, and sample garments
- Ask each participant to introduce themselves with their experience or interest in apparel or pattern making
- Encourage a friendly and open atmosphere for discussion and practice by stating the session will be interactive and hands-on
- Organise seating to allow clear view of the demonstration space and comfortable interaction for small group tasks
- Pace the session to match participants' understanding and allow hands-on time for all practical demonstrations
- Summarise key techniques and tools discussed at the end of the session and link them to their real-world application in garment construction.

Say

- Welcome to today's session on tools, techniques, and fabric handling which are the foundation of accurate and professional pattern making
- By the end of this session, you will understand how to choose the right tools and apply basic techniques to ensure precision in every step of garment creation
- We will explore the tools for cutting, marking, and sewing and learn how to handle fabric with care and accuracy for perfect results
- Understanding how to work with fabric and tools effectively is key to becoming a skilled pattern master in the apparel industry
- Let's look forward to developing practical skills today that will support you in designing and constructing garments that are professionally finished.

Ask

- What are the essential tools you currently use for cutting or marking fabric and what challenges do you face with them.
- Can someone describe why the grain line is important and what happens if it is not followed correctly?
- Have you tried different pattern-making techniques like draping or flat drafting and how did your results vary.
- Why do you think accurate body measurements are so critical before starting the cutting process
- What precautions should you take while handling delicate fabrics during cutting and sewing?

Elaborate

- Cutting tools like fabric shears and rotary cutters must be sharp and well-maintained to ensure clean and accurate fabric cuts.
- Marking tools such as tailor's chalk, disappearing ink pens, and tracing wheels are selected based on the type of fabric and the marking needed.
- Measuring tools like measuring tapes, rulers, and L-squares help ensure the pattern is drafted accurately according to body measurements.
- Pattern making can be approached using flat pattern drafting for structured garments or draping for more fluid and creative designs.
- Reverse engineering is used to replicate existing garments by tracing their parts into flat patterns for reuse or modification.
- Grain lines are indicated on patterns to ensure pieces are aligned with the fabric weave which ensures the correct drape and structure of garments.
- Fabric must be prewashed, ironed, and laid flat before marking to avoid shrinkage or distortion during construction.
- Sewing techniques such as stay stitching, edge finishing, and seam allowances affect the final look and durability of the garment.
- Understanding the function of each tool helps avoid common mistakes like inaccurate markings or frayed fabric edges.
- Hands-on practice with various tools and techniques helps build confidence in producing accurate patterns ready for construction.

Explain

- Cutting tools are designed to make precise cuts without damaging fabric edges and choosing the right cutter affects the final fit of the garment.
- Marking tools help indicate construction points such as darts, notches, and seam lines and must be visible but removable after sewing.
- Measurements must be taken with care across key body points like bust, waist, and hips and recorded correctly to ensure pattern fit.
- Flat pattern drafting uses standard blocks which are altered to match the design and measurements for customised garment creation.
- Draping is performed by pinning fabric on a dress form to shape the garment directly and create organic styles and silhouettes.
- Drafting involves creating patterns from scratch using body measurements and basic geometrical shapes and calculations.
- Grain lines ensure fabric stability and drape and ignoring them can lead to twisted seams and misaligned patterns.
- Sewing tools such as needles, threads, seam rippers, and thimbles must be used with understanding of fabric thickness and construction type.
- Reverse engineering involves measuring and tracing existing garments to learn construction and recreate their pattern shapes.
- Each sewing operation such as basting, hemming, or topstitching plays a role in strengthening and finishing the garment attractively.

Demonstrate

Participants will use a set of fabric swatches with printed grain lines and sample patterns to practice identifying grain direction and aligning patterns correctly for cutting to ensure accurate fabric layout and understanding of grain line alignment in practical application.

Role Play

1. **Name of the Roleplay:** Measurement and Pattern Consultation
2. **Objective of the Roleplay:** To help participants practice taking accurate body measurements and deciding the right pattern-making method based on client needs.
3. **Resources:** Participant handbook, measuring tape, sample measurement charts, dress form, chalk, notepad, pen, whiteboard, markers, projector.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Ask participants to pair up and role-play a client and pattern master taking and recording body measurements using the measuring tape and chart.
 - Each pair will discuss which pattern-making method would best suit the client's garment needs and justify their choice.
 - One person will act as the client describing their garment need while the other plays the pattern master recommending the right method.

- Switch roles to allow each participant to experience both measurement taking and pattern analysis.
 - Facilitate a discussion after the activity on challenges faced during measurements and importance of communication in accurate garment making.
6. **Outcome:** Participants will develop confidence in taking proper measurements and selecting appropriate pattern-making techniques based on client requirements.

Role Play

1. **Name of the Roleplay:** Tool Talk – Explaining Your Toolkit
2. **Objective of the Roleplay:** To enhance understanding and communication skills around the use and purpose of various sewing and cutting tools.
3. **Resources:** Participant handbook, toolkits with scissors, chalk, rotary cutter, needles, pins, seam ripper, measuring tape, presentation slides, markers.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Form small groups and assign each group a specific toolkit with 3-4 tools used in pattern making and garment construction.
 - Each group will take turns presenting to the class what each tool is used for and demonstrate it with fabric or paper.
 - Encourage each member to participate by sharing personal tips or precautions when using that tool.
 - Facilitate feedback and clarification to ensure all participants understand the function of each tool correctly.
 - Summarise by creating a reference list of essential tools with images and uses.
6. **Outcome:** Participants will gain practical understanding of tool functions and enhance their ability to explain their use in professional settings.

Notes for Facilitation

- Maintain high engagement by asking participants to demonstrate techniques to peers and explain their approach.
- Use real fabric and sample garments for better visualisation and hands-on relevance to industry standards.
- Incorporate short recaps after each sub-topic to reinforce learning and encourage peer sharing of best practices.
- Adapt explanations using local language terms or examples if participants are from non-English speaking backgrounds.
- Provide opportunities for questions and practice at each step to help participants build both skills and confidence in using tools and techniques.

Unit 4.2: Pattern and Grading Essentials

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the types of patterns and their applications.
2. Describe grading devices and standard-size charts.
3. Illustrate techniques and methods of grading.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, measuring tape, rulers, grading tools, sample patterns, overhead projector or large screen, computer/laptop.

Do

- Greet the participants with warmth and enthusiasm and introduce yourself by sharing your background and experience in pattern making and grading.
- Clearly state the objectives of the unit and what the learners can expect to achieve by the end of the session.
- Make sure all participants have access to their handbooks, notepads, and pens to enable them to engage actively and take notes.
- Ensure all technical tools such as grading rulers, measuring tapes, and sample patterns are available and organised before starting.
- Check that the projector or large screen is functional and that the presentation slides are ready for visual aid.
- Encourage participants to briefly introduce themselves and share their experience with pattern making if any.
- Explain that the session will be interactive with demonstrations, practical activities, and open discussions.
- Organise the seating arrangement in a way that supports collaborative work and clear viewing of the demonstration area.
- Pace the delivery in a structured manner that balances theoretical knowledge with hands-on demonstrations for better learning.
- Conclude the session with a quick recap and encourage participants to relate the grading skills to real apparel production settings.

Say



- Welcome to this session on Pattern and Grading Essentials which will introduce you to the foundation of designing and adjusting garment patterns.
- By the end of today's session, you will be confident in identifying various types of patterns and understand how grading tools and size charts work.
- We will explore what basic blocks are, how they serve as templates, and the role grading plays in offering different sizes from a single pattern.
- Understanding how to use grading tools and charts accurately is key to creating consistent, well-fitted garments in a production setting.
- I am looking forward to guiding you through both theory and practical exercises so you can see how essential pattern grading is in the apparel industry.

Ask



- Can anyone share what types of patterns you have worked with or seen being used in garment construction?
- What do you think is the purpose of grading a pattern and how does it benefit apparel production?
- Have you ever used a size chart or grading tool before and what challenges did you face?
- Why is it important to understand standard size charts when working with commercial patterns?
- What methods do you think are most accurate for grading patterns and why?

Elaborate



- There are different types of patterns such as basic blocks, working patterns, and production patterns, each serving specific functions in the garment-making process.
- Basic patterns or blocks are standard templates that can be modified to design multiple garments, ensuring uniformity and saving design time.
- Production patterns are finalised patterns used for cutting fabric in manufacturing and usually include seam allowances, grain lines, and notches.
- Grading is the process of increasing or decreasing the size of a pattern to fit different body sizes while maintaining the shape and proportions of the original design.
- Manual grading uses tools like rulers and measurement charts, while digital grading involves software for precise and scalable results.
- Grading is essential in mass production to maintain sizing consistency and reduce fabric waste due to inaccuracies.
- Size charts are developed based on anthropometric data and are critical in ensuring that the garment fits the target customer group accurately.
- Standard size charts vary between regions and brands, so understanding how to interpret them is essential for proper grading.
- The basic methods of grading include the cut and spread method, pattern shifting, and computer-aided grading, each with its advantages.
- Accurate grading saves time in production, improves customer satisfaction, and ensures uniformity across the final apparel products.

Explain

- Patterns are templates used to cut fabric into the desired garment shape and are the foundation of all apparel design and manufacturing processes.
- Basic blocks are simple pattern templates that represent the core fit of a garment without styling details and are used as starting points for design.
- Working patterns include styling features and are used during the development stage before the final production pattern is created.
- Grading refers to the process of creating different sizes of a pattern, such as small, medium, and large, from a single base size.
- Manual grading involves using specialised tools to alter pattern dimensions while keeping proportions intact to ensure a consistent fit across sizes.
- The most commonly used grading tools are grading rulers, square scales, and pattern notches which assist in marking and measuring the necessary shifts.
- A size chart provides a reference for body measurements and guides how much each point of a pattern should be increased or decreased.
- Pattern grading must consider body proportions and design aesthetics to maintain the original look of the garment in all sizes.
- Some garments require specific grading rules, such as extra ease in plus-size patterns or adjustments for children's wear.
- The use of standard grading techniques ensures compatibility with production processes and minimises errors in final garments.

Demonstrate

Participants will use sample bodice block patterns and grading rulers to perform manual grading by shifting and redrawing the pattern outlines into one larger and one smaller size while using a reference size chart to guide accurate measurements and spacing for each step in the grading process.

Activity

1. **Name of the Activity:** Pattern Type Identification and Use
2. **Objective of the Activity:** To help participants identify and differentiate between basic, working, and production patterns and understand their specific applications in apparel making.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, sample pattern sets, overhead projector or large screen, computer/laptop.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Display different physical or digital pattern types such as basic blocks, working samples, and finished production patterns on the screen or table.
 - Ask participants to work in small groups to identify each type and discuss what features make them unique.
 - Encourage groups to share how each pattern type is used at various stages of garment development.

- Guide a group discussion on the importance of using the correct pattern type in designing, sampling, and production.
 - Conclude by highlighting how understanding each pattern type contributes to better workflow and quality in garment making.
6. **Outcome:** Participants will be able to distinguish pattern types and apply their usage appropriately in apparel production.

Activity

1. **Name of the Activity:** Grading Line Mapping
2. **Objective of the Activity:** To enable participants to practice grading using standard size charts and learn to draw grading lines accurately on paper patterns.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, measuring tape, rulers, sample size charts, grading rulers, sample patterns.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Demonstrate how to use a size chart to determine grading increments for various body measurements
 - Distribute sample bodice block patterns and tools to participants in pairs or small groups
 - Instruct participants to grade one size up and one size down from the base pattern using manual shifting techniques
 - Supervise the group's progress and provide feedback on accuracy and alignment of grading lines
 - Conclude the activity with a quick quiz or discussion to reinforce the importance of measurement precision in grading.
6. **Outcome:** Participants will gain hands-on experience in pattern grading using tools and charts and understand how minor inaccuracies can affect garment fit.

Notes for Facilitation



- Encourage hands-on practice and allow time for each participant to experiment with the grading tools and measurement charts.
- Use real examples of apparel to demonstrate how graded patterns translate into finished garments of different sizes.
- Facilitate learning by circulating during activities to offer guidance and correct common errors in real-time.
- Encourage group discussions and sharing of experiences to build peer learning and confidence.
- Keep the session lively by including drawing exercises, quizzes, or short demonstrations to break theoretical explanations.
- Summarise each topic with visual examples and simple diagrams to support learners with limited technical backgrounds.
- Provide extra support for participants struggling with measurements by pairing them with more confident peers.
- Reinforce learning with short questions between segments to check understanding and clarify doubts.
- Maintain a practical pace, giving ample time for the use of physical tools without rushing the manual steps.
- Wrap up by linking today's learning to upcoming sessions on pattern adaptation, design customisation, or garment fitting.

Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. d. To shape fabric pieces
2. b. Draping
3. c. Adjusting pattern sizes
4. c. Tailor's chalk
5. c. To ensure fit and drape

Answer the following questions briefly.

1. Refer to Unit 4.1: Tools, Techniques, and Fabric Handling
Topic 4.1.1 Functions of Cutting, Marking, and Sewing Tools and Equipment
2. Refer to Unit 4.1: Tools, Techniques, and Fabric Handling
Topic 4.1.2 Methods for Taking and Recording Accurate Measurements
3. Refer to Unit 4.1: Tools, Techniques, and Fabric Handling
Topic 4.1.5 Grain Lines Correctly on Fabric and Patterns
4. Refer to Unit 4.2: Maintenance and Waste Management
Topic 4.1.4 Various Pattern-Making Methods
5. Refer to Unit 4.2: Pattern and Grading Essentials
Topic 4.2.2 Grading Devices and Standard Size Charts



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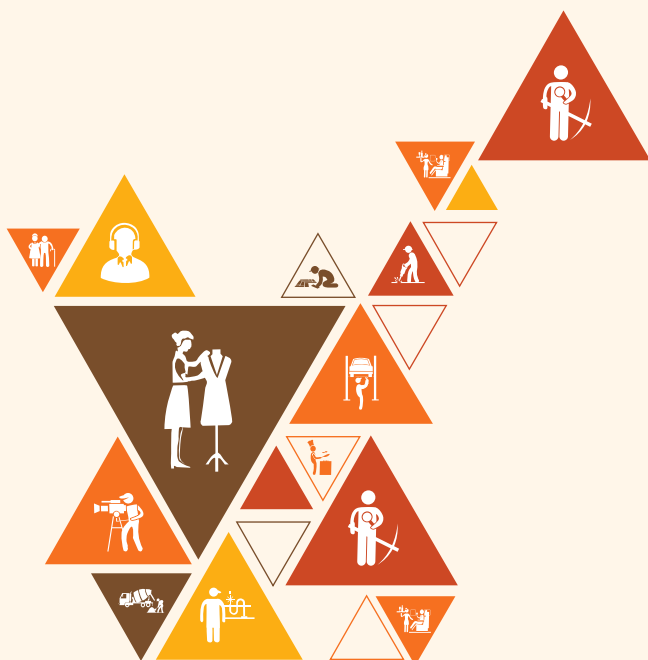
सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



5. Develop Pattern as per Tech Pack

Unit 5.1 - Fundamentals of Pattern Creation

Unit 5.2 - Advanced Techniques and Bulk Production



AMH/N1105

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain how cutting and marking tools and equipment are handled.
2. Demonstrate accurate methods for taking measurements.
3. Describe various sewing operations and techniques.
4. Illustrate different pattern-making methods, including flat pattern, draping, drafting, and reverse engineering.
5. Identify and describe types of grain lines on fabric and patterns.
6. List and explain the functions of different cutting equipment.
7. Discuss the use of grading devices according to standard-size charts.
8. Explain the methods and principles of grading.
9. Assess the relationship between grain lines, patterns, and fabric alignment.

Unit 5.1: Fundamentals of Pattern Creation

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the process of laying the pattern sheet on the table.
2. Illustrate how to mark details on patterns, including notches, grain lines, sizes, and piece numbers.
3. Describe the method of adding seam allowance to patterns.
4. Describe paper patterns for components such as pockets, buttonholes, and pleats.
5. Analyse pattern creation specifications using tech packs and draping techniques.
6. Assess size charts for garments, made-ups, and home furnishings.

Resources to be Used

Participant handbook, notepad, pen, ruler, pattern paper, measuring tape, tracing wheel, pattern notcher, whiteboard, markers, overhead projector or large screen, computer/laptop.

Do

- Greet the participants warmly and introduce yourself by sharing your background in pattern making and tailoring.
- Clearly state the learning objectives and briefly explain what the participants will learn in this session.
- Confirm that all participants have access to the necessary materials such as their handbooks, pattern paper, rulers, and tracing tools.
- Ensure the whiteboard, markers, laptop, and projector are working properly before beginning the session.
- Display the unit title and agenda visually using presentation slides or on the whiteboard for reference throughout the session.
- Invite each participant to introduce themselves and share their interest or experience in garment construction or pattern making.
- Inform participants that the session includes live demonstrations, hands-on practice, and discussions for better understanding.
- Organise the seating arrangement so that all participants can clearly view the demonstration table and screen.
- Walk through each section of the unit slowly and clearly, ensuring all participants can follow the steps and ask questions.
- Conclude by summarising the key concepts and asking participants to share one takeaway from the session that they found most useful.

Say

- Welcome to this session on the Fundamentals of Pattern Creation, where we will learn how to create accurate and detailed patterns for garments.
- By the end of this session, you will be able to confidently lay out pattern sheets, mark essential details, and add seam allowances.
- We will also look at how to make component patterns like those for pockets and pleats, and understand their purpose in a final garment.
- You will learn how to read a tech pack and understand its specifications for drafting a pattern accurately.
- We'll also study different size charts to ensure patterns are tailored correctly for garments, made-ups, and home furnishings.

Ask

- Can anyone explain why laying a pattern sheet properly on the table is important before beginning the drafting process?
- What are some of the common pattern markings that you already know or have seen used before?
- Why do you think adding the correct seam allowance is critical in pattern making?
- How do component patterns like pockets or pleats affect the overall construction of a garment?
- Have you ever referred to a tech pack or size chart before? If yes, how did it help you in your work?

Elaborate

- Laying the pattern sheet flat on the table ensures accurate marking and prevents distortion of measurements or lines.
- Pattern details such as notches, grain lines, and piece numbers help ensure proper cutting and garment assembly during stitching.
- Seam allowance is the extra space added around pattern edges to allow for stitching; its size depends on garment type and fabric.
- Component patterns for items like buttonholes and pleats are made separately to maintain design precision and symmetry.
- A tech pack is a document that includes garment specifications like dimensions, materials, and construction details used by pattern makers.
- Draping techniques involve creating the pattern by manipulating fabric on a dress form to achieve the desired shape and fit.
- Size charts provide standardised body measurements that help in drafting patterns for different categories like garments or home furnishings.
- Understanding the grain line direction helps in fabric layout to ensure the garment maintains proper shape and drape after stitching.
- Marking patterns accurately avoids confusion during cutting and assembly and is essential for replicating consistent garment sizes.
- Knowledge of pattern creation is essential for a Pattern Master to create garments that fit well, look professional, and match the design intent.

Explain

- Pattern creation begins by laying down the pattern paper on a smooth flat surface to ensure accurate drafting.
- Tools like rulers, set squares, measuring tapes, and curves are used to mark basic shapes and dimensions of the pattern.
- Notches are small markings added to show where pieces align and are especially helpful when assembling sleeves, collars, or side seams.
- The grain line marked on a pattern indicates how the pattern should be aligned with the fabric's weave direction.
- Seam allowance is the distance between the stitching line and the cutting edge; it can range from 0.5 to 1.5 cm depending on garment parts.
- Additional pattern pieces like pockets or button stands are traced separately and marked clearly with placement guides.
- A tech pack provides a complete guideline for creating a pattern according to client specifications including measurements and style elements.
- Size charts help determine dimensions for each garment size and are essential for drafting patterns in multiple sizes for mass production.
- Pleat patterns are made by folding and marking paper to show where fabric will be gathered or tucked on the garment.
- Draping on a dummy helps visualise the 3D form of the garment and then translate it into a 2D pattern by tracing fabric shapes.

Demonstrate

Participants will use printed size chart templates, basic pattern blocks, and tech pack samples to simulate the drafting of a simple garment pattern by marking key elements such as grain lines, notches, seam allowances, and labels to understand the step-by-step process of pattern creation in a real-world context.

Activity

1. **Name of the Activity:** Pattern Detailing and Component Identification
2. **Objective of the activity:** To help participants practice adding details and creating component pieces for a basic garment pattern.
3. **Resources:** Participant handbook, notepad, pen, pattern paper, measuring tape, tracing wheel, ruler, tech pack samples, overhead projector, whiteboard.
4. **Time Duration:** 25 minutes
5. **Instructions:**
 - Distribute basic bodice pattern templates and ask participants to mark grain lines, notches, seam allowances, and piece numbers.
 - Present component pattern pieces like patch pockets or button plackets and discuss their placement on the main pattern.

