



Skills for Employment Investment Program (SEIP)

**COMPETENCY-BASED LEARNING
MATERIAL**

(STUDENT GUIDE)

FOR

APPAREL MERCHANDISING

(RMG SECTOR)

**Finance Division, Ministry of Finance
Government of the People's Republic of Bangladesh**

Table of Contents

Copyright	3
How to Use this Competency-based Learning Material	4
List of Icons	5
Modules	6
Module 1: Identifying principles and major tasks of apparel	6
Learning Outcome 1.1 - Interpret job role of an apparel merchandiser	7
Learning Outcome 1.2 - List the organisations of RMG sector	11
Learning Outcome 1.3 - Illustrate functional flow chart of apparel merchandising	15
Answer Key	21
Module 2: Building and maintaining an effective business relationship with clients/customers	24
Learning Outcome 2.1 - Establish good relationship with client/customer	25
Learning Outcome 2.2 - Interpret the apparel marketing process	29
Learning Outcome 2.3 - Perform the order handling procedure	33
Learning Outcome 2.4 - Interpret the process of reporting	37
Answer Key	41
Module 3: Processing of sourcing materials	43
Learning Outcome 3.1 - Interpret types of fabrics used for woven and knitted apparel	44
Learning Outcome 3.2 - Interpret the trims and accessories	51
Learning Outcome 3.3 - Prepare bills of material (BOM) sheet	56
Learning Outcome 3.4 - Demonstrate the process of negotiation and booking	62
Answer Key	67
Module 4: Performing measurement, consumption and cost calculation for casual/formal apparel	70
Learning Outcome 4.1 - Interpret the sketch and measurement	72
Learning Outcome 4.2 - Interpret the points of measurement	78
Learning Outcome 4.3 - Perform fabric consumption and cost calculation	85
Learning Outcome 4.4 - Perform trims and accessories consumption and cost calculation	94
Learning Outcome 4.5 - Interpret process of cost manufacturing	99
Learning Outcome 4.6 - Apply the costing format and methods of calculation	105
Answer Key	114
Module 5: Applying the methods of order follow-up procedure	117
Learning Outcome 5.1 - Interpret the order follow-up procedure	118
Learning Outcome 5.2 - Recognise the suppliers evaluation process	123
Learning Outcome 5.3 - Demonstrate the time and action plan	126
Answer Key	132
Module 6: Interpreting the process of commercial and banking activities	134
Learning Outcome 6.1 - Process the commercial and banking requirements	135
Learning Outcome 6.2 - Perform the procedures for letter of credit (L/C)	140
Learning Outcome 6.3 - Perform documentation for payment	143
Answer Key	147

Copyright

The Competency-based Learning Material (Student Guide) for Apparel Merchandising is a document, aligned to its applicable competency standard, for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

This document is owned by the Finance Division of the Ministry of Finance of the People's Republic of Bangladesh, developed under the Skills for Employment Investment Program (SEIP).

Public and private institutions may use the information contained in this competency-based learning material for activities benefitting Bangladesh.

Other interested parties must obtain permission from the owner of this document for reproduction of information in any manner, in whole or in part, of this Competency-based Learning Material, in English or other language.

This document is available from:

Skills for Employment Investment Program (SEIP) Project
Finance Division
Ministry of Finance
Probashi Kallyan Bhaban (Level – 16)
71-72 Old Elephant Road
Eskaton Garden, Dhaka 1000
Telephone: +8802 551 38598-9 (PABX), +8802 551 38753-5
Facsimile: +8802 551 38752
Website: www.seip-fd.gov.bd

How to Use this Competency-based Learning Material

Welcome to the competency-based learning material for Apparel Merchandising for use in RMG works. These modules contain training materials and learning activities for you to complete in order to become competent and qualified as a skilled worker.

There are six (6) modules that make up this course which comprises the skills, knowledge and attitudes required to become a skilled worker including:

1. Identifying the principles and major tasks of apparel
2. Building and maintaining an effective business relationship with clients/customer
3. Processing of sourcing materials
4. Performing measurement, consumption and cost calculation for casual/formal apparel
5. Applying the methods of order follow-up procedure
6. Interpreting the process of commercial and banking activities

As a learner, you will be required to complete a series of activities in order to achieve each learning outcome of the module. These activities may be completed as part of structured classroom activities or simulated workplace demonstrations.

These activities will also require you to complete associated learning and practice activities in order to gain the skills and knowledge needed to achieve the learning outcomes. You should refer to **Learning Activity** pages of each module to know the sequence of learning tasks and the appropriate resources to use for each task.















This page will serve as the road map towards the achievement of competence. If you read the **Information Sheets**, these will give you an understanding of the work, and why things are done the way they are. Once you have finished reading the Information Sheets, you will then be required to complete the **Self-Check Quizzes**.

The self-check quizzes follow the Information Sheets in this learning guide. Completing the self-check quizzes will help you know how you are progressing. To check your knowledge after completion of the Self-Check Quizzes, you can review the **Answer Key** at the end of each module.

You are required to complete all activities as directed in the **Learning Activity and Information Sheet**. This is where you will apply your newly acquired knowledge while developing new skills. When working, high emphasis should be laid on safety requirements. You will be encouraged to raise relevant queries or ask the facilitator for assistance as required.

When you have completed all the tasks required in this learning guide, formal assessment will be scheduled to officially evaluate if you have achieved competency of the specified learning outcomes and are ready for the next task.

List of Icons

Icon Name	Icon
Module content	
Learning outcomes	
Performance criteria	
Contents	
Assessment criteria	
Resources required	
Information sheet	
Self-check Quiz	
Answer key	
Activity	
Video reference	
Learner job sheet	
Assessment plan	
Review of competency	

Module 1: Identifying the principles and major tasks of apparel merchandising



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to identify the principles and major tasks of apparel, which includes the tasks of interpreting job role of an apparel merchandiser, listing the organizations of RMG sector and illustrating functional flow chart of apparel merchandising. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

20 hours

**LEARNING OUTCOMES:**

Upon completion of the module, the trainee should be able to:

- 1.1 Interpret job role of an apparel merchandiser.
- 1.2 List the organizations of RMG sector.
- 1.3 Illustrate functional flow chart of apparel merchandising.

**PERFORMANCE CRITERIA:**

1. Job description of an apparel merchandiser is interpreted.
2. Role and responsibilities of an apparel merchandiser is identified.
3. Organizational policies, guidelines and code of conduct inferred.
4. Types of RMG industries are listed with key differentiators.
5. Key Organizational features of RMG industries are identified.
6. Source Companies are listed.
7. Buyer organizations are listed.
8. Functional flow chart of apparel merchandising is interpreted.
9. The functions, relationships and dependencies among the components of the flow chart are recognized.
10. Quality issues are identified.
11. Preventive measures are recognized for defects reduction and zero error products.



Learning Outcome 1.1 – Interpret Job Role of an Apparel Merchandiser



Contents:

- Job description of an apparel merchandiser.
- Role and responsibilities of an apparel merchandiser.
- Organizational policies, guidelines and code of conduct.



Assessment criteria:

1. Job description of an apparel merchandiser is interpreted.
2. Role and responsibilities of an apparel merchandiser is identified.
3. Organizational policies, guidelines and code of conduct inferred.



Resources required:

Students/trainees must be provided with the following resources:

- Workplace locations, class room, personal laptop/computer, trainee handbook (CBLM), PPT, Stationary and Organizational policies, guidelines, code of conduct and job description of a merchandiser



LEARNING ACTIVITY 1.1

Learning Activity	Resources/Special Instructions/References
Interpret job description, organizational policies, guidelines and code of conduct	<ul style="list-style-type: none">▪ Information Sheet: 1.1▪ Self-Check Quiz: 1.1▪ Answer Key: 1.1▪ https://youtu.be/u-ITX8AxR1I



INFORMATION SHEET 1.1

Learning Objective: to interpret, job role, organizational policies, guidelines and code of conduct of an apparel merchandiser.

☐ **Merchandiser:**

Merchandiser is the interface between Buyer & Exporter. He is the responsible from order analysis to shipment. Merchandising is the very valuable department in the Apparel Industry. Merchandising is the department which mediates marketing and production departments. Merchandising department will have to do costing and pricing also. In any case, the merchandiser is the person whose responsibility is to execute the orders perfectly as per the costing and pricing.

☐ **The word MERCHANDISER stands for:**

M- Should have good Managerial capacity.

E- Efficient in both English written and spoken.

R- Having high sense of Responsibility.

C- Always keep commitment.

H- Leads honest life.

A- Attitude should always be positive in resolving any problem

N- Never does any argue with buyers and seniors.

D- Fully devoted to his service.

I- Always well Informed about his all orders.

S- Sincere in office and daily works.

E- Enthusiastic in nature.

☐ **Types of merchandiser:**

- Fashion merchandiser.
- Production or export merchandiser.
- Retail merchandiser.

Following are the main responsibilities of merchandisers.

- ✓ Internal & external communication,
- ✓ Sampling,
- ✓ Lab dips,
- ✓ Accessories & trims,
- ✓ Preparing internal order sheets,
- ✓ Preparing purchase orders,
- ✓ Advising and assisting production,
- ✓ Advising quality department about quality level,
- ✓ Mediating production and quality departments,
- ✓ Maintain lab testing and buyers' requirements,
- ✓ Giving shipping instructions and following shipping,
- ✓ Helping documentation department,
- ✓ Taking responsibility for inspections and
- ✓ Following shipment.



Fig: Flow chart of a merchandiser

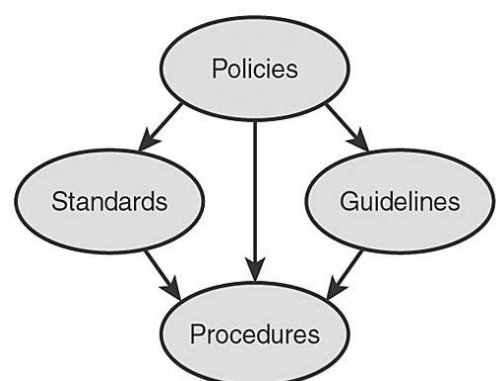
☐ **Organizational policies and guidelines:**

Garment Contractors who take a leadership role on these issues and, to the extent practicable, exceed the standards of this code. Garment Contractors must operate workplaces, and ensure that their subcontractors, vendors and/or manufacturers operate workplaces, that adhere to the following minimum standards and practices:

A. Legal Compliance: Garment Contractors must comply, at a minimum, with all applicable legal requirements of the country in which garments are manufactured. Where this Code and the applicable laws of the country of manufacture conflict or differ, the higher standard shall prevail. Such compliance shall include compliance with all applicable environmental laws.

B. Ethical Principles: Garment Contractors will commit to conduct their business according to a set of ethical standards which include, but are not limited to, honesty, integrity, trustworthiness, and respect for the unique intrinsic value of each human being.

C. Employment Standards: Garment Contractors whose workers are present at work voluntarily, are not at undue risk of physical harm, are fairly compensated and are not exploited in any way. In addition.



□ **Code of conduct:**

- Wages and benefit.
- Regular working hours.
- Overtime.
- Child labour.
- Forced labour.
- Health & safety.
- Non-discrimination.
- Harassment or abuse.
- Freedom of association.
- Women's right.



Individual Activity:

- *Identify the job role of an apparel merchandiser.*
- *List the organizational policies, guidelines and code of conduct.*



SELF-CHECK QUIZ 1.1

Write the correct answer for the following questions.

1. What is merchandising?
2. What are the major tasks of an apparel merchandiser?
3. What does each alphabet stand for the word MERCHANDISER?
4. What are the organizational policies and guidelines for RMG business?
5. What is buyers code of conduct?



Learning Outcome 1.2 - List the Organizations of RMG Sector



Contents:

- Types of RMG industries with key differentiators.
- Key organizational features of RMG industries.
- Source companies.
- Buyer companies.



Assessment criteria:

1. Types of RMG industries are listed with key differentiators.
2. Key organizational features of RMG industries are identified.
3. Source companies are listed.
4. Buyer companies are listed.



Resources required:

Students/trainees must be provided with the following resources:

- Workplace locations, class room, personal laptop/computer, trainee handbook (CBLM), PPT, stationary and raw material policy, production policy, quality assurance and marketing policy



LEARNING ACTIVITY 1.2

Learning Activity	Resources/Special Instructions/References
Identify RMG industries and key organizational features	<ul style="list-style-type: none">▪ Information Sheet: 1.2▪ Self-Check Quiz: 1.2▪ Answer Key: 1.2



INFORMATION SHEET 1.2

Learning Objective: to identify RMG sections, key organizational features, source companies and buyer organizations in RMG industry.

☐ **Types of RMG industries:**

- Woven garment's industry
- Knit garment's industry
- Fully fashion knit industry / Sweater industry
- Home textile industry

☐ **Common departments in woven, knit and home textile industry:**

Garment production is the final stage of textile manufacturing where cloth is cut into different parts and sews to make various types of garment. Here, different shapes and styles fabrics are made according to the buyer requirement. Different sections are involved to complete a finished garment.

1. Product Development and sample (PDS) section
2. Cutting section
3. Sewing section
4. Finishing section
5. Packing section
6. Store section

1. PDS Section:

- a) To make the patterns by following the tech pack.
- b) To make sample garment for approval.
- c) To confirm patterns sets for bulk production.
- d) To support cutting, sewing and finishing departments.

2. Cutting Section:

- a) Marker Making
- b) Fabric Spreading
- c) Fabric Cutting
- d) Cut panel numbering and bundling

3. Sewing Section:

Garment's cut parts are assembled here as per the approved sample.

4. Finishing Section:

- a) Thread trimming
- b) Button attach (if required)
- c) Preliminary pressing / ironing
- d) Tag attachment
- e) Final pressing

5. Packing Section:

- a) Needle detection
- b) Folding
- c) Poly packing
- d) Assortment making
- e) Cartoning

6. Store section:

- a) Receiving storing and delivering materials
- b) Quantitatively and qualitative inspection
- c) Stock control

☐ **Key organizational features of RMG industries:**

- ✓ Corporate culture
- ✓ Raw material sourcing policy
- ✓ Production policy
- ✓ Quality assurance
- ✓ Marketing policy
- ✓ Customer satisfaction

☐ **Source companies:**

For garment export house fabric and trims are the raw material which needs to be outsourced. Sourcing is basically determining the most cost-efficient vendor of materials, production, or finished goods at the specified quality and service level. It is closely associated and an important part of apparel merchandiser's responsibility. Materials basically include piece goods that will be cut and converted into the garments. Not only does the fabric have to be appropriate and suited to the garment design and end use but it must also be made available at the precise time when it is needed. Thus, lead times play an important role in the sourcing and placing orders for the materials required for the production. Lead times required from a supplier can vary from as little as two weeks to as much as nine months. Trims are all the materials other than the piece goods that are required to make up a garment. Findings require the same careful planning as the piece goods. As soon as the fabric is in the stores, then only the sourcing of the threads starts because the colour of the thread must match the buyer's requirements. The ordering of the threads must be complete by the time fabric is cut ready to be feeded to the sewing lines.

Sourcing department along with apparel merchandiser plays the vital role to execute and shipment of export order successfully. Merchandiser must make sure that all approvals related to fabric and trims should be coordinated with the sourcing department in given timeframe. Fabric sourcing department is basically engaged in determining how and where its merchandise i.e. fabric will be obtained within the scheduled time and cost. A sourcing manager must have knowledge about all varieties of fabrics and trims in order to execute their functions effectively. The different parameters in sourcing i.e. lead time, process of fabric and trim approvals, cost of logistics and incoterms need to keep in mind while deciding the sourcing tactics for particular export order.

☐ **Types of sourcing:**

Type of sourcing	Description
Local sourcing	<ul style="list-style-type: none">• Local manufacturer• Local trader
International sourcing	<ul style="list-style-type: none">• International manufacturer• International trader

These strategies are used for procurement of fabric by the export houses; the most popularly used method is either local manufactured fabric is used to meet the demand. If cost of manufacturing is higher or adequate infrastructure is not available then off-shoring or global manufacturing is the popular practices for fabric procurement. For garment export house it is very important to decide the tactics of sourcing very carefully. Merchandiser along with fabric sourcing department plays key role in deciding these tactics. As the export order processing is the responsibility of production merchandiser, merchandiser is well aware of buyer's requirements regarding fabric and lead time of the whole process.

☐ **Buyer organizations:**

Type of buyer organization	Description
International buyers	<ul style="list-style-type: none">• Direct buyers: whole seller, retailer, corporate consumers.• Liaison office
Buying agency	<ul style="list-style-type: none">• Local buying agency• International buying agency

Individual Activity:

- *Identify RMG sections and organizational features.*
- *Identify types of sourcing and buyer organization.*



SELF-CHECK QUIZ 1.2

Check your understanding by answering the following questions:

1. What are the types of RMG industries in Bangladesh?
2. Write down the name of any five departments of RMG industry?
3. What are the main activities of finishing section?
4. What are the types of sourcing?
5. What is the role of buying agency?



Learning Outcome 1.3 – Illustrate Functional Flow Chart of Apparel Merchandising



Contents:

- Functional flow chart of apparel merchandising.
- The functions, relationships and dependencies among the components of the flow chart.
- Quality issues.
- Preventive measures for defects reduction and zero error products.



Assessment criteria:

1. Functional flow chart of apparel merchandising is interpreted.
2. The functions, relationships and dependencies among the components of the flow chart are recognized.
3. Quality issues are identified.
4. Preventive measures are recognized for defects reduction and zero error products.



Resources required:

Students/trainees must be provided with the following resources:

- Workplace locations, class room, personal laptop/computer, trainee handbook (CBLM), PPT, stationary and functional flow chart, quality assurance guide of apparel merchandising



LEARNING ACTIVITY 1.3

Learning Activity	Resources/Special Instructions/References
Identify functional flow chart and quality issues	<ul style="list-style-type: none">▪ Information Sheet: 1.3▪ Self-Check Quiz: 1.3▪ Answer Key: 1.3



INFORMATION SHEET 1.3

Learning Objective: to identify functional flow chart, quality issues and major defects in garments products of apparel merchandising.

☐ **Functional flow chart:**

- Marketing for order sourcing.
- Order procedure
- Sampling
- Raw materials
- Production
- Quality
- Shipment
- Commercial & banking
- Accounts
- Feedback



Fig: Flow chart of Fashion Merchandising

☐ **Quality:**

Quality is defined as that combination of design and properties of materials of a product which are needed for the intended end use and level of the market in which it is sold. "Requisite Quality" is defined as the design and composition of a product, which has been thoroughly proved by adequate development work, in order to establish its reliability under the conditions to which it will be subjected in use and to avoid producing too high a grade of product for the intended market.

□ **Quality Assurance:**

The establishment and maintenance of ALL activities and functions concerned with the attainment of requisite quality" Quality Control "The systems required for programming and co-ordinating the efforts of the various groups in an organisation to maintain the requisite quality" As such Quality Control is seen as the agent of Quality Assurance or Total Quality Control.



□ **Garments Defects**

The defect is the common term in the garment industry. Garment defects are also well known as reject the item. Different types of defects are found in the garment industry. In garments industry these defects are dependent upon the classification of defects and an inspector's ability to make decisions. Creating a list of every defect that might be encountered during a quality inspection is not realistic. Having said that, the tables which follow do provide details of the majority of defects. According to the garments workmanship and appearance garments defects are divided in the three ways-

- Critical defects
- Major defects
- Minor defects



Fig: Garments Defects

☐ Critical Defects

A critical defect is one that is likely to result in hazardous or unsafe conditions when using the product. A critical defect is also a deviation from delivery requirements which prevents the product from being received. If one (1) occurrence of critical defect is observed during the inspection, the entire lot will be rejected. A 100% inspection will be carried-out by the garments factory QA Staff to remove the defective product/s.

☐ Major Defects

A major defect is one that is likely to result in a customer complaint or return. A major defect is also one that will most likely result in product failure after a period of time that is considered unacceptable to the customer or end user. A major defect will usually (but not always) be obvious to the inspector during the visual garment's inspection. It will also be obvious to the customer during use.

☐ Minor Defects

A minor defect is one that is unlikely to result in customer complaint or return. A minor defect is a deviation from the required standard, but one that is unlikely to affect the usability of the product. A minor defect will usually be seen by the inspector but may be overlooked by the customer.

☐ Garments Defect Table

Defining whether the defect is Critical, Major or Minor might require some degree of personal judgment. Some defects might be obvious – others less so. It is essential that the quality control inspectors are familiar with all of the defect types contained in these defect tables. It is also important that these inspectors have sufficient experience and knowledge to ensure the right decision is made. The tables are designed to be used for reference only – they are not a fully comprehensive list of faults and must not be considered inclusive or exhaustive.

SL	Garments Workmanship and Appearance	Critical	Major	Minor
1.	Brand name differs from PO/sample	X	–	–
2.	Broken / Skip stitch	–	X	–
3.	Open seam or hem	–	X	–
4.	Wavy seams/stitch	–	–	X
5.	Collar Fullness or tightness of fabric (Bubbling)	–	X	–
6.	Unintentional pleats form along the seam	–	–	X
7.	Missing / wrong accessories	–	X	–
8.	Thread discoloration	–	–	X
9.	Incorrect interlining weight in relation to the fabric	–	–	X
10.	Sharp ends, Bent Buttons / snaps post	X	–	–
11.	Button too big for the buttonhole	–	X	–
12.	Buttonhole too big for the button	–	X	–
13.	Zipper puller self-lock not secure	–	X	–
14.	Zipper slider does not glide through the zipper teeth smoothly	–	X	–
15.	Zipper stitching margin too small that may cause slider to jam	–	X	–
16.	Snapping action too tight to close	–	X	–

17.	Snapping action too loose to close adequately	–	X	–
18.	Belt loop Missing/Incomplete	–	X	–
19.	Colour shade variation within a box	–	X	–
20.	Missing collar bone	–	X	–
21.	Broken hanger resulting to sharp end/edge	X	–	–
22.	Poorly attached hanger hook	–	X	–
23.	Poly bag / inner box damage / wrinkled	–	–	X
24.	Poly bag / inner box too loose or too tight	–	X	–



Fig: Faults in garment

Individual Activity:

- Identify functional flow chart, quality issues.
- Identify major defects in garments products.
- Prepare defects table and report.



SELF-CHECK QUIZ 1.3

Check your understanding by answering the following questions:

- ☐ Write the correct answer for the following:
1. Write down the functional flow chart of apparel merchandising?
 2. How will you define the quality?
 3. What do you mean by quality assurance?
 4. What are the types of garments defects?
 5. Describe the “major defects” of garments?



