

APPAREL PRODUCTION PLANNING, SCHEDULING AND QUALITY CONTROL

Weeks 1-4: Unit I – Apparel Production

Week 1

- **Lecture 1:** Definitions of Production, Productivity, Efficiency, and WIP
- **Lecture 2:** Concepts of Inventory and Bottleneck in Apparel Production
- **Lecture 3:** Definition and Role of Pitch in Production Systems
- **Lecture 4:** Introduction to Line Balancing

Week 2

- **Lecture 5:** Apparel Production Types: Overview of PBS, MPS, and UPS
- **Lecture 6:** Progressive Bundle System (PBS): Process and Features
- **Lecture 7:** Modular Production System (MPS): Process and Features
- **Lecture 8:** Unit Production System (UPS): Process and Features

Week 3

- **Lecture 9:** Comparative Analysis of PBS, MPS, and UPS
- **Lecture 10:** Advantages and Challenges of Different Apparel Production Systems
- **Lecture 11:** Role of Technology in Modern Production Systems
- **Lecture 12:** Case Studies in Apparel Production

Week 4

- **Lecture 13:** Recap and Discussion on Unit I
- **Lecture 14:** Practical Activity: Simulating a Line Balancing Task
- **Lecture 15:** Practice Quiz on Apparel Production Systems
- **Lecture 16:** Group Discussion: Best Practices in Apparel Production

Weeks 5-7: Unit II – Production Planning and Control (PPC)

Week 5

- **Lecture 17:** Definition and Objectives of PPC
- **Lecture 18:** Key Elements of PPC: Material, Method, Machine, and Manpower
- **Lecture 19:** Routing, Estimating, and Loading in PPC
- **Lecture 20:** Scheduling and Dispatching in Apparel Industry

Week 6

- **Lecture 21:** Inspection, Evaluating, and Cost Control in PPC
- **Lecture 22:** Coordination and Communication in PPC
- **Lecture 23:** Challenges in PPC Implementation
- **Lecture 24:** Practical Session: Designing a PPC Plan

Week 7

- **Lecture 25:** Case Studies: Successful PPC in Apparel Production
 - **Lecture 26:** Recap and Discussion on Unit II
 - **Lecture 27:** Practice Quiz on PPC Concepts and Procedures
 - **Lecture 28:** Problem-Solving Activity: Optimizing PPC for Efficiency
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Weeks 8-10: Unit III – Quality Control

Week 8

- **Lecture 29:** Definition and Importance of Quality in Apparel Production
- **Lecture 30:** Introduction to Quality Control and Quality Assurance
- **Lecture 31:** 7 Tools of Quality Control: Overview and Application
- **Lecture 32:** Introduction to Quality Standards in Apparel Industry

Week 9

- **Lecture 33:** Types of Inspection: Raw Material, In-Process, and Final Inspection
- **Lecture 34:** Understanding the Inspection Loop and Comparability Checks
- **Lecture 35:** 4-Points System for Textile Inspection: Process and Use
- **Lecture 36:** Care Labeling: American Care Labeling System

Week 10

- **Lecture 37:** Importance of Care Labeling in Garments and Textiles
 - **Lecture 38:** Case Studies: Quality Issues and Their Solutions in Garments
 - **Lecture 39:** Recap and Discussion on Unit III
 - **Lecture 40:** Practice Quiz on Quality Control Concepts
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Weeks 11-13: Unit IV – Inspection & Audits

Week 11

- **Lecture 41:** Final Inspection and Audits: Process and Importance
- **Lecture 42:** Acceptance Quality Level (AQL): 2.5 Standard and Its Comparison
- **Lecture 43:** Compliance in the Garment Industry: Importance and Challenges

- **Lecture 44:** Introduction to Third-Party Audit Organizations in India

Week 12

- **Lecture 45:** Overview of SGS, Bureau Veritas, and Intertek
- **Lecture 46:** Role of Audits in Ensuring Product Quality and Compliance
- **Lecture 47:** Practical Activity: Simulating an Audit Process
- **Lecture 48:** Recap and Discussion on Inspection and Audits

Week 13

- **Lecture 49:** Case Studies: Role of Compliance in Apparel Exports
 - **Lecture 50:** Practice Quiz on Inspection and Audit Procedures
 - **Lecture 51:** Group Discussion: Future Trends in Apparel Inspection and Audits
 - **Lecture 52:** Problem-Solving Activity: Designing an Effective Audit Plan
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Weeks 14-16: Unit V – Defects Classification

Week 14

- **Lecture 53:** Defects in Garments: Critical, Major, and Minor
- **Lecture 54:** Introduction to Tolerance Limits and Their Importance
- **Lecture 55:** Understanding Rejected and Surplus Products
- **Lecture 56:** Relationship Between Defect Percentage and Cost of Quality

Week 15

- **Lecture 57:** Classification of Defects in Weaving, Dyeing, and Printing
- **Lecture 58:** Classification of Defects in Finishing and Apparel Construction
- **Lecture 59:** Practical Activity: Identifying Defects in Garments
- **Lecture 60:** Strategies for Reducing Defects in Apparel Production

Week 16

- **Lecture 61:** Recap and Discussion on Unit V
- **Lecture 62:** Practice Quiz on Defect Classification and Cost of Quality
- **Lecture 63:** Comprehensive Review of Entire Syllabus
- **Lecture 64:** Final Exam Preparation and Doubt Clearing