- Ask participants to draw a pocket pattern based on given dimensions and add necessary seam allowances.
 - Provide a tech pack sheet and guide participants in using it to adjust measurements or add pattern instructions.
 - Conclude the activity by displaying some examples and allowing peer review of marked patterns.
6. **Outcome:** Participants will gain hands-on experience in pattern detailing and component creation while learning to interpret specifications from a tech pack.

Notes for Facilitation

- Encourage visual demonstration and repeat critical steps slowly so participants can follow clearly and ask questions as needed.
- Use real-life examples from garment manufacturing to connect theory with practical pattern creation techniques.
- Check participant progress frequently during the hands-on parts of the session and offer tips for improving accuracy.
- Keep participants engaged through interactive discussion and feedback on their markings and pattern layout.
- Reinforce key learning after every demonstration to help participants retain essential concepts in pattern making.

Unit 5.2: Advanced Techniques and Bulk Production

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain product components essential for pattern creation.
2. Illustrate the use of computer applications in pattern making.
3. Describe pattern marking principles for bulk production.
4. Discuss the concept and significance of bulk production.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Greet the participants with enthusiasm and introduce yourself with a brief overview of your professional experience in garment manufacturing or pattern making.
- Clearly state the learning objectives of the unit and explain the relevance of advanced techniques in today's apparel industry.
- Ensure that all participants have their materials ready and are seated comfortably for visibility and participation.
- Check that the computer or laptop, projector, and presentation slides are properly set up and working smoothly.
- Encourage participants to share their previous experiences with pattern making or any exposure to bulk production processes.
- Outline the session flow, mentioning the inclusion of both traditional and digital pattern making tools.
- Create a welcoming environment by encouraging open dialogue and clarifying that questions and active participation are valued.
- Move step by step through the unit topics, allowing time for discussion, questions, and clarification.
- Ensure visual aids and examples are clearly visible and used at appropriate points to enhance understanding.
- Conclude by summarising the key insights of the session and asking learners to relate them to real-world apparel production settings.

Say

- Welcome to today's session on advanced pattern-making techniques and how they are applied in bulk production.
- This session will help you understand how pattern components, technology, and marking strategies combine in large-scale apparel manufacturing.
- We will look at how digital tools are integrated into the design workflow to speed up production without compromising quality.
- You will also learn how marking principles help reduce fabric wastage and increase efficiency in bulk production.
- Let's explore how each component of pattern creation plays a critical role in consistent and cost-effective manufacturing.

Ask

- What do you think are the main differences between basic and advanced pattern-making techniques?
- How do you think computer applications improve the pattern-making process in large-scale production?
- Can anyone explain why proper pattern marking is crucial in bulk production environments?
- What challenges have you or others faced when transitioning from manual to digital pattern-making tools?
- In your view, how can understanding the bulk production process improve quality and reduce errors?

Elaborate

- Advanced pattern making involves precise definition of each garment component like sleeves, collars, pockets, and hems that must align during mass production.
- Product components must be well-documented with technical specifications to ensure consistency across production batches.
- Computer-aided design (CAD) tools simplify the replication, grading, and editing of patterns, saving significant time and effort in production settings.
- These applications allow accurate placement of patterns on fabric to minimise wastage and optimise material usage.
- Pattern marking is the process of planning how pattern pieces are placed on fabric, which is critical for cost control in bulk orders.
- Efficient marking ensures less fabric is wasted and the cutting process is streamlined for operators on the production floor.
- Bulk production refers to the manufacturing of garments in large quantities, often requiring precise coordination between teams and machines.
- It is important to maintain quality while producing in volume, and advanced pattern-making helps in achieving that standard.
- Understanding the bulk production flow enables designers to plan ahead for grading, fabric type adjustments, and component alignment.
- The goal is to produce high volumes of clothing without compromising on fit, quality, or finish, which is made possible through advanced patterning strategies.

Explain

- Product components like plackets, waistbands, and cuffs are created with precise measurements and placements to ensure consistency.
- Digital pattern-making uses software to draw, grade, and store patterns, eliminating the need for manual redrawing and resizing.
- Markers are guides that show how each pattern piece fits on fabric rolls for cutting, and optimising markers saves fabric costs.
- Bulk production relies heavily on planning, standardisation, and quality checks, and begins with well-made patterns that account for scaling and fit.
- Technological tools enable visualisation of how pattern adjustments will affect garment construction before a single piece is cut.
- CAD software can simulate fabric drape and fit, offering previews that aid in pre-production adjustments and decision-making.
- Computerised marking can automatically calculate the most efficient layout of pieces, especially for different sizes or fabric widths.
- With good marking practices, time is saved during cutting, and human error is minimised in repetitive manufacturing steps.
- The importance of defining technical specifications is heightened in bulk production where misalignment can result in hundreds of defective items.
- Using advanced pattern-making ensures all units of a product match design intent and meet buyer specifications in commercial apparel orders.

Demonstrate

Participants will use digital pattern templates from a basic garment design to simulate how computer-aided pattern-making software creates pattern components, performs grading, and generates efficient markers for bulk production across multiple sizes.

Activity

1. **Name of the Activity:** Digital Pattern Efficiency Analysis
2. **Objective of the activity:** To help participants explore how computer applications improve efficiency and precision in bulk pattern production.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Introduce the concept of CAD pattern-making tools with a short demonstration.
 - Ask participants to form small groups and review sample digital patterns provided on-screen.
 - Each group will identify how digital patterns improve alignment, grading, and material usage.

- Groups will list advantages of using computer tools versus manual pattern making, especially in bulk contexts.
 - Conclude by having each group share their key observations on how CAD systems impact bulk production planning.
6. **Outcome:** Participants will understand how digital tools in pattern making contribute to time savings, reduced errors, and better material optimisation in mass production settings.

Notes for Facilitation

- Use relatable examples of garments like T-shirts or trousers to demonstrate how digital tools handle various sizes and design elements.
- Allow time for participants to ask questions about specific digital pattern functions to reinforce practical understanding.
- Incorporate visuals showing the transformation from manual to digital patterns for clarity.
- Maintain a balance between explanation and interaction so participants stay engaged and participate in the group activity.
- Wrap up the session by highlighting how advanced techniques prepare participants for professional roles in production-focused apparel environments.

Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. Laying the pattern sheet on the table
2. b. Notches and grain lines
3. c. The extra fabric added around pattern pieces for stitching
4. c. Tech packs and draping
5. c. Computer applications

Answer the following questions briefly.

1. Refer to Unit 5.1: Fundamentals of Pattern Creation
Topic 5.1.1 Laying the Pattern Sheet on the Table
2. Refer to Unit 5.1: Fundamentals of Pattern Creation
Topic 5.1.2 Marking Details on Patterns
3. Refer to Unit 5.1: Fundamentals of Pattern Creation
Topic 5.1.2 Marking Details on Patterns
4. Refer to Unit 5.1: Fundamentals of Pattern Creation
Topic 5.1.5 Pattern Creation Specifications Using Tech Packs and Draping Techniques
5. Refer to Unit 5.2: Advanced Techniques and Bulk Production
Topic 5.2.2 Usage of Computer Applications in Pattern Making





Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Identify the organisation's capability of incorporating changes as a result of an inspection.
2. Identify the fabric used for stitching the product.
3. Explain how to calculate the consumption of fabric per garment.
4. Explain how to design sketches, sewing and sample specifications.

Unit 6.1: Core Concepts in Fabric Inspection and Garment Production

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain organisational adaptability to inspection results.
2. Describe fabric properties relevant to garment stitching.
3. Discuss fabric consumption per garment.
4. Illustrate sketching, sewing, and sample specification techniques.

Resources to be Used

Participant handbook, notepad, pen, fabric swatches, seam samples, measuring tape, sketching paper, sewing tools, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Greet participants warmly and introduce yourself by sharing your background in fabric inspection and apparel production
- Clearly state the unit objectives and outline how each objective relates to practical garment manufacturing
- Ensure each participant has access to fabric swatches, sketching tools, sewing samples, handbook, notepad, and pen
- Check that the whiteboard, markers, presentation slides, laptop, and projector are ready and functional
- Encourage participants to share any previous experience with fabric inspection or sample making
- Provide a brief overview of the session flow including inspection practices, fabric analysis, and sample creation
- Foster an interactive learning atmosphere by inviting questions and comments during the session
- Arrange seating so everyone can observe demonstrations at the inspection table and sewing area
- Move through each topic methodically, allowing time for hands-on inspection and group discussion
- Conclude by summarising the session's key points and inviting participants to share one insight they will apply.

Say

- Welcome to today's session on fabric inspection and garment production fundamentals where we focus on quality from fabric to sample
- By the end of today you will be able to adapt an organisation's approach based on inspection outcomes and understand fabric behaviour in stitching

- We will learn how to calculate fabric consumption for a garment and effectively use sketching and sample techniques to define production details
- You will gain hands-on experience inspecting fabrics, identifying critical properties, estimating yardage, and creating sample specifications
- Let's explore how these core concepts ensure efficient production, reduce waste, and improve garment quality.

Ask



- What steps would you take if you discovered a fault in a fabric roll during inspection?
- How do you think fabric weight and weave influence stitching performance and garment durability.
- Can anyone explain how to estimate the amount of fabric required for a standard shirt or home textile item?
- Have you ever sketched a garment or created a sewing sample to test fit or design ideas.
- Why is sample specification important before starting bulk garment production?

Elaborate



- Organisational adaptability to inspection results means updating quality controls, communicating changes, and retraining staff when fabric faults are found
- Fabric properties such as tensile strength, stretch, weight, and weave structure directly affect how stitches hold and seams perform
- Calculating fabric consumption requires understanding garment dimensions, pattern layout, shrinkage allowance, and waste factors
- Sketching garments helps visualise design details and communicate style lines before production
- Sewing samples validate construction methods, reveal fit issues, and guide adjustments before bulk manufacturing
- Sample specification sheets act as reference documents detailing fabric type, stitching methods, seam allowances, and finishing techniques
- Inspection reports should feed into a feedback loop that influences fabric sourcing, supplier selection, and production planning
- Choosing the right fabric for a design requires knowledge of properties like drape, resilience, abrasion resistance, and elasticity
- Proper fabric consumption planning reduces waste, lowers costs, and ensures efficient inventory management
- Integrating sketching and sample creation into the design process helps prevent costly errors and accelerates production readiness.

Explain

- Organisational adaptability involves documenting defects, communicating with suppliers, adjusting orders, and revising quality inspection protocols.
- Fabric weight refers to grams per square meter and thicker fabrics often require different needles, stitch types, or tension settings.
- Stretchable knits need special stitching methods like zigzag stitches or overlocking to maintain elasticity and seam stability.
- Fabric consumption per garment is calculated using garment size charts, marker layouts, fabric width, and shrinkage allowance.
- Sketching technique uses proportion templates and design annotations to represent darts, seams, finishes, and pattern details.
- Creating sewing samples includes cutting fabric, stitching seams, attaching trims, and evaluating first-fit garments.
- A sample specification sheet records fabric type, stitch type, seam allowance, thread, trims, and pressing instructions for consistency.
- Inspection should check for faults such as slubs, holes, uneven dye, tension issues, and print misalignment before production.
- Garment production processes rely on accurate fabric data and samples to ensure the final output matches design and quality standards.
- Feedback from inspection and sample stages must be integrated into production SOPs, training materials, and supplier guidelines.

Demonstrate

Participants will use fabric swatch sets, defect charts, measuring tape, sketching paper, sewing samples, and specification templates to simulate inspection of fabric rolls, calculate yardage for a basic garment, and prepare annotated sketches and sewn samples as in a real production workflow.

Activity

1. **Name of the Activity:** Fabric Inspection and Sample Specification
2. **Objective of the Activity:** Participants will practice inspecting fabric swatches, calculating consumption for a sample garment, sketching design details, and preparing a sample specification for production approval.
3. **Resources:** Participant handbook, fabric swatches, defect identification chart, measuring tape, sketching paper, pens, sewing sample, specification templates, whiteboard, laptop, projector.
4. **Time Duration:** 30 minutes
5. **Instructions:**
 - Divide participants into small groups and distribute fabric swatches and defect charts
 - Ask each group to inspect their swatches, note defects, and suggest acceptable tolerance levels
 - Have participants calculate fabric consumption for a specified garment using measurement guidelines

- Request a rough sketch of the garment showing seam lines, grain direction, and design details
 - Ask participants to fill out a sample specification sheet including fabric type, stitch method, seam allowance, trims, and finishing steps
 - Conclude by having each group share their inspection findings, consumption calculations, sketches, and specifications while the facilitator provides feedback.
6. **Outcome:** Participants will understand how to inspect fabric, estimate consumption, communicate design through sketches, and document sample specifications effectively

Notes for Facilitation

- Maintain a hands-on approach so participants stay engaged during fabric inspection and sample creation.
- Encourage detailed discussions on defect types and acceptable thresholds for various garment applications.
- Provide real-world examples of consumption calculations to guide understanding across sizes and fabric widths.
- Offer sketching tips and visual aids to help participants illustrate design and technical details clearly.
- Ensure everyone has the opportunity to present and receive feedback on their group's inspection and specification work.

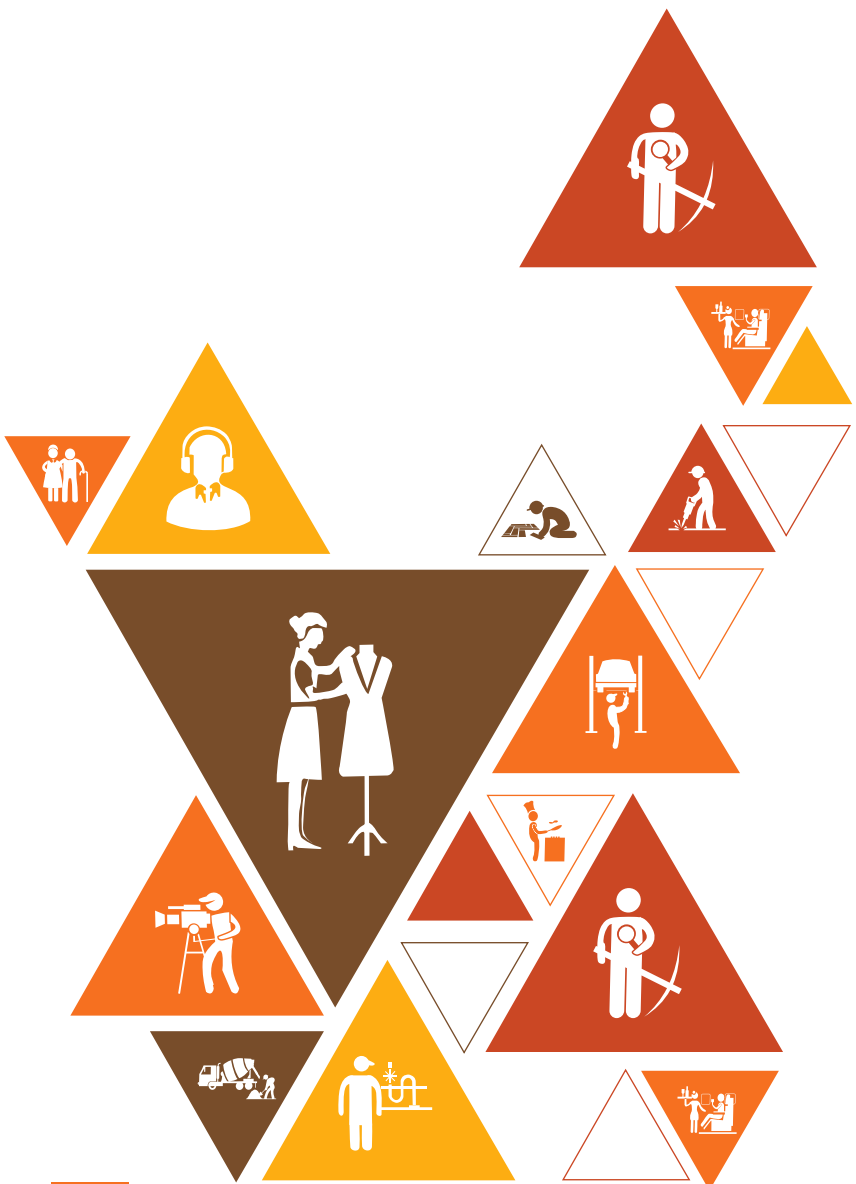
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. Adjusting production based on inspection results
2. b. Elasticity
3. c. To minimise waste and cost
4. b. To explain design ideas clearly
5. c. Ensuring consistency in production

Answer the following questions briefly.

1. Refer to Unit 6.1: Core Concepts in Fabric Inspection and Garment Production
Topic 6.1.1 Organisational Adaptability to Inspection Results
2. Refer to Unit 6.1: Core Concepts in Fabric Inspection and Garment Production
Topic 6.1.2 Fabric Properties Relevant to Garment Stitching
3. Refer to Unit 6.1: Core Concepts in Fabric Inspection and Garment Production
Topic 6.1.3 Fabric Consumption per Garment
4. Refer to Unit 6.1: Core Concepts in Fabric Inspection and Garment Production
Topic 6.1.4 Sketching, Sewing, and Sample Specification Techniques
5. Refer to Unit 6.1: Core Concepts in Fabric Inspection and Garment Production
Topic 6.1.4 Sketching, Sewing, and Sample Specification Techniques





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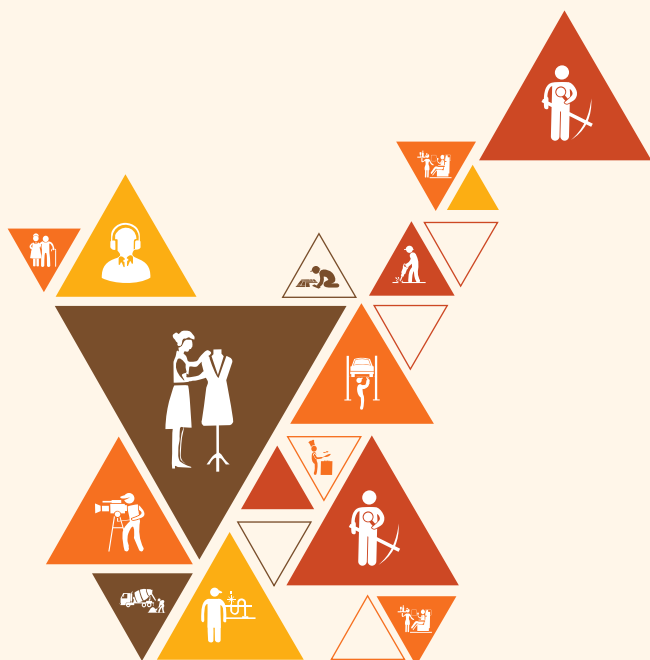


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7. Inspect Pattern

Unit 7.1 - Pattern Development and Garment Construction



AMH/N1106

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Identify the cutting process required to cut the pattern.
2. Determine the stitching process required to stitch the product of the pattern developed.
3. Review sketches and design specifications to meet quantities, shapes and sizes of pattern parts.
4. Examine the tech pack for measurements and cutting details wherever required.
5. Test the pattern by making a garment sample to check the fit, fall, and other aesthetic attributes.
6. Evaluate the stitch of the product.
7. Elaborate the pattern against the developed product.

Unit 7.1: Pattern Development and Garment Construction

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the cutting processes used in pattern creation.
2. Describe stitching techniques for assembling patterns.
3. Review sketches and design specifications for accuracy.
4. Analyse tech packs for measurement and cutting details.
5. Discuss patterns with garment samples to assess fit and aesthetics.
6. Illustrate final stitching methods for product completion.
7. Evaluate patterns by comparing them with finished products.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet the participants with enthusiasm and introduce yourself by sharing your background in pattern making and garment construction.
- Present the unit's objectives in a clear and structured manner to help participants understand the learning outcomes of the session.
- Encourage participants to arrange their materials including handbooks, pens, and notepads for note-taking and hands-on activities.
- Check that the technical equipment including the projector and computer setup is working properly to ensure a smooth session.
- Explain the structure of the session and highlight key concepts that will be demonstrated and discussed throughout.
- Invite participants to introduce themselves and share any previous experiences with garment construction or pattern making.
- Mention that this session will involve practical demonstrations, hands-on activities, and interactive discussions to enhance learning.
- Create a comfortable seating arrangement that supports clear visibility of demonstrations and easy group interaction.
- Pace the session by pausing between demonstrations and theory to allow participants to absorb, reflect, and ask questions.
- Conclude with a summary of the day's learning and ask participants to relate the content to real-world garment development scenarios.