REVIEW OF COMPETENCY

Final Checklist <i>(for the performance criteria of the module identifying the principles and major tasks of apparel merchandising)</i>		
Performance Criteria	Yes	No
1. Job description of an apparel merchandiser is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
2. Role and responsibilities of an apparel merchandiser is identified.	<input type="checkbox"/>	<input type="checkbox"/>
3. Organizational policies, guidelines and code of conduct inferred.	<input type="checkbox"/>	<input type="checkbox"/>
4. Types of RMG industries are listed with key differentiators.	<input type="checkbox"/>	<input type="checkbox"/>
5. Key Organizational features of RMG industries are identified.	<input type="checkbox"/>	<input type="checkbox"/>
6. Source companies are listed.	<input type="checkbox"/>	<input type="checkbox"/>
7. Buyer organizations are listed.	<input type="checkbox"/>	<input type="checkbox"/>
8. Functional flow chart of apparel merchandising is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
9. The functions, relationships and dependencies among the components of the flow chart are recognized.	<input type="checkbox"/>	<input type="checkbox"/>
10. Quality issues are identified.	<input type="checkbox"/>	<input type="checkbox"/>
11. Preventive measures are recognized for defects reduction and zero error products.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 1.1

1. Merchandising is the department which mediates marketing and production departments. Merchandising department will have to do costing and pricing also. In any case, the merchandiser is the person whose responsibility is to execute the orders perfectly as per the costing and pricing.
2. Following are the major tasks of an apparel merchandiser:
 - Internal and external communication
 - Sampling
 - Lab dips
 - Accessories and trims
 - Preparing internal order sheets
 - Preparing purchase orders
 - Advising and assisting production
 - Advising quality department about quality level
 - Mediating production and quality departments
 - Giving shipping instructions and following shipping
 - Helping documentation department
 - Taking responsibility for inspections
 - Following shipment
3. Stands for the word merchandiser
 - M- Should have good Managerial capacity
 - E- Efficient in both English written and spoken
 - R- Having high sense of responsibility
 - C- Always keep commitment
 - H- Leads honest life
 - A- Attitude should always be positive in resolving any problem
 - N- Never does any argue with buyers and seniors
 - D- Fully devoted to his service
 - I- Always well Informed about his all orders
 - S- Sincere in office and daily works
 - E- Enthusiastic in nature
4. Organizational policies and guidelines:
 - Legal compliance
 - Ethical principle
 - Employment standards
5. Buyers code of conduct:
 - Wages and benefit
 - Regular working hours
 - Overtime
 - Child labour
 - Forced labour
 - Health and safety
 - Non-discrimination
 - Harassment or abuse
 - Freedom of association

- Women's right

ANSWER KEY 1.2

1. Types of RMG industries:

- Woven garment's industry
- Knit garment's industry
- Sweater industry
- Home textile industry

2. Name of five departments of RMG industry:

- PDS section
- Cutting section
- Sewing section
- Finishing section
- Packing section

3. Main activities of finishing section:

- Thread trimming
- Button attach (if required)
- Preliminary pressing/ironing
- Tag attachment
- Final pressing

4. The types of sourcing:

- Local sourcing
- International sourcing

5. The role of buying agency is:

- To collect the order by using marketing tools and technique, execute the order by enlisted factories.

ANSWER KEY 1.3

1. Functional flow chart:

- Marketing for order sourcing
- Order procedure
- Sampling
- Raw materials
- Production
- Quality
- Shipment
- Commercial and banking
- Accounts
- Feedback

2. Quality is defined as that combination of design and properties of materials of a product which are needed for the intended end use and level of the market in which it is sold. "Requisite Quality" is defined as the design and composition of a product, which has been thoroughly proved by adequate development work.

3. The establishment and maintenance of ALL activities and functions concerned with the attainment of requisite quality" Quality Control "The systems required for programming and co-ordinating the efforts

of the various groups in an organisation to maintain the requisite quality" As such Quality Control is seen as the agent of Quality Assurance or Total Quality Control.

4. Garments defects are divided in the three ways:
 - Critical defects
 - Major defects
 - Minor defects
5. A major defect is one that is likely to result in a customer complaint or return. A major defect is also one that will most likely result in product failure after a period of time that is considered unacceptable to the customer or end user.

Module 2: Building and maintaining an effective business relationship with clients/ customers



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to build and maintaining an effective business relationship with clients/customer, which includes the tasks of establishing good relationship with clients/customer, interpreting the apparel marketing process, performing the order handling procedure and interpreting the process of reporting. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

40 hours



LEARNING OUTCOMES:

Upon completion of the module, the trainee should be able to:

- 2.1 Establish good relationship with clients/customers.
- 2.2 Interpret the apparel marketing process.
- 2.3 Perform the order handling procedure.
- 2.4 Interpret the process of reporting.



PERFORMANCE CRITERIA:

- 1. Communication requirements of customers are identified.
- 2. Communication with customers is demonstrated.
- 3. Rapport building techniques are demonstrated.
- 4. Marketing process is interpreted.
- 5. Effective business communication with customers is demonstrated.
- 6. Market segments are identified with key details and data.
- 7. Information about style and materials are collected.
- 8. Order confirmation is interpreted.
- 9. Execution process of order is illustrated.
- 10. Order handling procedure is demonstrated.
- 11. Reporting process is interpreted.
- 12. Report is prepared and submitted.
- 13. Reports are documented.



Learning Outcome 2.1 – Establish Good Relationships with Clients/Customers



Contents:

- Communication requirements of customers.
- Communication with customers.
- Rapport building techniques.



Assessment criteria:

1. Communication requirements of customers are identified.
2. Communication with customers is demonstrated.
3. Rapport building techniques are demonstrated.



Resources required:

Students/trainees must be provided with the following resources:

- Workplace locations, class room, personal laptop/computer, trainee handbook (CBLM), PPT, Stationary and Communication guide, learning materials and rapport building techniques



LEARNING ACTIVITY 2.1

Learning Activity	Resources/Special Instructions/References
Identifying communication methods and rapport building techniques	<ul style="list-style-type: none">▪ Information Sheet: 2.1▪ Self-Check Quiz: 2.1▪ Answer Key: 2.1



INFORMATION SHEET 2.1

Learning Objective: to identify, communication methods and rapport building techniques of an apparel merchandiser.

☐ **Communication:**

Communication of information is a most important aspect of any export order process. In merchandising there are various tools used to communicate the technical and colours information to factory in order to proceed further in export order. The communication tools are as:

- Quality manuals
- Purchase order
- Tech pack etc.
- Costing, coating and negotiation

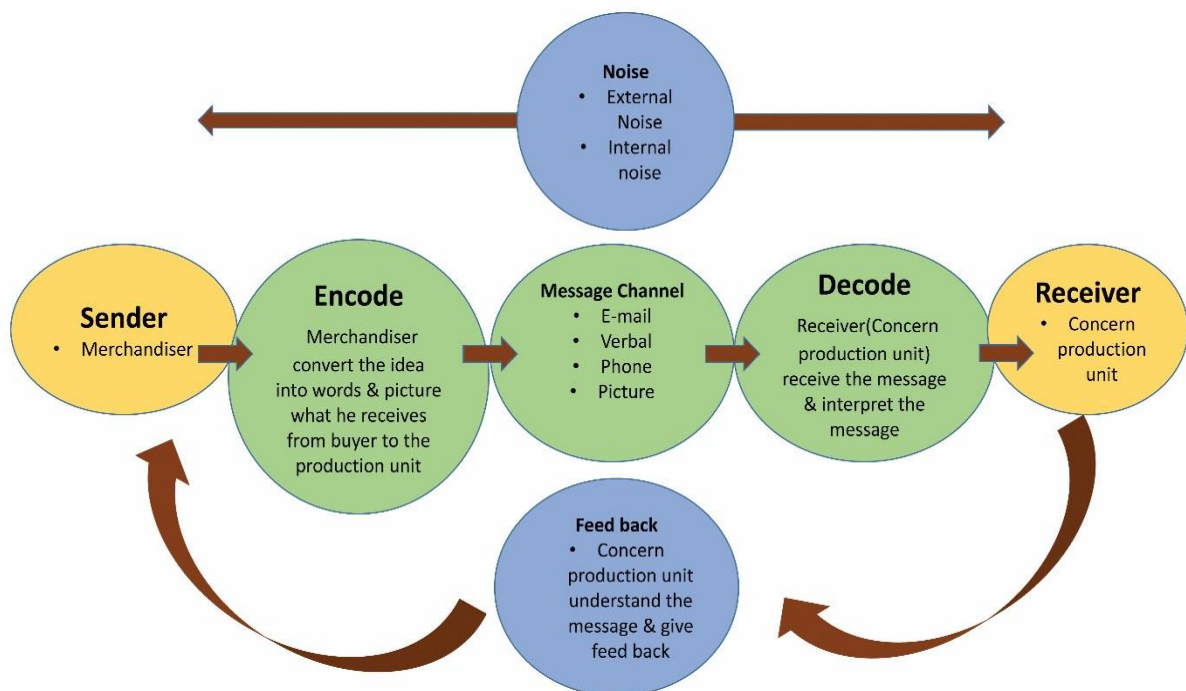


Fig: Communication process of a merchandiser

☐ **Modes of communication:**

There are several modes of communication those are commonly practiced in fashion merchandising to communicate with buyer and suppliers.

1. E-mail
2. Telephonic conversation
3. Formal meetings
4. Video conference
5. Courier
6. Entrepreneur Resource Planning (ERP)
7. Virtual prototyping
8. Electronic data interchange (EDI)

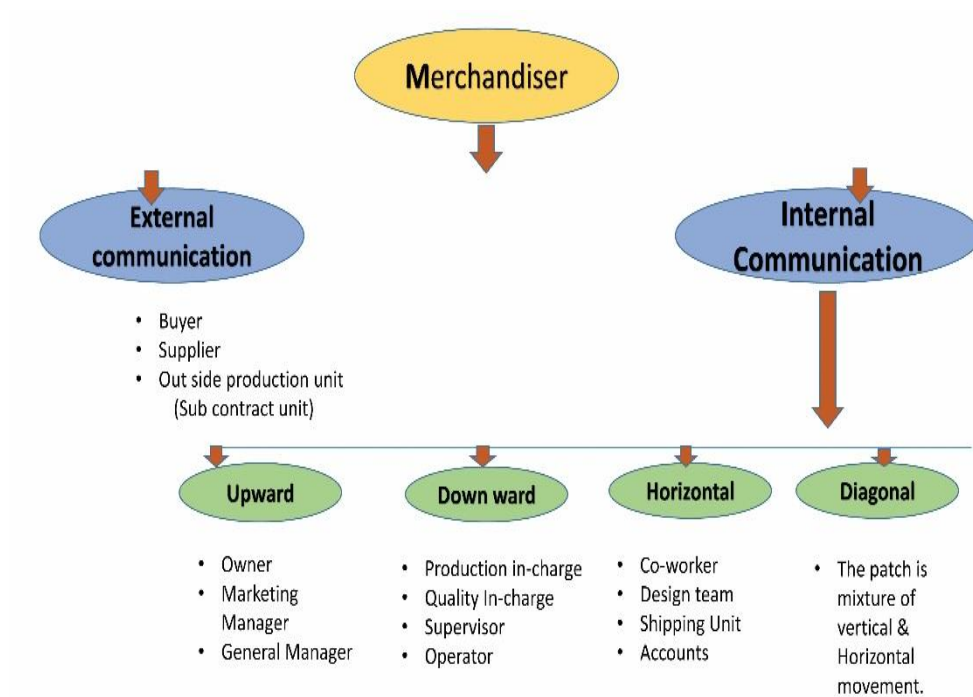


Fig: Communication flows of a merchandiser

□ **Rapport building techniques**

1. Empathy
 2. Timely & regular communication
 3. Commitment to quality
 4. Adherence to deadlines
 5. Transparency in dealings
 6. Integrity and honesty
 7. Advance communication on schedule changes
- Active effectively to build rapport:
 1. Appear well dressed and well groomed
 2. Display open body language
 3. Do a product demonstration
 4. Focus your full attention on the customer
 5. Follow – up with the customer if they are open to connecting again
 - Connecting with potential customers:
 1. Create a positive online presence
 2. Treat everyone as if they are a potential customer
 3. Ask current customers for referrals and recommendations

Individual Activity:

- Identify communication methods of an apparel merchandiser.
- Identify rapport building techniques.



SELF-CHECK QUIZ 2.1

Write the correct answer for the following questions.

1. What are the communication tools in apparel merchandising?
2. Write any five modes of communication?
3. What are the techniques for rapport building?



Learning Outcome 2.2 - Interpret the Apparel Marketing Process



Contents:

- Marketing process.
- Effective business communication with customers.
- Market segments with key details and data.



Assessment criteria:

1. Marketing process is interpreted.
2. Effective business communication with customers is demonstrated.
3. Market segments are identified with key details and data.



Resources required:

Students/trainees must be provided with the following resources:

- Workplace locations, class room, personal laptop/computer, trainee handbook (CBLM), PPT, stationary and company profile, products/sample



LEARNING ACTIVITY 2.2

Learning Activity	Resources/Special Instructions/References
Identify marketing process and effective business communication	<ul style="list-style-type: none">▪ Information Sheet: 2.2▪ Self-Check Quiz: 2.2▪ Answer Key: 2.2



INFORMATION SHEET 2.2

Learning Objective: to identify marketing process and effective business communication with customers.

☐ **Marketing process:**



☐ **Marketing Knowledge:**

Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering, and freely exchanging products and services of value with other.



Fig: Marketing Plan

There are several more subtle and cost-effective ways of promoting fashion ranges to potential consumers which are more popular, such as:

- Public relations
- Fashion show
- Press launches
- Sponsorship
- Celebrity endorsement
- Point-of-purchase material
- Special offers
- Competitions
- Websites

☐ **The way of effective business communication for a merchandiser:**

1. **Highlighting the areas of attention:** A message can be big & so the receiver may not be able to understand what the area needed corrective action. That's why mailing communication must be highlighted to focus the area need correction.
2. **Clear & simple Message:** Message should be very simple & clear so that anyone can understand it at any level of downward & upward stream.
3. **Descriptive & specific:** Message in details by using picture, graphics will help receiver to understand meaning appropriately.
4. **Completeness:** The message must be complete. It should convey all the facts required by the receiver.
5. **Relevancy in the communication:** Irrelevant message always create doubt & confusion. So careful discussion & writing should have to be taken in consideration for effective communication.
6. **Correctness & accuracy:** In order to ensure correctness better to use references & document.
7. **Offering feedback:** Giving and receiving feedback effectively is an important part of communication whether inside or outside the organization.
8. **Confident communication:** This will help to build trust level between the parties. So, body language, firm hand shake, good eye contact & smiling face will be an added advantage to get good feedback from the others.
9. **Face to face communication:** Conferences and other face-to-face communication can take merchandising to a new level. This will help to get immediate action & solve the problem.
10. **Follow up in writing:** Merchandiser While taking notes during phone or in-person meetings, the other party might not be, so need follow up after the meeting with a written message, giving an overview of the discussion to make sure that both are on the same page. Require summarizing what was agreed, repeat questions that were raised and outline the next steps and responsibilities for both parties.
11. **Politeness & avoid rude word:** No one like a rude person so carefully rude words should have to be avoided.

☐ **Market Segmentation:**

Market segmentation is a marketing strategy that involves dividing a broad target market into subsets of consumers who have common needs, and then designing and implementing strategies to target their needs and desires using media channels and other touch-points that best allow reaching them. Market segments allow companies to create product differentiation strategies to target them. Target Marketing involves breaking a market into segments and then concentrating your marketing efforts on one or a few key segments. It can be the key to a small business 's success. The beauty of target marketing is that it makes the promotion, pricing and distribution of your products and/or services easier and more cost-effective. It provides a focus to all of your marketing activities.

☐ **Criteria for segmenting:**

An ideal market segment meets all of the following criteria:

- It is possible to measure.
- It must be large enough to earn profit.
- It must be stable enough that it does not vanish after some time.
- It is possible to reach potential customers via the organization's promotion and distribution channel.
- It is internally homogeneous (potential customers in the same segment prefer the same product qualities).
- It is externally heterogeneous, that is, potential customers from different segments have different quality preferences.
- It responds consistently to a given market stimulus.
- It can be reached by market intervention in a cost-effective manner.

□ **Methods of segmenting consumer markets:**

- Geographic segmentation.
- Segmentation by occasions.
- Price discrimination.
- Algorithms & approaches.
- Psychographic.
- Supplier segmentation.



Individual Activity:

- *Identify marketing process and marketing knowledge.*
- *Identify effective business communication techniques with customers.*



SELF-CHECK QUIZ 2.2

Write the correct answer for the following questions.

1. Write any five ways for effective business communication?
2. What do you mean by market segment?
3. Write any three criteria for segmenting market?



Learning Outcome 2.3 – Perform the Order Handling Procedure



Contents:

- Execution process of order.
- Order handling procedure of apparel merchandising.



Assessment criteria:

1. Information about style and materials are collected.
2. Order confirmation is interpreted.
3. Execution process of order is illustrated.
4. Order handling procedure is demonstrated.



Resources required:

Students/trainees must be provided with the following resources:

- Style/sample, materials, tech-pack



LEARNING ACTIVITY 2.3

Learning Activity	Resources/Special Instructions/References
Identify execution process and order handling procedure	<ul style="list-style-type: none">▪ Information Sheet: 2.3▪ Self-Check Quiz: 2.3▪ Answer Key: 2.3



INFORMATION SHEET 2.3

Learning Objective: to identify execution process and order handling procedure of apparel merchandising.

☐ **Order confirmation document:**

- ✓ Copy of master L/C.
- ✓ Purchase Order (PO) sheet.
- ✓ Final tech pack / Buyer's comments & regarding approved sample.

☐ **Order execution:**

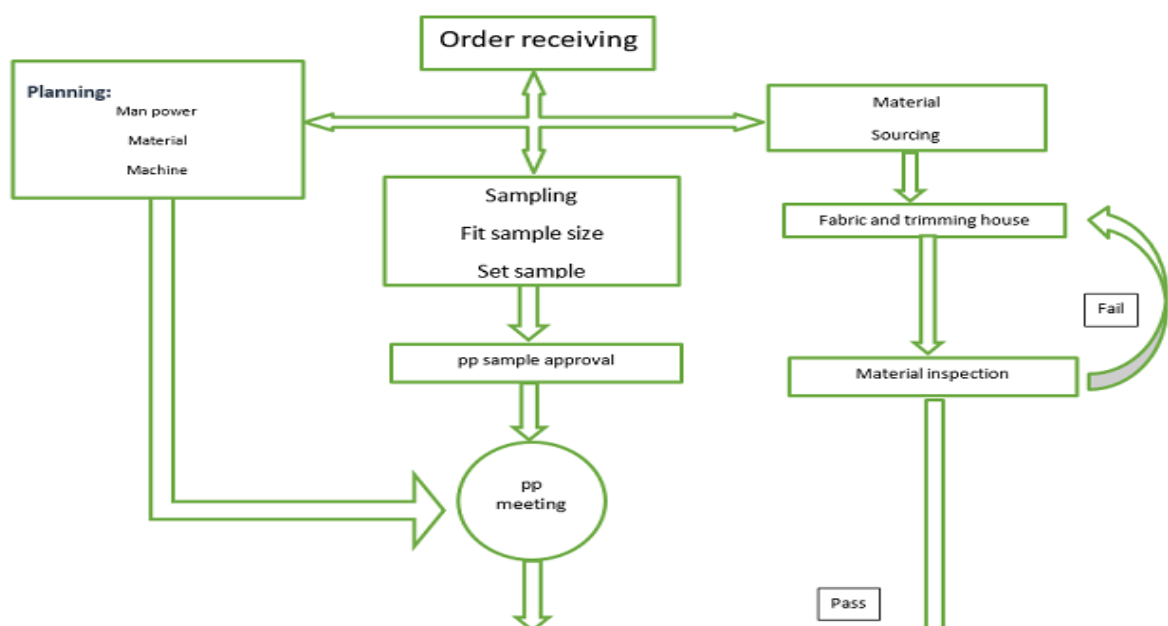
A garments merchandiser has to face a lot of problems from receiving order to shipment of that. If the merchandiser will follow an accurate order execution process then you can easily solve those problems, also can shipping the goods in timely. as its importance on garments merchandising.

The second and final important matter to send the shipment in timely is "Order execution"

☐ **Garments Order Execution Process:**

During executing of a garment order, the following processes should be maintained by a garment's merchandiser:

- Receive order file from marketing department.
- Raw material booking.
- Back to back (B/B) L/C is given to the suppliers,
- Fit sample sent to the buyer for the fit approval,
- Pre-production (P.P) sample submitted to the buyer,
- Fabrics and accessories should be in-housed according to T/A plan,
- Pilot production should be started according to T/A plan,
- Inspection by the buyers Q.C,
- Bulk production should be started according to TNA plan,
- Final inspection according to TNA plan,
- Commercial department prepares the shipping documents,
- Goods sent to port (Sea port or airport),
- Goods handed over to the shipping line.



□ **Order handling procedure:**

- Study on technical package.
- Style analysis.
- Lead time / space availability.
- Consumption and costing.
- Pricing.
- Negotiation.
- Price revision.
- Order confirmation.
- Production.
- Shipment.

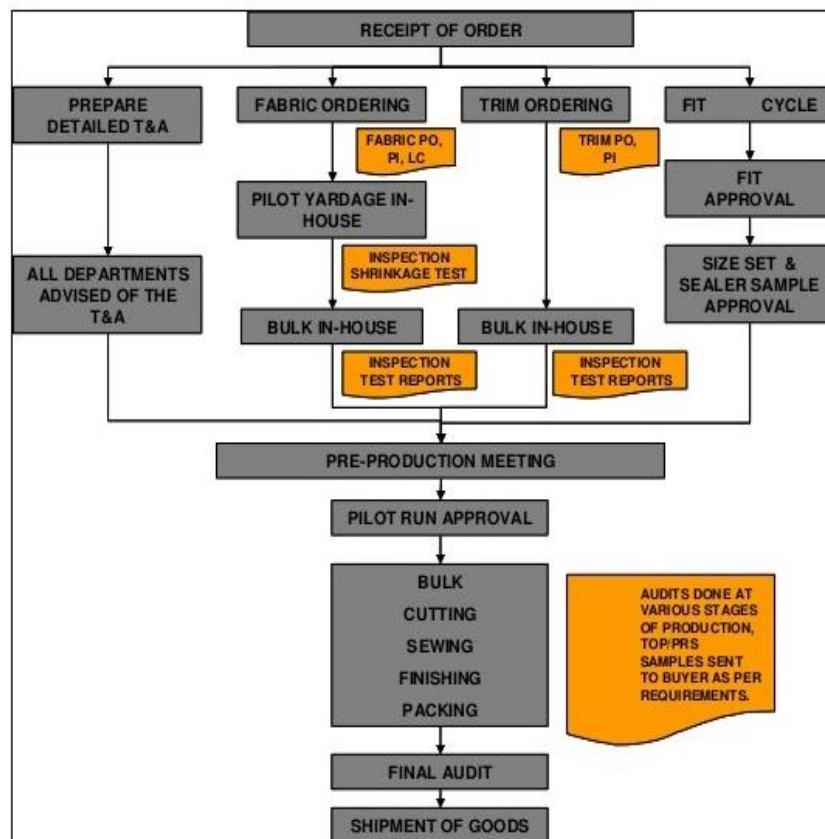


Fig: Order handling procedure

Individual Activity:

- Identify execution process.
- Order handling procedure of apparel merchandising.



SELF-CHECK QUIZ 2.3

Write the correct answer of the following:

1. What are the documents used for order confirmation?
2. Write down the order execution process?
3. Write the order handling procedure?



Learning Outcome 2.4 – Interpret the Process of Reporting



Contents:

- Reporting process.
- Different types of reporting.



Assessment criteria:

1. Reporting process is interpreted.
2. Report is prepared and submitted.
3. Reports are documented.



Resources required:

Students/trainees must be provided with the following resources:

- Style/sample, stationery, laptop/computer



LEARNING ACTIVITY 2.4

Learning Activity	Resources/Special Instructions/References
Identify reporting process	<ul style="list-style-type: none">▪ Information Sheet: 2.4▪ Self-Check Quiz: 2.4▪ Answer Key: 2.4



INFORMATION SHEET 2.4

Learning Objective: to identify reporting process of apparel merchandising.

☐ **Reporting process:**



☐ **Reporting:**

Give a spoken or written account of something that one has observed, heard, done, or investigated.

☐ **Methods of reporting in apparel industry:**

- Verbal report
- Written report on a format
- Online reporting
- Reporting by E-mail

☐ **Common written reporting formats**

1. Material receiving report
2. Material delivery report
3. Daily production report
4. Material inspection report
5. Inline production inspection report



SELF-CHECK QUIZ 2.4

Write the correct answer of the following:

1. What do you mean by reporting?
2. What are the methods of reporting in apparel industry?
3. Write down the name of some common reporting formats?



REVIEW OF COMPETENCY

Final Checklist (for the performance criteria of the module build and maintaining an effective business relationship with clients / customers)		
Performance Criteria	Yes	No
1. Communication requirements of customers are identified.	<input type="checkbox"/>	<input type="checkbox"/>
2. Communication with customers is demonstrated.	<input type="checkbox"/>	<input type="checkbox"/>
3. Rapport building techniques are demonstrated.	<input type="checkbox"/>	<input type="checkbox"/>
4. Marketing process is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
5. Effective business communication with customers is demonstrated.	<input type="checkbox"/>	<input type="checkbox"/>
6. Market segments are identified with key details and data.	<input type="checkbox"/>	<input type="checkbox"/>
7. Information about style and materials are collected.	<input type="checkbox"/>	<input type="checkbox"/>
8. Order confirmation is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
9. Execution process of order is illustrated.	<input type="checkbox"/>	<input type="checkbox"/>
10. Order handling procedure is demonstrated.	<input type="checkbox"/>	<input type="checkbox"/>
11. Reporting process is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
12. Report is prepared and submitted.	<input type="checkbox"/>	<input type="checkbox"/>
13. Reports are documented.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 2.1

1. The communication tools are as:
 - Quality manuals
 - Purchase order
 - Style no
 - Tech pack etc.
2. The modes of communication are:
 - E-mail
 - Telephonic conversation
 - Formal meeting
 - Video conference
 - Electronic data interchange (EDI)
3. Rapport building techniques are:
 - Empathy
 - Timely and regular communication
 - Commitment to quality
 - Adherence to deadlines
 - Transparency in dealings
 - Integrity and honesty
 - Advance communication on schedule changes

ANSWER KEY 2.2

1. The five ways for effective business communication:
 - Highlighting the areas of attention
 - Clear and simple message
 - Descriptive & specific
 - Completeness
 - Relevancy in the communication
2. Market segmentation is a marketing strategy that involves dividing a broad target market into subsets of consumers who have common needs, and then designing and implementing strategies to target their needs and desires using media channels and other touch-points that best allow reaching them. Market segments allow companies to create product differentiation strategies to target them.
3. Three criteria for segmenting market:
 - It is possible to measure.
 - It is possible to reach potential customers via the organization's promotion and distribution channel.
 - It responds consistently to a given market stimulus.

ANSWER KEY 2.3

1. Order confirmation documentation:
 - ✓ Copy of master L/C
 - ✓ Purchase Order (PO)sheet
 - ✓ Final tech pack / Buyer's comments & regarding approved sample
2. Garments Order Execution Process:

During executing of a garment order, the following processes should be maintained by a garment's merchandiser:

- Receive order file from marketing department
- Raw material booking
- Back to back (B/B) L/C is given to the suppliers
- Fit sample sent to the buyer for the fit approval
- Pre-production (P.P) sample submitted to the buyer
- Fabrics and accessories should be in-housed according to T/A plan
- Pilot production should be started according to T/A plan
- Inspection by the buyers Q.C
- Bulk production should be started according to TNA plan
- Final inspection according to TNA plan
- Commercial department prepares the shipping documents
- Goods sent to port (Sea port or airport)
- Goods handed over to the shipping line

3. Order handling procedure:

- Study on technical package
- Style analysis
- Lead time/space availability
- Consumption and costing
- Pricing
- Negotiation
- Price revision
- Order confirmation
- Production
- Shipment

ANSWER KEY 2.4

1. Reporting:

Give a spoken or written account of something that one has observed, heard, done, or investigated.

2. Methods of reporting in apparel industry:

- Verbal report
- Written report on a format
- Reporting by E-mail

3. Common written reporting formats:

- Material receiving report
- Material delivery report
- Daily production report
- Material inspection report
- Inline production inspection report
- Corporate Social Responsibility (CSR) report
- Health and safety report

Module 3: Processing of sourcing materials



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to process of sourcing materials, which includes the tasks of interpreting types of fabrics used for woven and knit apparels, trims and accessories, preparing bill of materials (BOM) sheet and demonstrating the process of negotiation and booking. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

50 hours

**LEARNING OUTCOMES:**

Upon completion of the module, the trainee should be able to:

- 3.1 Interpret types of fabrics used for woven and knit apparels.
- 3.2 Interpret the trims and accessories.
- 3.3 Prepare bill of material (BOM) sheet.
- 3.4 Demonstrate the process of negotiation and booking.

**PERFORMANCE CRITERIA:**

- 1. Woven fabrics are categorized and compared in accordance with the requirements.
- 2. Knit fabrics are categorized and compared in accordance with the requirements.
- 3. Fabrics are selected and collected according to work order.
- 4. The specifications of trims and accessories based on the product are identified.
- 5. Trims and accessories are identified.
- 6. Trims and accessories are collected and delivered to the concerned department.
- 7. Purpose of BOM sheet is stated.
- 8. Procedure of preparing BOM sheet is interpreted.
- 9. BOM for each style is prepared.
- 10. Negotiation process with suppliers is demonstrated.
- 11. Price and availability of materials is negotiated.
- 12. Booking process and procedures are followed and executed.



Learning Outcome 3.1 – Interpret Types of Fabrics used for Woven and Knit Apparels



Contents:

- Types of fabrics used for woven and knit apparels.
- Categorize of fabrics for woven and knit apparels.



Assessment criteria:

1. Woven fabrics are categorized and compared in accordance with the requirements.
2. Knit fabrics are categorized and compared in accordance with the requirements.
3. Fabrics are selected and collected according to work order.



Resources required:

Students/trainees must be provided with the following resources:

- Types of fabric, knit fabrics and woven fabrics



LEARNING ACTIVITY 3.1

Learning Activity	Resources/Special Instructions/References
Identifying different types of fabrics used for woven and knit apparels	<ul style="list-style-type: none">▪ Information Sheet: 3.1▪ Self-Check Quiz: 3.1▪ Answer Key: 3.1



INFORMATION SHEET 3.1

Learning Objective: to identify different types of fabrics used for woven and knit apparels.

☐ **Woven Fabrics**

Woven fabrics are defined as fabrics composed of warp yarns (Longitudinal) and weft yarns (transverse) that are interlaced at according to the type of weave or design that are desired.

☐ **Classification of woven fabric structure**

Woven structures are classified into the following categories:

- Simple structures
- Compound structures

☐ **Simple structure**

Only one series of warp (end) and one series of weft (pick) threads are used in this construction.

The warp and weft threads are interlaced with one another at right angle.

All the neighbouring warp and weft threads are parallel to one another and play an equally important role in determining the properties of the fabric.

Example: Plain, Twill and Satin fabric.

☐ **Compound structure**

More than one series warp and weft threads are used in this construction, some of threads forms the body or ground and the other forms the figuring or ornamentation, the neighbouring threads need not be parallel to one another.

Example: Pile, Towel fabric

☐ **Flow chart of woven fabric manufacturing process:**

- Spinning
- Winding.
- Warp yarn preparation.
- Cone winding or pre-winding.
- Warping.
- Sizing.
- Drafting in or drawing in.
- Denting.
- Looming.
- Weaving.

□ **Different types of woven fabrics:**



Plain / poplin weaved fabric:

Also called tabbinet is a strong fabric in a plain weave of any fibre or blend, with crosswise ribs that typically gives a corded surface.



Twill fabric:

Are easily recognizable because they will show diagonal weave or texture. will almost always have a bit of shine, though the degree can depend on the weave, colour, and cotton used.



Herringbone:

A weaving technique that produces a ribbed chevron design.

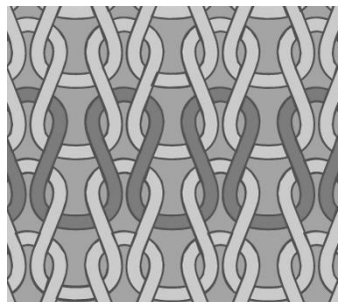


<p><u>Sateen:</u></p> <p>A fabric produced by weaving the warp yarns over several weft yarns at a time, creating a lustre in silk, nylon, and polyester materials.</p>	
<p><u>Jacquard:</u></p> <p>A jacquard weave is created through a loom process, which is programmed to raise each warp thread independently of the other threads. The design of the jacquard fabric is incorporated into the weave, instead of being printed or dyed onto the fabric.</p>	
<p><u>Oxford:</u></p> <p>is very similar to pinpoint oxford, except it uses a slightly heavier thread and looser weave. It has a slightly rougher texture but is more durable than most fabrics.</p>	
<p><u>Denim Fabric:</u></p> <p>Denim is a sturdy cotton twill textile in which the weft passes under two or more warp threads. This twill weaving produces the familiar diagonal ribbing of the denim that distinguishes it from cotton duck.</p>	

☐ **Different types of knit fabrics:**

Weft knitting fabric:

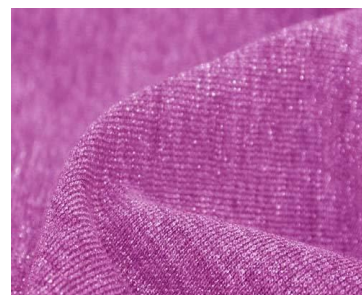
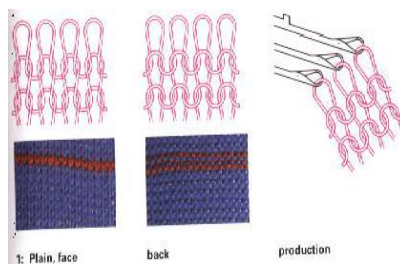
In weft knitting, the loops are formed across width of the fabric. Each weft thread is fed, more or less at right angles to the direction in which the fabric is produced.



Different types of weft knitted fabrics:

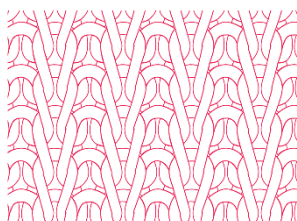
Single jersey:

Single jersey is weft knitted fabric which is formed by one set of needles. Single jersey is the mostly used for making T-shirts in textile. In single jersey face side and back side appearance is different. This fabric is much warm, flexible, stretchy, and wear to comfort therefore get popularity.



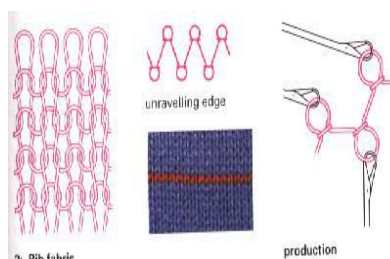
Double jersey:

Double jersey is weft knitted fabric which is formed by two sets of needles. Double jersey fabric is almost similar to the single jersey fabric but in double jersey face and back side appearance is same.



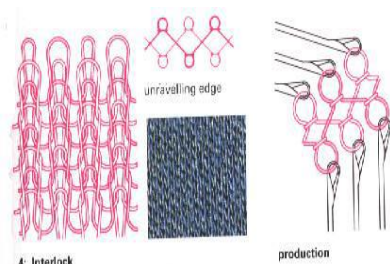
Rib:

Knitted rib fabrics can be knitted using any fibre or yarn type and in all weights. The fabric is knitted on double-bed knitting machines with two sets of alternating single-headed needles. The vertical ribs on one side of the fabric are composed of face stitches that are knitted on one needle-bed.



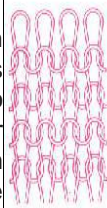
Inter lock:

Interlock means a device or mechanism for connecting or coordinating the function of different components. a fabric knitted with closely interlocking stitches allowing it to stretch. Interlock fabric is a variation of rib knit construction. Similar to a Jersey knit except both front and back of the fabric look identical. Double knit construction makes this a thicker knit fabric. Interlock is the tightest weave, gives the smoothest surface and the finest hand. The fabric is extremely soft, firm and absorbent.

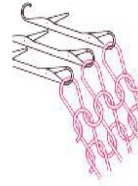


Purl Fabric:

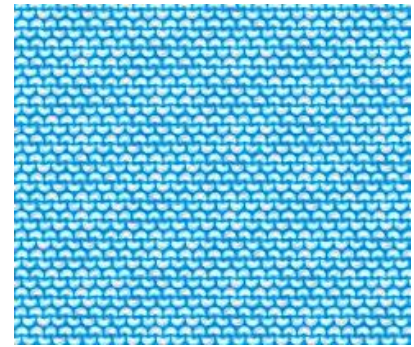
The Purl fabrics are also known as link-link fabrics. Purl was originally spelt 'pearl' and was so named because of its similar appearance to pearl droplets. In purl, the loops of one course are intermeshed in one direction and the loops of the next course intermeshed in opposite direction. the alternate courses having face and back loops.



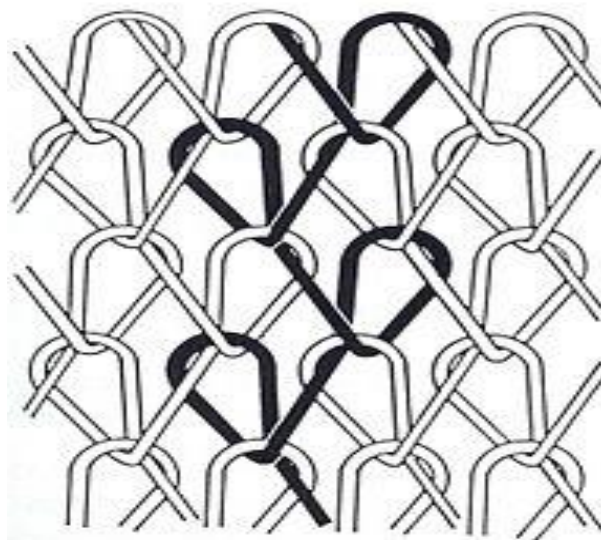
3: Purl fabric



production




**Warp knitted fabric:**

Warp knitting represents the fastest method of producing fabric from yarn. Warp knitting differs from weft knitting in that each needle loops its own thread. The needles produce parallel rows of loops simultaneously that are interlocked in a zigzag pattern. Fabric is produced in sheet or flat form using one or more sets of warp yarn. The yarns are fed from warp beams to a row of needles extending across the width of the machine.

**Different types of warp knitted fabrics:****Tricot Knit:**

Tricot fabric is soft, wrinkle resistant & has good drapability. Tricot knits are used for a wide variety of fabric weights & design. It makes light fabric weighting less than 4 ounce/square yard. Some examples of tricot fabric are sleepwear, boluses, dresses etc.



<p><u>Raschel Knit:</u></p> <p>The Raschel knit ranks in importance of production with tricot but it makes varieties of products ranging from laces, power nets for foundation garments, swimwear to carpets. Raschel knitting is done with heavy yarns & usually has a complex lace-like pattern.</p>	
<p><u>Crochet Knit:</u></p> <p>This basic stitch is used in hand crochet. This construction is used in a wide variety of fabrics ranging from nets & laces to bed spreads & carpets, various types of edgings or trimmings lace are also produced.</p>	
<p><u>Milanese Knit:</u></p> <p>The Milanese stitch produces a fabric very similar to tricot. It can be identified by the fine rib on the face & a diagonal pattern on the back. However, Milanese fabric is superior to tricot in smoothness, elasticity, regularity of structure & friction resistance.</p>	

Individual Activity:

- Identify different types of fabrics.
- Categorize and select woven fabrics and knit fabrics.



SELF-CHECK QUIZ 3.1

Write the correct answer for the following questions.

1. Write the flow chart of woven fabric manufacturing process?
2. Write down the any five types for woven fabrics?
3. What are the characteristics of twill fabric?
4. Write the name of any five types of knit fabrics?
5. What are the characteristics of single jersey fabric?



Learning Outcome 3.2 - Interpret the Trims and Accessories



Contents:

- Trims and accessories use in garment product.
- Identify trims and accessories.



Assessment criteria:

1. The specifications of trims and accessories based on the product are identified.
2. Trims and accessories are identified.
3. Trims and accessories are collected and delivered to the concerned department.



Resources required:

Students/trainees must be provided with the following resources:

- Trims and accessories



LEARNING ACTIVITY 3.2

Learning Activity	Resources/Special Instructions/References
Identify trims and accessories	<ul style="list-style-type: none">▪ Information Sheet: 3.2▪ Self-Check Quiz: 3.2▪ Answer Key: 3.2



INFORMATION SHEET 3.2

Learning Objective: to identify trims and accessories use for garment products.


Trims:

Trims are directly involve making of a garment. So, trims which materials are directly attached with the fabric to make a garment are called trims. Moreover, we can say that the materials used is sewing room other than fabric is called trims.

Different types of trims:

<p>Sewing Thread:</p> <p>The physical appearance and quality of seam is directly related to sewing thread. It is one of the main elements to production garment. Sewing thread play an important factor to join two parts of fabric.</p>	
<p>Label</p> <p>The label is a short piece of fabric which contain little information such as garment size, wash, care, price, composition, etc. There are different types of label used in garments like as main label, size Label, wash care label, care label, price label, etc.</p>	
<p>Button</p> <p>Button is a small disc or knob sewn onto a garment, either to fasten it from being pushed through a slit/ hole made for the purpose or for decoration.</p> <p>Types of Buttons Used in Garments:</p> <p>In apparel industry buttons are normally classify according to the size, materials, and holes.</p> <ul style="list-style-type: none"> ○ According to No. of Holes: <ul style="list-style-type: none"> 2-hole button. 4-hole button. Shank button. Snap button. Decorative button. 	





<p>Zipper</p> <p>Zipper is important garments part which is used for opening and closing function. This is one kind of trimming, but it also uses as garments accessories. Zipper is the most common fastening device which used in apparel industry. The zipper is another common accessory in the apparel industry. The zipper is mainly used for opening and closing two parts of the fabric, but it's also used for fashionable items. Generally, zipper contains two parts of interlocking teeth, which called a chain, fabric tape, slider, etc.</p>	
<p>Elastic</p> <p>Able to regain its normal shape spontaneously after being stretched or compressed. Elastic is normally used at waist sides of the garments.</p>	
<p>Rivet</p> <p>The uses of ribbon are mostly seen at jeans pant and heavy garments. Ribbon is a small metal bolt which is used two parts of tension place in garments.</p>	
<p>Draw cord/string</p> <p>A string or cord, encased in a fabric tube, with one or more small openings into the tube, on a bag or garment, allowing the item to be closed. (as with a bag or tightened)</p>	
<p>Shoulder Pad</p> <p>Shoulder pads are a type of fabric-covered padding used in men's and women's clothing to give the wearer the illusion of having broader and less sloping shoulders. In the beginning, shoulder pads were shaped as a semicircle or small triangle, and were stuffed with wool, cotton or sawdust.</p>	
<p>Velcro Tape</p> <p>Hook-and-loop fasteners (Velcro Tape) consist of two components: typically, two lineal fabric strips (or, alternatively, round "dots" or squares) which are attached (sewn or otherwise adhered) to the opposing surfaces to be fastened.</p>	


<p>Applique embroidery</p> <p>Appliqué is ornamental needlework in which pieces of fabric in different shapes and patterns are sewn or stuck onto a larger piece to form a picture or pattern. It commonly used as decoration, especially on garments.</p>	
---	---

Accessories:

Accessories are the function of a garment. Moreover, the materials which are used to make a garment attractive for selling & packing other than fabric & trims is called accessories. By the way, it is the very important items to make fulfil a garment. It is also help decorative of a garment.

Different types of Accessories:

<p>Hang Tag/ price tag</p> <p>Hang tag: It shows the brand name, style no and other information like price, content, composition, care instruction, origin, etc. of that garment. It is regarded as finishing accessories. It is hanged with garment by plastic staple or string.</p>	
<p>Collar stay</p> <p>Collar Stay: Collar stay is one of the most important accessories which is used in shirt collar. Normally collar stay is used in collar points of a shirt. It is also known as collar bone.</p>	
<p>Carton</p> <p>Carton is very essential accessory in apparel industry. It is used in packing garments. Carton box is made by using ply board. Number of plies indicates the quality of a carton.</p>	
<p>Hanger</p> <p>Hanger is used for hanging the garments. It is important for hang shirt, coat and also different kinds of garments.</p>	
<p>Gum Tape</p> <p>Gum tape is an adhesive-coated fastening tape used for temporary or, in</p>	

some cases, permanent joining. Single-sided tapes allow joining of two overlapping or adjoining materials, while double-sided tape (adhesive on both sides) allows joining of two items back-to-back.	
Barcode sticker Barcode sticker also known as UPC (Unit price code) ticket in the apparel industry. It is paper-made tag which normally mentions price and bar code. Barcode sticker may be attached separately on it.	