Say

- Welcome to today's session on pattern development and garment construction which is an essential skill for any professional in the apparel industry.
- By the end of this session, you will have a deeper understanding of how patterns are developed, interpreted, and transformed into garments.
- We will explore the processes of cutting, stitching, and reviewing technical specifications that guide garment creation.
- You will also learn how to analyse measurement sheets and tech packs and apply them practically in assessing pattern accuracy and final product fit.
- Let's dive into the step-by-step construction of garments from design sketch to finished product and understand each stage in detail.

Ask

- What tools and methods do you think are essential for accurate pattern cutting in garment making?
- Can anyone share their experience working with a tech pack or interpreting garment specifications?
- How would you ensure stitching techniques match the design intent of a garment during construction?
- Why is it important to compare patterns with final garment samples before bulk production?
- How do you think proper pattern analysis impacts the overall quality and fit of the final garment?

Elaborate

- Pattern cutting is the foundation of garment construction and requires precision to ensure the fabric pieces match the design intent.
- There are multiple methods of cutting patterns such as manual cutting, die cutting, and digital cutting which vary depending on garment complexity.
- Stitching techniques vary for different fabrics and garment styles and include basic seams, overlock stitching, flatlock stitching, and decorative stitches.
- Reviewing sketches and designs helps to identify the intended silhouette, fabric types, trims, and construction details.
- Tech packs contain detailed measurements, stitch lines, seam allowances, and construction notes that guide pattern makers and tailors.
- Analysing a tech pack helps in visualising the final garment and ensures the pattern matches the intended shape and fit.
- By comparing the pattern with a finished product, makers can determine inaccuracies, sizing mismatches, or construction flaws.
- Garment samples offer a visual and functional reference to assess how patterns translate into real garments.
- Final stitching methods include hemming, edge finishing, and closure applications which bring the garment to a wearable stage.
- Evaluating patterns after product completion provides feedback for pattern correction and improved future production cycles.

Explain

- Pattern making begins with basic block development which serves as the template for constructing different garment styles.
- Blocks are modified using various techniques like dart manipulation, style line development, and ease adjustment to create the desired design.
- Cutting is done using paper patterns laid on fabric, followed by marking seam allowances and notches to aid in accurate sewing.
- Stitching starts with assembling garment sections like bodices, sleeves, and skirts, followed by joining them using construction seams.
- Tech packs are used to communicate exact dimensions, material details, and finish specifications between designers, pattern makers, and production teams.
- Sketches act as a visual plan and help the maker understand the construction sequence and design features such as pleats, gathers, or panels.
- Once stitched, the prototype garment is evaluated against the sketch and pattern to check for accuracy and adjustments.
- Quality check involves looking for symmetry, seam alignment, accurate fit, and overall aesthetic value of the garment.
- Stitching methods like topstitching or invisible hemming are chosen based on garment type, fabric used, and desired appearance.
- Final assessment of the pattern includes verifying balance, grain line alignment, and matching points before proceeding to production.

Demonstrate

Participants will use a full-size printed tech pack with corresponding garment sketches to simulate the process of reviewing design specifications and developing a matching pattern for a basic top using real fabric swatches and measurement tools.

Role Play

1. **Name of the Roleplay:** Tech Pack Review and Pattern Accuracy
2. **Objective of the Roleplay:** To help participants practise analysing a tech pack and identifying potential issues before starting pattern cutting.
3. **Resources:** Participant handbook, printed tech packs, measuring tape, sketch paper, pen, presentation slides, whiteboard, projector, internet-enabled computer or laptop.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Distribute a printed tech pack and a corresponding design sketch to each group of participants.
 - Ask them to review the measurements, seam types, fabric details, and special instructions in the tech pack.
 - In pairs, one participant acts as the pattern master and the other as a designer giving clarification on design intent.

- Participants will highlight any areas of confusion or potential fit issues and present how they would resolve them.
 - Conclude with a discussion on the importance of cross-checking tech packs before production.
6. **Outcome:** Participants will understand the critical details in a tech pack and how to ensure patterns are accurately developed from design specs.

Role Play

1. **Name of the Roleplay:** Garment Assembly and Fit Analysis
2. **Objective of the Roleplay:** To provide hands-on experience in assembling fabric pieces and evaluating the finished garment against the original pattern.
3. **Resources:** Participant handbook, sample fabric kits, scissors, thread, hand sewing needles or sewing machines, pattern pieces, markers, whiteboard, projector.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Distribute pre-cut fabric pieces based on a given pattern and assign roles of cutter, assembler, and quality checker to group members.
 - Each group assembles the garment sections by following stitching guidelines and matching notches and seam allowances.
 - Once assembled, a participant wears or fits the garment on a mannequin to assess the final outcome.
 - Groups will compare the finished product with the original sketch and pattern sheet and identify any deviations.
 - Lead a reflection session discussing what corrections can be made to the pattern for improved fit and finish.
6. **Outcome:** Participants will learn how to construct a garment from patterns and evaluate the accuracy of the completed piece.

Notes for Facilitation

- Use industry-based examples to explain pattern adaptation and garment production across different categories like formalwear or active wear.
- Break complex steps like dart shifting or fabric grain alignment into simple visual instructions using charts or mini demonstrations.
- Encourage participants to share observations and common mistakes in stitching or pattern cutting to reinforce peer learning.
- Utilise hands-on role-plays and simulations to deepen understanding of practical garment construction.
- Conclude each session with a short quiz or reflection question to solidify participant takeaways and learning application.

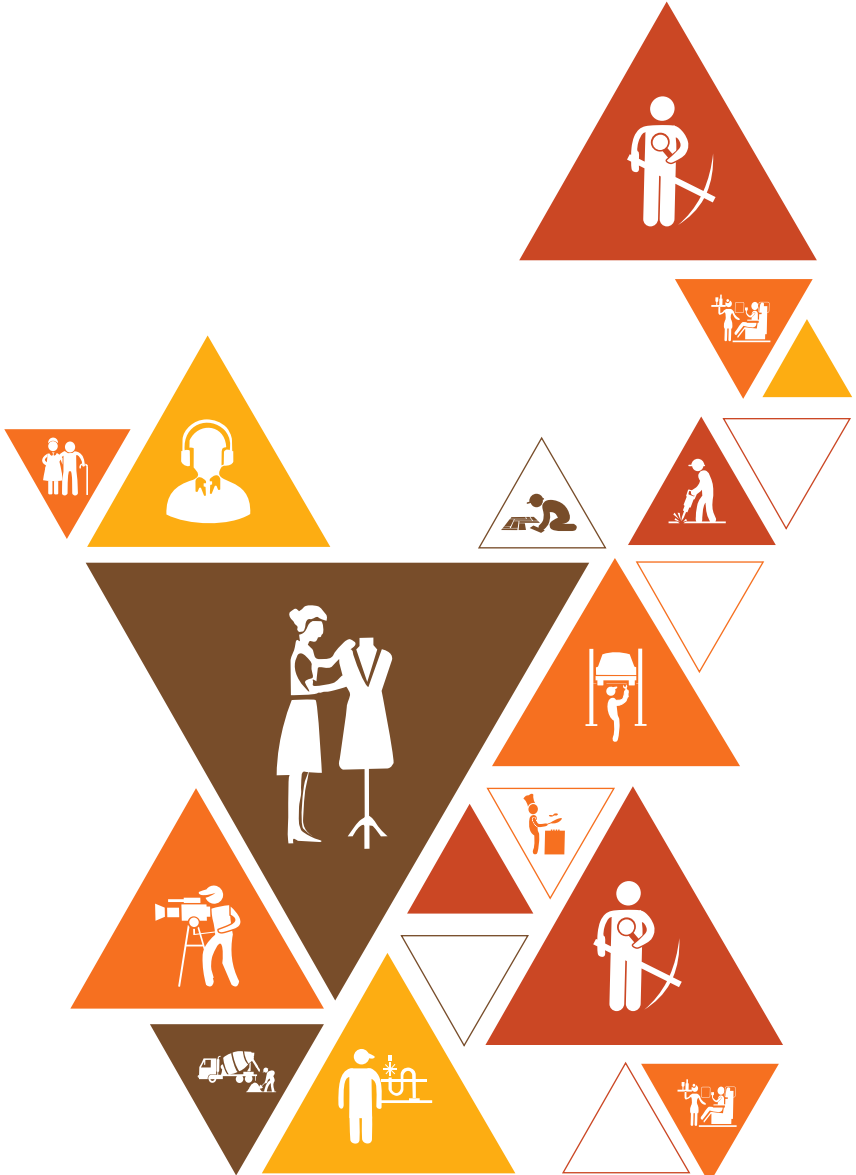
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. To shape fabric according to the design
2. c. To assemble different pattern parts
3. c. Measurement and design accuracy
4. b. Cutting and sizing guidance
5. c. To assess fit and aesthetics

Answer the following questions briefly.

1. Refer to Unit 7.1: Pattern Development and Garment Construction
Topic 7.1.1 Cutting Processes Used in Pattern Creation
2. Refer to Unit 7.1: Pattern Development and Garment Construction
Topic 7.1.2 Stitching Techniques for Assembling Patterns
3. Refer to Unit 7.1: Pattern Development and Garment Construction
Topic 7.1.3 Sketches and Design Specifications
4. Refer to Unit 7.1: Pattern Development and Garment Construction
Topic 7.1.4 Tech Packs for Measurement and Cutting Details
5. Refer to Unit 7.1: Pattern Development and Garment Construction
Topic 7.1.7 Evaluation of Patterns





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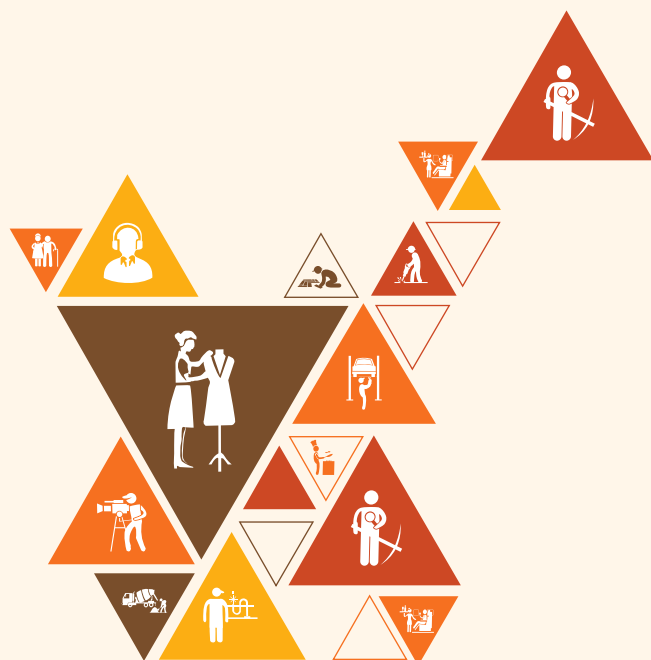
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8. Validate Pattern

Unit 8.1 - Pattern Development and Modification

Unit 8.2 - Fabric Consumption and Quality Review



AMH/N1106

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Review changes in the pattern.
2. Demonstrate the labelling of the pattern.
3. Document the fabric consumption and the final pattern details with respect to the style of the product.
4. Incorporate the changes in the pattern.
5. Calculate the consumption of the fabric using the pattern for one piece of the garment or any other product.
6. Create the final pattern with all changes accommodated.
7. Create the grade patterns for different sizes of garments made up and home furnishing articles within a style for mass production.
8. Check the graded patterns against the specifications given for the product.
9. Review the pattern against the developed product.

Unit 8.1: Pattern Development and Modification

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain pattern changes and modifications.
2. Describe the labelling and documentation of patterns.
3. Illustrate the final pattern, detailing the fabric consumption data.
4. Analyse graded patterns for different sizes and mass production.
5. Assess graded patterns against specifications.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, pattern development charts, rulers, basic drafting tools, sample patterns, presentation slides, overhead projector or large screen.

Do

- Greet the participants warmly and introduce yourself, sharing your professional background in pattern making to build credibility and rapport
- Clearly outline the unit objectives and inform participants what knowledge and skills they will acquire through the session
- Ensure all participants have access to their handbooks, drafting tools, pattern samples, and note-taking materials
- Check that the presentation slides, charts, and digital projection equipment are properly set up and working before the session begins
- Invite participants to introduce themselves and share their experience or interest in apparel pattern development to encourage peer learning
- Briefly explain the flow of the session including demonstrations, practical group activities, and learning simulations to encourage engagement
- Organise seating and worktables to allow clear visibility of drafting demonstrations and ease of group interaction
- Set clear expectations for participant involvement by stating the interactive and hands-on nature of the session
- Encourage participants to ask questions throughout the session to foster continuous clarification and shared learning
- Close the session with a recap of key concepts, reinforcing how pattern development and modifications contribute to accuracy in garment production.

Say

- Welcome to today's session on Pattern Development and Modification which is an essential skill for anyone aiming to excel as a Pattern Master in the apparel industry
- By the end of this unit you will understand how to modify patterns, label and document them correctly and analyse graded patterns for large-scale production
- Today we will learn how small changes in a pattern can significantly impact the fit and consumption of fabric which is crucial for cost-effective production
- The process of developing and modifying patterns involves creativity and technical precision which must be aligned with size specifications and production requirements
- Let's explore how understanding grading and pattern documentation contributes to the consistency and efficiency needed for mass production.

Ask

- What are some common reasons a pattern may need to be modified during the garment development process?
- How do you think incorrect labelling of a pattern could affect garment production and quality control?
- Why is it important to analyse and verify graded patterns before they are sent for mass cutting and stitching?
- What information should be included in the documentation of a finalised pattern?
- In what ways can incorrect fabric consumption estimation impact the overall garment production cost?

Elaborate

- Pattern changes are required for design adaptations seasonal adjustments customer feedback and body measurement variations
- Proper labelling of patterns includes size code grain line piece name and quantity which avoids confusion during cutting
- Documentation of patterns helps track revisions note technical details and ensure smooth communication with production teams
- Graded patterns are essential for producing garments in different sizes while maintaining shape and design accuracy
- Mass production depends on precision in patterns as minor inconsistencies can lead to material wastage and fitting issues
- Understanding how to calculate fabric consumption from final patterns is a vital step in production planning and cost estimation
- Modifications may include altering lengths reshaping curves adjusting darts or seams to suit different design or fit needs
- Every pattern must be tested through sample garments to verify that modifications maintain intended fit and silhouette
- Pattern makers use specific tools such as curves rulers and blocks to make accurate modifications during pattern development
- Grading methods such as manual and computer-aided grading help ensure scalable accuracy across all garment sizes.

Explain

- A pattern is a template used to trace the shapes of fabric pieces needed to create a garment and modifications alter its fit or style
- Modifying patterns involves adjusting parts like necklines armholes or hems to suit different styles or measurements
- Labelled patterns include essential data such as size directionality and part identifiers to guide the cutting and stitching teams
- Documentation of patterns includes technical sheets with pattern codes material types design references and size details
- Final pattern layouts must be calculated to show fabric usage which helps in estimating garment costs and avoiding excess waste
- Grading involves creating a set of the same pattern in different sizes which requires precise measurements and scaling techniques
- Patterns must be matched to their intended fabric type as stretch and drape characteristics can influence the pattern's performance
- Incorrect pattern grading can lead to poor fit which affects customer satisfaction and leads to returns and production losses
- Documentation serves as a legal and operational record for pattern designs which can be referenced for future productions
- Analysing a graded pattern means checking consistency across all sizes and ensuring each size retains the original design intent.

Demonstrate

Participants will use printed basic bodice block sheets to practice pattern modification techniques such as length adjustment dart manipulation and neckline changes while documenting changes on the pattern sheet and estimating fabric consumption per modification for accuracy in real-world applications.

Activity

1. **Name of the Activity:** Graded Pattern Analysis Challenge
2. **Objective of the Activity:** To enable participants to understand and evaluate graded patterns for sizing accuracy and production readiness.
3. **Resources:** Participant handbook, pattern grading chart samples, rulers, pens, measurement tables, whiteboard, overhead projector or large screen, presentation slides.
4. **Time Duration:** 25 minutes
5. **Instructions:**
 - Divide participants into small groups and distribute sets of graded patterns for different sizes.
 - Ask each group to verify measurement increments between sizes using measurement tables provided in the handbook.
 - Have groups discuss any inconsistencies found and propose modifications if needed.

- Request groups to identify whether the pattern grading is suitable for mass production considering fabric utilisation and symmetry.
 - Facilitate a group discussion on how the insights gained from analysis help improve production efficiency and consistency.
6. **Outcome:** Participants will develop practical skills to assess graded patterns and identify corrections ensuring readiness for bulk production.

Notes for Facilitation

- Use real pattern pieces and tools to make the session more hands-on and relatable for all skill levels.
- Break down complex pattern concepts into smaller tasks and explain them with visual cues and live demonstrations.
- Encourage collaborative problem-solving during group activities to reinforce pattern analysis and accuracy.
- Be attentive to participants' pace of learning and revisit technical steps when needed to ensure clarity.
- Conclude with reflective questions to help participants connect the learning to real-life garment production scenarios.

Unit 8.2: Fabric Consumption and Quality Review

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the fabric consumption calculation for garments and products.
2. Illustrate the process of finalising patterns with all changes incorporated.
3. Analyse patterns by cross-checking them with developed products.
4. Assess the quality and accuracy of patterns.

Resources to be Used

Participant handbook, measuring tape, sample patterns, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Greet the participants with enthusiasm and introduce yourself by sharing your relevant experience in garment pattern making and fabric evaluation.
- State the objectives of the unit and give a short overview of the learning outcomes participants will achieve by the end of the session.
- Ensure all participants have their handbook, notepad, and pen, and assist anyone who may be missing any learning materials.
- Verify that the projector or screen, whiteboard, and all digital equipment are working properly before starting the presentation.
- Make sure sample patterns and measuring tapes are distributed for hands-on engagement during the activities.
- Ask participants to introduce themselves briefly and share their level of familiarity with pattern analysis and fabric consumption.
- Explain that the session will include practical calculations, demonstrations, and pattern accuracy reviews with a focus on learning through doing.
- Organise the seating to support group-based review exercises and visual demonstrations with a clear view of the demonstration table.
- Pace the content delivery to ensure that participants have enough time to understand technical steps and practice along with you.
- Conclude the session by summarising all critical points and encourage participants to ask questions related to real-time issues in quality pattern reviews.

Say

- Welcome to this session on fabric consumption and quality review in garment production where we'll explore practical ways to improve efficiency and precision.
- Today you will learn how to calculate fabric consumption accurately and ensure the patterns you work with are optimised and error-free.
- We will walk through a hands-on method to finalise patterns, check for consistency with developed samples, and maintain high-quality standards.
- You'll see how even minor errors in pattern measurements can affect fabric usage and final product accuracy.
- Let's work together today to learn techniques that can reduce fabric waste while improving production quality.

Ask

- Can anyone share what methods you currently use to estimate fabric usage for different types of garments.
- What do you think are the most common errors when comparing a paper pattern to the final garment sample?
- How do you usually confirm if all changes are correctly reflected in a finalised pattern?
- What indicators do you look for when evaluating the quality of a pattern before it goes for cutting?
- How might small inaccuracies in fabric calculation affect the cost or fit of the final product?

Elaborate

- Fabric consumption depends on the type of garment, the fabric width, and the layout of the pattern pieces during the cutting process.
- Accurate fabric calculation helps reduce material wastage and ensures cost-effective production planning.
- Finalised patterns must reflect all necessary adjustments from the prototyping phase to ensure the product matches the design expectations.
- Cross-checking a pattern with the actual garment helps in identifying measurement mismatches or placement errors.
- Pattern quality review ensures that all seams align correctly and design elements are preserved after modifications.
- In mass production settings, pattern accuracy is crucial to avoid repeated mistakes and fabric wastage across bulk orders.
- Proper documentation and labelling of each pattern piece aid in systematic reviews and consistent quality assurance.
- Grain lines, seam allowances, and notches must be checked on each pattern piece to maintain alignment and stitching quality.
- By comparing a developed product to its pattern, manufacturers can identify overlooked corrections or manual inconsistencies.
- High-quality patterns contribute to better-fitting garments and reduce the chances of production rejections or returns.