Individual Activity:

- *Identify trims and accessories use for garment products.*
- *List tris and accessories for apparel merchandiser.*



SELF-CHECK QUIZ 3.2

Write the correct answer for the following questions.

1. Define trims and accessories?
2. Write the name of any ten types of trims?
3. Write the name of any ten types of accessories?
4. What are the types of labels used in garments?
5. Which information can be found in hang tag/price tag?



Learning Outcome 3.3 – Prepare Bill of Material (BOM) Sheet



Contents:

- BOM sheet.
- Procedure of preparing BOM sheet.



Assessment criteria:

1. Purpose of BOM sheet is stated.
2. Procedure of preparing BOM sheet is interpreted.
3. BOM for each style is prepared.



Resources required:

Students/trainees must be provided with the following resources:

- Materials, BOM sheet sample, Learning materials, sample/product



LEARNING ACTIVITY 3.3

Learning Activity	Resources/Special Instructions/References
Interpret BOM sheet and prepare	<ul style="list-style-type: none">▪ Information Sheet: 3.3▪ Self-Check Quiz: 3.3▪ Answer Key: 3.3▪ Job Sheet: 1



INFORMATION SHEET 3.3

Learning Objective: to interpret Procedure of preparing BOM sheet of apparel merchandising.

BOM:

BOM stands for bill of material. It is actually a list of raw materials which are needed to be sourced for making the garments. It should be prepared and sourced the materials before starting the garments production. Before preparing bill of material, garment merchandiser should be aware about the shipping date of the garment.

In readymade apparel industry, BOM is normally prepared by factory merchandiser or production merchandiser. After that, it is approved by responsible person from the factory owner and handed over to the purchase department to purchase and in-house the required raw materials in timely.

BOM Information:

Bill of material contains the below information's:

1. Details description of raw materials,
2. Consumption of raw materials per each garment,
3. The person name, who is responsible for sourcing,
4. Supplier name,
5. Projected cost per each item,
6. Product quality,
7. Product specification,
8. Product colour name or colour code,
9. Raw material price,
10. Sourcing date,
11. Cuttable Width,
12. Total cost of raw material,
13. Product code (It is often called a style no. for fabric or input),
14. Size (buttons) or length (zippers).
15. Product code (often called a style no. for fabric or input)
16. Product description
17. Cuttable Width, size (buttons) or length (zippers)
18. Test results (shrinkage, lead)
19. Estimated/actual allocation
20. Required processing

BOM Preparation Method in Garment Industry:

After confirmation of a garment export order, production merchandiser or factory merchandiser receives the details information of the product (product quantity, colour, size, style etc.) from the buying merchandiser. Then he prepares bill of material sheet by maintaining a specific format which normally followed in ready-made garment sector. Here, one thing should be noted here that, production merchandiser or factory merchandiser should provide bill of materials to the purchase department to source raw materials according to the style of garments. Otherwise they may mix-up all.

Bill of Materials or BOM Format Followed in Apparel Industry:

All the production merchandiser follows the below bill of materials format in apparel sector.

BOM					
SEASON	Atum Winter 2012		DATE	9/11/2011	
CLIENT NAME	Ereen		STYLE #	#ELD001	
SIZE CLASSIFICATION/RANGE	S, M, L, XL		TECHNICAL DESIGNER	Paramita Das	
FABRIC NAME	100% Cotton Knitted 220 GSM		PRODUCT CATEGORY	Ladies Dress	
FABRIC CONTENT	Cotton		BRAND LABEL	Ereen	
STYLE DESCRIPTION	Ladies Dress				
FABRICS		QUANTITY	UNIT PRICE	AMOUNT	
100% Cotton SJ 220 GSM SC			\$ -	\$ -	
100% Cotton SJ 220 GSM SC			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
TOTAL FABRIC COST			\$ -	\$ -	
TRIMS		QUANTITY	UNIT PRICE	AMOUNT	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
TOTAL TRIM COST			\$ -	\$ -	
CMT		QUANTITY	UNIT PRICE	AMOUNT	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
TOTAL CMT COST			\$ -	\$ -	
PACKAGING MATERIAL		QUANTITY	UNIT PRICE	AMOUNT	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
TOTAL PACKAGING MATERIAL COST			\$ -	\$ -	
TOTAL COST OF GARMENT / PC			\$ -	\$ -	
COST OF GARMENT				\$	-
MANUFACTURER PROFIT				\$	-
COSTING FOR BUYER				\$	-
CONVERSION RATE :					60
PROFIT IN INR					0

JOB SHEET 1

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Calculate the Bill of Material (BOM) by following the given tech pack
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> ▪ this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel Merchandising ▪ this assessment activity will be used to measure your underpinning skills ▪ you will have fifteen (15) minutes to familiarise yourself with the resources to be used ▪ you have two (2) hours to complete this demonstration 	
Procedure:	
<ul style="list-style-type: none"> ▪ observe and wear personal protective equipment (PPE) as required for the task to be performed ▪ read the specification information provided ▪ collect all materials needed to complete the task ▪ perform the task within the given time ▪ observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required tools and materials. 2. Analyse the given tech pack. 3. Fill-in your answers in the table provided to you by your assessor. 	
Diagram/Drawing:	
<p>Tech Pack: Style: 5540 (Basic crew neck T-shirt) Total Number of colours: 6 Total Print styles: 6 Order Quantity: 60000 pcs</p>	



Buyer	Kingsman					Prepared by			
Style	5540					Date			
PO#	9028								
Order Qty	60000 pcs								
SL. No	Item Description	Consumption	Extra Purchase	Total consumption	Unit Measure (UoM)	Unit Price	Amount	Remarks	
1	Shell Fabric: 100% cotton S/J	1.65 Kg/Dzn	15%		Kg	\$ 4.10/Kg			
2	Sewing thread	80 meter/pcs	20%		Cone	\$ 0.55/cone		2200 meter/ cone	
3	Main Label	1 pcs/ garment	3%		Dzn	\$ 0.45/Dzn			
4	Care label	1 pcs/ garment	4%		Dzn	\$ 0.30/Dzn			
5	Hang tag	1 pcs/ garment	3%		Dzn	\$ 0.40/Dzn			
6	Poly (individual)	1 pcs/ garment	3%		Dzn	\$ 0.70/Dzn			
7	Carton	50 pcs/ Carton	0%		Piece	\$ 0.65/pcs			
						Total Amount			
Resources Required:									
Tools	Calculator								
Equipment	N/A								
Machinery	N/A								
Materials:	N/A								

Individual Activity:

- *Prepare BOM sheet of apparel merchandising.*
- *Calculate the bill of material (BOM) by following the given tech pack.*

**SELF-CHECK QUIZ 3.3**

Write the correct answer of the following:

1. What is the elaboration of BOM?
2. What is a BOM sheet?
3. What is the basic information found in a BOM sheet?



Learning Outcome 3.4 – Demonstrate the Process of Negotiation and Booking



Contents:

- Negotiation process.
- Booking process and procedure.



Assessment criteria:

1. Negotiation process with suppliers is demonstrated.
2. Price and availability of materials is negotiated.
3. Booking process and procedures are followed and executed.



Resources required:

Students/trainees must be provided with the following resources:

- Style/sample, stationery, laptop/computer.



LEARNING ACTIVITY 3.4

Learning Activity	Resources/Special Instructions/References
Identify negotiation process and procedures	<ul style="list-style-type: none">▪ Information Sheet: 3.4▪ Self-Check Quiz: 3.4▪ Answer Key: 3.4



INFORMATION SHEET 3.4

Learning Objective: to Identify negotiation process and procedures of apparel merchandising.

Negotiation

Negotiation is a method by which people settle differences. It is a process by which compromise or agreement is reached while avoiding argument. In any disagreement, individuals understand they aim to achieve the best possible outcome for their position. However, the principles of fairness, seeking mutual benefit and maintaining a relationship are the keys to a successful outcome.

Stage of negotiation

- ✓ Preparation
- ✓ Discussion
- ✓ Clarification
- ✓ Negotiate
- ✓ Agreement
- ✓ Implementation of a course of action

Purpose of Negotiation:

The major purpose of negotiation is the winning of both sides. One side will earn profit continuously and another party will lose, it is not beneficial for both positions. For example, an importer is in the illogical winning situation and the supplier is in losing position.

Buyer Negotiation:

A successful buyer negotiation outcome does not mainly occur through luck but by following a clear process. The process which reflects the various levels of knowledge of the subject of negotiation. A garment merchandiser has to do a lot of task to negotiate the buyer. This article has presented a details discussion on buyer negotiation process which are deeply followed in readymade garments sector.

Negotiation Process:

Buyer/ Sourcing Manager – Reviews the costs submitted from the supplier. Amendments are made to the samples resulting in cost price changes and further negotiations. The Buyer/Sourcing Manager will negotiate prices with the supplier.

Merchandiser – Supports the Buyer by providing foretasted volumes to achieve accurate cost prices.

Designer – Supports the Buyer in any amendments of product development / design packs to achieve target cost prices.

Buyer Negotiation Process Followed by Garment Merchandiser:

An effective buyer negotiation can be made by following some key factors which are mentioned in the below:

1. Researching the needs of both parties
2. Preparation
3. Offer
4. Discussion
5. Counter and revised offers
6. Summaries
7. Agree and commit

Fabric Booking Sheet

FABRIC BOOKING SHEET.										Confirmation Date : 11.12.12		Program No-	
Buyer SMYK										T.A. Solution Ltd.			
Job No. 8 Art No:										Order Quantity : 14012		Pcs.	
Style / Order No. BCB710144AD										Average Cons/Dz : 1.900		Dz	
Item T SHIRT L/S Boys										L/C Status :			
Cutting Target Percentage = 5%										Cutting Quantity(Pcs) : 14713		Pcs.	
Packing Instruction										Shipment date : 15.04.13			
<<< Knitting - SIDE SEAM >>>													
Size	92	98	104	110	116	122	128	Neck Tape		98% cotl 2% Bla 1X1 LYCRA Rib	TOTAL FAB.+RIB(KGS)		
Consumtion / Dz	1300	1400	1500	1600	1750	1900	2100	0.100					
Individual Dia - CM													
Finish Dia - INCH.	30" Tube On Cutting Table												
Light Gray mel Combo-A	291	522	707	635	592	438	298		3503	Pcs	0.170		
Contrast Neck tape :	17-1048 Tpx							3503	0	Pcs	0.000		
16-0952 Tpx combo-B	291	522	707	635	592	438	298		3503	Pcs	0.170		
Contrast Neck tape :	19-1862 Tpx							3503	0	Pcs	0.000		
19-3906 Tpx Combo-C	291	522	707	635	592	438	298		3503	Pcs	0.170		
Contrast Neck tape :	19-1862 Tpx							3503	0	Pcs	0.000		
16-1448 Tpx Combo-D	291	522	707	635	592	438	298		3503	Pcs	0.170		
Contrast Neck tape :	16-0952 Tpx							3503	0	Pcs	0.000		
									0	Pcs	0.000		
									0	Pcs	0.000		
									0	Pcs	0.000		
									0	Pcs	0.000		
									0	Pcs	0.000		
									0	Pcs	0.000		
Total Pcs	1164	2088	2828	2620	2368	1752	1192		14012	Pcs			
Colour / Fabrica(Kgs)													
Light Gray mel Combo-A	32	61	88	87	86	69	52	0	476	Kgs	50	526	
Contrast Neck tape :	17-1048 Tpx	0	0	0	0	0	0	29	29	Kgs	0	29	
16-0952 Tpx combo-B	32	61	88	87	86	69	52	0	476	Kgs	50	526	
Contrast Necktape :	19-1862 Tpx	0	0	0	0	0	0	29	29	Kgs	0	29	
19-3906 Tpx Combo-C	32	61	88	87	86	69	52	0	476	Kgs	50	526	
Contrast Necktape :	19-1862 Tpx	0	0	0	0	0	0	29	29	Kgs	0	29	
16-1448 Tpx Combo-D	32	61	88	87	86	69	52	0	476	Kgs	50	526	
Contrast Necktape :	16-0952 Tpx	0	0	0	0	0	0	29	29	Kgs	0	29	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
	0	0	0	0	0	0	0	0	0	Kgs	0	0	
Total Fab.Qty	126	244	354	349	345	277	209	117	2021	Kgs	199	2219	
Parameter of fabric Quality													
Shrinkage Tolerance 40°F ¹		3 - 4%		Shade Matching Tolerance		2-3%							
Final GSM on Garments		160											

Accessories Booking Format:

Buyer Name:	Carodel
Order No.	002
Order Qty.	1620
Style :	Girls T-Shirt

Applicant:	Supplier :
Four Knit Wear Ltd	Garments Craft
Pathantoly, Siddirgonj, Narayanganj.	Zigatalah, Dhaka.

SUBJECT: ACCESSORIES BOOKING SHEET

Dear Sir,

Please supply accessories as follows. Also note that bulk accessories should be as per Buyer approved quality.

This order will be finally correction from your side.

1	SIZE LABEL	SIZE						
TYPE	ARTICULA	62	68	74	80	86	TOTAL	With 05% +
STOCK	SIZE LABEL	200	200	200	200	200	1000	1050
LOT A	SIZE LABEL		44	44	132	132	440	462
LOT B	SIZE LABEL	36	36	36	36	36	180	189
STOCK+A	Main label (KNOT SO BAD)						1440	1512
STOCK+A	Fire Label						1620	1701
STOCK+A	Care label 100% Cotton with Importer Label						1620	1701
STOCK+A	Snap Button						5760	6048
STOCK+A	Poly Bag (236	280	280	368	368	1532	1608.6
LOT B	Poly Bag (Blister)						18	18.9



SELF-CHECK QUIZ 3.4

Write the correct answer of the following:

1. Define negotiation?
2. What is the stage of negotiation?
3. What are the points to be included in a booking sheet?



REVIEW OF COMPETENCY

<u>Final Checklist</u> (for the performance criteria of the module processing of sourcing materials)		
Performance Criteria	Yes	No
1. Interpret types of fabrics used for woven and knit apparels.	<input type="checkbox"/>	<input type="checkbox"/>
2. Interpret the trims and accessories.	<input type="checkbox"/>	<input type="checkbox"/>
3. Prepare bill of materials (BOM) sheet.	<input type="checkbox"/>	<input type="checkbox"/>
4. Demonstrate the process of negotiation and booking.	<input type="checkbox"/>	<input type="checkbox"/>
5. The specifications of trims and accessories based on the product are identified.	<input type="checkbox"/>	<input type="checkbox"/>
6. Trims and accessories are identified.	<input type="checkbox"/>	<input type="checkbox"/>
7. Trims and accessories are collected and delivered to the concerned department.	<input type="checkbox"/>	<input type="checkbox"/>
8. Purpose of BOM sheet is stated.	<input type="checkbox"/>	<input type="checkbox"/>
9. Procedure of preparing BOM sheet is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
10. BOM for each style is prepared.	<input type="checkbox"/>	<input type="checkbox"/>
11. Negotiation process with suppliers is demonstrated.	<input type="checkbox"/>	<input type="checkbox"/>
12. Price and availability of materials is negotiated.	<input type="checkbox"/>	<input type="checkbox"/>
13. Booking process and procedures are followed and executed.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 3.1

1. Flow chart of woven fabric manufacturing process:

- Spinning bobbin for winding
- Roll winding for spool production
- Warp yarn preparation
- Cone winding or pre-winding
- Warping
- Sizing
- Drafting in or drawing in
- Denting
- Looming
- Weaving

2. Five types of woven fabrics:

- Plain/poplin weaved fabric
- Twill fabric
- Herringbone
- Sateen
- Jacquard.

3. Characteristics of Twill fabric Are easily recognizable because they will show diagonal weave or texture. will almost always have a bit of shine, though the degree can depend on the weave, colour, and cotton used.

4. Five types of knit fabrics:

- Single jersey
- Double jersey
- Rib
- Interlock
- Purl fabric

5. Characteristics of Single jersey is weft knitted fabric which is formed by one set of needles. Single jersey is the mostly used for making T-shirts in textile. In single jersey face side and back side appearance is different. This fabric is much warm, flexible, stretchy, and wear to comfort therefore get popularity.

ANSWER KEY 3.2

1. Trims:

Trims are directly involve making of a garment. So, trims which materials are directly attached with the fabric to make a garment are called trims. Moreover, we can say that the materials used is sewing room other than fabric is called trims.

Accessories:

Accessories are the function of a garment. Moreover, the materials which are used to make a garment attractive for selling & packing other than fabric & trims is called accessories. By the way, it is the very important items to make fulfil a garment. It is also help decorative of a garment.

2. Name of ten types of trim:

1. Sewing thread
2. Label
3. Button
4. Zipper
5. Elastic
6. Rivet
7. Drawstring
8. Shoulder pad
9. Applique embroidery
10. Velcro tape.

3. Name of ten types of accessories:

1. Hang tag price tag
2. Collar stays
3. Carton
4. Hanger
5. Gum tape
6. Price tag
7. Back board
8. Neck board
9. Poly bag
10. Carton sticker

4. Information can be found in hang tag / price tag:

Hang tag: It shows the brand name, style no and other information like price, content, composition, care instruction, origin, etc. of that garment. It is regarded as finishing accessories. It is hanged with garment by plastic staple or string.

Price tag/ticket also known as UPC (Unit price code) ticket in the apparel industry. It is paper-made tag which normally mentions price and bar code. Barcode sticker may be attached separately on it.

ANSWER KEY 3.3

1. BOM stands for bill of material.

2. BOM a list of raw materials which are needed to be sourced for making the garments. It should be prepared and sourced the materials before starting the garments production. Before preparing bill of material, garment merchandiser should be aware about the shipping date of the garment.

In readymade apparel industry, BOM is normally prepared by factory merchandiser or production merchandiser. After that, it is approved by responsible person from the factory owner and handed over to the purchase department to purchase and in-house the required raw materials in timely.

3. Basic information found in a BOM sheet:

1. Details description of raw materials
2. Consumption of raw materials per each garment
3. Projected cost per each item
4. Product quality
5. Product specification
6. Raw material price
7. Sourcing date
8. Cuttable Width
9. Total cost of raw material
10. Product code (often called a style no. for fabric or input)
11. Estimated/actual allocation
12. Required processing

ANSWER KEY 3.4

1. Negotiation

Negotiation is a method by which people settle differences. It is a process by which compromise, or agreement is reached while avoiding argument. In any disagreement, individuals understand they aim to achieve the best possible outcome for their position. However, the principles of fairness, seeking mutual benefit and maintaining a relationship are the keys to a successful outcome.

2. Stages of negotiation:

- Preparation
- Discussion
- Clarification
- Negotiate
- Agreement
- Implementation of a course of action

Module 4: Performing measurement, consumption and cost calculation for casual/formal apparel



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to perform measurement, consumption and cost calculation for casual/formal apparel, which includes the tasks of Interpreting the sketch and measurement, points of measurement, performing fabric consumption and cost calculation, trims and accessories consumption and cost calculation, interpreting process of cost manufacturing and applying the costing format and methods of calculation. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

60 hours



LEARNING OUTCOMES:

Upon completion of the module, the trainee should be able to:

- 4.1 Interpret the sketch and measurement.
- 4.2 Interpret the points of measurement.
- 4.3 Perform fabric consumption and cost calculation.
- 4.4 Perform trims and accessories consumption and cost calculation
- 4.5 Interpret process of cost manufacturing.
- 4.6 Apply the costing format and methods of calculation.



PERFORMANCE CRITERIA:

1. Sketch is comprehended as per technical package.
2. Measurement charts are recognized, followed and applied.
3. Measurement charts are updated in accordance with changes.
4. Points of measuring of the measurement guide are recognized.
5. Level of tolerance specified in the measuring guide are identified and stated.
6. Fabric consumption is identified and interpreted.
7. Fabric consumption formula is applied.
8. Cost calculation is computed.
9. Trims and accessories consumption calculation is identified and interpreted.
10. Trims and accessories consumption formula is applied.
11. Costing of the trims and accessories is computed.
12. The process of CM calculation is interpreted.
13. CM calculation formula is applied.
14. CM calculation for apparel is computed.
15. Method of costing format is identified.
16. Cost format is applied to compute cost.

17. The concept of FOB (free on board) price is identified.
18. FOB price is prepared in accordance with specifications.



Learning Outcome 4.1 – Interpret the Sketch and Measurement



Contents:

- Sketch as per technical package.
- Measurement charts.
- Prepare measurement charts.



Assessment criteria:

1. Sketch is comprehended as per technical package.
2. Measurement charts are recognized, followed and applied.
3. Measurement charts are updated in accordance with changes.



Resources required:

Students/trainees must be provided with the following resources:

- Measurement chart, technical package and stationery



LEARNING ACTIVITY 4.1

Learning Activity	Resources/Special Instructions/References
Identifying measurement charts and sketches	<ul style="list-style-type: none">▪ Information Sheet: 4.1▪ Self-Check Quiz: 4.1▪ Answer Key: 4.1



INFORMATION SHEET 4.1

Learning Objective: to Identify measurement charts and sketches in apparel industry.

☐ **Sketch:**

In the garment manufacturing, the first step is designing the sketch for the dresses that have to be prepared. For this purpose, the designer first draws several rough sketches in the sketchbook. The designer does not go for details at this moment but he rather let his creativity flow on the paper and he draws many sketches. Later these sketches are analysed by a panel of designers. They finally select few out of them. These few sketches are rendered in detail separately or in the form of a single collection. The designer also draws working drawings along with the sketch. Working drawings are a flat drawing of the sketch and it help pattern maker in understanding the patterns involved in the construction.

☐ **Types of Sketch:**

1. Flat sketch
2. Illustration

☐ **Flat sketch**

A flat sketch, also called flat drawing and technical flat in the fashion industry, is a technical drawing of a garment as if it were laid flat to show the design details like seams and stitching. It is a black and white CAD (or computer-aided design) drawing that serves as a guide for drafting the pattern design, and is prepared at the beginning of the development stage. This helps both the designer and the patternmaker throughout the entire garment-making process.

☐ **Illustration**

Fashion Illustration is the art of communicating fashion ideas in a visual form that originates with illustration, drawing and painting and also known as Fashion sketching. It is mainly used by fashion designers to brainstorm their ideas on to paper or computer, using digital software like Adobe Photoshop and Illustrator, which helps them to communicate easily with their team. Fashion sketching plays a major role in designing to preview and visualize designers' thoughts and make decisions before going to actual clothing to reduce any wastage.

☐ **Technical Package:**

Tech pack is an instruction guide for procedure of the garment manufacturing. This is a graphical and written document which indicates the design specification, fit specification, procedure for manufacturing the garment, measurement and sizing of the garment.

Contents of Tech-Pack include:

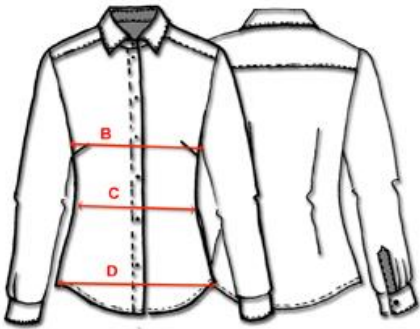
1. **Flat Sketch** – is a technical sketch of the fully constructed garment. This includes front view, side view, and back view to show accurate layout of proportion and measurements.
2. **Color Combo** – are colorways for a particular style to include the combo of colorways with embroideries, graphics, and trims.
3. **Fabric Details** – outline composition, cost, weight, and width of fabric. It is also important to include fabric consumption for production purposes.
4. **Stitching and Garment Construction Detailing** – illustrates how a garment style is to be stitched and constructed. This information is critical for reducing production time.

5. **Graphic or Print Details** – include color code screen separations, technique details, and any vendor information that will be used for creating screens or prints, size and placement of print or graphic as well as any associated costs.
6. **Embroidery or Beading Details** – includes vendor information such as embroidery, budget and cost, colors, technique, and material. It is also very important to include size and placement details on the garment.
7. **Trim Details** – include measurements on everything from closures and finishing's to labels and hang-tags.
8. **Washing Details** – are the washing care instructions for the garment.
9. **Measurement Details and Chart size** – is one of the most important aspect of a tech-pack. These details should include the company's fit standards along with the style measurements to create the garment. Including company standards in the tech-pack will greatly reduce the number of pre-production garments. It is important to highlight any measurements that may be difficult to understand by the factory and/or provide illustrations to further clarify.
10. **Bills of Materials (BOM)** – is the last step in the tech-pack development process. The BOM includes a check-list of materials, items, processes, vendors, and consumptions used in preparing the garment. The BOM is also used to prepare actual cost of garment as well as fabric consumption needed for manufacturing.


Sample Tech pack:

HIGH SOCIETY LTD, 155 LINCOLN ROAD, HENDERSON, AUCKLAND ... TELEPHONE: (09) 8371001 ... FAX: (09) 8370380 ... www.highsociety.co.nz							
RANGE:	STORY:	DATE:	DESIGNER:	DATE:	P/MAKER:	DATE:	APPROVAL:
SEASON:	DESCRIPTION:						
STYLE NO:			MAKER:				

SKETCH - FRONT & BACK VIEW



GARMENT DETAIL:



CATCH SEAM INSIDE CUFF BAND
STITCH AS LAST SEAM
ON THE ROUND

DESCRIPTION	8	10	12	14	16	18	GRADE	TOL.±
A BODY LENGTH from HSP	63.40	64.00	64.60	65.20	65.80	66.40	0.60	
B 1/2 CHEST WIDTH @ waist	47.50	50.00	52.50	55.00	57.50	60.00	2.50	
C 1/2 WAIST @ 18cm BELOW ARMHOLE	42.50	45.00	47.50	50.00	52.50	55.00	2.50	
D 1/2 HIP @ 35cm BELOW ARMHOLE	48.50	51.00	53.50	56.00	58.50	61.00	2.50	
E 1/2 HEM WIDTH	-2.50		2.50	5.00	7.50	10.00	2.50	
F NECK WIDTH	-0.50		0.60	1.20	1.80	2.40	0.60	
G FRONT NECK DROP	0.00		0.00	0.00	0.00	0.00	0.00	
H FRONT NECK DROP - V NECK (subjective)	-0.50		0.50	1.20	1.80	2.40	0.60	
I BACK NECK DROP	0.00		0.00	0.00	0.00	0.00	0.00	
J SHOULDER WIDTH	-1.20		1.20	2.40	3.60	4.80	1.20	
K ARMHOLE ON CURVE @ front	-1.00		1.00	2.00	3.00	4.00	1.00	
L ARMHOLE ON CURVE @ back	-1.00		1.00	2.00	3.00	4.00	1.00	
M 1/2 BICEP WIDTH - sleeve	-1.00		1.00	2.00	3.00	4.00	1.00	
N 1/2 ELBOW WIDTH - or 3/4 sleeve cuff width	-0.50		0.50	1.00	1.50	2.00	0.50	
O 1/2 CUFF WIDTH @ wrist	-0.25		0.25	0.50	0.75	1.00	0.25	
P SLEEVE LENGTH from LSP	-0.50		0.50	1.00	1.50	2.00	0.50	
Q								
R								
S								
T								

ALL MEASUREMENTS ARE IN CENTIMETRES

☐ Measurement of Garments:

For preparing the apparel pattern and a complete garment perfect measurement guideline must be needed. Sometimes only base measurement is not enough for preparing this. Measurement specification mainly comes from the buyer to get the actual size of each and every part of the garment.

Garment measurement techniques have been designed to show how and where to measure a wide variety of different measurement points on finishing garments across all product areas. Garment measurement guidelines should be used when reviewing size specifications, measuring garments and also creating sample product.

Measurements of garments can also contribute to minimize production time and reduce production cost. Every reputed garment manufacturing industry has a garments measurement department. They use some essential key points of measurement to get a perfect pattern and get a perfect sample. Methodically we use the same system of garments measurement to evaluate garment and that we use the same terminology to complete these measurements process.

☐ Term Abbreviations:

- BK = Back
- BLW = Below
- BTTM = Bottom
- BTTN = Button
- CB = Center Back
- CF = Center Front
- CNTR = Center
- FM = From
- FT = Front
- HPS = High Point Shoulder
- MSRMNT = Measurement
- SHLDR = Shoulder
- W/B = Waistband
- W/O = Without

☐ Preparation for Measuring Garments

- Smooth and flat surface table must be used.
- Garment must be buttoned and zipped unless otherwise specified
- Garment with non-closure must be overlapped as specified
- Carefully remove all folds, wrinkles or creases on garment without any distort.

☐ Sample Measurement Chart

Measurement Chart												
POM	Description	Add'l Comments	Variation	QC	Tol(-)	Tol(+)	12-18 months	18-24 months	2T	3T	4T	5T
1081	Neck Width Seam to Seam			Y	1/4	1/4	5 1/8	5 1/4	5 3/8	5 1/2	5 5/8	5 3/4
1083	Front Neck Drop: Imaginary Line to Seam				1/4	1/4	2 1/8	2 1/4	2 3/8	2 1/2	2 5/8	2 3/4
1087	Back Neck Drop: Imaginary Line to Seam				1/8	1/8	1	1	1	1	1	1
1058	Collar Length at Outer Edge				1/4	1/4	13 7/8	14 1/4	14 5/8	15	15 3/8	15 3/4
1090	Collar Height at Center Back				1/8	1/8	2 5/8	2 5/8	2 7/8	2 7/8	2 7/8	2 7/8
1096	Collar Stand Height at Center Back				1/8	1/8	1	1	1	1	1	1
1082	Collar Point				1/8	1/8	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
1114	High Chest	at 1/2 of Armhole - Set-In			1/4	1/4	8 1/2	8 3/4	9 1/8	9 1/2	9 7/8	10 1/4
1116	High Back at 1/2 of Armhole	Set-In			1/4	1/4	8 1/2	8 3/4	9 1/8	9 1/2	9 7/8	10 1/4
1120	Chest 1" Below Armhole	Girls		Y	3/8	3/8	23	23 3/4	24 1/2	25 1/4	26	26 3/4
1135	Waistband Height				999	999	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
1258	Bottom Opening Straight	Sweep - Girls		Y	3/8	3/8	23 1/2	24 1/4	25	25 3/4	26 1/2	27 1/4
499245	Fit Placket Stitching Width				1/8	1/8	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
1542	Center Front Yoke Height				1/8	1/8	1 5/8	1 7/8	1 7/8	2 1/8	2 1/8	2 3/8
1549	Center Back Yoke Height				1/8	1/8	2 1/2	2 3/4	2 7/8	3	3 1/8	3 1/4
1097	Shoulder Width-Seam to Seam at Back	Set-In		Y	3/8	3/8	9 1/4	9 1/2	9 7/8	10 1/4	10 5/8	11
1130	Shoulder Slope				999	999	3/4	3/4	3/4	3/4	3/4	3/4
1133	Shoulder Seam Forward				999	999	3/4	3/4	1	1	1	1
1290	Sleeve Length from Center Back	Long		Y	3/8	3/8	15 3/4	16 3/4	18	19 1/4	20 1/4	21 1/4
1292	Underarm Sleeve Length	Underarm Sleeve Length from Cuff Seam	Long		1/4	1/4	6 3/4	7 1/2	8 3/8	9 1/4	10 1/8	11
1296	Bicep 1" below Armhole				3/8	3/8	8 7/8	9 1/4	9 5/8	10	10 3/8	10 3/4
1301	Sleeve Opening	Cuff Opening	Long	Y	1/4	1/4	6 1/4	6 1/2	6 1/2	6 3/4	6 3/4	7
499246	Cuff Height				999	999	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
499247	Siv Vent Opening				1/8	1/8	1 3/4	1 3/4	2	2	2	2
499248	Siv Vent Placement from UA Siv Seam at Siv Hem- Cuff closed				1/8	1/8	1 3/8	1 1/2	1 1/2	1 5/8	1 5/8	1 3/4
1338	Body Length from High Point Shoulder		Jacket	Y	3/8	3/8	11 3/4	12 1/2	13 1/8	13 3/4	14 5/8	15 1/4
1477	Panel Width at Top		Front		1/8	1/8	2 3/8	2 3/8	2 5/8	2 5/8	2 7/8	2 7/8
1477	Panel Width at Top	Blk Panel Width at Yoke Seam	Back		1/8	1/8	6 1/2	6 3/4	7 1/8	7 3/8	7 3/4	8
499249	Blk Panel Width at Waist Seam				1/8	1/8	4 1/2	4 3/4	5 1/8	5 3/8	5 3/4	6

☐ **Pattern in Apparel Industry**

Pattern is a hard paper which is made by following each individual component for a style of apparel or clothing. Pattern is one of the most important parts of apparel industry.

☐ **Types of Pattern Used in Clothing Sector:**

There are mainly two types of patterns used in readymade apparel sector which mentioned in the below:

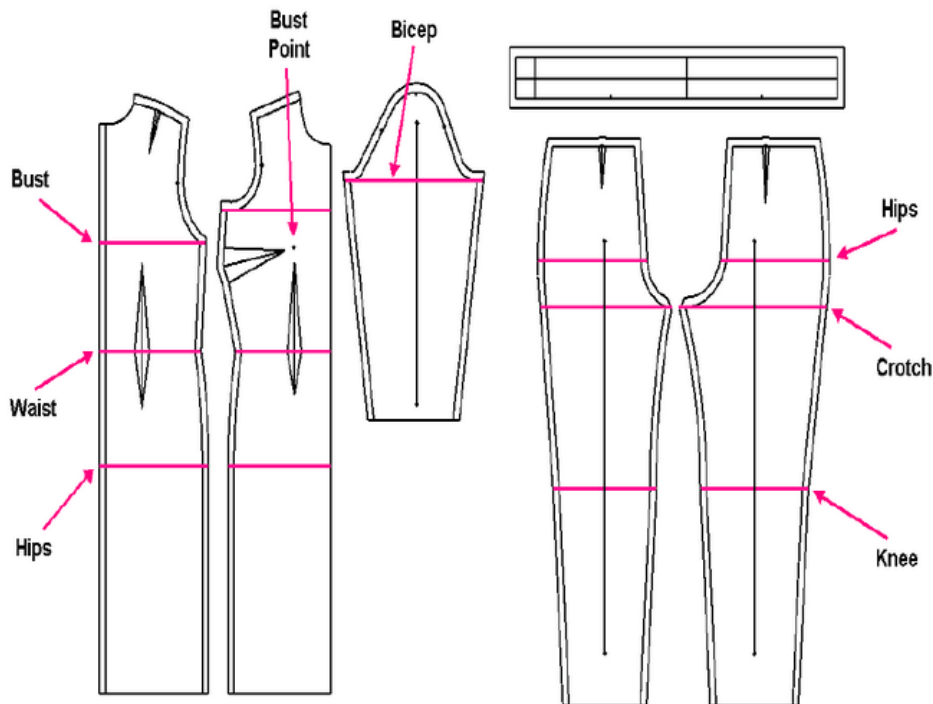
- Basic block or block pattern,
- Working pattern.

Basic block or block pattern:

Basic block or block pattern is an individual component of apparel without any design or style. It can be made into two ways such as modelling and flat method.

Working Pattern:

Working pattern is made on the basic of block. Individual block pattern is drawn on hard paper or mount board. Alternate; sewing allowance, trimming allowance, Button hole, centre front line, centre back line, button attaching, dart, pleat, Notch, shrinkage of the fabric, etc are added with the copied pattern. Working pattern are needed for every part of the garments.



Pattern used in apparel industry

Individual Activity:

- *Identify sketches and measurement charts.*
- *Take a measurement as per sample.*
- *Apply measurement charts as per sample.*

**SELF-CHECK QUIZ 4.1**

Write the correct answer for the following questions.

1. What is sketch?
2. What are the types of sketch?
3. What is tech pack?
4. What are the contents of tech pack?
5. What is the elaboration of HPS?



Learning Outcome 4.2 - Interpret the Points of Measurement



Contents:

- The points of measuring.
- Level of tolerance specified in the measuring guide.



Assessment criteria:

1. Points of measuring of the measurement guide are recognized.
2. Level of tolerance specified in the measuring guide are identified and stated.



Resources required:

Students/trainees must be provided with the following resources:

- Measuring chart, marker and measuring device



LEARNING ACTIVITY 4.2

Learning Activity	Resources/Special Instructions/References
Identify points of measuring for garments	<ul style="list-style-type: none">▪ Information Sheet: 4.2▪ Self-Check Quiz: 4.2▪ Answer Key: 4.2▪ Job Sheet 2



INFORMATION SHEET 4.2

Learning Objective: to identify points of measure for garment products in apparel industry.

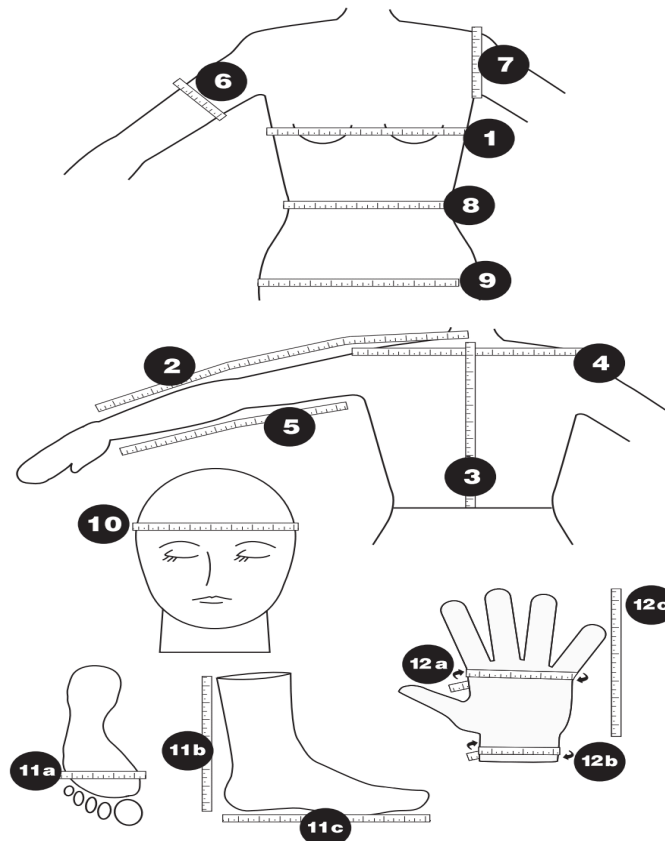
How to take garment measurement:

Certain rules or guidelines should be followed in making measurements of garments so that all concerned use the same measurement methods or technique. A company should have the guidelines in writing and as a part of quality policy. Correctly measuring garments is essential to achieve the high-quality garment.

Basic guidelines for garments measurement:

- Before starting garments measurement, take measurement specification sheet, measurement tools, and documentation of those measurements.
- Take all measurements with metal ruler or fiber glass scale.
- Take measurements with garments placed on a surface in a natural position.
- Take all measurements to the nearest 1/8" using a 1/4" flexible metal tape measure or as specified by the buyer.
- Do not pull or stretch garment at the time of measurements unless otherwise specified.
- Take all measurements from outside edge to outside edge unless otherwise specified as inside to inside.
- Measure garment on wearer's left side.
- Take measurements of openings like waist, neck, leg opening from inside edge.
- For curved seams, such as rises and armholes, stand tape on edge and walk along seam to be measured.
- When take stretch measurements, stretch to full extension of fabric but not widely.

☐ How to measure



1. **Chest/Bust** - Measure around the fullest part of the chest/bust. Do not draw the tape too tightly.
2. **Centre Back Neck-to-Wrist**- With arm straight, measure from back base of neck, across shoulder, and along arm to wrist.
3. **Back Waist Length**- Measure from the most prominent bone at base of neck to the natural waistline.
4. **Cross Back**- Measure from shoulder to shoulder.
5. **Arm Length**- With arm slightly bent, measure from armpit to wrist.
6. **Upper Arm**- Measure around the widest section of the upper arm located above the elbow.
7. **Armhole Depth**- Measure from the top outside edge of the shoulder down to the armpit.
8. **Waist**- Measure your waist at the smaller circumference of your natural waist, usually just above the belly button.
9. **Hip**- Measure at the widest part of your lower hip.
10. **Head Circumference**- For an accurate head measure, place a tape measure across the forehead and measure around the full circumference of the head. Keep the tape snug for accurate results.
11. **Sock Measurements**- The following measurements are for crew-style or dress socks, which usually come several inches above the ankle and below the calf.
 - 11a. **Foot Circumference**- To determine the foot circumference, measure around the widest part of your foot.
 - 11b. **Sock Height**- To determine the height of the sock, measure from where you start to turn for the heel shaping to the top of the sock.
 - 11c. **Total Foot Length**- To measure the total length of your foot, place a ruler or tape measure on the floor. Position the back of your heel at the beginning of the tape and the measure to your longest toe.
- 12a. **Hand Circumference**- Measure around the palm of your dominate hand, which is usually just below the knuckles. Exclude the thumb.
- 12b. **Wrist Circumference**- Measure around the widest part of the wrist.
- 12c. **Hand Length**- Measure from the wrist to the base of the hand to the tip of the middle finger or to the top of the longest finger.

☐ **Tolerance:**

Tolerance is the plus-or-minus measurement used to determine whether a product meets a specified quality standard. No two garments of the same size can be guaranteed to be the exact same – this is why two “smalls” of the same shirt may have a slightly different fit, but both shirts may still fall within an acceptable range. As long as the measurements (such as +/- 0.5-inch tolerance, or half an inch bigger or smaller than the intended standard measurement) fall within the set tolerance, the garment still meets the quality guidelines. Tolerance is essentially the maximum room for error in a garment's specific measurements.

☐ **Measurement Tolerance Limit of Garments**

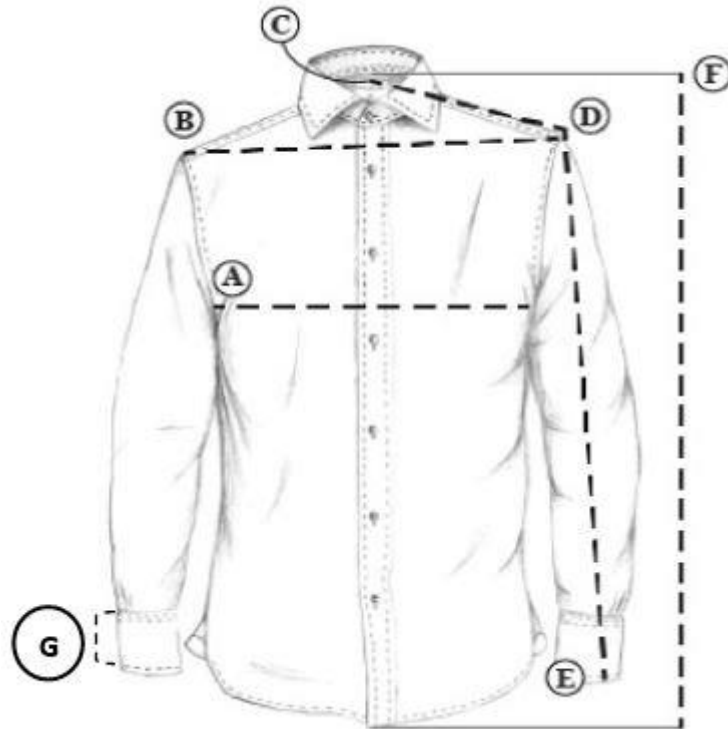
There is a certain tolerance limit for Garments measurement fixed by the buyer. Tolerance limit has lower and upper limits, allowed measured value limit between maximum and minimum of fixed requirement. Tolerance, for example, you can follow the below-mentioned data.

Measurement points	Upper Limit	Lower Limit
Waist	+ 3/4"	– 3/4"
Seat	+1"	-3/4"
Thigh	+1/2"	-1/2"
Inseam	+3/4"	-1/2"
Back Rise	+1/2"	-1/2"
Front Rise	+1/2"	-1/2"

***It's just an example to follow, it can be varied buyer to buyer.**

JOB SHEET 2

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Measure the points specified for a sample shirt
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> ▪ this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel merchandising ▪ this assessment activity will be used to measure your underpinning skills ▪ you will have fifteen (15) minutes to familiarise yourself with the resources to be used ▪ you have two (2) hours to complete this demonstration 	
Procedure:	
<ul style="list-style-type: none"> ▪ observe and wear personal protective equipment (PPE) as required for the task to be performed ▪ read the specification information provided ▪ collect all materials needed to complete the task ▪ perform the task within the given time ▪ observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required tools and materials required for the task. 2. Get the measurement of each point of the sample shirt as given in the drawing. 3. Make a table as given below in a word file. 4. Print your output 	
Diagram/Drawing:	



Write down the name of the points which is marked on the above sketch (A to G)

Sample table:

Points of measurement	Name of points	Measurement in Inch
A		
B		
C		
D		
E		
F		
G		

Resources Required:

Tools:	Measuring tools
Equipment:	Computer and printer
Machinery:	N/A
Materials:	Paper

Individual Activity:

- Measure the points specified for a sample shirt
- Identify tolerance specified in the measuring guide.