Explain

- Fabric consumption is calculated by measuring the total area covered by all pattern pieces and dividing it by the fabric width while accounting for fabric layout efficiency.
- To finalise a pattern, all feedback from sample fitting sessions is incorporated and the pattern is updated and cleaned of any redundant markings or notes.
- The comparison of a physical sample and its corresponding pattern reveals practical issues like incorrect seam allowances or missing notches.
- Quality checking of patterns includes verifying symmetry, shape accuracy, proper placement of darts, and alignment of stitching points.
- Each pattern must be consistent with the measurement sheet, have clear labelling, and allow efficient fabric usage to reduce cutting and stitching errors.
- Patterns should be tested on similar fabric types to predict their performance during actual production.
- Every modification in the pattern must be documented to track the evolution of design and ensure consistency in future production.
- The layout plan of patterns on fabric, called the marker, is used to further refine fabric consumption and cutting accuracy.
- Patterns should be stored in labelled envelopes or digital folders to maintain a clean and professional pattern archive.
- By following quality assurance protocols for patterns, you can increase production efficiency, reduce costs, and ensure garment uniformity.

Demonstrate

Participants will use a printed sample marker sheet to simulate fabric consumption calculations by arranging sample pattern pieces and measuring total fabric length used to understand how efficient layout planning and accurate pattern review contribute to quality garment production.

Activity

1. **Name of the Activity:** Fabric Usage Efficiency Exercise
2. **Objective of the Activity:** To help participants calculate fabric consumption and understand the effect of pattern layout and quality on fabric usage.
3. **Resources:** Participant handbook, measuring tape, sample pattern sheets, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Display the layout of pattern pieces on a sample marker using a projector or printout
 - Divide participants into small groups and give them the same pattern pieces to simulate the fabric layout
 - Ask each group to measure and calculate the fabric used in their layout and compare with the optimal layout on screen

- Guide them to identify any pattern-related changes that might reduce fabric usage
 - Facilitate a discussion on how layout decisions impact total fabric cost and quality outcomes.
6. **Outcome:** Participants will develop practical skills in calculating fabric usage and learn the impact of pattern finalisation and accuracy on fabric efficiency.

Notes for Facilitation

- Use real-life fabric samples and patterns to make learning visual and relatable and keep participants engaged.
- Simplify technical content with step-by-step walkthroughs and encourage questions after each key concept.
- Encourage group discussions and collaborative work to simulate a production team environment.
- Give timely feedback during hands-on calculations and layout exercises to reinforce learning.
- Wrap up the session by revisiting the key takeaways and linking fabric efficiency to cost-effectiveness and production quality in real garment units.

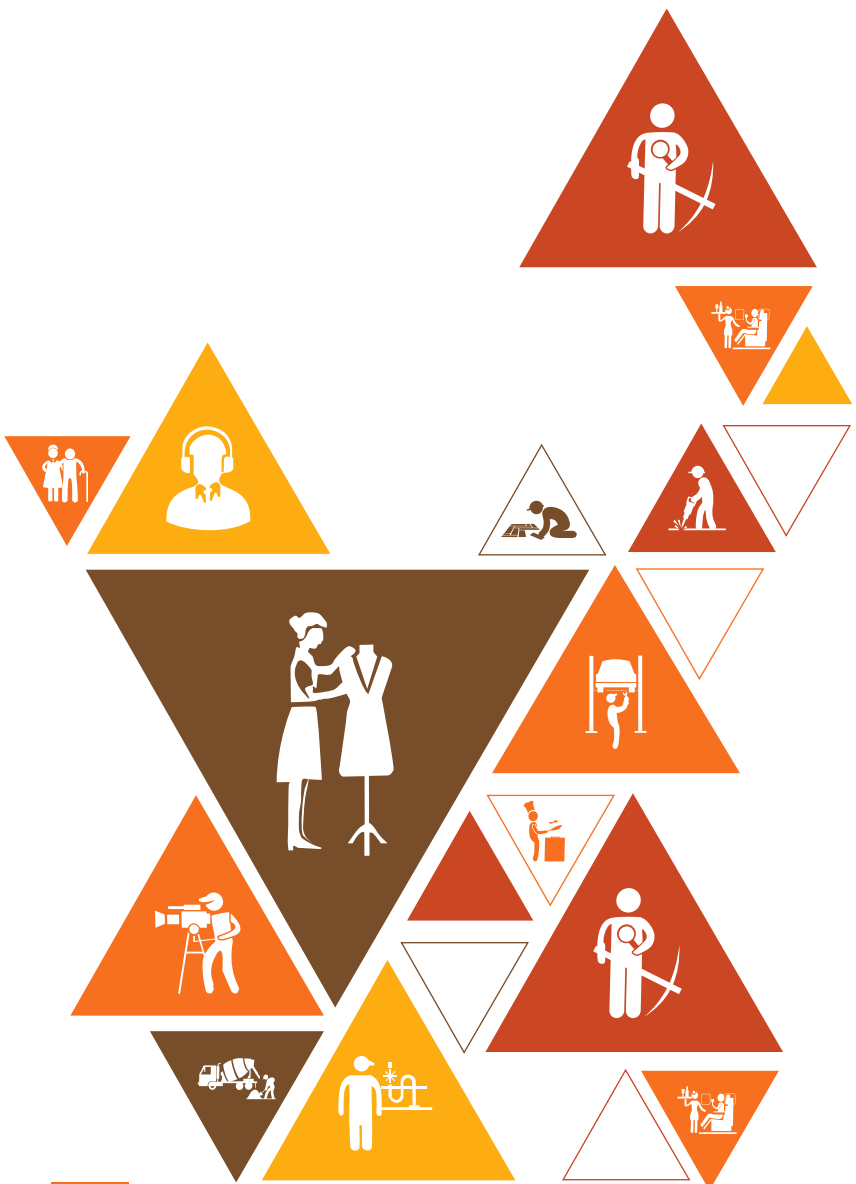
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. b. Adjusting design shapes and sizes
2. c. To ensure clear documentation and communication
3. c. To create patterns for different sizes
4. b. Estimating how much fabric is needed
5. c. The accuracy and final fit

Answer the following questions briefly.

1. Refer to Unit 8.1: Pattern Development and Modification
Topic 8.1.1 Pattern Changes and Modifications
2. Refer to Unit 8.1: Pattern Development and Modification
Topic 8.1.2 Labelling and Documentation of Patterns
3. Refer to Unit 8.2: Fabric Consumption and Quality Review
Topic 8.2.1 Fabric Consumption Calculation for Garments and Products
4. Refer to Unit 8.2: Fabric Consumption and Quality Review
Topic 8.2.2 Process of Finalising Patterns
5. Refer to Unit 8.2: Fabric Consumption and Quality Review
Topic 8.2.3 Patterns by Cross-Checking





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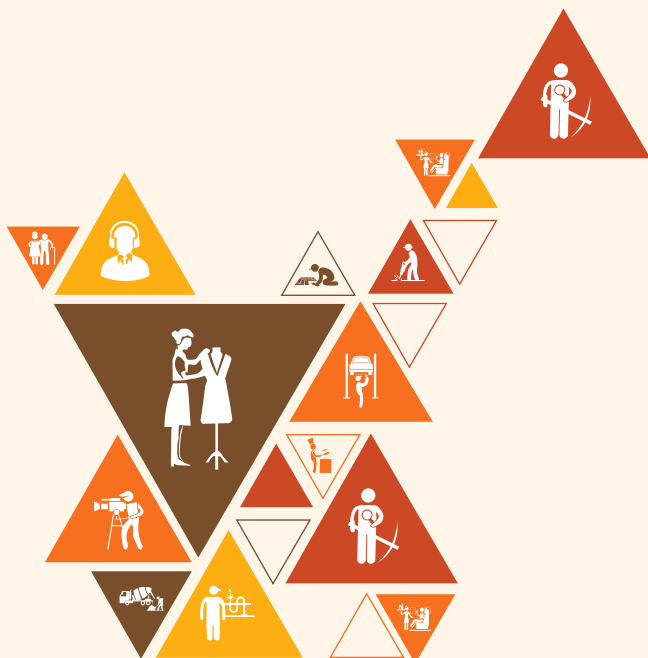
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9. Maintain Health, Safety and Security in the Pattern Making Workplace

Unit 9.1 - Tools, Equipment, and Hazard Management

Unit 9.2 - Emergency Response and First Aid Preparedness



AMH/N1107

Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain the safe handling of tools and equipment used in pattern making.
2. Identify hazards related to damage to organisational assets and records.
3. Describe health and safety signage and their meanings.
4. List different workplace hazards, including fire risks.
5. Illustrate safe handling techniques for tools like cutters, scissors, and shears.
6. Assess workplace processes for potential risks and threats.
7. Participate in mock drills and evacuation procedures.
8. Demonstrate basic first aid, firefighting, and emergency response skills.
9. Perform basic CPR techniques effectively.

Unit 9.1: Tools, Equipment, and Hazard Management

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain safe handling practices for pattern-making tools and equipment.
2. Describe workplace hazards and methods for protecting organisational assets.
3. Discuss the importance of complying with health and safety signage.
4. Illustrate fire safety measures and general workplace hazard protocols.
5. Analyse risk and threat assessment techniques in work processes.

Resources to be Used

Participant handbook, real and dummy tools (scissors, cutters, measuring tape, etc.), PPE kits (gloves, goggles), health and safety posters, fire extinguisher (demo or video), risk assessment templates, notepad, pen, projector, computer/laptop with internet connection.

Do

- Welcome participants and introduce the unit with energy and concern for safety in everyday workplace tasks
- State the objectives clearly and explain why safety, risk awareness, and proper tool usage are essential in garment and pattern-making industries
- Ensure all participants have access to safety kits or visuals to understand safety compliance practically
- Inspect the demonstration area to ensure tools are safe and equipment for demonstration is ready to use
- Set up a whiteboard and projector to show safety signs, risk assessment forms, and fire safety procedures
- Involve participants by asking about their past experiences with unsafe tool handling or workplace accidents
- Create a safe space where participants feel comfortable sharing and learning from each other's safety concerns
- Encourage group work while assessing hazards and discussing ways to reduce risks in real work processes
- Provide real examples of how neglecting tool safety or hazard protocols has led to losses in companies
- End the session by linking personal safety with the safety of co-workers and the reputation of the organisation.

Say

- Welcome to this essential unit on managing workplace tools and hazards — your safety and your team's safety start with you.
- Today, we'll explore how to handle pattern-making tools safely and how to recognise and respond to different workplace risks.
- You'll see why even small safety signs matter and how following simple safety rules can prevent major accidents.
- We'll also learn about fire safety, protective equipment, and how to assess risks in a smart and practical way.
- Let's make safety a habit and not just a rule — because a safe workplace is a productive workplace.

Ask

- What tools do you use daily in your workspace, and how do you make sure they are used safely.
- Have you ever noticed a safety sign but ignored it—what happened.
- What are some common hazards you see around your workplace that could be avoided.
- How do you think risk assessment can help reduce accidents or losses in an organisation?
- Can anyone share how a small mistake with a tool led to a bigger issue or injury.

Elaborate

- Safe handling of tools includes proper grip, correct storage, regular maintenance, and knowing when a tool is faulty or unsafe.
- Workplace hazards can be physical (sharp edges, loose wires), chemical (cleaning agents), or ergonomic (poor posture, repetitive motion).
- Organisational assets include tools, machines, materials, and human life — protecting them involves identifying risks and following safety protocols.
- Health and safety signage (like 'No Entry', 'Wear Gloves', and 'Fire Exit') must be followed to guide behaviour and prevent confusion during emergencies.
- Fire safety includes knowing where extinguishers are, how to use them, and conducting mock drills regularly to stay prepared.
- Risk assessment means identifying what could go wrong, how bad it could be, and what steps can be taken to prevent it.
- Every job role comes with its own risks, and awareness can greatly reduce incidents of injury or material loss.
- Good hazard management improves employee confidence, reduces downtime, and promotes a culture of responsibility.
- Safety doesn't just protect workers—it also prevents loss of expensive tools, time, and reputation for the organisation.
- Being proactive in risk assessment creates long-term benefits for both employees and employers.

Explain

- Tools in pattern making like rotary cutters, heavy scissors, and marking tools must be used carefully to avoid cuts or injury.
- Always wear PPE (Personal Protective Equipment) when working with risky tools or in areas with high heat or chemicals.
- Hazards must be reported immediately, and temporary warnings like cones or signs must be placed until resolved.
- Safety signs are there to guide quick decision-making, especially in emergencies, and help standardise workplace safety behaviour.
- Fire safety includes having an evacuation plan, understanding fire extinguisher use (PASS – Pull, Aim, Squeeze, Sweep), and fire drills.
- Hazard protocols involve cleaning spills, securing sharp tools, proper lighting, and using non-slippery surfaces.
- Risk and threat assessment includes identifying vulnerable areas, probability of danger, and implementing control measures.
- Use a risk matrix to prioritise high-risk tasks and assign responsibilities for preventive actions.
- For every workplace process, document the safety steps to reduce legal risks and improve operational consistency.
- A safety-focused mind-set also boosts team cooperation, lowers insurance costs, and improves the workplace culture.

Demonstrate

- Show the correct use and safe storage of pattern-making tools (scissors, rotary cutters)
- Use a sample fire extinguisher or video to demonstrate the basic fire safety procedure (PASS)
- Present a sample risk assessment form and walk participants through how to fill it based on a common workplace scenario.

Activity

1. **Name of the Activity:** Workplace Hazard Spotting and Risk Assessment
2. **Objective of the Activity:** To help participants identify potential hazards and practice risk assessment techniques in a simulated work environment.
3. **Resources:** Participant handbook, printed hazard images, mock workplace layout, sticky notes, risk matrix chart, pens.
4. **Time Duration:** 25 minutes
5. **Instructions:**
 - Display or distribute images of a garment workspace with intentional safety issues (e.g., wires on floor, open scissors, blocked exits)
 - Ask participants in small groups to identify and list all the visible hazards

- Each group then fills a simple risk assessment form indicating the level of risk and proposed action
 - Discuss findings and highlight good practices in hazard control and safety improvement
 - Reinforce the importance of creating a checklist or report when unsafe conditions are observed.
6. **Outcome:** Participants will learn to visually assess a work area for hazards and apply a structured method to record and respond to risks.

Notes for Facilitation

- Use real-life stories or short videos to capture attention and highlight consequences of ignoring safety
- Make the learning experience interactive by encouraging personal examples and group reflections
- Ensure that demonstrations are clearly visible to everyone, and allow hands-on practice where possible
- Print and display health and safety posters around the training room to reinforce key signs and messages
- Summarise key safety terms and provide a take-home safety checklist for participants to use in their workplace.

Unit 9.2: Emergency Response and First Aid Preparedness

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the safe and secure use of cutting tools like cutters, scissors, and shears.
2. Participate in mock drills and evacuation procedures.
3. Demonstrate basic first aid, firefighting, and emergency response techniques.
4. Apply first aid practices during workplace incidents.
5. Illustrate CPR and life-saving techniques.
6. Describe methods for preventing and managing equipment-related injuries.

Resources to be Used

First aid kit, dummy for CPR practice, cutting tools (scissors, rotary cutters), safety signage, fire extinguisher (demo or video), emergency response posters, evacuation map or mock layout, projector, notepad, pen.

Do

- Welcome participants warmly and emphasise the importance of being ready for emergencies at any time.
- Display the objectives on a board or screen and connect them to real-life scenarios at work.
- Prepare all tools, dummies, and first aid materials for hands-on activities.
- Ensure participants feel safe and confident during mock drills and practical sessions.
- Encourage questions throughout the session, especially around CPR and injury response.
- Share relevant real-life workplace incidents to illustrate the importance of quick emergency response.
- Review safety guidelines for using sharp tools before starting practical tasks.
- Create a safe and inclusive environment where everyone can practice and learn without fear.
- End the session by reminding participants that saving a life could start with their first step.

Say

- Emergencies don't come with a warning. That's why we must always be ready to act quickly and correctly.
- Today, we'll learn how to safely use cutting tools, give first aid, help during fire incidents, and even save a life using CPR.
- Whether it's a cut, a burn, or someone falling unconscious, knowing the basics of emergency care can make a big difference.
- Let's learn by doing—because confidence in action comes from hands-on experience.

Ask



- What cutting tools do you commonly use, and how do you keep yourself safe?
- Have you ever been in a situation where someone needed first aid or emergency help?
- Do you know where the fire exits and first aid kits are in your workplace?
- Why do you think CPR training is important, even for non-medical workers?
- What are some ways equipment can cause injuries, and how can we prevent them?

Elaborate



- Cutting tool safety includes checking for sharpness, using the right tool for the job, storing tools securely, and never leaving blades exposed.
- Mock drills simulate emergency conditions (like fire or gas leak) so workers can practice quick evacuation and correct responses.
- Basic first aid includes stopping bleeding, cleaning wounds, applying bandages, and helping with burns, cuts, or bruises.
- Fire response means identifying the type of fire and using the correct fire extinguisher—never using water on electrical fires.
- CPR (Cardiopulmonary Resuscitation) involves chest compressions and rescue breaths to keep blood flowing in emergencies like cardiac arrest.
- Equipment injuries happen due to poor handling, lack of PPE, or faulty machines; prevention involves training, awareness, and inspection.

Explain



- Use tools like shears and cutters only for their intended purpose and avoid rushing or multitasking while cutting.
- Participate in mock drills seriously—they help you remember where to go and what to do when a real emergency occurs.
- In case of injuries, first assess the danger, then respond using the DRSABC method (Danger, Response, and Send for help, Airway, Breathing, and CPR).
- Fire extinguishers come in different types (ABC, CO₂, foam)—it's important to know which one to use in each situation.
- First aid can prevent a small injury from becoming a serious infection—keep the area clean and report injuries immediately.
- CPR starts with chest compressions at a rhythm of 100–120 per minute—push hard and fast in the centre of the chest.
- Prevention is better than cure—keep tools maintained, report unsafe equipment, and wear gloves or goggles when needed.

Demonstrate

Participants will use a CPR dummy, fire extinguisher, first aid kit, and floor plan to practice key emergency skills. They will demonstrate how to safely use and store cutting tools, perform CPR with compressions and breaths, and follow the PASS method to operate a fire extinguisher. They will also dress a wound using basic first aid supplies and take part in a mock evacuation drill using emergency exit signs.

Activity

1. **Name of the Activity:** First Aid and Emergency Response Simulation
2. **Objective of the Activity:** To provide hands-on practice of first aid, CPR, and evacuation procedures.
3. **Resources:** Dummy/CPR manikin, first aid kit, evacuation map, fire safety posters, printed emergency role cards.
4. **Time Duration:** 30 minutes
5. **Instructions:**
 - Divide participants into small teams.
 - Give each team a different emergency scenario (cut from scissors, fainting, minor burn, equipment shock).
 - Ask each team to role-play their response using actual or dummy first aid supplies.
 - One team will simulate an evacuation following a fire alert.
 - Each group presents their response and receives feedback.
6. **Outcome:** Participants will gain confidence in reacting to workplace emergencies with speed, care, and clarity.

Notes for Facilitation

- Emphasise that quick response and calm thinking can save lives.
- Let each participant try CPR compressions at least once on the dummy.
- Provide a printed first aid and emergency checklist for future use at work.
- Use real-life visuals and posters to reinforce safety steps.
- Celebrate participation and encourage sharing of learnings with co-workers.

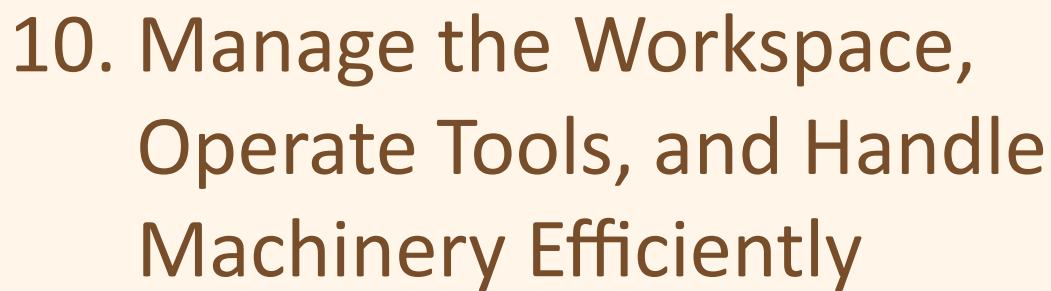
Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. Using them with focus and storing them properly after use
2. c. To ensure safety and avoid hazards
3. d. Follow evacuation procedures
4. c. To identify and prevent potential hazards
5. b. Applying pressure to stop bleeding

Answer the following questions briefly.

1. Refer to Unit 9.1: Tools, Equipment, and Hazard Management
Topic 9.1.1 Safe Handling Practices for Pattern-Making Tools and Equipment
2. Refer to Unit 9.1: Tools, Equipment, and Hazard Management
Topic 9.1.2 Workplace Hazards and Methods for Protecting Organisational Assets
3. Refer to Unit 9.2 Emergency Response and First Aid Preparedness
Topic 9.2.2 Mock Drills and Evacuation Procedures
4. Refer to Unit 9.2: Emergency Response and First Aid Preparedness
Topic 9.2.3 Basic First Aid, Fire-Fighting, and Emergency Response Techniques
5. Refer to Unit 9.2: Emergency Response and First Aid Preparedness
Topic 9.2.5 CPR and Life-Saving Techniques



Unit 10.4 - Communication and Problem-Solving



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain safe working practices for cleaning, maintenance, and handling of equipment and tools.
2. Describe the effects of contamination (e.g., machine oil, dirt) on product quality.
3. Identify different types of cleaning equipment, substances, and their appropriate use.
4. Illustrate the operation of machines used for layering, spreading, and cutting processes.
5. List maintenance procedures for tools and equipment and describe common faults with rectification methods.
6. Explain effective communication methods with colleagues and supervisors, including reporting procedures.
7. Describe company quality standards and the importance of maintaining accurate quality records.
8. Demonstrate proper lifting, handling, and posture techniques to prevent injury.
9. Discuss methods for minimising wastage and safely disposing of waste in designated locations.

Unit 10.1: Workplace Safety and Maintenance

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain safe practices for cleaning and maintaining equipment.
2. Describe the effects of contamination on products, such as machine oil and dirt.
3. List types of cleaning equipment, substances, and their specific uses.
4. Illustrate safe handling techniques for materials, tools, and equipment.
5. Demonstrate correct lifting and handling procedures.
6. Identify and rectify common equipment faults effectively.
7. Perform running maintenance of tools and machines within responsibility limits.
8. Follow cleaning schedules and outline limits of responsibility.
9. Ensure proper storage of cleaning equipment after use.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, measuring tape, sample patterns, sewing machine, fabric swatches, presentation slides, overhead projector or large screen, computer or laptop.

Do

- Greet participants with a warm welcome and briefly introduce your experience in pattern making and garment construction.
- Clearly outline the objectives of the session and give participants an idea of what topics will be covered.
- Ensure that each participant has access to their handbook, notepad, pen, and required learning materials such as fabric swatches and sample patterns.
- Check that the whiteboard, projector, and sewing machine are all set up and functioning properly.
- Display the presentation slides on the large screen and ensure all visuals related to cutting and stitching processes are ready.
- Encourage each participant to introduce themselves and share their experience or interest in garment making.
- Mention that the session will include hands-on activities, discussions, demonstrations, and group work.
- Arrange the seating to allow easy access to materials and clear visibility of both instructor and demonstration area.
- Guide the flow of the session so participants can actively engage with examples while keeping the pace informative and supportive.
- Summarise the main learning points at the end and ask participants to reflect on how these skills apply in real garment production environments.

Say

- Welcome to today's session on Pattern Development and Garment Construction, where we will explore how patterns are created, assembled, and finalised.
- By the end of this session, you will understand the steps of cutting and stitching and how these processes shape the final garment.
- We will closely examine sample sketches and tech packs to ensure design accuracy before garment construction begins.
- Today's learning will include both theoretical understanding and practical applications, so get ready to work with tools, fabrics, and machines.
- I look forward to discussing how each part of the pattern making process affects garment fit, aesthetics, and production quality.

Ask

- What are some common tools used during the pattern cutting stage and why are they important?
- Can someone explain how reviewing a tech pack helps in reducing garment construction errors?
- Why is it important to match the pattern to the garment sample during the checking stage?
- How do stitching techniques change depending on fabric type or garment design?
- What do you think happens if measurements in the pattern do not align with the sketch specifications?

Elaborate

- Cutting is the first major step in garment construction, where patterns are laid out on fabric using tools like measuring tape and cutting scissors to ensure accurate dimensions.
- Stitching is the assembly phase where fabric pieces are joined using hand sewing or sewing machines, requiring precision and knowledge of fabric behaviour.
- Design specifications such as seam allowance, grain line, and notches must be reviewed before cutting to avoid errors during construction.
- Tech packs are detailed documents containing garment dimensions, fabric type, and stitching instructions, acting as a guide throughout production.
- Understanding the difference between body measurements and garment measurements helps in creating well-fitting clothing.
- Fit checking involves comparing the stitched sample with the design to assess comfort, appearance, and alignment with the original pattern.
- Patterns should be tested against real fabric to check how they respond to stretch, drape, and stitch tension during assembly.
- Final stitching includes hemming, finishing seams, and attaching closures like zippers or buttons, completing the garment as per design requirements.
- Garment samples help visualise how a design translates from paper to reality, guiding corrections in pattern development.
- Evaluating patterns after product completion is essential for quality control and for improving future designs.

Explain

- Pattern making involves drafting garment parts on paper based on measurements and transferring them onto fabric for cutting.
- Cutting follows the pattern outline to extract fabric shapes that match the garment's design and measurement.
- Stitching joins the cut pieces using straight or curved seams, depending on the design requirements and fabric type.
- Seam types such as flat-felled or overlocked seams contribute to the garment's durability and aesthetic.
- Sketches help the pattern maker visualise the garment's design features like pleats, darts, collars, and sleeves.
- Design specifications provide clarity on fit, length, and style, ensuring the final garment meets the intended look.
- Tech packs guide each stage from cutting to finishing, reducing miscommunication during production.
- Patterns are checked against garment samples to verify that the shape, size, and fit are aligned with client expectations.
- Final stitching involves adding finishing details and ensuring the product looks polished and professional.
- Evaluation helps identify gaps between the pattern and the final product, improving future accuracy and efficiency.

Demonstrate

Participants will use printed pattern templates and muslin fabric to simulate the cutting and stitching process from reviewing a tech pack to constructing a basic garment prototype, allowing them to understand each stage of the pattern development cycle in a hands-on and sequential manner.

Role Play

1. **Name of the Roleplay:** Pattern Check and Correction Discussion.
2. **Objective of the Roleplay:** To help participants learn how to discuss pattern errors and corrections effectively with design and stitching teams.
3. **Resources:** Participant handbook, sample tech packs, incorrect and corrected pattern copies, pens, whiteboard, markers.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Form groups of three where one participant plays the designer, another the pattern master, and the third the tailor.
 - Distribute a sample tech pack and a faulty pattern copy to each group.
 - The group must analyse and identify measurement or design mismatches.
 - Participants conduct a mock discussion on how to correct the errors and update the pattern for stitching.
 - Facilitate a summary where each group shares what corrections they suggested and why.
6. **Outcome:** Participants will improve communication and problem-solving skills when working in teams during the garment creation process.

Notes for Facilitation



- Use physical examples of patterns, fabric, and garments to explain concepts for better visual understanding.
- Adapt the speed of the session to ensure all participants have hands-on time with tools and materials.
- Encourage group participation and interaction during activities to build confidence and engagement.
- Incorporate real-life examples from garment production units to connect learning with practical application.
- Summarise each role-play or task with specific lessons and ask participants how they can apply these in real projects.

Unit 10.2: Tools, Machines, and Processes

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the machines used for layering and spreading processes.
2. List markers and tools required for marking.
3. Describe types of cutting machines, including scissors, straight knife, band knife, and laser cutting.
4. Illustrate maintenance procedures for tools and equipment.
5. Demonstrate correct use of cleaning equipment and methods.
6. Analyse strategies for minimising wastage and ensuring safe waste disposal.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Welcome the participants and introduce yourself, sharing your background in garment production and machine handling.
- Clearly communicate the unit's objectives and explain the agenda to provide participants with a clear direction for the session.
- Ensure every participant has access to their handbook and writing materials to actively participate and take notes.
- Verify that all required equipment, projector, and internet connection are working smoothly to support the session.
- Set up the seating to provide clear visibility of demonstrations and encourage group interaction.
- Highlight the importance of hands-on learning and invite participants to engage in practical discussions and activities.
- Share the relevance of each tool and machine to real-life garment production environments to spark interest.
- Encourage participants to discuss their prior experiences or observations of the machines or tools being taught.
- Move through topics at a steady pace to ensure clarity and maintain engagement across all learning styles.
- Conclude the session with a summary of key takeaways and prompt participants to think about how they can apply their knowledge in the workplace.

Say

- Welcome to today's session where we will explore the essential tools and machines used in garment construction and the correct processes for using and maintaining them.
- By the end of this session, you will understand the usage of cutting, spreading, marking tools and how to maintain and clean them properly.
- We'll look at the differences between traditional tools like scissors and advanced machines like band knives and laser cutters.
- Today's session will also focus on best practices for minimising material wastage and disposing of waste safely in the workplace.
- I look forward to hearing your observations and questions as we work through demonstrations and real-world examples.

Ask

- Can anyone share which cutting machines they've seen or used before in a garment unit or training setup?
- What do you think are some safety measures one must follow while using cutting or spreading machines?
- Why is regular maintenance of tools and machines important for a pattern master or garment worker?
- How would you ensure that marking tools are used efficiently and precisely during production?
- What strategies can help reduce fabric wastage during the layering and cutting process?

Elaborate

- Layering machines are used to arrange fabric layers evenly before cutting, which improves precision and reduces material waste.
- Spreading machines are often automated or semi-automated and help align the fabric correctly without tension.
- Marking tools like pencils, chalks, and markers are used to trace cutting lines or design patterns directly onto fabric.
- Manual scissors are best for sample cutting or small batches, while straight knives are used for large quantities and bulk cuts.
- Band knives provide a continuous cutting loop, offering high accuracy, especially for curves and notches.
- Laser cutting machines use heat and are ideal for high precision work, reducing fraying and increasing productivity.
- Regular maintenance includes sharpening blades, cleaning dust or fabric lint, and checking alignment or belt tension.
- Cleaning equipment such as lint brushes, vacuum systems, and oil cloths keep workstations clean and safe for operation.
- Waste minimisation involves smart marker planning, fabric saving techniques, and recycling leftover fabric pieces.
- Safe waste disposal includes segregating fabric scraps, storing sharp tools correctly, and avoiding clutter in the work area.

Explain

- Tools like scissors, markers, rulers, and measuring tapes are essential for precision during garment preparation.
- Layering machines help place multiple fabric layers uniformly, saving time and enhancing accuracy during cutting.
- Spreading processes require care to ensure fabric grains are aligned and no wrinkles exist that could distort the final garment.
- Straight knife machines consist of a vertically moving blade and are ideal for cutting straight lines in thick fabric layers.
- Band knife machines are stationary machines where fabric is moved against the blade, giving better control over curves.
- Laser cutting machines are programmed digitally and can execute complex patterns with great speed and clean edges.
- Maintenance of these machines includes oiling, tightening screws, and replacing worn-out parts to avoid breakdowns.

Demonstrate

Participants will use a simplified tool-and-machine identification chart with labelled diagrams and icons to classify and match each tool and machine with its corresponding process and safety instructions, reinforcing their understanding of use, maintenance, and best practices through visual and hands-on reference.

Role Play

1. **Name of the Roleplay:** Machine Handling and Safety Dialogue
2. **Objective of the Roleplay:** To help participants understand the correct usage and safety measures while using cutting and spreading machines.
3. **Resources:** Participant handbook, pen, notepad, presentation slides, whiteboard, markers, overhead projector or screen, computer or laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Divide participants into small groups and assign roles such as machine operator, supervisor, and safety officer.
 - Provide each group with a machine scenario, such as cutting with a straight knife or spreading fabric.
 - Ask them to perform a short role-play demonstrating how to use the machine while following safety guidelines.
 - After each group's presentation, initiate a group discussion highlighting correct practices and improvement areas.
 - Summarise the activity by highlighting the importance of safety awareness and teamwork during machine operations.
6. **Outcome:** Participants will be able to demonstrate correct machine handling practices and communicate safety procedures effectively.

Notes for Facilitation



- Maintain high energy during the session and relate each machine or tool to actual garment unit experiences.
- Use real or visual samples of tools and machines to keep the learning tangible and relatable.
- Engage participants with questions throughout to reinforce understanding and address doubts in real-time.
- Simplify explanations using drawings or physical demonstrations to support different learning styles.
- Summarise key points after every role-play or demonstration to reinforce important concepts and practices.

Unit 10.3: Quality Standards and Record-Keeping

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain company quality standards and expectations.
2. Describe the types of records maintained and methods for completion.
3. Discuss the importance of maintaining accurate quality records.
4. Report quality issues to the appropriate personnel.
5. Follow written instructions and procedures effectively.
6. Apply organisational procedures and safe working practices.
7. Identify the limits of self-responsibility in quality control.

Resources to be Used

Participant handbook, pen, notepad, whiteboard, markers, printed quality record templates, sample quality checklists, projector or screen, computer/laptop with internet, flip charts.

Do

- Welcome the participants warmly and introduce the topic's relevance in the garment and textile industry.
- Briefly outline the unit objectives and explain the importance of quality standards in workplace productivity.
- Distribute handbooks and encourage participants to keep notes during discussions and activities.
- Ensure the use of visual aids and sample quality documents to support understanding.
- Share real examples of how poor quality control affects production timelines and brand reputation.
- Involve participants in reviewing sample quality forms to identify gaps or errors.
- Discuss the chain of command for reporting quality issues and the importance of timely communication.
- Clarify how written procedures must be interpreted accurately to ensure product consistency.
- Emphasise safety procedures linked to quality assurance tasks.
- Reinforce that quality is a shared responsibility, but each worker must know their role and limits

Say

- Quality is not just about how good a product looks but about meeting the standards that customers expect.
- Every organisation has specific quality benchmarks that must be followed—let's understand how to meet them.
- You will learn how to fill out basic records correctly—without this, the entire quality process can fail.

- If a product defect is noticed, it is your responsibility to report it correctly and quickly to the right person.
- Written instructions are your guide—understanding and following them ensures that errors are avoided.
- Today, we'll also look at how safety practices and record-keeping go hand-in-hand.
- Let's learn where your responsibility starts and ends—quality control is teamwork.

Ask

- Has anyone here seen or filled out a quality checklist or inspection form before?
- What kind of problems do you think happen when records are not kept properly?
- Why is it important to report defects even if they seem small?
- What can go wrong if instructions are misunderstood or skipped during production?
- Who should you report a repeated quality issue to in your workplace?
- Can you think of a situation where you were unsure if it was your responsibility to report or fix a defect?

Elaborate

- Company quality standards ensure that all garments produced meet size, stitching, and appearance benchmarks. These standards may differ for domestic and export items.
- Records may include quality checklists, production logs, inspection reports, and defect reports. These help track problems and improve processes.
- Accurate records help prevent repeat mistakes, identify problem areas, and prove that quality checks were performed.
- Quality issues must be reported to supervisors or quality assurance teams. Delays in reporting can lead to shipment rejections.
- Written procedures guide workers on what to do at each step, ensuring consistency and minimising mistakes.
- Safe working practices include checking tools and surroundings before inspections, ensuring no injuries or hazards during quality checks.
- Workers are expected to follow quality standards but are not responsible for solving systemic issues—these should be reported upward.

Explain

- Quality control begins with understanding what a “good” product looks like—this is defined by company standards.
- Common records include daily quality inspection sheets, sample reports, and final inspection documentation.
- Errors in records can lead to incorrect decisions, such as passing a defective batch or missing trends in defects.
- It is important to communicate defects early and clearly so that the production process is not delayed.

- Written instructions often include step-by-step procedures or visual references—following these ensures fewer errors.
- Organisational procedures also cover hygiene, safety gear, and machine handling during quality inspection.
- Workers should act within their level—if unsure about how to fix an issue, they should escalate it rather than ignore it.
- Each employee plays a role in upholding ethical practices but must understand which decisions they can make and which need approval.
- Respecting customer guidelines enhances client satisfaction and reduces the chances of returns or reputation damage.

Demonstrate



Use a mock quality record sheet filled with both correct and incorrect entries. Ask participants to identify errors and correct them. This practical activity strengthens understanding of record accuracy and the consequences of improper documentation.

Role Play



1. **Name of the Roleplay:** Reporting a Quality Issue
2. **Objective of the Roleplay:** To help participants practice reporting garment defects to supervisors using correct language, tone, and procedure.
3. **Resources:** Sample defective garment (e.g., with stitching or fabric flaw), defect reporting template, participant notebook, pen, whiteboard, markers.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Select one participant to act as a production worker and another as the quality supervisor.
 - Provide the 'worker' with a garment that contains a visible defect, such as an incorrect stitch, fabric damage, or misplaced label.
 - Ask the worker to examine the defect and role-play reporting it to the supervisor clearly and respectfully, using the provided reporting template.
 - After the first round, ask the pair to swap roles and repeat the exercise.
 - Encourage other participants to observe and take notes on how well the reporting was done—focusing on communication, accuracy, and proper procedure.
 - Conclude the role-play with a group discussion and facilitator feedback on areas such as confidence, clarity, and adherence to reporting protocols.
6. **Outcome:** Participants will gain hands-on experience in defect identification and reporting, improve their workplace communication skills, and understand the importance of timely and respectful quality issue reporting.

Notes for Facilitation



- Link each concept to real garment industry practices to make it relevant and practical.
- Break down complex forms or procedures into simple steps.
- Use visual aids and live demonstrations to increase understanding.
- Encourage shy participants by pairing them with more confident ones during activities.
- Revisit the key message: “Quality is everyone’s responsibility—but knowing your role is key.”

Unit 10.4: Communication and Problem-Solving

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain effective communication strategies with colleagues and supervisors.
2. Describe lines of communication, authority, and reporting procedures.
3. Illustrate methods for resolving problems within the work area.
4. Discuss the importance of maintaining proper posture and comfortable working positions.
5. Explain the significance of adhering to instructions and guidelines.
6. Assess accurate reporting and documentation of workplace issues.
7. Analyse collaborative problem-solving approaches in the workplace.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet the participants with a warm welcome and introduce yourself by sharing your experience in the garment and apparel industry.
- Clearly explain the objectives of the unit so that participants understand the expected outcomes of the session.
- Confirm that all participants have the participant handbook, notepad, and pen ready to take notes and participate actively.
- Test the whiteboard, projector, and internet connection to ensure a smooth and uninterrupted session.
- Set up the presentation slides on the projector or screen for easy visual access to key points and examples.
- Invite participants to briefly introduce themselves and mention one communication challenge they face at work.
- Explain the interactive format of the session, highlighting activities, group discussions, and role-plays.
- Arrange the seating to facilitate small group interactions and clear visibility of the facilitator and visuals.
- Pace the session in a manner that maintains engagement while allowing enough time to grasp concepts fully.
- Summarise the key learning points at the end and encourage participants to think of how they can apply them in real work scenarios.

Say

- Welcome to today's session on Communication and Problem-Solving for Pattern Masters in Apparel, where we'll learn to work better as a team and manage daily workplace challenges.
- By the end of this session, you will understand how to communicate clearly, solve problems efficiently, and report issues professionally.
- We will explore different lines of authority, how to follow instructions correctly, and why posture and comfort matter while working.
- Good communication and problem-solving make the workplace more productive, safer, and more pleasant for everyone.
- Let's dive in and learn how we can handle communication breakdowns and workplace issues using practical tools and teamwork.

Ask

- What are some common misunderstandings you've faced while communicating with your team or supervisor?
- Can anyone share how they usually report a problem or issue at the workplace?
- Why do you think posture and comfort are important while working long hours on pattern-making tasks?
- What do you think is the impact of not following guidelines or instructions properly at work?
- Have you ever resolved a workplace issue with a team member and how did that go?

Elaborate

- Effective communication ensures that tasks are completed correctly and reduces errors in cutting, sewing, and pattern instructions.
- Using clear language and active listening helps prevent misunderstandings between team members and supervisors.
- A well-defined line of communication ensures that issues are escalated to the right person at the right time.
- Understanding who to report to and how to do so helps maintain order and avoid delays in production.
- Problem-solving methods such as identifying the root cause and involving relevant colleagues ensure practical solutions.
- Maintaining proper posture prevents physical strain during long hours of drafting or working at cutting tables.
- Adhering to safety and procedural guidelines avoids injuries and improves overall workplace discipline.
- Accurate documentation of workplace issues helps in analysis and future prevention of the same problems.
- Collaborative problem-solving builds team trust and brings diverse ideas to overcome challenges.
- Following structured communication processes enhances team coordination and workplace harmony.