SELF-CHECK QUIZ 4.2

Write the correct answer of the following:

1. Write any five guidelines for garments measurements?
2. How can you measure point of chest?
3. How can you measure point of waist?
4. What is tolerance?



Learning Outcome 4.3 – Perform Fabric Consumption and Cost Calculation



Contents:

- Fabric consumption formula.
- Cost calculation.
- Calculate cost calculation of a garment's product.



Assessment criteria:

1. Fabric consumption is identified and interpreted.
2. Fabric consumption formula is applied.
3. Cost calculation is computed.



Resources required:

Students/trainees must be provided with the following resources:

- Fabrics, calculator and sample/product



LEARNING ACTIVITY 4.3

Learning Activity	Resources/Special Instructions/References
Identify fabric consumption formula and cost calculation	<ul style="list-style-type: none">▪ Information Sheet: 4.3▪ Self-Check Quiz: 4.3▪ Answer Key: 4.3



INFORMATION SHEET 4.3

Learning Objective: to Identify fabric consumption formula and cost calculation for apparel merchandising.

☐ **Fabric Consumption:**

The quantity of fabric needed for making a garment is called fabric consumption for costing. It is difficult to know the actual consumption before completion of marker planning but we can get an approximate fabric consumption from sample.

Fabric consumption is calculated by two process:

1. From marker (it is more accurate)
2. From measurement or mathematical system (it is approximate)

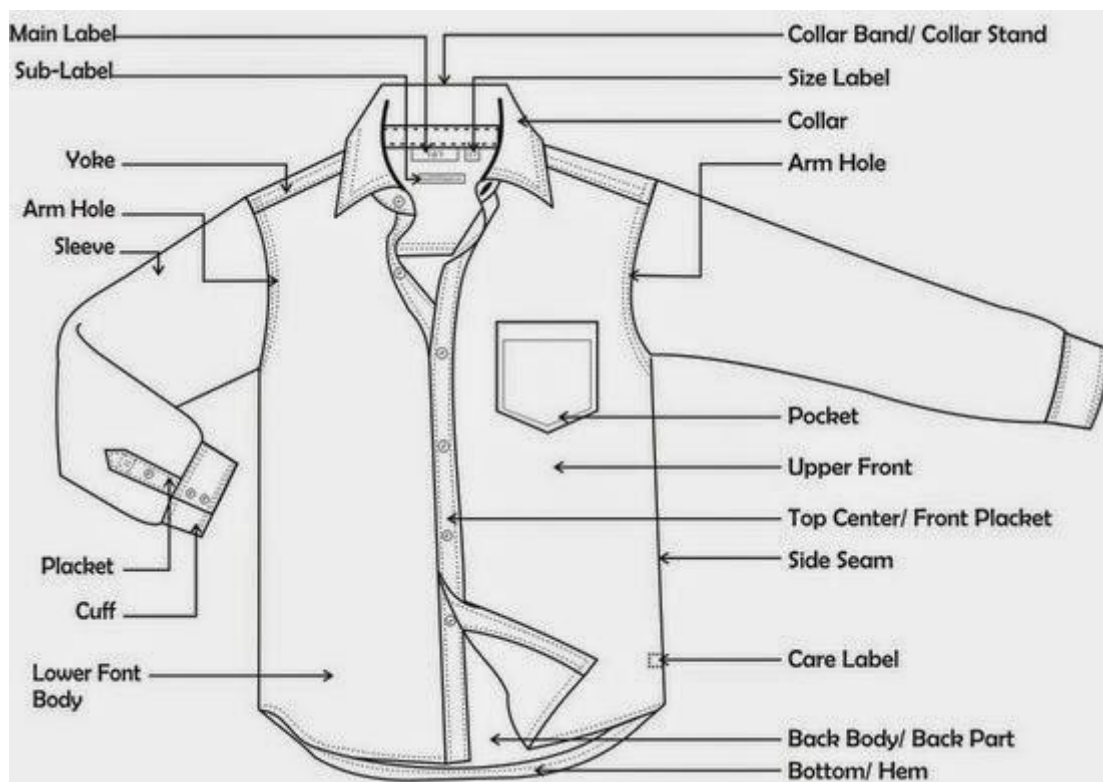
☐ **Woven fabric consumption Formula:**

$\{(\text{Length} + \text{allowance}) \times (\text{width} + \text{allowance}) \times \text{number of parts}\} / \text{fabric cut able width} / 36 \times 12 + \text{wastage \%}$

= results in yards / dozen.

☐ **Fabric consumption calculation method for woven Tops:**

A garments merchandiser should identify each part of a “woven long sleeve shirt” before starting the consumption calculation.



Parts of long sleeve woven shirt

Normally, a “woven long sleeve shirt” consists with the following parts-

1. Body parts (Body Length + Chest width),
2. Sleeve,
3. Collar,
4. Cuff,
5. Collar Band,
6. Pocket,
7. Yoke.

Suppose,

The buyer “A” forwards a “woven long sleeve shirt” item order (10000pcs) to you with the following specification.

Follow the below measurement chart.

	Actual Length	Allowance	Measurement with Allowance
Body Length from HSP	70cm	6cm	76cm
½ Chest	50cm	6cm	56cm
Sleeve Length	60cm	6cm	66cm
Arm hole (Straight)	23cm	5cm	28cm
Collar Length	40cm	4cm	44cm
Collar Width	6cm	2cm	8cm
Cuff Length	9cm	3cm	12cm
Cuff Width	2.5cm	0.5cm	3cm
Collar Band Length	30cm	3cm	33cm
Collar Band Width	2cm	2cm	4cm
Pocket Length	12cm	2cm	14cm
Pocket Width	10cm	1cm	11cm
Yoke Length	45cm	4cm	49cm
Yoke Height	10cm	3cm	13cm

Now, find the required fabric consumption for the order.

Solution:

Consumption method for the above order will be discussed in the below in part by part.

Let,

Fabric width- 55”

Wastage-10%

Fabric consumption for the Body Parts (Body + Chest):

Here, we will apply the following formula (Per dozen),

$$= \frac{(\text{Body Length from HSP} + \text{Allowance}) \times (\frac{1}{2} \text{ Chest} + \text{Allowance}) \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{76 \times 56 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 20.31 \text{ yds per dozen} \dots \dots \dots (1)$$

So, consumption for the Body Parts (Body + Chest) is 20.31yds per dozen.

(Note: 2.54 used to convert into inch from cm and 36 used to convert into yds from inch).

Fabric consumption for the Sleeve:

Here, we will apply the following formula (Per dozen),

$$= \frac{(\text{Sleeve Length} + \text{Allowance}) \times (\text{Arm hole straight} + \text{Allowance}) \times 2 \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{66 \times 28 \times 2 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 17.64\text{yds per dozen} \dots\dots\dots (2)$$

So, consumption for the sleeve is 17.64yds per dozen.

Fabric consumption for the Collar:

Here, we will apply the following formula (Per dozen),

$$= \frac{(\text{Collar Length} + \text{Allowance}) \times (\text{Collar Width} + \text{Allowance}) \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{44 \times 8 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 1.68\text{yds per dozen} \dots\dots\dots (3)$$

So, consumption for the Collar is 1.68yds per dozen.

Fabric consumption for the Cuff:

Here, we will apply the following formula (Per dozen),

$$= \frac{(\text{Cuff Length} + \text{Allowance}) \times (\text{Cuff Width} + \text{Allowance}) \times 2 \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{12 \times 3 \times 2 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 0.344\text{yds per dozen} \dots\dots\dots (4)$$

So, consumption for the Cuff is 0.344yds per dozen.

Consumption for the Collar Band:

Here, we will apply the following formula (Per dozen),

$$\frac{(\text{Collar Band Length} + \text{Allowance}) \times (\text{Collar Band Width} + \text{Allowance}) \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{33 \times 4 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 0.63\text{yds per dozen} \dots\dots\dots (5)$$

So, consumption for the Collar Band is 0.63yds per dozen.

Consumption for the Pocket:

Here, we will apply the following formula (Per dozen),

$$\frac{(\text{Pocket Length} + \text{Allowance}) \times (\text{Pocket Width} + \text{Allowance}) \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{14 \times 11 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 0.735\text{yds per dozen} \dots\dots\dots (6)$$

So, fabric consumption for the Pocket is 0.735yds per dozen.

Consumption for the Yoke:

Here, we will apply the following formula (Per dozen),

$$\frac{(\text{Yoke Length} + \text{Allowance}) \times (\text{Yoke Height} + \text{Allowance}) \times 2 \times 12}{\text{Fabric Width} \times 36 \times 2.54} \quad (\text{In yds})$$

$$= \frac{49 \times 13 \times 2 \times 12}{55 \times 36 \times 2.54} \quad (\text{In yds})$$

$$= 3.04\text{yds per dozen} \dots\dots\dots (7)$$

So, consumption for the Yoke is 3.04yds per dozen.

Now,

Total fabric consumption for the woven long sleeve shirt is-

= [{Number (1) + Number (2) + Number (3) + Number (4) + Number (5) + Number (6) + Number (7)} + Wastage%]

= {(20.31 + 17.64 + 1.68 + 0.344 + 0.63 + 0.735 + 3.04) + 10%}

= (44.379 + 10%) per dozen.

= 48.82yds per dozen.

So, total fabric consumption for the woven long sleeve shirt is 48.82yds per dozen.

And,

Total fabric consumption for 10000pcs (833.33 dozen) woven long sleeve shirt is (48.82 × 833.33) = 40680.59yds.

☐ **Knit fabric consumption Formula:**

{(Length + allowance) X (width + allowance) X number of parts} X fabric weight in GSM / 10000000 X 12 + wastage %.

= results in KG per dozen.

☐ **Fabric consumption calculation for T-shirt**

No.	Parts	Actual measurement(cm)	Allowance (cm)	Total
1	Chest	96	6	102
2	High point shoulder	65	5	70
3	Sleeve length	20	5	25
4	Arm hole	46	3	49
5	Neck	58	3	61
6	Neck width	4	3	7

Formula:

For Body

CPD (Consumption per dozen) = Length × Width×12

Pieces × GSM/10000000

= 102×70×12×150/10000000

= 1.2852 kg

Here, GSM is 150

For Sleeve

$$\begin{aligned}\text{CPS} &= \text{Length} \times \text{Width} \times 12 \times 2 \text{ parts} \times \text{GSM} / 10000000 \\ &= 25 \times 49 \times 12 \times 2 \times 150 / 10000000 \\ &= 0.441 \text{ kg}\end{aligned}$$

Here, GSM is 150 and in 1 piece of T-shirt has 2 sleeves

For Neck

$$\begin{aligned}\text{Neck} &= \text{Length} \times \text{Width} \times 12 \times \text{GSM} / 10000000 \\ &= 61 \times 7 \times 12 \times 200 / 10000000 \\ &= 0.10248 \text{ kg}\end{aligned}$$

Here, GSM is 200

$$\begin{aligned}\text{Total consumption} &= \text{body} + \text{sleeve} + \text{neck} + 7 \% \text{ wastage} \\ &= 1.2852 + 0.441 + 0.10248 + 0.07 \\ &= 1.89868 \text{ kg/dozes}\end{aligned}$$

So total fabric required to make one dozen of T-shirt

Costing:

☐ Elements for costing:

- Fabric consumption with unit price.
- Trims and accessories with unit price.
- Embellishment cost.
- CM
- Commercial and banking cost.
- Etc.

☐ Sample costing for 1 dozen Men's T-shirt

1. Fabric consumption 2 kg/dz	\$5.0/kg	\$10/kg
2. Accessories	\$2/dz	\$2/dz
3. CM (cost of manufacturing)	\$2/dz	\$2/dz

Total =\$14

$$\text{A) Direct cost (raw materials)} = \$14.0$$

B) Indirect cost (15% to 20% of direct cost)

$$\begin{aligned}\text{Indirect cost} &= \$14.0 \times 20\% \\ &= \$2.8\end{aligned}$$

$$\begin{aligned}\text{Total} &= \$14.0 + \$2.8 \\ &= \$16.8\end{aligned}$$

$$\text{C) Profit @5\%} = \$16.8 \times 5\%$$

$$= @0.84$$

Therefore, total cost = \$16.8 + \$0.84
 = \$17.64
 = \$18

So, the cost for 1 dozen men's T-shirt is \$18

Costing tips for the knits items:

Before start costing

- 1) **Fabrication:** You must take clear idea regarding the fabrication before taking the order from the buyer / buying house. After then, you must ensure that, you have strong source of the followings fabric.
- 2) **Size spec:** Make sure that, you have got the correct/latest size spec with the measurement of all the sizes, which will be ordered. Many times, we see that, PO sheet has come with new bigger size which was not during the costing.
- 3) **Fabric color:** Try to know that, how many colors the style has & also try to know that, color wise order qty ratio.
- 4) **Qty:** Take information regarding approximate order qty.
- 5) **Shipment date:** Asked buyer for the shipment date & check with your production department that, they have enough space for shipped out the followings qty within the required ship date or tell your possible date.
- 6) **Test requirement:** Let you know that; the order has any test or not.
- 7) **L/C payments term:** Take a previous L/C copy from them & discuss with your commercial people regarding all the terms along with payment terms.
- 8) **Inspection:** get a confirmation from the buyer that, who will inspect the goods. If third party then who will pay their charges.

Individual Activity:

- *Identify fabric consumption formula.*
- *Calculate the cost calculation for apparel merchandising.*



SELF-CHECK QUIZ 4.3

Write the correct answer of the following:

1. What is fabric consumption?
2. Which two process are used to calculate fabric consumption?
3. Write down the formula of woven fabric consumption?
4. Write down the formula of knit fabric consumption?
5. What are the elements for coasting?



Learning Outcome 4.4 – Perform Trims and Accessories Consumption and Cost Calculation.



Contents:

- Trims and accessories consumption formula.
- Costing of trims and accessories.



Assessment criteria:

1. Trims and accessories consumption calculation is identified and interpreted.
2. Trims and accessories consumption formula is applied.
3. Costing of the trims and accessories is computed.



Resources required:

Students/trainees must be provided with the following resources:

- Trims and accessories, calculator, style/sample and laptop/computer



LEARNING ACTIVITY 4.4

Learning Activity	Resources/Special Instructions/References
Identify trims and accessories calculation formula	<ul style="list-style-type: none">▪ Information Sheet: 4.4▪ Self-Check Quiz: 4.4▪ Answer Key: 4.4



INFORMATION SHEET 4.4

Learning Objective: to Identify trims and accessories calculation formula of apparel merchandising.

3. Trims and accessories consumption formula:

Sewing Thread Consumption Calculation:

Before sewing thread consumption, we should follow some terms –

1. Wastage for woven and knit 15%
2. 50/2 Means –50 count, 2 ply =4000m. (Just only for knit fabric)
3. Woven = (40/2 lower = 4000 m, 20/2 upper = 3000m / cone)

Example:

O/Q =5000 PCS, Thread Consumption = 160m / gmt 50/2. Calculate total no of cones required for that order.

We know that,

$$\begin{aligned}\text{Cone requirement} &= \{(\text{CONS} / \text{Gmt} * \text{O/Q}) / \text{quantity of thread}\} + \text{Wastage} \\ &= \{(160 * 5000) / 4000\} + 15\% \\ &= 230 \text{ cone}\end{aligned}$$

O/Q =5000 PCS, Thread Consumption =200 m/gmt, 20/2=80 m, 40/2=120m. Calculate total no of cones required for that order?

For 40/2 (bottom + bobbin) require of cone,

$$\begin{aligned}&= \{(\text{CONS} / \text{Gmt} * \text{O/Q}) / \text{quantity of thread}\} + \text{wastage} \\ &= \{(120 * 5000) / 4000\} + 15\% \\ &= 172.5 \text{ cone} \\ &= 173 \text{ CONE}\end{aligned}$$

For 20/2 (TOP+NEEDLE) require of cone,

$$\begin{aligned}&= \{(80 * 5000) / 3000\} + 15\% \\ &= 153.33 \text{ cone} \\ &= 154 \text{ cone}\end{aligned}$$

Button Consumption Calculation for Garments:

Before calculation of button for garments we should follow some terms

1 dzn = 12 pc
In case of metal button,
1 gross (g) = 12*12 = 144 pc
Wastage = 6%

For plastic button,
1 great gross (gg)
= 144*12
= 1728 pcs.

Wastage = 5%

Button Consumption Calculation for Garments:

O/Q = 5000 PCS, plastic button required = 12 pcs/grmt. Calculate total number of plastic button requirement for that order.

Plastic button requirement,

$$\begin{aligned}
 &= \{(\text{CONS} / \text{Gmt} * \text{O/Q}) / \text{great gross}\} + \text{Wastage} \\
 &= \{(12 * 5000) / 1728\} + 5\% \\
 &= 36.46 \text{ G}
 \end{aligned}$$

Note: in button don't add number before decimal such as 36.

O/Q = 5000 PCS, metal button required = 4 pcs/ grmt. Calculate Total number of metal button Requirement for That Order.

$$\begin{aligned}
 \text{Metal button requirement} &= \{(\text{CONS} / \text{Gmt} * \text{O/Q}) / \text{gross}\} + \text{Wastage} \\
 &= \{(4 * 5000) / 144\} + 6\% \\
 &= 147.22 \text{ G}
 \end{aligned}$$

Lace/All Kinds of Tape Consumption Calculation for Garments:

Suppose, O/Q = 5000pcs, Lace Consumption = 10" /Garment. Calculate Lace Requirement For That Order (5 Percent) Wastage.

Solution:

$$\begin{aligned}
 \text{Lace Required} &= \{(\text{Cons/Gmt} * \text{O/Q}) / 36\} + \text{Wastage} \\
 &= \{(10 * 5000) / 36\} + 5\% \\
 &= 1458.33 \\
 &= 1459 \text{ Yds.}
 \end{aligned}$$

Suppose, O/Q = 5000pcs, IN Consumption = 2.40 YDS / Dz. Calculate Interlining Requirement For That Order (5 Percent) Wastage.

Solution:

$$\begin{aligned}
 \text{Interlining Required} &= \{(\text{Cons/Dz} / 12) * \text{O/Q}\} + \text{Wastage} \\
 &= \{(2.40 / 12 * 5000)\} + 5\% \\
 &= 1050 \text{ yds}
 \end{aligned}$$

Size Label Consumption Calculation for Garments:

Suppose, O/Q = 5000pcs, Size Range S To XI . Size Ratio = 1:1:2:1

Calculate Size Label Requirement for That Order (5 Percent) Wastage.

Solution,

$$\begin{aligned}
 \text{Qty of S} &= \{(\text{O/Q} * \text{Individual Ratio}) / \text{Some Of Total Ratio}\} + \text{Wastage} \\
 &= \{(5000 * 1) / 5\} + 5\% \\
 &= 1050
 \end{aligned}$$

$$\begin{aligned}
 \text{Qty Of M} &= \{(\text{O/Q} * \text{Individual Ratio}) / \text{Some Of Total Ratio}\} + \text{Wastage} \\
 &= \{(5000 * 1) / 5\} + 5\% \\
 &= 1050
 \end{aligned}$$

$$\text{Qty Of L} = \{(\text{O/Q} * \text{Individual Ratio}) / \text{Some Of Total Ratio}\} + \text{Wastage}$$

$$= \{(5000 \times 2) / 5\} + 5\%$$

$$= 2100$$

Qty Of L = $\{(O/Q \times \text{Individual Ratio}) / \text{Some Of Total Ratio}\} + \text{Wastage}$

$$= \{(5000 \times 1) / 5\} + 5\%$$

$$= 1050$$

Suppose,

O/Q = 5000pcs, . Teeth clip/gmt = 3pcs. Calculate teeth clip requirement? Wastage 3 %

Solution:

Interning Required = $\{(Cons/Gmt) \times O/Q\} + \text{Wastage}$

$$= (3 \times 5000) + 3\%$$

$$= 1540 \text{ PCS}$$

Suppose,

O/Q = 5000 pcs, gmt tape /ctn = 6 yds. No of ctn=50

Calculate gum tape requirement? Wastage 5%.

Solution,

Gum tape require = $\{(gum \text{ tape } /ctn \times \text{no of ctn}) / qty /ctn\} + \text{wastage}$

$$= \{(6 \times 50) / 50\} + 5\%$$

$$= 7 \text{ roll}$$

Suppose,

O/Q = 5000pcs, piece poly will be used 25 gmt/blister poly. 4 blister poly/ctn.

Calculate poly and ctn requirement (wastage 5%)

Solution,

Piece poly requirement = $O/Q + \text{wastage}$

$$= 5000 + 5\%$$

$$= 5250 \text{ pieces.}$$

Blister poly require,

$$\{(O/Q) / (gmt/blister \text{ poly})\} + \text{wastage}$$

$$= 210 \text{ pcs}$$

Gmts/ctn = $gmts/blister \times \text{NO Of blister } /ctn$

$$= 100$$

Ctn requirement = $\{(O/q) / (gmt/ctn)\} + 5\%$

$$= 50 \text{ pc}$$



SELF-CHECK QUIZ 4.4

Write the correct answer of the following:

1. How much should be the button consumption per dozen with 5% wastage?
2. How much wastage should be considered for sewing thread while calculating thread consumption?



Learning Outcome 4.5 – Interpret Process of Cost of Manufacturing



Contents:

- Process of CM calculation.
- CM calculation formula.



Assessment criteria:

1. The process of CM calculation is interpreted.
2. CM calculation formula is applied.
3. CM calculation for apparel is computed.



Resources required:

Students/trainees must be provided with the following resources:

- Calculator, style/sample and laptop/computer.



LEARNING ACTIVITY 4.5

Learning Activity	Resources/Special Instructions/References
Identify process of CM calculation	<ul style="list-style-type: none">▪ Information Sheet: 4.5▪ Self-Check Quiz: 4.5▪ Answer Key: 4.5▪ Job Sheet 3



INFORMATION SHEET 4.5

Learning Objective: to Identify Cost Manufacturing (CM) calculation formula of apparel merchandising.