Explain

- Communication strategies like using polite language, asking questions when unsure, and confirming instructions help reduce mistakes.
- When team members understand the reporting hierarchy, they know whom to approach for support or guidance.
- Proper communication helps avoid production delays, especially when working on tight schedules.
- Clear written or verbal instructions improve efficiency in tasks like marking, grading, or laying out patterns.
- Posture affects both health and productivity, so sitting straight and adjusting table height makes long tasks more manageable.
- Ignoring small issues can lead to bigger problems, so it is important to report them on time.
- Correct reporting includes stating what the issue is, when it occurred, and how it affects work.
- Collaborative approaches like group discussions or team meetings can provide faster and better solutions.
- Consistent documentation helps management identify patterns in problems and improve workflows.
- Being aware of your responsibilities, communication style, and reporting lines leads to a more professional workplace.

Demonstrate

Participants will use a visual communication and reporting flowchart to simulate how they would identify, report, and collaboratively solve a workplace issue while ensuring clarity in communication and proper documentation of the incident in a structured format for learning and practice.

Role Play

1. **Name of the Roleplay:** Resolving a Miscommunication with a Supervisor
2. **Objective of the Roleplay:** To demonstrate the importance of using clear communication when handling a workplace misunderstanding.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Assign participants into pairs with one playing the Pattern Master and the other acting as the Supervisor.
 - Provide each pair with a scenario where a pattern modification was misunderstood and caused delay.
 - Ask the participants to enact a conversation where they clarify the issue and use good communication strategies to resolve it.
 - After each role-play, ask the group to reflect on what communication strategies were effective.
 - Facilitate a discussion about how misunderstandings can be avoided by clarifying and confirming instructions.
6. **Outcome:** Participants will understand the impact of clear communication in avoiding errors and building trust with supervisors.

Notes for Facilitation



- Encourage active listening by asking follow-up questions during discussions and role-plays to reinforce learning.
- Use relatable examples from tailoring units and pattern drafting environments to help participants connect better.
- Reinforce learning by summarising key takeaways after each segment and asking participants how they can apply them at work.
- Create a supportive environment where participants feel comfortable sharing workplace experiences.
- Incorporate hands-on activities to maintain engagement and provide practical experience in communication and reporting.

Answers to Exercises for PHB

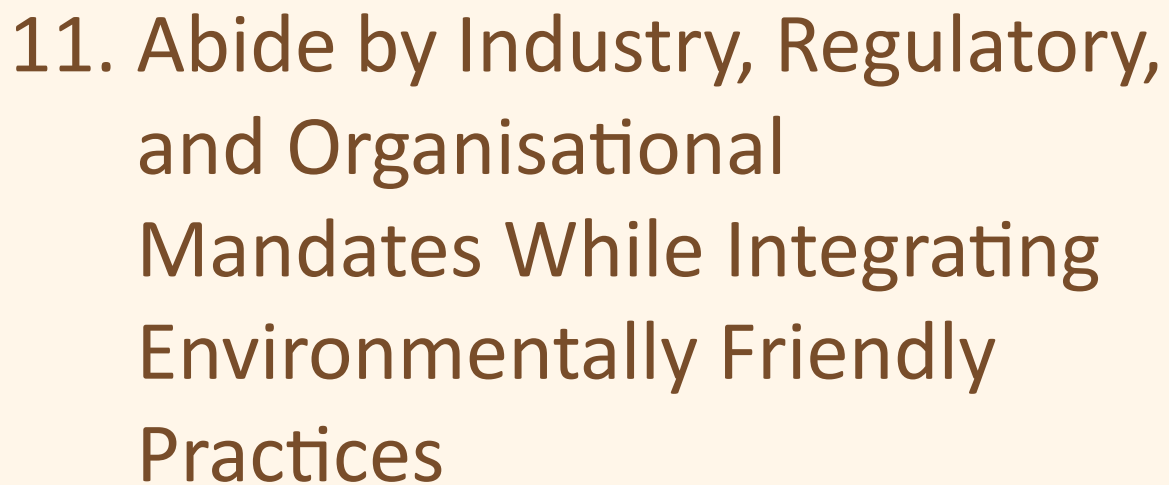
Answer the following questions by choosing the correct option:

1. c. To remove contamination effectively
2. c. Laser cutter
3. b. To avoid health issues and discomfort
4. c. Store them properly
5. c. Appropriate personnel

Answer the following questions briefly.

1. Refer to Unit 10.1: Workplace Safety and Maintenance
Topic 10.1.1 Safe Practices for Cleaning and Maintaining Equipment
2. Refer to Unit 10.2: Tools, Machines, and Processes
Topic 10.2.3 Types of Cutting Machines in Garment Production
3. Refer to Unit 10.3: Quality Standards and Record-Keeping
Topic 10.3.3 Maintaining Accurate Quality Records
4. Refer to Unit 10.4: Communication and Problem-Solving
Topic 10.4.1 Effective Communication Strategies with Colleagues and Supervisors
5. Refer to Unit 10.2: Tools, Machines, and Processes
Topic 10.2.6 Strategies for Minimising Wastage and Ensuring Safe Waste Disposal





Unit 11.3 - Operational Efficiency and Maintenance



Key Learning Outcomes



By the end of this module, the participants will be able to:

1. Explain the importance of ethical and value-based governance in organisations.
2. Discuss the benefits of practising values and ethics for individuals and organisations.
3. Describe the significance of punctuality, attendance, and adherence to workplace regulations.
4. Illustrate customer-specific and country-specific regulatory requirements in the apparel sector.
5. Analyse the reporting procedures and handling of deviations in organisational policies.
6. Assess personal responsibility limits and the importance of clarifying policy-related doubts.
7. Apply legal, regulatory, and ethical procedures while supporting supervisors in enforcement.
8. Demonstrate safe handling of materials, equipment, and software, ensuring a hazard-free workspace.
9. Use appropriate cleaning methods, report unsafe conditions, and maintain design work backups effectively.

Unit 11.1: Ethical and Organisational Integrity

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain the significance of ethical and value-based governance.
2. Describe the benefits of practising ethics and values in the workplace.
3. Discuss the impact of punctuality, attendance, and professionalism.
4. Identify customer-specific requirements in work processes.
5. Analyse country and customer-specific regulations in the apparel sector.
6. Illustrate organisational reporting procedures for deviations.
7. Assess the limits of personal responsibility and boundaries.
8. Report deviations to regulatory authorities effectively.
9. Discuss policies and procedures through discussions with supervisors.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.

Do

- Greet the participants and introduce yourself while building rapport and explaining your background in the apparel sector to set a professional tone
- Clearly explain the unit objectives and how they relate to integrity, values, and compliance in the workplace for pattern makers
- Confirm that participants have all required learning materials such as their handbook, writing tools, and readiness to engage
- Check and set up the technological and visual aids like the whiteboard, projector, and presentation slides before starting
- Invite each participant to briefly share their expectations from this session to create an inclusive learning atmosphere
- Inform the group that ethical decision-making will be explored through discussions, scenarios, and small group reflections
- Arrange seating in a semi-circle or clusters for clear visibility and effective group interaction during discussion and activities
- Pace the session based on participant feedback and engagement, allowing time for clarification of real-life applications
- Summarise the key points after each sub-topic and relate them to daily responsibilities in the apparel sector
- Close the session by asking participants to share one new learning they plan to apply in their workplace immediately.

Say

- Welcome to today's session on ethical and organisational integrity in the apparel industry which plays a key role in ensuring trust, quality, and compliance
- By the end of this session, you will better understand how ethics and values directly impact the way we work and interact with our clients, supervisors, and co-workers
- We will also explore how professionalism, punctuality, and clear communication contribute to a respectful and effective work culture
- You will learn how to identify and report ethical issues, workplace deviations, and compliance matters as part of your personal responsibility
- Let's explore how following the right processes protects your role, the company's reputation, and the quality expected by clients and international buyers.

Ask

- What do you understand by the term ethical behaviour in the context of a garment or pattern-making workplace?
- Can anyone share a time when professionalism or punctuality positively influenced the workplace or team output?
- Why do you think following customer-specific requirements is crucial for repeat business and brand image?
- How would you respond if you noticed a deviation from a standard work process that may affect the final garment quality?
- What steps would you take if you needed to report an issue to your supervisor or a regulatory authority?

Elaborate

- Ethical and value-based governance means following rules and principles that ensure fairness, transparency, and accountability in the workplace.
- Being ethical in your actions builds long-term trust with clients and strengthens your own credibility and reliability as a professional.
- In the apparel sector, ethics influence areas such as timely delivery, safe working conditions, quality control, and proper use of materials.
- Respecting workplace boundaries and following procedures for grievances or deviations avoids misunderstandings and protects both employee and employer.
- Professionalism includes maintaining punctuality, dressing appropriately, following safety norms, and treating colleagues with respect.
- Different countries and clients have specific requirements related to quality, labour rights, safety, and materials used which must be followed strictly.
- Knowing where your responsibility ends and when to involve supervisors prevents overstepping and ensures accountability.
- Understanding and applying organisational procedures to report errors or violations supports improvement and maintains integrity.

- Effective reporting means documenting facts clearly, communicating with the right person, and ensuring confidentiality when needed.
- Regular discussions with supervisors help clarify job expectations, reinforce values, and allow space to address workplace concerns constructively.

Explain

- Ethical governance means working with honesty, fairness, and responsibility while ensuring quality output and compliance with company policies.
- In the apparel sector, practicing ethics includes respecting time, materials, deadlines, and fulfilling client specifications without compromise.
- Professional conduct reflects in how you communicate, maintain attendance, follow instructions, and respond to challenges at work.
- Many apparel clients follow global compliance norms and expect companies to meet these standards related to quality, safety, and fair treatment.
- A pattern master must know when to take action and when to escalate issues through proper reporting lines to prevent small issues from becoming major errors.
- Every organisation has a specific reporting process which helps in correcting mistakes early and maintaining quality consistency.
- You are expected to take ownership of your tasks while also respecting the limits of your role and allowing supervisors to handle major decisions.
- Customer-specific regulations include measurement systems, material preferences, delivery schedules, and documentation that must be carefully followed.
- Punctuality and discipline are not just habits but part of workplace integrity that affect the trust placed in you by the employer and client.
- Being ethical also means helping others follow the rules and participating in a work culture where everyone is accountable and valued.

Demonstrate

Participants will use sample deviation report templates to simulate a scenario where they identify a production error in a garment pattern and must decide how to report it following company procedure while respecting professional boundaries and organisational hierarchy.

Activity

1. **Name of the Activity:** Workplace Ethics Mapping
2. **Objective of the Activity:** To help participants identify workplace situations where ethics and values are required for decision-making.
3. **Resources:** Participant handbook, pen, notepad, whiteboard, markers, presentation slides, overhead projector or large screen, computer or laptop with internet connection.
4. **Time Duration:** 20 minutes

5. Instructions:

- Present a list of common workplace scenarios that require ethical decisions such as reporting errors or maintaining confidentiality
- Ask participants to work in pairs and identify the ethical issues and right course of action for each situation
- Guide each pair to relate the issue to company values and customer expectations
- Invite pairs to present one case and their decision to the group for discussion
- Conclude by highlighting how ethical actions build trust and reduce workplace conflicts.

6. Outcome: Participants will learn to recognise and respond to ethical challenges in the apparel workplace.

Notes for Facilitation

- Encourage open discussions and allow participants to express their views on ethics based on real workplace situations they may have encountered
- Use examples specific to the apparel industry such as customer quality requirements, sample delivery deadlines, or handling workplace complaints
- Keep participants engaged by varying the format between discussions, short writing tasks, and case-based activities
- Address doubts related to compliance or boundaries gently and ensure all responses are respected
- Summarise frequently and check in with participants to reinforce learning before moving to the next topic.

Unit 11.2: Compliance and Sustainability Practices

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain organisational policies and procedures.
2. Describe methods to support supervisors in policy enforcement.
3. Discuss procedures for handling legal, regulatory, and ethical breaches.
4. Illustrate legal and regulatory compliance in the apparel industry.
5. Analyse work performance against organisational standards.
6. Apply sustainable consumption practices in daily tasks.
7. Assess strategies for enhancing performance through eco-friendly adaptations.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, overhead projector or large screen, computer/laptop with internet connection.

Do

- Greet the participants warmly and introduce yourself by sharing your background and experience related to workplace compliance and sustainability.
- Clearly explain the objectives of the unit and provide a brief overview of what participants can expect to learn during the session.
- Ensure that all participants have access to their participant handbook, notepad, and writing materials before the session begins.
- Check that all technical tools such as the whiteboard, projector, and internet connection are functioning properly for smooth delivery.
- Use the initial moments to ask participants to introduce themselves and share their expectations for this session.
- Create a supportive and interactive learning environment by encouraging active participation and discussion.
- Organise seating so participants can view the screen clearly and collaborate in small groups for upcoming activities.
- Engage participants with examples from real-life apparel industry scenarios to relate the concepts to their daily work.
- Monitor the pace of the session to ensure all participants are able to grasp the concepts effectively.
- Conclude the session by summarising key takeaways and motivating participants to apply sustainable and compliant practices in their roles.

Say

- Welcome to today's session on compliance and sustainability practices in the apparel industry where we will understand the importance of following rules and maintaining environmental responsibility.
- By the end of this session, you will learn how to follow organisational policies, support supervisors, and ensure your work aligns with compliance standards.
- We will discuss legal and regulatory frameworks that apply to the apparel industry and how to handle violations ethically and responsibly.
- You will also discover how small changes in your daily tasks can support sustainability and improve your performance at work.
- This session is designed to help you become a responsible and informed team member who contributes to both company goals and environmental well-being.

Ask

- Can anyone share an example of an organisational policy they follow in their current role or have heard about?
- What are some common challenges in following compliance rules in the apparel industry?
- Why do you think it's important to report breaches of legal or ethical standards at the workplace?
- How can individual workers help in supporting eco-friendly practices in a manufacturing setting?
- In what ways can we improve our personal performance while also contributing to environmental sustainability?

Elaborate

- Compliance refers to following all rules and standards set by your organisation and the government to ensure safe and ethical work environments.
- Organisational policies may cover a range of topics such as safety procedures, waste disposal, working hours, and employee conduct.
- Supporting your supervisor means helping in ensuring that all team members follow policies and guidelines while setting a good example yourself.
- Breaches in compliance could be anything from ignoring safety rules to engaging in unethical behaviour and must be reported responsibly.
- In the apparel industry, regulations often include standards for fair wages, child labour laws, and sustainable sourcing practices.
- Assessing your work performance regularly helps identify areas of improvement and shows your commitment to quality and responsibility.
- Sustainable consumption means reducing waste, reusing materials, and using resources wisely in your day-to-day tasks.
- Eco-friendly adaptations could include using fabric scraps effectively, reducing electricity usage, or managing chemical waste properly.
- Companies that focus on sustainability often gain respect, reduce costs, and meet the growing expectations of environmentally aware customers.
- A culture of compliance and sustainability builds trust, improves teamwork, and ensures long-term success for both employees and employers.

Explain

- Organisational policies are formal rules that guide how employees should behave and perform their duties to maintain order and efficiency.
- These policies are created to ensure the workplace runs smoothly, legally, and ethically with clear expectations for all employees.
- Supervisors rely on team members to follow and help enforce these rules through cooperation, accountability, and communication.
- Legal compliance in the apparel sector ensures that labour laws, product safety standards, and environmental guidelines are strictly followed.
- Performance against organisational standards is measured using checklists, targets, and quality benchmarks to maintain consistent output.
- Sustainable practices in daily tasks include using fewer paper resources, switching off unused machines, and promoting fabric reuse.
- Eco-friendly behaviours at work reduce the environmental footprint and show that workers are mindful of how their actions affect the planet.
- Sustainability also improves efficiency since less waste and smarter processes usually lead to cost savings and higher productivity.
- When employees align their actions with both compliance and sustainability goals, they support the broader mission of responsible production.
- Following these practices helps individuals build a reputation as reliable and forward-thinking professionals within the organisation.

Demonstrate

Participants will use a printed compliance checklist template for apparel workers to simulate identifying policy gaps and suggest eco-friendly solutions during a mock workplace audit to understand how to maintain compliance while improving sustainability in their daily tasks.

Role Play

1. **Name of the Roleplay:** Reporting a Policy Violation
2. **Objective of the Roleplay:** To help participants practice how to report a legal or ethical policy violation effectively and professionally.
3. **Resources:** Participant handbook, pen, notepad, presentation slides, whiteboard, markers, overhead projector or large screen, computer/laptop with internet connection.
4. **Time Duration:** 20 minutes
5. **Instructions:**
 - Divide participants into small groups and assign each a scenario involving a breach of organisational policy.
 - Ask one participant in each group to play the role of a team member reporting the breach, while another plays a supervisor receiving the report.
 - Encourage the group to discuss the best approach for handling the situation while maintaining professionalism.

- After each role-play, facilitate a group discussion to reflect on what went well and what could be improved.
 - Summarise the activity by highlighting the importance of clear communication and timely reporting in compliance.
6. **Outcome:** Participants will gain confidence in reporting policy breaches and understand the significance of addressing issues ethically.

Notes for Facilitation

- Encourage participants to ask questions and share experiences from their workplace to build relevance and engagement.
- Use clear examples and explain unfamiliar terms so that everyone can understand, regardless of their background.
- Adapt your explanations to the participants' level of experience to keep them interested and involved throughout the session.
- Incorporate visual demonstrations wherever possible to explain policy structures and sustainable workflows clearly.
- Summarise each activity with a short recap of key learnings and encourage participants to apply them in real-life work settings.

Unit 11.3: Operational Efficiency and Maintenance

Unit Objectives

By the end of this unit, the participants will be able to:

1. Explain safe handling practices for materials, equipment, and software.
2. Describe the process of performing scheduled maintenance and cleaning.
3. Report unsafe equipment and hazardous incidents accurately.
4. Illustrate the use of appropriate cleaning equipment and methods for specific tasks.
5. Assess the need for system or software upgrades and implement backup management.
6. Maintain and organise soft copies of design work for future reference.

Resources to be Used

Participant handbook, notepad, pen, whiteboard, markers, presentation slides, projector or large screen, sample maintenance checklists, cleaning tool visuals, computers/laptops, backup management tool (demo or image).

Do

- Start the session by greeting participants and introducing yourself with a brief explanation of your experience in workplace safety, maintenance, and operations.
- Provide an overview of what the unit will cover and how it helps improve efficiency and safety at the workplace.
- Ensure all participants have their learning materials ready and can view the presentation screen.
- Set up real or visual samples of cleaning equipment, maintenance checklists, or screenshots of file backup software to enhance engagement.
- Encourage active participation by asking simple questions and prompting learners to share their own work habits.
- Use group discussions, demonstrations, and structured activities to build practical understanding of daily maintenance routines.
- Guide the activity carefully, supporting participants in completing their tasks and providing feedback when needed.
- Close the session by reviewing key points and encouraging practical application at their own workstations.

Say

- Welcome to today's session on operational efficiency and maintenance. In this session, we'll learn how to keep our equipment, software, and workplace safe and well-organised.
- We'll explore how regular maintenance, cleaning, and safe handling help prevent problems and improve performance.

- You will also learn how to identify and report unsafe conditions and how to maintain your work files properly for future use.
- Understanding these processes ensures your work is consistent, safe, and efficient, especially in a fast-paced industry like apparel production.
- Let's begin by learning the basics of handling tools and technology safely and then move on to cleaning and organising practices.

Ask



- What are some examples of equipment or tools you use regularly at work?
- Why do you think cleaning and maintenance should be done regularly?
- Have you ever seen a safety hazard at work? How was it handled?
- What methods do you use to store or organise your design files?
- When do you think it is necessary to upgrade a software system?

Elaborate



- Safe handling involves using tools, machines, and software carefully to avoid damage or injury—for example, wearing gloves or turning off a machine before cleaning it.
- Scheduled maintenance means checking and cleaning equipment at regular intervals so it runs smoothly and doesn't break down.
- Reporting unsafe equipment or hazards quickly can prevent serious accidents and shows responsibility in the workplace.
- Different tasks need different cleaning tools—soft brushes for delicate surfaces, disinfectants for shared tools, and dry clothes for electronics.
- Keeping software updated helps avoid technical issues and improves speed and security. Regular backups protect your work from being lost.
- Organising soft copies of design files means naming them clearly, storing them in folders by date or project, and backing them up on a drive or cloud.
- These small but important steps keep the workplace safe, clean, and efficient while helping you perform better.