1. Cost Manufacturing:

Calculating cost of manufacturing (CM) for any garment items is an important factor in garments merchandising. Every garments merchandiser should know the actual calculating method of it. Other-wise, factory may fall in huge loss. As its importance in garments merchandising, today I will present an easy method for calculating cost of manufacturing (CM) for any garment items.

2. How to Calculate Cost of Manufacturing (CM) of Garment's:

Before calculating cost of manufacturing (CM) for any garment items, a garment merchandiser should confirm the following matters:

1. Factory total expenditure per month (running), it includes factory rent, electricity bill, water bill, commercial cost, transportation, worker & staff wages etc.
2. Total number of machines in the factory.
3. Total number of machines required to complete an item.
4. Targeted production per hour from the existing layout (excluding alter and reject).
5. Total working day per month.
6. Total working hours per day.

Now by applying following formula, a garment merchandiser can easily calculate the actual cost of garments manufacturing.

Cost of manufacturing (CM) per pcs,

$$\text{Factory total expenditure/month} \times \text{Total number of machines required to complete an item} \\ = \frac{\text{Total machines} \times \text{Total working day/month} \times \text{Total working hrs/day} \times \text{Targeted production/hr}}{\text{Total machines required to complete an item}}$$

Now one example is enough to remove all the confusions from the above discussion.

Example:

Suppose,
H.N apparels has received an order of basic T-Shirt item.

Where,

H.N apparels total expenditure per month-30,00,000 taka

Total number of machines in the factory-100

Total number of machines required to complete an item-25

Targeted production per hour from the existing layout-180

Total working day per month-26

Total working hours per day-08

Now calculate the cost of manufacturing (CM) of the mentioned item.

Solution:

Cost of making (CM) per pcs,

$$\begin{aligned} & \text{Factory total expenditure/month} \times \text{Total number of machines required to complete an item} \\ = & \frac{\text{Total machines} \times \text{Total working day/month} \times \text{Total working hrs/day} \times \text{Targeted production/hr}}{30,00,000 \times 25} \\ = & \frac{100 \times 26 \times 8 \times 180}{30,00,000 \times 25} \end{aligned}$$

= 20.03 taka per pcs

= (20.03 × 12) taka per dozen

= 240.38 taka per dozen

= 240.38/78 (in dollar) {1dollar-78taka (running)}

= \$3.08 per dozen

So, the cost of making (CM) per dozen basic T-Shirt is \$3.08

JOB SHEET 3

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Calculate the manufacturing cost (CM) per dozens of lady's tang top
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> ▪ this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel Merchandising ▪ this assessment activity will be used to measure your underpinning skills ▪ you will have fifteen (15) minutes to familiarise yourself with the resources to be used ▪ you have two (2) hours to complete this demonstration 	
Procedure:	
<ul style="list-style-type: none"> ▪ observe and wear personal protective equipment (PPE) as required for the task to be performed ▪ read the specification information provided ▪ collect all materials needed to complete the task ▪ perform the task within the given time ▪ observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required tools and materials. 2. Analyse the given problem. 3. Give the step by step calculation. 	
Diagram/Drawing:	
<ul style="list-style-type: none"> • Name of the company: XYZ Apparels • Average monthly fixed cost and overheads: Tk. 3050590 • Total no. of machine in the factory: 220 • No. of machine needed for the line: 15 • Production per hour: 340 pieces • Working hours per day: 8 hours • Working days in the month: 26 • Conversion rate of US\$: Tk. 82/US\$ 	

**Resources Required:**

Tools	Calculator
Equipment	N/A
Machinery	N/A
Materials:	N/A



SELF-CHECK QUIZ 4.5

Write the correct answer of the following:

1. What is Cost Manufacturing (CM)?
2. What is the information needed to calculate CM?
3. How many working days should be considered in a month while calculating the CM?



Learning Outcome 4.6 – Apply the Costing Format and Methods of Calculation



Contents:

- Method of costing.
- Cost format.
- FOB price in accordance with specifications.



Assessment criteria:

1. Method of costing format is identified.
2. Cost format is applied to compute cost.
3. The concept of FOB (free on board) price is identified.
4. FOB price is prepared in accordance with specifications.



Resources required:

Students/trainees must be provided with the following resources:

- Calculator, FOB Policy guide, style/sample and laptop/computer



LEARNING ACTIVITY 4.6

Learning Activity	Resources/Special Instructions/References
Identify method of costing format and concept of FOB	<ul style="list-style-type: none">▪ Information Sheet: 4.6▪ Self-Check Quiz: 4.6▪ Answer Key: 4.6▪ Job Sheet 4▪ Job Sheet 5



INFORMATION SHEET 4.6

Learning Objective: to Identify method of costing format and concept of FOB in apparel merchandising.

Garment Costing:

Costing is a very complex procedure, with set patterns and guidelines followed by the industry, and it is difficult to find out costs for every process there are some inbuilt costs while costing. Garment costing includes all the activities like purchase of raw materials and accessories, knitting fabrics, processing and finishing of fabrics, sewing, and packing of garments, transport, and conveyance, shipping, overheads, banking charges and commissions, etc.

To do perfect garment costing, one must know about all these activities thoroughly about their costs, procedures, advantages and risk factors. Also, he must know how to solve the problems when occurred and to take a suitable alternate decision immediately in time.

Costing Essentials:

The method of making costing will vary from style to style. As there are many different styles in garments, it is not possible here to discuss all the styles. Hence let us take some following styles as examples which are in regular use.

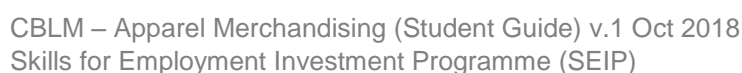
1. Men's Basic T-shirts
2. Men's Printed Polo shirts
3. Ladies Nightdress
4. Men's Pajamas
5. Men's Solid Pique Polo shirts
6. Ladies yarn striped T-shirts (Feeder stripes)
7. Boys yarn striped T-shirts (Engineering stripes)

Different terms related to garments costing are mentioned in the following:

1. Yarn cost
2. Process cost
3. Buyer negotiation
4. Quality
5. Quantity
6. CM
7. Overhead cost
8. Shortage in process
9. Buyer specification about the definite product
10. Process of shipment (Sea or Air)
11. Currency
12. FOB
13. CIF
14. Commission (%) for the middle man
15. Profit (%) for factory or buying house

COST SHEET

FOB means “free on board”. In this case, exporter quotes the garment buyer a price that includes all costs up to and including delivery of goods aboard an overseas vessel. Here, exporter quote the price by adding fabric cost, accessories cost, CM (cost of manufacturing), overhead cost, commission, C&F commission and transportation cost from factory to port.



JOB SHEET 4

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Calculate the cost for casual apparel
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel merchandising this assessment activity will be used to measure your underpinning skills you will have fifteen (15) minutes to familiarise yourself with the resources to be used you have two (2) hours to complete this demonstration 	
Procedure:	
<ul style="list-style-type: none"> observe and wear personal protective equipment (PPE) as required for the task to be performed read the specification information provided collect all materials needed to complete the task perform the task within the given time observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required materials for the job (refer to the list provided to you by the assessor). 2. Read and analyse the given tech pack. 3. Given the required information in the tech pack, calculate the consumption of casual apparel. (Knit) 4. Report to the assessor for evaluation. 	
Diagram/Drawing:	
<p>The tech pack below is a reference for you to finish this task.</p>	

Tech pack of basic T-shirt

Garment Measurement Sheet								
Measurement set: 01 UOM: CM (Note: Measurements are not approved. Ensure to use approved measurement for bulk)								
Code	NAME	XXS	XS	S	M	L	XL	Allowance (+/-)
A	LENGTH OF BACK ON CENTER	48.00	51.00	54.00	58.00	62.00	66.00	
B	LENGTH OF SHOULDERS ON BACK	31.00	32.50	34.00	36.00	38.00	40.00	
C	1/2 WIDTH OF CHEST	37.00	39.00	41.00	44.00	47.00	50.00	
D	1/2 WIDTH OF BOTTOM	37.00	39.00	41.00	44.00	47.00	50.00	
E	1/2 WIDTH OF SLEEVE 2 CM UNDER ARM HOLE	13.50	14.50	15.50	17.00	18.50	20.00	
F	1/2 WIDTH OF BOTTOM SLEEVE	12.50	13.00	13.50	14.20	14.90	15.60	
G	LENGTH OF SLEEVE FROM 1/2 NECK HOLE	28.00	30.00	32.00	34.00	36.00	38.00	
H	WIDTH OF NECK HOLE	15.90	16.20	16.50	17.00	17.50	18.00	
I	DEPTH OF BACK NECK HOLE	2.50	2.50	2.50	2.50	2.50	2.50	
J	DEPTH OF FRONT NECK HOLE	6.10	6.30	6.50	6.80	7.10	7.40	
K	HEIGHT OF COLLAR / RIB WIDTH	2.00	2.00	2.00	2.00	2.00	2.00	
L	1/2 MINIMUM NECK HOLE WIDTH, AFTER STRETCHED	26.50	27.00	27.50	28.20	28.90	29.60	
M	LENGTH OF SLEEVE FROM SHOULDERS	12.50	13.75	15.00	16.00	17.00	18.00	

Fabric shell: 100% Cotton Single Jersey, 190 GSM, **Neck :** 100% cotton rib, 210 GSM.

Color: white - red - navy blue

Size ratio: 1-1-2-2-1-1.

Main level, care level, size level. hang tag with price, Individual polybag, 24 pcs per carton.

Resources Required:

Tools:	Measuring tape
Equipment:	N/A
Machinery:	N/A
Materials:	Writing material Calculator

JOB SHEET 5

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Calculate the cost for formal apparel (woven)
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> ▪ this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel Merchandising ▪ this assessment activity will be used to measure your underpinning skills ▪ you will have fifteen (15) minutes to familiarise yourself with the resources to be used ▪ you have two (2) hours to complete this demonstration 	
Procedure:	
<ul style="list-style-type: none"> ▪ observe and wear personal protective equipment (PPE) as required for the task to be performed ▪ read the specification information provided ▪ collect all materials needed to complete the task ▪ perform the task within the given time ▪ observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required materials for the job (refer to the list provided to you by the assessor). 2. Read and analyse the given tech package. 3. Given the required measurement in the tech pack, calculate the costing of casual apparel. (Woven) 4. Consider the price of materials on your own way. 5. Report to the assessor for evaluation. 	
Diagram/Drawing:	
<p>The tech pack below is a reference for you to finish this task.</p>	



Style no: AM 001 Date:
 Category: Menswear Size: Medium (40)
 Season: Spring-summer Designer's name: Shahariar Mehta
 Description of garment: Men tailored formal evening wear shirt

Measurements:

1. Full length = 27"
2. ½ chest = 18"
3. Collar length = 16"
4. Collar width = 1.5"
5. Collar band length = 16.5"
6. Collar band width = 1.5"
7. Sleeve length = 20"
8. ½ armhole = 10.5"
9. Cuff length = 8"
10. Cuff width = 3.25"
11. Back yoke length = 19"
12. Back yoke width = 5"

Fabric: 100% cotton poplin, width = 46"

Trims: 7 buttons in front, DTM sewing threads 20/2, 1 main label, 1 care label

Packing: Standard pack, individual Poly bag, 20 per carton.

Wash: NO wash

Resources Required:	
Tools:	Measuring tape
Equipment:	N/A
Machinery:	N/A
Materials:	Writing material Calculator



SELF-CHECK QUIZ 4.6

Write the correct answer of the following:

1. What are the heads that need to be included in the costing sheet?
2. What are the terms related to garment's costing? (any five)
3. What is the elaboration of FOB?



REVIEW OF COMPETENCY

Final Checklist <i>(for the performance criteria of the module performing measurement, consumption & cost calculation for casual / formal apparel)</i>		
Performance Criteria	Yes	No
1. Sketch is comprehended as per technical package.	<input type="checkbox"/>	<input type="checkbox"/>
2. Measurement charts are recognized, followed and applied.	<input type="checkbox"/>	<input type="checkbox"/>
3. Measurements charts are updated in accordance with changes.	<input type="checkbox"/>	<input type="checkbox"/>
4. Points of measuring of the measurement guides are recognized.	<input type="checkbox"/>	<input type="checkbox"/>
5. Level of tolerance specified in the measuring guide are identified and stated.	<input type="checkbox"/>	<input type="checkbox"/>
6. Fabric consumption is identified and interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
7. Fabric consumption formula is applied.	<input type="checkbox"/>	<input type="checkbox"/>
8. Cost calculation is computed.	<input type="checkbox"/>	<input type="checkbox"/>
9. Trims and accessories consumption calculation is identified and interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
10. Trims and accessories consumption formula is applied.	<input type="checkbox"/>	<input type="checkbox"/>
11. Costing of the trims and accessories is computed.	<input type="checkbox"/>	<input type="checkbox"/>
12. The process of CM calculation is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
13. CM calculation formula is applied.	<input type="checkbox"/>	<input type="checkbox"/>
14. CM calculation for apparel is computed.	<input type="checkbox"/>	<input type="checkbox"/>
15. Method of costing format is identified.	<input type="checkbox"/>	<input type="checkbox"/>
16. Cost format is applied to compute cost.	<input type="checkbox"/>	<input type="checkbox"/>
17. The concept of FOB (free on board) price is identified.	<input type="checkbox"/>	<input type="checkbox"/>
18. FOB price is prepared in accordance with specifications.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 4.1

1. Sketch:

In the garment manufacturing, the first step is designing the sketch for the dresses that have to be prepared. For this purpose, the designer first draws several rough sketches in the sketchbook. The designer does not go for details at this moment but he rather let his creativity flow on the paper and he draws many sketches. Later these sketches are analysed by a panel of designers. They finally select few out of them. These few sketches are rendered in detail separately or in the form of a single collection. The designer also draws working drawings along with the sketch. Working drawings are a flat drawing of the sketch and it help pattern maker in understanding the patterns involved in the construction.

2. Types of Sketch:

- a. Flat sketch
- b. Illustration

3. Technical Package:

Tech pack is an instruction guide for procedure of the garment manufacturing. This is a graphical and written document which indicates the design specification, fit specification, procedure for manufacturing the garment, measurement and sizing of the garment.

4. Contents of Tech-Pack include:

- a. Flat sketch
- b. Colour combo
- c. Fabric details
- d. Stitching and garment construction detailing
- e. Graphic or print details
- f. Embroidery or beading details
- g. Trim details
- h. Washing details
- i. Measurement details and chart size
- j. Bills of materials (BOM)

5. Elaboration of HPS is High Point Shoulder.

ANSWER KEY 4.2

1. Five guidelines for garments measurements are:

- Before starting garments measurement, take measurement specification sheet, measurement tools, and documentation of those measurements.
- Take all measurements with metal ruler or fiber glass scale.
- Take measurements with garments placed on a surface in a natural position.
- Take all measurements to the nearest 1/8" using a 1/4" flexible metal tape measure or as specified by the buyer.
- Do not pull or stretch garment at the time of measurements unless otherwise specified.

2. Point of chest can you measure around the fullest part of the chest/bust. Do not draw the tape too tightly.

3. Point of waist Measure your waist at the smaller circumference of your natural waist, usually just above the belly button.
4. Tolerance is the plus-or-minus measurement used to determine whether a product meets a specified quality standard. No two garments of the same size can be guaranteed to be the exact same – this is why two “smalls” of the same shirt may have a slightly different fit, but both shirts may still fall within an acceptable range.

ANSWER KEY 4.3

1. Fabric Consumption:

The quantity of fabric needed for making a garment is called fabric consumption for costing. It is difficult to know the actual consumption before completion of marker planning, but we can get an approximate fabric consumption from sample.

2. Fabric consumption is calculated by two process:

1. From marker (it is more accurate)
2. From measurement or mathematical system (it is approximate)
3. Woven fabric consumption Formula:

$\{(\text{Length} + \text{allowance}) \times (\text{width} + \text{allowance}) \times \text{number of parts}\} / \text{fabric cut able width} / 36 \times 12 + \text{wastage \%}$
 = results in yards / dozen.

4. Knit fabric consumption Formula:

$\{(\text{Length} + \text{allowance}) \times (\text{width} + \text{allowance}) \times \text{number of parts}\} \times \text{fabric weight in GSM} / 10000000 \times 12 + \text{wastage \%}$
 = results in KG por dozen.

5. Elements for costing:

- Fabric consumption with unit price.
- Trims and accessories with unit price.
- Embellishment cost.
- CM
- Commercial and banking cost.
- Etc.

ANSWER KEY 4.4

1. Button Consumption Calculation for Garments:

O/Q =5000 PCS, plastic button required =12 pcs/grmt. Calculate Total number of plastic button Requirement for That Order.

2. Sewing Thread Consumption Calculation:

Before sewing thread consumption, we should follow some terms –

1. Wastage for woven and knit 15%
2. 50/2 Means –50 count, 2 ply =4000m. (Just only for knit fabric)
3. Woven = (40/2 down = 4000 m, 20/2 up = 3000m)

Example:

O/Q = 5000 PCS, Thread Consumption = 160m/grmt50/2. Calculate Total No Of Cones Required For That Order.

We know that,

$$\begin{aligned}\text{Cone requirement} &= \{(\text{CONS} / \text{Gmt} * \text{O/Q}) / \text{quantity of thread}\} + \text{Wastage} \\ &= \{(160 * 5000) / 4000\} + 15\% \\ &= 230 \text{ cone}\end{aligned}$$

O/Q = 5000 PCS, Thread Consumption = 200 m/grmt, 20/2=80 m, 40/2=120m. Calculate Total No Of Cones Required For That Order?

ANSWER KEY 4.5

1. Cost Manufacturing:

Calculating cost of manufacturing (CM) for any garment items is an important factor in garments merchandising. Every garments merchandiser should know the actual calculating method of it. Otherwise, factory may fall in huge loss.

2. Before calculating cost of manufacturing (CM) for any garment items, a garment merchandiser should confirm the following matters:
- Factory total expenditure per month (running), it includes factory rent, electricity bill, water bill, commercial cost, transportation, worker & staff wages etc.
 - Total number of machines in the factory.
 - Total number of machines required to complete an item.
 - Targeted production per hour from the existing layout (excluding alters and reject).
 - Total working day per month.
 - Total working hours per day.
3. 26 working days should be considered in a month while calculating the CM.

ANSWER KEY 4.6

1. Garment costing includes all the activities like purchase of raw materials and accessories, knitting fabrics, processing and finishing of fabrics, sewing, and packing of garments, transport, and conveyance, shipping, overheads, banking charges and commissions, etc.
2. Different terms related to garments costing are mentioned in the following:
1. Yarn cost
 2. Process cost
 3. Buyer negotiation
 4. Quality
 5. Quantity
3. FOB means “free on board”.

Module 5: Applying the methods of order follow up proceed



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to applying the methods of order follow up proceed, which includes the tasks of interpreting the order follow up procedure, recognizing the supplier's evaluation process, demonstrating the time and action plan. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

40 hours



LEARNING OUTCOMES:

Upon completion of the module, the trainee should be able to:

- 5.1 Interpret the order follow-up procedure.
- 5.2 Recognize the supplier's evaluation process.
- 5.3 Demonstrate the time and action plan.



PERFORMANCE CRITERIA:

- 1. Methods of order follow up are interpreted.
- 2. Approvals of samples at different stages of order execution are obtained.
- 3. All information of approved samples is collected, recorded and maintaining as per company guidelines.
- 4. Suppliers evaluation process is interpreted.
- 5. Order follow up chart is prepared.
- 6. Suppliers evaluation chart is applied.
- 7. Types of TNA plan is interpreted on basis lead time.
- 8. TNA plan of order is prepared.
- 9. TNA is applied.



Learning Outcome 5.1 – Interpret the Order Follow-up Procedures



Contents:

- Order follow-up procedure.
- Approved sample as per company guideline.



Assessment criteria:

1. Methods of order follow-up are interpreted.
2. Approvals of samples at different stages of order execution are obtained.
3. All information of approved samples is collected, recorded and maintained as per company guidelines.



Resources required:

Students/trainees must be provided with the following resources:

- Order follow up flow chart, approved sample and stationery



LEARNING ACTIVITY 5.1

Learning Activity	Resources/Special Instructions/References
Identifying order follow up procedure	<ul style="list-style-type: none">▪ Information Sheet: 5.1▪ Self-Check Quiz: 5.1▪ Answer Key: 5.1



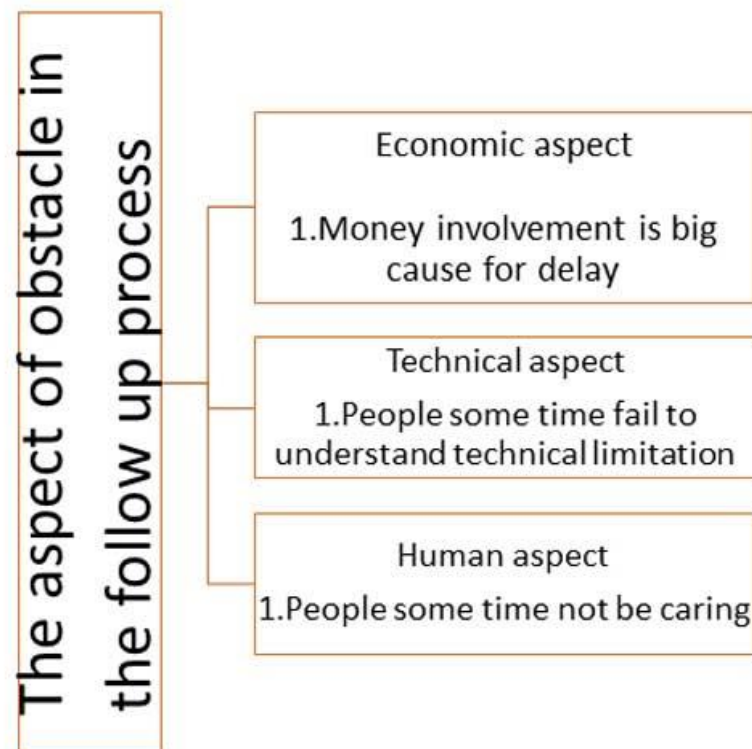
INFORMATION SHEET 5.1

Learning Objective: to Identify order follow up procedure in apparel industry.

1. Order follow-up:

Follow up is to monitor, control, and finding problems & work on solution. This process is mandatory for merchandiser to co-ordinate among the production unit. Proper follow up process helps to meet dead line & increase business.