Explain



- Proper operational practices ensure tools and systems function well and reduce the chances of delays or accidents.
- Safe handling means following basic safety rules—like unplugging a computer before cleaning or using lifting tools for heavy materials.
- Scheduled cleaning and maintenance must be planned and noted using a checklist to track what's been done and what's pending.
- Accurate reporting involves noting down the equipment name, the issue observed, the date, and whom it was reported to.

- Using the correct cleaning equipment for each task prevents damage and ensures hygiene. For example, harsh chemicals should not be used on digital screens.
- Software systems need regular updates to fix bugs and improve functionality. Backups protect against data loss in case of errors or crashes.
- Organising files helps you retrieve past work quickly, share work efficiently, and show professionalism in record-keeping.

Demonstrate



The facilitator shows a maintenance checklist and walks the participants through how to mark scheduled tasks (e.g., clean machine, check cables). Then, using a computer or demo file structure, the facilitator demonstrates how to rename, store, and back up soft copies of design files on a USB drive or cloud folder.

Activity



1. **Name of the Activity:** Maintenance and File Organisation Drill
2. **Objective of the Activity:** To give participants hands-on experience in scheduling maintenance tasks and organising design files.
3. **Resources:** Maintenance checklist (printed), sample design files (printed or digital), folder structure template, coloured markers/pens, computer/laptop or printed activity sheet.
4. **Time Duration:** 25 minutes
5. **Instructions:**
 - Divide participants into small groups of 3–4.
 - Provide each group with a sample maintenance checklist, a list of common equipment/software, and a folder structure guide.
 - Ask the group to fill in a weekly maintenance plan for cleaning and checking each item on the checklist. They should include who is responsible and when it should be done.
 - Provide them with 10 sample file names (e.g., “design123”, “final1.jpeg”, and “draft_v3”) and ask them to rename and organise them into proper folders by project and date.
 - Ask each group to decide when a system/software update might be necessary and how they would create a backup for their work.
 - Once done, each group will present their maintenance plan and folder structure to the class.
 - Facilitate a short discussion to reflect on what they learned and how it applies to their current role.
6. **Outcome:** Participants will understand how to plan basic maintenance routines, recognise safety responsibilities, and organise design work efficiently. This will help them become more accountable and efficient in the workplace.

Notes for Facilitation



- Keep the pace suitable for all learning levels and provide guidance where needed.
- Support learners who may not be comfortable with digital file management by using visual aids and printed examples.
- Give constructive feedback during the activity to help learners see where they can improve.
- Emphasise that operational efficiency is not just the responsibility of one person—it's a shared effort across the team.
- Encourage learners to take these practices back to their work area and apply them consistently.

Answers to Exercises for PHB

Answer the following questions by choosing the correct option:

1. c. Improved trust and collaboration
2. c. It enhances discipline and reliability
3. b. Minimising resource wastage
4. c. Report it immediately
5. c. In soft copies, properly organised

Answer the following questions briefly.

1. Refer to Unit 11.1: Ethical and Organisational Integrity
Topic 11.1.1 Ethical and Value-Based Governance in the Workplace
2. Refer to Unit 11.1: Ethical and Organisational Integrity
Topic 11.1.3 Punctuality, Attendance, and Professionalism
3. Refer to Unit 11.2: Compliance and Sustainability Practices
Topic 11.2.2 Methods to Support Supervisors in Policy Enforcement
4. Refer to Unit 11.3: Operational Efficiency and Maintenance
Topic 11.3.3 Unsafe Equipment and Hazardous Incidents
5. Refer to Unit 11.2: Compliance and Sustainability Practices
Topic 11.2.6 Sustainable Consumption Practices in Daily Tasks





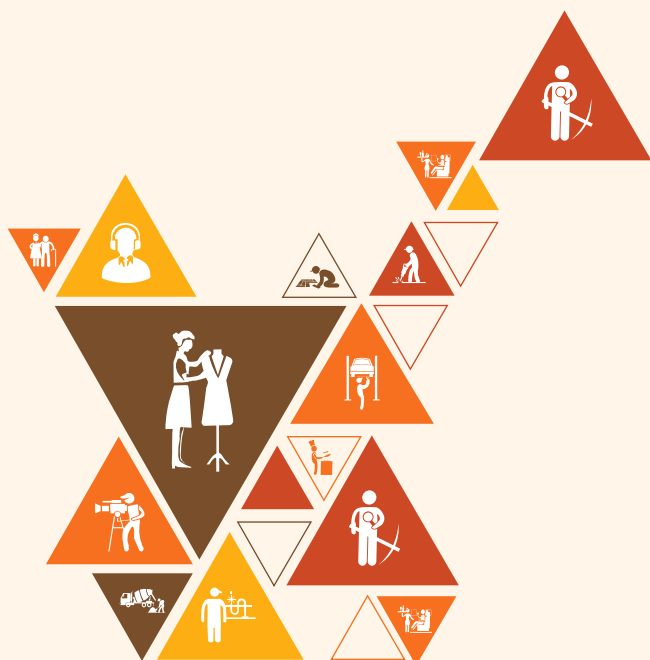
Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



12. Employability Skills



DGT/VSQ/N0102

Scan the QR codes or click on the link for the e-books



<https://www.skillindiadigital.gov.in/content/list>

Employability Skills



Skill India
कौशल भारत - कुशल भारत



सत्यमेव जयते
GOVERNMENT OF INDIA
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& ENTREPRENEURSHIP

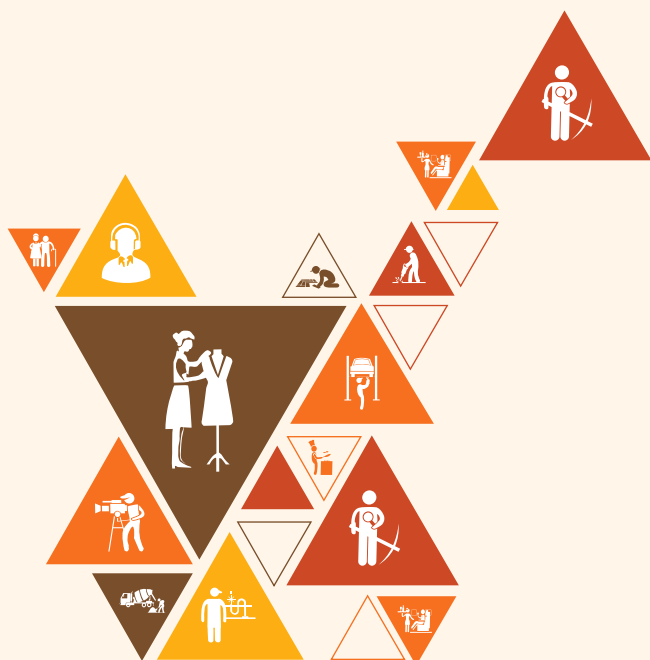


13. Annexures

Annexure I: Training Delivery Plan

Annexure II: Assessment Criteria

Annexure III: List of QR Codes Used in PHB



Annexure I

Training Delivery Plan

Training Delivery Plan			
Program Name:	Pattern Master - Apparel		
Qualification Pack Name & Ref. ID	Pattern Master - Apparel , AMH/Q1105		
Version No.	4.0	Version Update Date	22-10-2027
Pre-requisites to Training (if any)	Preferably Training on Pattern Making		
Training Outcomes	After completing this programme, participants will be able to: 1. Elaborate on the procedures to maintain your work area, tools, and machines in optimal condition. 2. Illustrate how to comply with industry, regulatory, and organisational requirements in the pattern-making unit. 3. Highlight strategies for greening job roles and adopting environmentally sustainable practices. 4. Elucidate the steps for planning and preparing the pattern-making process as per the received tech pack. 5. Discuss methods for inspecting and validating patterns to ensure accuracy and quality. 6. Describe how to maintain health, safety, and security in the pattern-making workplace with gender and PwD sensitisation. 7. Explain essential employability skills required for a successful career as a Pattern Master in the apparel industry.		

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
1.	Introduction and Orientation to Pattern Master – Apparel	Introduction and Orientation to Pattern Master – Apparel	• Elaborate on the process of planning and preparation involved in pattern making based on the Techpack received for apparel production. • Describe the key roles and responsibilities that define the job profile of a Pattern Master – Apparel in a typical garment manufacturing setup.	Bridge Module	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	3 Theory (03:00) Practical (00:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
			Outline the different employment opportunities available for a Pattern Master – Apparel within various segments of the apparel industry.				
2	Fabric Fundamentals	Information Collection and Interpretation	- Elaborate on how to collect, comprehend, and compile information from various sources, including designers, buyers, and merchandisers. - Describe how to analyse information and translate inputs accurately as per company procedures. - Outline the process of coordinating with concerned designers and merchandisers for clarity of information against received tech packs and suggesting modifications if necessary.	AMH/N1105 PC1, PC2, PC3	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	8 Theory (02:00) Practical (06:00)
		Review Integration and Pattern Detailing	- Illustrate how to effectively incorporate and accommodate review inputs alongside the tech pack. - Elucidate the process of creating paper patterns with all essential details such as notches and parts marking (pockets, buttonholes, pleats, etc.). - Describe the method for including pattern marking for bulk production on created patterns.	AMH/N1105 PC4, PC5			8 Theory (02:00) Practical (06:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Fabric Consumption Calculation	- Elaborate on the process of compiling inputs from designers, buyers, and merchandisers to ensure complete understanding of the Techpack requirements. - Outline the procedure to coordinate with designers and merchandisers for clarifying technical inputs and suggesting necessary modifications. - Elaborate on the method of incorporating feedback and review inputs effectively alongside the Techpack for precise pattern development.	AMH/N1105 PC6			8 Theory (01:00) Practical (07:00)
		Documentation and Communication	- Elaborate on the importance of documenting all collected, analysed, and translated information for future reference. - Describe how to effectively communicate suggested modifications and clarifications to designers and merchandisers. - Illustrate the process of maintaining clear and comprehensive records of all review inputs and their incorporation into the tech pack and patterns.	AMH/N1105 PC1, PC3, PC4			5 Theory (00:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
3	Interpreting the Tech-pack	Tech Pack Information Management	- Elaborate on how to collect, comprehend, and compile information from various sources, including designers, buyers, and merchandisers. - Describe how to analyse information and translate inputs as per company procedure. - Outline how to coordinate with the concerned designer and merchandiser for clarity of information against the tech pack received and suggest modifications if any.	AMH/N1105 PC1, PC2, PC3	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	7 Theory (02:00) Practical (05:00)
		Pattern Development and Refinement	- Illustrate how to incorporate and accommodate review inputs alongside the tech pack. - Elucidate the process of creating paper patterns with all essential details like notches, parts marking (pockets, buttonholes, pleats, etc.). - Describe how to include pattern marking for bulk production.	AMH/N1105 PC4, PC5			7 Theory (02:00) Practical (05:00)
		Fabric Consumption Calculation	- Elaborate on the process of compiling inputs from designers, buyers, and merchandisers to ensure complete understanding of the Techpack requirements. - Outline the procedure to coordinate with designers and merchandisers for clarifying technical inputs and suggesting necessary modifications.	AMH/N1105 PC6			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
			Elaborate on the method of incorporating feedback and review inputs effectively alongside the Techpack for precise pattern development.				
4	Prepare for Making patterns as Per Techpack	Information Collection & Understanding	- Elaborate on how to collect, comprehend, and compile information from various sources such as the designer, buyer, and merchandiser. - Describe how to analyse information and translate inputs accurately as per company procedure. - Outline how to coordinate with the concerned designer and merchandiser for clarity of information against the tech pack received and suggest modifications if any.	AMH/N1105 PC1, PC2, PC3	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	5 Theory (02:00) Practical (03:00)
		Tech Pack Review & Adaptation	- Illustrate how to effectively incorporate and accommodate review inputs alongside the tech pack. - Elaborate on the importance of adapting pattern specifications based on feedback from designers and merchandisers. - Outline the procedure to ensure all suggested revisions are accurately reflected in the final pattern draft.	AMH/N1105 PC4			5 Theory (02:00) Practical (03:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Pattern Creation Fundamentals	- Elucidate the process of creating paper patterns with all essential details like notches. - Describe how to include parts marking such as pockets, buttonholes, and pleats on the patterns. - Outline the method for adding pattern marking specifically for bulk production.	AMH/N1105 PC5			5 Theory (02:00) Practical (03:00)
		Fabric Consumption Calculation	- Describe how to calculate the average fabric consumption accurately as per the pattern developed. - Elaborate on the factors influencing fabric consumption, including pattern size, garment type, and fabric width. - Outline the methodology to estimate fabric requirements for bulk production while minimising material wastage.	AMH/N1105 PC6			5 Theory (02:00) Practical (03:00)
		Pre-Production Communication & Refinement	- Elaborate on the techniques for communicating potential modifications and clarifications regarding the tech pack with relevant stakeholders. - Outline the process of ensuring all review inputs are fully understood and correctly integrated into the pattern preparation. - Illustrate the importance of cross-referencing all compiled information with the tech pack to avoid discrepancies before pattern creation.	AMH/N1105 PC1, PC3, PC4			5 Theory (02:00) Practical (03:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
5	Develop pattern as Per Tech-pack	Information Gathering & Comprehension	- Elaborate on how to collect, comprehend, and compile information from various sources such as the designer, buyer, and merchandiser. - Describe how to analyse information and translate inputs accurately as per company procedure. - Outline how to coordinate with the concerned designer and merchandiser for clarity of information against the tech pack received and suggest modifications if any.	AMH/N1105 PC1, PC2, PC3	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	8 Theory (03:00) Practical (05:00)
		Review Integration & Tech Pack Alignment	- Illustrate how to effectively incorporate and accommodate review inputs alongside the tech pack. - Describe the process of identifying and resolving discrepancies between initial tech pack information and review inputs. - Outline how to ensure all necessary adjustments are made to align patterns with updated specifications.	AMH/N1105 PC4			8 Theory (03:00) Practical (05:00)
		Fundamental Pattern Construction	- Elucidate the process of creating paper patterns with all essential details like notches. - Describe how to establish accurate basic block patterns based on tech pack measurements. - Outline the techniques for maintaining pattern integrity and precision during the initial construction phase.	AMH/N1105 PC5			8 Theory (03:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Detailed Pattern Marking for Components	- Describe how to include specific parts marking on patterns, such as pockets, buttonholes, and pleats. - Illustrate the proper placement and sizing of these component markings. - Elucidate the importance of clarity and accuracy in marking for subsequent production stages.	AMH/N1105 PC5			7 Theory (02:00) Practical (05:00)
		Pattern Preparation for Mass Production	- Outline the method for adding pattern marking specifically for bulk production on created patterns. - Describe how to optimise patterns for efficient cutting and assembly in a mass production environment. - Illustrate the techniques for ensuring consistency and reproducibility across multiple pattern pieces for bulk manufacturing.	AMH/N1105 PC5			6 Theory (01:00) Practical (05:00)
		Material Consumption Calculation	- Calculate the average fabric consumption accurately as per the pattern developed. - Describe the factors that influence fabric consumption and how to account for them in calculations. - Elucidate methods for minimising fabric waste while maintaining design integrity.	AMH/N1105 PC6			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
6	Post pattern making activities	Initial Pattern Verification	- Elaborate on how to check sketches and design specifications to ensure they meet the quantities, shapes, and sizes of pattern parts. - Describe the process of verifying pattern accuracy against initial design requirements. - Outline methods for identifying discrepancies between design intent and initial pattern pieces.	AMH/N1106 PC1	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)
		Garment Sample Testing & Analysis	- Illustrate how to test patterns by making a garment sample to check its fit, fall, and other aesthetic attributes. - Elucidate the criteria for evaluating the garment sample's performance against design expectations. - Describe how to document observations and feedback from the garment sample testing phase.	AMH/N1106 PC2			6 Theory (01:00) Practical (05:00)
		Pattern Review & Modification	- Review patterns against test performance, identifying areas for improvement. - Accommodate and incorporate changes in the pattern as per buyer comments and performance review. - Create the final pattern with all changes accommodated, ensuring it meets all requirements.	AMH/N1106 PC3, PC4			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Master Pattern Creation for Production	- Create a master pattern for different sizes of garments, made-ups, and home furnishing articles within a style for mass production. - Describe the principles of grading and nesting patterns for various sizes. - Outline the process of preparing patterns for efficient and consistent mass manufacturing.	AMH/N1106 PC5			6 Theory (01:00) Practical (05:00)
		Fabric Consumption & Record Keeping	- Calculate fabric consumption accurately as per the master pattern developed. - Highlight records of patterns developed for future reference, ensuring proper categorisation and retrievability. - Elaborate on the importance of accurate documentation for inventory management and cost control.	AMH/N1106 PC6, PC7			6 Theory (01:00) Practical (05:00)
7	Inspect pattern	Initial Pattern Verification	- Elaborate on how to check sketches and design specifications to ensure they meet the quantities, shapes, and sizes of pattern parts. - Describe the process of verifying pattern accuracy against initial design requirements. - Outline methods for identifying discrepancies between design intent and initial pattern pieces.	AMH/N1106 PC1	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Sample Garment Assessment	- Illustrate how to test patterns by making a garment sample to check its fit, fall, and other aesthetic attributes. - Elucidate the criteria for evaluating the garment sample's performance against design expectations. - Describe how to document observations and feedback from the garment sample testing phase.	AMH/N1106 PC2			6 Theory (01:00) Practical (05:00)
		Pattern Adjustment & Finalisation	- Review patterns against test performance, identifying areas for improvement. - Discuss on how to accommodate and incorporate changes in the pattern as per buyer comments and performance review. - Create the final pattern with all changes accommodated, ensuring it meets all requirements.	AMH/N1106 PC3, PC4			6 Theory (01:00) Practical (05:00)
		Master Pattern Development	- Create a master pattern for different sizes of garments, made-ups, and home furnishing articles within a style for mass production. - Describe the principles of grading and nesting patterns for various sizes. - Outline the process of preparing patterns for efficient and consistent mass manufacturing.	AMH/N1106 PC5			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Resource Calculation & Documentation	- Calculate fabric consumption accurately as per the master pattern developed. - Discuss how to maintain records of patterns developed for future reference, ensuring proper categorisation and retrievability. - Elaborate on the importance of accurate documentation for inventory management and cost control.	AMH/N1106 PC6, PC7			6 Theory (01:00) Practical (05:00)
8	Validate pattern	Initial Pattern Conformance	- Elaborate on how to check sketches and design specifications to ensure they meet the quantities, shapes, and sizes of pattern parts. - Describe the process of verifying pattern accuracy against initial design requirements. - Outline methods for identifying discrepancies between design intent and initial pattern pieces.	AMH/N1106 PC1	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)
		Garment Sample Evaluation	- Illustrate how to test patterns by making a garment sample to check its fit, fall, and other aesthetic attributes. - Elucidate the criteria for evaluating the garment sample's performance against design expectations. - Describe how to document observations and feedback from the garment sample testing phase.	AMH/N1106 PC2			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Pattern Refinement & Finalisation	- Review patterns against test performance, identifying areas for improvement. - Discuss how to accommodate and incorporate changes in the pattern as per buyer comments and performance review. - Create the final pattern with all changes accommodated, ensuring it meets all requirements.	AMH/N1106 PC3, PC4			6 Theory (01:00) Practical (05:00)
		Master Pattern Development for Production	- Create a master pattern for different sizes of garments, made-ups, and home furnishing articles within a style for mass production. - Describe the principles of grading and nesting patterns for various sizes. - Outline the process of preparing patterns for efficient and consistent mass manufacturing.	AMH/N1106 PC5			6 Theory (01:00) Practical (05:00)
		Resource Calculation & Pattern Archiving	- Calculate fabric consumption accurately as per the master pattern developed. - Maintain records of patterns developed for future reference, ensuring proper categorisation and retrievability. - Elaborate on the importance of accurate documentation for inventory management and cost control.	AMH/N1106 PC6, PC7			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
9	Maintain health, safety and security in the pattern making	Hazard Identification and Prevention	- Elaborate on how to identify health and safety hazards in the pattern making workplace. - Describe mechanisms to safeguard against identified hazards, including gender and PwD sensitisation. - Outline how to keep vigilance for potential risks and threats associated with the workplace and equipment, such as cuts from cutters, scissors, and shears.	AMH/N1107 PC1	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)
		Safe Tool and Equipment Handling	- Illustrate how to handle tools and equipment like cutters and scissors safely and securely. - Elucidate proper techniques for operating sharp tools to prevent injuries. - Describe best practices for storing and maintaining tools to ensure their safe use.	AMH/N1107 PC2			6 Theory (01:00) Practical (05:00)
		Compliance with Workplace Regulations	- Comply with health, safety, gender, and PwD (People with Disability) related instructions applicable to the workplace. - Describe the importance of adhering to all relevant safety protocols and guidelines. - Outline the procedures for reporting any non-compliance or unsafe conditions within the workplace.	AMH/N1107 PC3			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Emergency Preparedness & Awareness	- Participate in mock-drills and evacuation procedures organised at the workplace. - Describe the role of individual employees in group discussions and training sensitisation programs for gender and PwD awareness. - Outline the steps to respond effectively during workplace emergencies.	AMH/N1107 PC4			6 Theory (01:00) Practical (05:00)
		First Aid and Emergency Response Training	- Undertake first-aid training to provide immediate care in case of injury. - Participate in fire-fighting training to learn how to respond to fire incidents effectively. - Elucidate the importance of emergency response training to handle unforeseen critical situations at the workplace.	AMH/N1107 PC5			6 Theory (01:00) Practical (05:00)
10	Manage the workspace, operate tools, and handle machinery	Workplace Safety and Organisation	- Employ safe and precise techniques in managing materials, machinery, equipment, and tools to uphold a clean and hazard-free workplace environment. - Discuss how to notify authorised personnel of any unsafe or damaged equipment or hazardous incidents. - Outline how to verify the presence of appropriate machine guards for operational safety.	AMH/N0310 PC1, PC5, PC6	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)
		Material Handling and Waste Reduction	- Highlight proper lifting and handling procedures during operations. - Optimise material usage to reduce waste. - Safely dispose of any waste material at designated locations.	AMH/N0310 PC2, PC3			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Routine Maintenance and Cleaning	- Perform routine maintenance and cleaning tasks within assigned responsibilities and agreed-upon schedules. - Utilise suitable cleaning equipment and methods relevant to the assigned tasks. - Outline the importance of regular cleaning for maintaining equipment longevity and workplace hygiene.	AMH/N0310 PC4, PC8			6 Theory (01:00) Practical (05:00)
		Ergonomics and Posture Management	- Maintain a comfortable and ergonomically sound working posture. - Describe the principles of ergonomics in a workplace setting to prevent injuries. - Illustrate various postures and movements that promote worker well-being during tasks.	AMH/N0310 PC7			6 Theory (01:00) Practical (05:00)
		Hazard Reporting and Prevention	- Elaborate on the process of identifying potential hazards in the workplace. - Describe the protocol for reporting damaged equipment or any hazardous incidents to authorised personnel. - Outline methods for proactively preventing workplace accidents through vigilant observation and adherence to safety guidelines.	AMH/N0310 PC1, PC5, PC6			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
11	Abide by industry, regulatory, and organisational mandates, while integrating environmentally friendly practices	Sustainable Practices Implementation	- Implement and adhere to organisational policies and procedures, integrating sustainable consumption practices. - Describe how to actively participate in enhancing organisational performance and facilitating the transition to environmentally friendly processes. - Describe how to incorporate eco-friendly practices into daily tasks.	AMH/N0311 PC2, PC3, PC4	Classroom lecture/ Power-Point Presentation/Question & Answer and Group Discussion	Whiteboard and markers, Chart paper and sketch pens, an LCD Projector and Laptop for presentations, PCs/ Laptops, and Internet with Wi-Fi (at Least 2 Mbps Dedicated).	6 Theory (01:00) Practical (05:00)
		Safe Handling & Waste Management	- Safely and appropriately handle materials, equipment, computers, and software to ensure a clean and hazard-free work environment, supporting the adoption of eco-friendly practices. - Promptly report unsafe equipment and hazardous incidents to relevant personnel. - Outline how to manage work interruptions efficiently while performing ongoing maintenance and cleaning.	AMH/N0311 PC4, PC5, PC6			6 Theory (01:00) Practical (05:00)
		Workplace Maintenance & Cleaning	- Perform ongoing maintenance and cleaning tasks within assigned responsibilities and agreed upon schedules. - Explain cleaning equipment and techniques suitable for the specific tasks at hand. - Elucidate the importance of regular cleaning for maintaining a safe and efficient workspace.	AMH/N0311 PC5, PC7			6 Theory (01:00) Practical (05:00)

SL	Module Name	Session name	Session Objectives	NOS	Methodology	Training Tools/Aids	Duration (hours)
		Digital Workflow Optimisation	- Request system or software upgrades as needed to optimise work efficiency. - Explain how to maintain backup files while using various design software. - Describe how to maintain soft copies of design work in files for future reference.	AMH/N0311 PC8, PC9			6 Theory (01:00) Practical (05:00)
		Environmental Responsibility & Reporting	- Illustrate the importance of abiding by industry, regulatory, and organisational mandates related to environmental practices. - Describe the procedures for reporting environmental incidents or concerns within the workplace. - Elucidate the role of individual responsibility in contributing to a cleaner and safer work environment through adherence to eco-friendly practices.	AMH/N0311 PC2, PC6, PC4			6 Theory (01:00) Practical (05:00)
Total Duration							Theory: 96:00 Practical: 204:00
Employability Skills (DGT/VSQ/N0102) https://www.skillindiadigital.gov.in/content/list							60:00
OJT Duration (Mandatory)							60:00
Total							Theory + Practical + ES 600:00

Annexure II

Assessment Criteria

CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Pattern Master - Apparel	
Job Role	Pattern Master - Apparel
Qualification Pack	AMH/Q1105, V4.0
Sector Skill Council	Apparel

S. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below.)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
5	To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.
6	In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
7	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Assessment Outcomes	Assessment Criteria for Outcomes	Marks Allocation		
		Theory	Practical	Viva
AMH/N0310: Manage the workspace, operate tools, and handle machinery efficiently.	PC1 Employ safe and precise techniques in managing materials, machinery, equipment, and tools to uphold a clean and hazard-free workplace environment.	2	5	1
	PC2 Adhere to proper lifting and handling procedures during operations.	2	5	1
	PC3 Optimize material usage to reduce waste and safely dispose of any waste material at designated locations.	2	3	1
	PC4 Perform routine maintenance and cleaning tasks within assigned responsibilities and agreed-upon schedules.	2	10	1
	PC5 Promptly notify authorized personnel of any unsafe or damaged equipment or hazardous incidents.	2	3	0.5
	PC6 Verify the presence of appropriate machine guards for operational safety.	2	3	1
	PC7 Maintain a comfortable and ergonomically sound working posture.	1	10	0.5
	PC8 Utilize suitable cleaning equipment and methods relevant to the assigned tasks.	1	10	1
	NOS Total	14	49	7

AMH/N0311: Abide by industry, regulatory, and organizational mandates, while integrating environmentally friendly practices	PC1 Execute job duties in alignment with organizational standards, emphasizing green solutions, and adhering to established procedures, policies, legislation, and regulations.	2	1	1
	PC2 Implement and adhere to organizational policies and procedures, integrating sustainable consumption practices.	2	1	1
	PC3 Actively participate in enhancing organizational performance and facilitating the transition to environmentally friendly processes.	2	1	1
	PC4 Safely and appropriately handle materials, equipment, computers, and software to ensure a clean and hazard-free work environment, supporting the adoption of eco-friendly practices.	3	2	2
	PC5 Perform ongoing maintenance and cleaning tasks within assigned responsibilities and agreed upon schedules, managing work interruptions efficiently.	3	1	1
	PC6 Promptly report unsafe equipment and hazardous incidents to relevant personnel.	2	1	1
	PC7 Utilize cleaning equipment and techniques suitable for the specific tasks at hand.	2	1	1
	PC8 Request system or software upgrades as needed to optimize work efficiency, and maintain backup files while using various design software.	2	1	1
	PC9 Maintain soft copies of design work in files for future reference.	2	1	1
	NOS Total	20	10	10
AMH/N1105: Plan and Prepare for process of pattern making as per techpack received	PC1 Collect, comprehend and compile information from various sources viz. designer/buyer/merchandiser	3	5	2
	PC2 Analyze information and translate inputs as per company procedure	3	10	2
	PC3 Coordinate with concerned designer and merchandiser for clarity of information against techpack received and suggest modifications (if any)	2	5	1
	PC4 Incorporate and accommodate review inputs alongside the techpack	3	15	2
	PC5 Create paper patterns with all details like notches, parts marking (pockets, button holes, pleats, etc.), pattern marking for bulk production	7	40	3
	PC6 Calculate the average fabric consumption as per pattern developed	3	5	1
	NOS TOTAL	21	80	11
AMH/N1106: Inspect and validate pattern	PC1 Check sketches, design specifications to meet quantities, shapes and sizes of pattern parts	2	7	1
	PC2 Test pattern by making garment sample to check fit, fall, and other aesthetic attributes	3	15	2
	PC3 Review pattern against test performance	2	6	1
	PC4 Accommodate and incorporate changes in the pattern as per buyer comments and performance review and create final pattern with all changes accommodated	5	15	2
	PC5 Create master pattern for different sizes of garments made ups and home furnishing articles within a style for mass production.	3	20	2
	PC6 Calculate fabric consumption as per the master pattern developed	2	5	0.5
	PC7 Maintain record of patterns developed for future reference	2	2	0.5
	NOS Total	19	70	9

AMH/N1107: Maintain health, safety and security in the pattern making workplace with Gender & PwD Sensitization	Identifying health and safety hazards and ensuring mechanism to safeguard against hazards with gender & PwD sensitization	6	21	3
	PC1 Keep vigilance for potential risks and threats associated with workplace and equipment. like cuts from cutters, scissors, shears, etc.	0.5	1	0.5
	PC2 Handle tools and equipments like cutters, scissors, etc. safely and securely	2	5	0.5
	PC3 Comply with health safety, gender and PwD (People with disability) related instructions applicable to the workplace	0.5	3	1
	PC4 Participate in mock-drills/evacuation procedures; group discussions, training sensitization programs for gender and PwD awareness organized at the workplace	1	5	0.5
	PC5 Undertake first-aid, fire-fighting and emergency response training	2	7	0.5
	NOS Total	6	21	3
DGT/VSQ/N0102: Employability Skills (60 Hours)	Introduction to Employability Skills	1	1	
	PC1. identify employability skills required for jobs in various industries	-	-	
	PC2. identify and explore learning and employability portals	-	-	
	Constitutional values – Citizenship	1	1	
	PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	
	PC4. follow environmentally sustainable practices	-	-	
	Becoming a Professional in the 21st Century	2	4	
	PC5. recognize the significance of 21st Century Skills for employment	-	-	
	PC6. practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	
	Basic English Skills	2	3	
	PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	
	PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	
	PC9. write short messages, notes, letters, e-mails etc. in English	-	-	
	Career Development & Goal Setting	1	2	
	PC10. understand the difference between job and career	-	-	
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	
	Communication Skills	2	2	
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	
	PC13. work collaboratively with others in a team	-	-	
	Diversity & Inclusion	1	2	
	PC14. communicate and behave appropriately with all genders and PwD	-	-	
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	

	Financial and Legal Literacy	2	3	
	PC16. select financial institutions, products and services as per requirement	-	-	
	PC17. carry out offline and online financial transactions, safely and securely	-	-	
	PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	
	PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	
	Essential Digital Skills	3	4	
	PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	
	PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	
	PC22. use basic features of word processor, spreadsheets, and presentations	-	-	
	Entrepreneurship	2	3	
	PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	
	PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	
	PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	
	Customer Service	1	2	
	PC26. identify different types of customers	-	-	
	PC27. identify and respond to customer requests and needs in a professional manner.	-	-	
	PC28. follow appropriate hygiene and grooming standards	-	-	
	Getting ready for apprenticeship & Jobs	2	3	
	PC29. create a professional Curriculum vitae (Résumé)	-	-	
	PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	
	PC31. apply to identified job openings using offline/online methods as per requirement	-	-	
	PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	
	NOS Total	20	30	

Annexure III

List of QR Codes Used in PHB

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
Module 1: Introduction and Orientation to Pattern Master – Apparel	Unit 1.1: Apparel Industry and the Role of a Pattern Master	1.1.1 Detailed Analysis of the Apparel Industry	10	https://youtu.be/r-imEISQG-J8?si=atk1XojamP2VqXNU	 Top Textile Exporting Countries in the World
		1.1.2 Roles and Responsibilities of a Pattern Master in Apparel Manufacturing	10	https://youtu.be/qHWyn-quupRM?si=KSW9_Spt-9Kuu6e7D	 Roles and Responsibilities of Pattern Maker in Apparel Industry
		1.1.4 Analysis of the Apparel Production Process and the Pattern Master's Contribution	10	https://youtu.be/8XGZ-rk5Rfvl?si=n0qf904yWjeyFzPu	 Mastering the Technical Side of the Apparel Industry, Pattern Making & Tech Packs Explained
Module 2: Fabric Fundamentals	Unit 2.1: Core Fashion and Fabric Expertise	2.1.1 Understanding Customer Requirements and Organisational Capabilities	28	https://youtu.be/AySvdBm3sNQ?si=mGo7n5qS-3HUX9ipR	 How To Understand Customer Behaviour

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
Module 3: Interpreting the Tech Pack		2.1.3 Different Fabrics, Their Properties, and Trade Names	28	https://youtu.be/Dqd_KSCRPY-Y?si=ESNwtrb1F-PPSxurm	 Fabrics and Their Properties and Uses
		2.1.4 Types of Trims and Accessories in Apparel Manufacturing	28	https://youtu.be/OHmjUCO-QXUQ?si=P0tJi7R_EfYqen18	 Different Types Of Trimmings And Accessories Used In Apparel Industry
	Unit 3.1: Insights into Tech Pack Interpretation	3.1.1 Collaboration Strategies with Designers and Merchandisers for Clarity	40	https://youtu.be/RQ3T-fr9Qobo?si=N8UDZ5x-zc-A2vwOp0	 How to collaborate effectively with Product Designers?
		3.1.2 Review Inputs with Tech Pack Specifications	40	https://youtu.be/KYGu6Y-6Oo6s?si=OO-uWr4IAmv-Xxy-Wq	 How to make a Tech Pack
		3.1.3 Notations and Symbols Used in the Tech Pack	40	https://youtu.be/gaKayTDg2h-w?si=UVkLWXTy6X9SMzdW	 Tech Pack for Merchandiser

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
Module 4: Prepare for Making Patterns as Per Tech Pack	Unit 4.1: Tools, Techniques, and Fabric Handling	4.1.1 Functions of Cutting, Marking, and Sewing Tools and Equipment	77	https://youtu.be/4pvfCGeUt-jo?si=WdRXkp_7gQUrJqRN	 Basic Sewing tools for beginners
		4.1.5 Grain Lines Correctly on Fabric and Patterns	77	https://youtu.be/L-YsphC4uHw?si=RhfMnf-doB6yJJFx2	 What is Grain Line
	Unit 4.2: Pattern and Grading Essentials	4.2.1 Types of Patterns and Their Applications	77	https://youtu.be/n0c2TY-5JKI4?si=D_aGJtb3RKXtqy68	 Garment Construction
Module 5: Develop pattern as Per Tech Pack	Unit 5.1: Fundamentals of Pattern Creation	5.1.2 Marking Details on Patterns	126	https://youtu.be/DUHDs-v0t4Ns?si=WruY0c-1IrodyvCII	 Handling Various Fabrics Laying Marking and Cutting
		5.1.6 Size Charts for Garments, Made-Ups, and Home Furnishings	126	https://youtu.be/DaV04jnY-LAo?si=ile93pjDh-YmafTVS	 How To Use A Size Chart When Ordering Shirts Online

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
	Unit 5.2: Advanced Techniques and Bulk Production	5.2.2 Usage of Computer Applications in Pattern Making	126	https://youtu.be/8WV8aGJAx-o?si=H79QETRm-0iNWL-L	 Best Cad software for beginners
Module 6: Post Pattern Making Activities	Unit 6.1: Core Concepts in Fabric Inspection and Garment Production	6.1.1 Organisational Adaptability to Inspection Results	146	https://youtu.be/Ey4MqC7Kp-7g?si=hhs75fSx-95lr3rzg	 Inspection and Quality control
		6.1.3 Fabric Consumption per Garment	146	https://youtu.be/sv7NDjD-v4Rg?si=ZjUL_bKO1tULIJKv	 Fabric Consumption Calculation Woven Pant
		6.1.4 Sketching, Sewing, and Sample Specification Techniques	146	https://youtu.be/jQa9broAp-1k?si=HCoICBQ1cP7c8nHt	 Tips & Techniques
Module 7: Inspect Pattern	Unit 7.1: Pattern Development and Garment Construction	7.1.1 Cutting Processes Used in Pattern Creation	163	https://youtu.be/8kKbYdc0jik?si=01MkU7i0scyUMT00	 Fabric cutting process

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
Module 8: Validate Pattern		7.1.2 Stitching Techniques for Assembling Patterns	163	https://youtu.be/EU5GR4E-E4XY?si=gweYI4EL3-MovpiAk	 Basic Hand Embroidery Stitches
		7.1.4 Tech Packs for Measurement and Cutting Details	163	https://youtu.be/gaKayTDg2h-w?si=HXLKyL7CJSYzbnli	 Tech Pack for Merchandiser
	Unit 8.1: Pattern Development and Modification	8.1.2 Labelling and Documentation of Patterns	199	https://youtu.be/29qhHn-6BxYk?si=X8uH11aFenxdZAL0	 Labelling and Notching Patterns
		8.1.4 Graded Patterns for Different Sizes and Mass Production	199	https://youtu.be/V_0qYvi-4aEk?si=gtTsvvY65mXlh73E	 Pattern Grading
	Unit 8.2: Fabric Consumption and Quality Review	8.2.1 Fabric Consumption Calculation for Garments and Products	199	https://youtu.be/uvOphUzWKH4?si=MdWHd-CW_WSNfyWv-	 Fabric Consumption Calculation Method

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
Module 9: Maintain Health, Safety and Security in the Pattern Making Workplace	Unit 9.1: Tools, Equipment, and Hazard Management	9.1.1 Safe Handling Practices for Pattern-Making Tools and Equipment	227	https://youtu.be/p_9hOqd-w75o?si=tg3p727N0DZExKuj	 Personal Protective Equipment (PPE)
		9.1.2 Workplace Hazards and Methods for Protecting Organisational Assets	227	https://youtu.be/2Q810SfKAS-c?si=oRxi8ie6tqneASPK	 Workplace Hazards
	Unit 9.2: Emergency Response and First Aid Preparedness	9.2.5 CPR and Life-Saving Techniques	227	https://youtu.be/8YREV-VM2n7g?si=2seyQE1LQaU9Ug-Bu	 Cardiopulmonary resuscitation (CPR)
Module 10: Manage the Workspace, Operate Tools, and Handle Machinery Efficiently	Unit 10.1: Workplace Safety and Maintenance	10.1.4 Safe Handling Techniques for Materials, Tools, and Equipment	275	https://youtu.be/QtXa6tPU-Jgk?si=r1uCVme3l-ZU7ku5z	 Safety rules in a sewing lab while handling equipment
	Unit 10.2: Tools, Machines, and Processes	10.2.1 Machines Used for Layering and Spreading Processes	275	https://youtu.be/Q9IHNBh73wc?si=8NWvg-6tRy-b2Jvev7	 Full Automatic Fabric Spreading Machine

Module No.	Unit No.	Topic Name	Page No. in PHB	URL	QR Code (s)
		10.2.2 Markers and Tools Required for Marking in Garment Production	275	https://youtu.be/e-YvHtdM-Pa8?si=A_7og2PrT_Yb9pOP	 Ruler and Pen Tips for Marking Fabric
Module 11: Abide by Industry, Regulatory, and Organisational Mandates While Integrating Environmentally Friendly Practices	Unit 11.1: Ethical and Organisational Integrity	11.1.1 Ethical and Value-Based Governance in the Workplace	294	https://youtu.be/ltW7KVY-J1go?si=IXulgxZKE8u6OSC3	 Business Ethics
	Unit 11.2: Compliance and Sustainability Practices	11.2.4 Legal and Regulatory Compliance in the Apparel Industry	294	https://youtu.be/qsFUx6GPbx-U?si=5EF1qwPxKVrP_CcL	 Compliance Certificates in Apparel Industry
	Unit 11.3: Operational Efficiency and Maintenance	11.3.1 Safe Handling Practices for Materials, Equipment, and Software	294	https://youtu.be/vRYtwfLw-hA?si=G0yWOE-bUof4morjY	 How do we ensure workplace safety?





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सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP



**APPAREL MADE-UPS HOME FURNISHING
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