To develop an effective lead follow-up process in merchandising, it is important to first understand what the primary obstacle that stands among the people. The aspect of the obstacle can be different and it requires to take measure them to overcome.

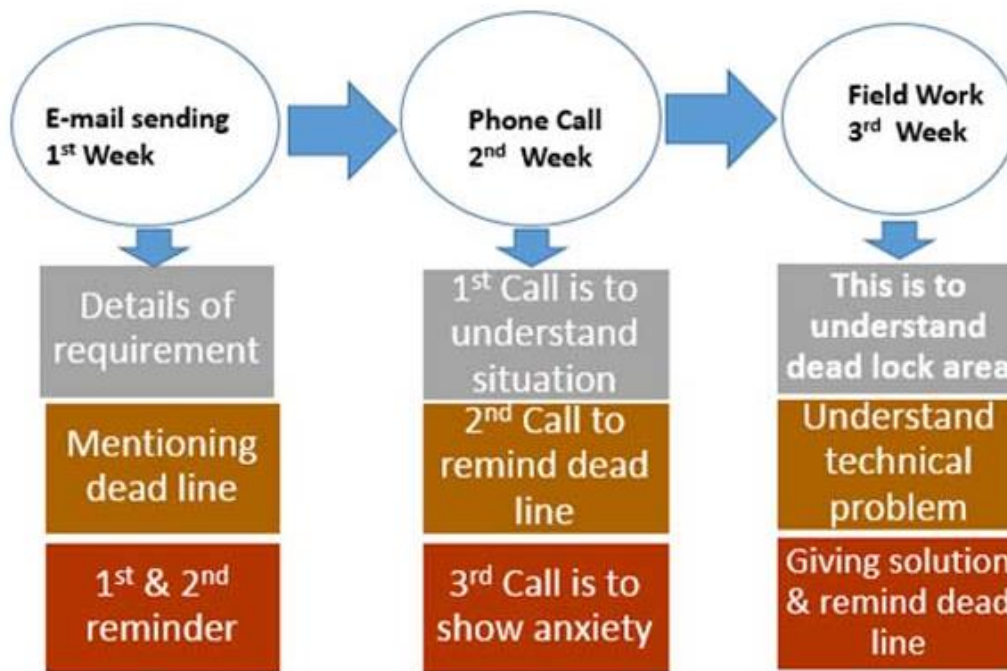


The above obstacles are mostly responsible for all kinds of delays. But merchandiser some time fails to understand them and works haphazardly. If people are not caring in the factory then no need to wait and then ask to change the team. In the same way other aspect can be taken to work as root cause of the problem.

2. The purpose of follow up process

1. Reduction on distance of man and materials
2. Avoid waiting time & unnecessary delays
3. Reduce cycle time

3. General follow up process in merchandising



Effective follow up process in merchandising

1. **Work measurement / time study:** This will help to understand the urgency.
2. **Recurring reminders:** Repeatedly reminding will focus on quick response that task may not be stuck somewhere of the process.
3. **E-mail attachment:** Merchandiser should be attached by mail otherwise there will be chances to have denials from the factory or supplier.
4. **Calendar view & calendar feeds:** Time action calendar is to maintain dead line & continuing progress to keep.
5. **Response detection:** Most of the time it was seen factory or supplier give late response by mail or phone. In all cases need to be sure that the responses are accurate & on time.
6. **Zooming & going to bottom line:** Sometime the reality may not be same as assumed or improper information keep things to be hold. So, merchandiser should work at bottom line as much as possible & always keep zooming of the problem to discover the reality.
7. **Worst case scenario:** This can be technical problem or big disaster but merchandiser should keep the alternative at least two possible way. Suppose if sample got rejected after making it then to keep enough fabric for remaking the sample.
8. **Keep things real:** To be honest with yourself as well as others.
9. **Monitoring & control:** refers to the control of any system, device, network or people through communication & managed by a control Merchandiser has to continuing this whatever situation arise.
10. **Review:** This helps to reduce error or doing things again & again.

Garments Order Execution Process:

During executing of a garment order, the following processes should be maintained by a garment's merchandiser:

1. Order enquiry from buyer to factory,
2. Approval of order from the buyer,
3. Buyer bank given master L/C to the buying house,
4. Back to back (B/B) L/C is given to the suppliers,
5. Fit sample sent to the buyer for the fit approval,
6. Pre-production (P.P) sample submitted to the buyer,
7. Fabrics and accessories should be in-housed according to T/A plan,

8. Pilot production should be started according to T/A plan,
9. Online inspection by the buyers Q.C,
10. Bulk production should be started according to T/A plan,
11. Commercial department prepares the shipping documents,
12. Final inspection according to T/A plan,
13. Goods sent to port (Sea port or airport),
14. Goods handed over to the shipping line.

Approved samples:

Sampling is one of the most important processes in garments industry which has a vital role in attracting the buyers. Normally buyers are placed an order after satisfying with the quality of samples. As its importance on garments industry, today I will discuss about the different kinds of sample used for completing an order.

Types of Samples Required for Completing a Garments Order:

There are mainly eight types of sample needed for completing a garment order. Those are:

1. Proto sample
2. Fit sample
3. Size set sample
4. Counter sample
5. Salesman sample (SMS)
6. Pre-production sample (PPS)
7. Top over production sample (TOP)
8. Shipment sample

Merchandising File

It is the most important task for a merchandiser to maintain a complete and clear file for each order. A standard merchandising file should contain following items:

1. Check list
2. Cost breakdown
3. Master LC
4. PI, BTB LC
5. Technical sheet including measurement sheet
6. PO (Purchase/Production Order) sheet with colour and size break down
7. Sample comments sheets (sample approval & comments received from buyer)
8. Fabric colour/shade approval (Lab dip/fabric swatches/mail).
9. Approved trim card (approved sample of trims such as main label, care label, hang tag, zipper, button, lace, sewing thread, etc.)
10. Approved embroidery/print strike off (if any)
11. Printed copy of important mails received from and sent to buyer
12. Copy of fabric, yarn & accessories' work order
13. Inventory reports
14. Minutes of the pre-production meeting
15. Printed copy of Time and Action plan prepared by production planning department
16. Packing List

Documents, trim cards should be punched with punching machine to file those in a ring binder. Small poly pouch can be used to put trims that cannot be stapled. Need to insert separator marking related docs so that one can easily find those.

Finally, file should be labelled with Buyer Name, Style/Order Number, LC Number, Order Quantity, Ex-factory date etc.

Individual Activity:

- *Identify Garments order execution process.*
- *Apply order follow-up procedures.*

**SELF-CHECK QUIZ 5.1**

Write the correct answer for the following questions.

1. What do you mean by order follow-up?
2. What is the purpose of follow up process?
3. Write down any five effective follow-up process in merchandising?
4. Write down the name of approved sample?
5. What are the elements included in a merchandiser file?



Learning Outcome 5.2 - Recognize the Suppliers Evaluation Process



Contents:

- The supplier's evaluation process.
- Supplier evaluation chart.



Assessment criteria:

1. Suppliers evaluation process is interpreted.
2. Order follow-up chart is prepared.
3. Supplier evaluation chart is applied.



Resources required:

Students/trainees must be provided with the following resources:

- Suppliers evaluation form, evaluation chart and measuring chart



LEARNING ACTIVITY 5.2

Learning Activity	Resources/Special Instructions/References
Identify supplier's evaluation process and evaluation chart	<ul style="list-style-type: none">▪ Information Sheet: 5.2▪ Self-Check Quiz: 5.2▪ Answer Key: 5.2



INFORMATION SHEET 5.2

Learning Objective: to Identify suppliers evaluation process and evaluation chart in apparel merchandising.

Suppliers evaluation process and evaluation chart:

Suppliers Evaluation:

Supplier evaluation is a term used in business and refers to the process of evaluating and approving potential suppliers by quantitative assessment. The purpose of supplier evaluation is to ensure a portfolio of best in class suppliers is available for use. The main objective of the supplier evaluation process is to reduce purchase risk and maximize the overall value of the purchaser.

Main criteria for evaluating suppliers:

There are various criteria for supplier's evaluation, such as Quality and process control, Continuous improvement, Facility environment, Customer relationship, Delivery, Inventory warehousing, Ordering, Financial condition, Certification, Price etc.

By analysing the manufacturers view, following are the main criteria for evaluating suppliers.

Main criterion	Sub-criteria
Delivery	On-time delivery performance
	Quantity reliability
Quality	Total quantity rejected verse Total quantity received
	Required documentation
	Quality management system
Price	Price level
	Price trend

Steps of supplier evaluation process:

Step 1: Align supplier performance goals with organizational goals objectives

Step 2: Determine an evaluation approach

Step 3: Develop a method to collect information about suppliers

Step 4: Design and develop a robust assessment system

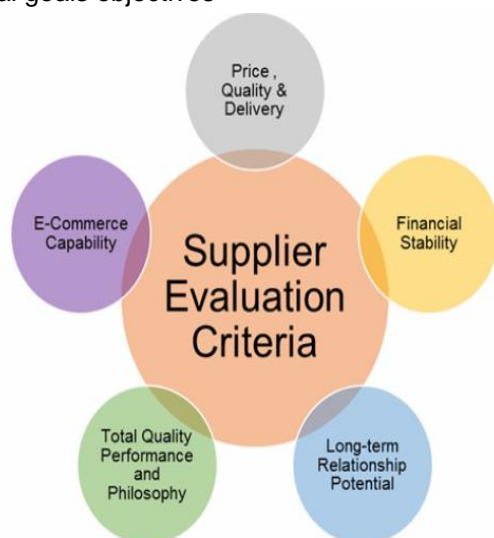
Step 5: Develop a supplier performance assessment system

Step 6: Give feedback to suppliers on their performance

Step 7: Produce results from measuring supplier performance

Key performance indicators (KPI) for supplier's evaluation:

- Quality
- Price and financial issues
- Logistics
- Customer relationship
- Continuous improvement



Individual Activity:

- *Identify supplier evaluation process.*
- *Identify main criteria for supplier evaluation.*

**SELF-CHECK QUIZ 5.2**

Write the correct answer of the following:

1. What is supplier evaluation?
2. What are the main criteria for supplier evaluation?
3. What are the KPI's for Suppliers evaluation?



Learning Outcome 5.3 – Demonstrate the Time and Action Plan



Contents:

- Types of TNA plan.
- TNA plan of order.



Assessment criteria:

1. Types of TNA plan is interpreted on basis lead time.
2. TNA plan of order is prepared.
3. TNA is applied.



Resources required:

Students/trainees must be provided with the following resources:

- Calculator, combined execution plan, cutting plan, sewing plan, finishing and packing plan, shipment plan and sample/product



LEARNING ACTIVITY 5.3

Learning Activity	Resources/Special Instructions/References
Identify time and action plan	<ul style="list-style-type: none">▪ Information Sheet: 5.3▪ Self-Check Quiz: 5.3▪ Answer Key: 5.3▪ Job Sheet 6



INFORMATION SHEET 5.3

Learning Objective: to Identify time and action plan for apparel merchandising.

Time and Action Plan (TNA):

The critical path or TNA is a proper collaboration of Time and action. In an apparel industry, to execute an export order, need to regular evaluation of production activates with the help of times. This regular evaluation is called Critical Path Method or Time and action plan or calendar. This is also known as TNA. By this evaluation, a merchandiser can easily know the present situation of the order. In the case of export order, we all know that, buyer mention lead time with order sheet. According to this lead time, a merchandiser makes Critical path. This method helps to make sure an order delivery within lead time.

Types of Time and Action Calendar:

- For buyers
- For manufacturers

The basic difference between a buyer's TNA and a manufacturer's TNA is that a manufacturer's TNA will have all minor details, involving the time duration for all the pre-production activities and the production activities for a particular order. Whereas, a buyer's TNA will have information regarding when the goods are being exported and when they will be reaching his warehouse and the retail store.

Stage	Action/ Activities	Planned Date/ Duration/days	Reduction of time
1	Confirmation of order	1-Sep	-119
2	Received PO	2-Sep	-118
3	Release fabric PO	7-Sep	-113
4	Release Accessories PO	7-Sep	-113
5	Bulk fabric app.(Quality)	7-Sep	-113
6	Lap dip app.	10-Sep	-110
7	Measurement app.	15-Sep	-105
8	level app.	20-Sep	-100
9	Booking of fabric	20-Sep	-100
10	Bulk fabric (FML)	25-Sep	-65
11	Fabric in house	5-Oct	-55
12	Bulk fabric app.(for shade)	6-Oct	-54
13	Send accessories for test	10-Oct	50
14	Accessories in house	12-Oct	-48
15	PP meeting with supplier	15-Oct	-45
16	Cutting	15-Oct	-45
17	Sewing	18-Oct	-42
18	Gold seals app.	5-Nov	-25
19	test result send	15-Nov	-16
20	Pre-shipment inspection	28-Nov	-3
21	Goods Ex-factory	1-Dec	0

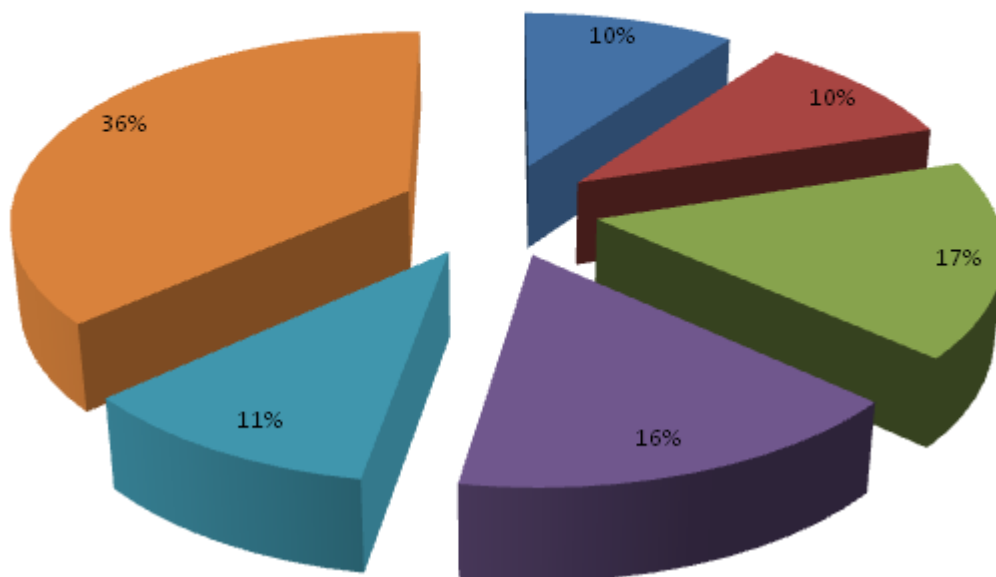
Time and Action Plan (TNA)

Necessity of TNA in Apparel Industry:

1. It helps a smart merchandiser to make out the critical tasks in an industry.
2. It is an essential element for a smooth shipment order.
3. It is essential for timely shipment an export order
4. It helps proper the execution process of export order.
5. It provides the idea about the position of running order.
6. It helps to optimize the factory inventory.
7. It gives the apparent plan about the Export order.
8. It is useful to know the status of the order processing at different level in the apparel industry.
9. It enhances the factory inventory management.
10. It improves efficiency due to proper time schedule.
11. It enhances productivity as a result, also improve a company profit.

Basic time require for an order

■ Order analysis ■ Costing ■ Fabric & accessories booking ■ sampling ■ Cutting ■ Sewing



Basic Time Required for an Order

Individual Activity:

- *Identify time and action plan for apparel merchandising.*
- *Make a Time and Action Plan.*

**SELF-CHECK QUIZ 5.3**

Write the correct answer of the following:

1. What is the elaboration of TNA?
2. What is TNA plan or calendar?
3. What is the necessity of TNA calendar?

JOB SHEET 6

PRACTICAL DEMONSTRATION	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Apparel Merchandising
Task:	Make a Time and Action Plan
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
<p>Read and understand the directions carefully:</p> <ul style="list-style-type: none"> this practical demonstration is based on the performance criteria from all or some of the units of competency in Apparel Merchandising this assessment activity will be used to measure your underpinning skills you will have fifteen (15) minutes to familiarise yourself with the given situation you have two (1) hour to complete this output (printed output of a time and action plan) 	
Procedure:	
<ul style="list-style-type: none"> observe and wear personal protective equipment (PPE) as required for the task to be performed read the specification information provided collect all materials needed to complete the task perform the task within the given time observe and follow all health and safety (OHS) requirements at all times 	
Job Specification Information:	
<ol style="list-style-type: none"> 1. Collect required information for the job. 2. Given the scenario and information related to the time and action plan, develop a comprehensive plan. 3. Encode your time and action plan in the computer provided to you. 4. Save the TNA in your new created folder named "Apparel merchandising", print the TNA and submit to your assessor. 	
Diagram/Drawing:	
<p>Assumption: 20 000 pieces of casual shirt, made out of 95% cotton and 5% polyester, plain woven solid dyed fabric, with embroidery logo on it. Delivery date is 31st of October 2018, shipment at U.K. The lead time is 90 days.</p>	
Resources Required:	
Tools:	N/A
Equipment:	Computer, printer
Machinery:	N/A
Materials:	Writing material, Ink, Paper (for printing)



REVIEW OF COMPETENCY

Final Checklist (for the performance criteria of the module applying the methods of order follow up proceed)		
Performance Criteria	Yes	No
1. Methods of order follow up are interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
2. Approvals of samples at different stages of order execution are obtained.	<input type="checkbox"/>	<input type="checkbox"/>
3. All information of approved samples is collected, recorded and maintained as per company guidelines.	<input type="checkbox"/>	<input type="checkbox"/>
4. Suppliers evaluation process is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
5. Order follow up chart is prepared.	<input type="checkbox"/>	<input type="checkbox"/>
6. Supplier evaluation chart is applied.	<input type="checkbox"/>	<input type="checkbox"/>
7. Types of TNA plan is interpreted on basis lead time.	<input type="checkbox"/>	<input type="checkbox"/>
8. TNA plan of order is prepared.	<input type="checkbox"/>	<input type="checkbox"/>
9. TNA is applied.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 5.1

1. Follow up is to monitor, control, and finding problems and work on solution. This process is mandatory for merchandiser to co-ordinate among the production unit. Proper follow up process helps to meet dead line and increase business.

To develop an effective lead follow-up process in merchandising, it is important to first understand what the primary obstacle that stands among the people. The aspect of the obstacle can be different, and it requires to take measure them to overcome.

2. The purpose of follow up process
 1. Reduction on distance of man and materials
 2. Avoid waiting time & unnecessary delays
 3. Reduce cycle time
3. Effective follow up process in merchandising
 1. Work measurement / time study
 2. Recurring reminders
 3. E-mail attachment
 4. Zooming & going to bottom line
 5. Review
4. There are mainly eight types of sample needed for completing a garment order. Those are-
 1. Proto sample
 2. Fit sample
 3. Size set sample
 4. Counter sample
 5. Salesman sample (SMS)
 6. Pre-production sample (PPS)
 7. Top over production sample (TOP)
 8. Shipment sample
5. A standard merchandising file should contain following items:

Check list

Cost breakdown

Master LC

PI, BTB LC

Technical sheet including measurement sheet

PO (Purchase/Production Order) sheet with colour and size break down

Sample comments sheets (sample approval & comments received from buyer)

Fabric colour/shade approval (Lab dip/fabric swatches/mail).

Approved trim card (approved sample of trims such as main label, care label, hang tag, zipper, button, lace, sewing thread, etc.)

Approved embroidery/print strike off (if any)

Printed copy of important mails received from and sent to buyer

Copy of fabric, yarn & accessories' work order

Inventory reports

Minutes of the pre-production meeting

Printed copy of Time and Action plan prepared by production planning department

Packing List

ANSWER KEY 5.2

1. Supplier evaluation is a term used in business and refers to the process of evaluating and approving potential suppliers by quantitative assessment. The purpose of supplier evaluation is to ensure a portfolio of best in class suppliers is available for use. The main objective of the supplier evaluation process is to reduce purchase risk and maximize the overall value of the purchaser.
2. a. Delivery b. Quality c. Price
3. Key performance indicators (KPI) for supplier's evaluation:
 - Quality
 - Price and financial issues
 - Logistics
 - Customer relationship
 - Continuous improvement

ANSWER KEY 5.3

1. The critical path or TNA is a proper collaboration of Time and action.
2. Time and Action Plan (TNA):

The critical path or TNA is a proper collaboration of Time and action. In an apparel industry, to execute an export order, need to regular evaluation of production activates with the help of times. This regular evaluation is called Critical Path Method or Time and action plan or calendar. This is also known as TNA. By this evaluation, a merchandiser can easily know the present situation of the order. In the case of export order, we all know that, buyer mention lead time with order sheet. According to this lead time, a merchandiser makes Critical path. This method helps to make sure an order delivery within lead time.

3. Necessity of TNA in Apparel Industry:
 1. It helps a smart merchandiser to make out the critical tasks in an industry.
 2. It is an essential element for a smooth shipment order.
 3. It is essential for timely shipment an export order
 4. It helps proper the execution process of export order.
 5. It provides the idea about the position of running order.
 6. It helps to optimize the factory inventory.
 7. It gives the apparent plan about the Export order.
 8. It is useful to know the status of the order processing at different level in the apparel industry.
 9. It enhances the factory inventory management.
 10. It improves efficiency due to proper time schedule.
 11. It enhances productivity as a result, also improve a company profit.

Module 6: Interpreting the process of commercial and banking activities



MODULE CONTENT

Module Descriptor:

This module covers the skills, knowledge and attitudes to interpreting the process of commercial and banking activities, which includes the tasks of processing the commercial and banking requirements, performing the procedures for letter of credit (L/C) and documentation for payment. It also includes information sheets, job sheets, self-checking, answer keys and assessment plan.

Nominal Duration:

40 hours



LEARNING OUTCOMES:

Upon completion of the module, the trainee should be able to:

- 6.1 Process the commercial and banking requirements.
- 6.2 Perform the procedures for letter of credit (L/C).
- 6.3 Perform documentation for payment.



PERFORMANCE CRITERIA:

- 1. Legal requirement for apparel business is interpreted.
- 2. Commercial documentation is performed.
- 3. International commercial terms (INTERCOMS) is interpreted.
- 4. Banking requirements for apparel business are identified.
- 5. Banking requirements and procedures are finalized.
- 6. Purpose of letter of credit (L/C) is recognized.
- 7. Different types of letter of credits are interpreted.
- 8. L/C procedures are followed.
- 9. L/C documentation are prepared and executed.
- 10. Purpose of payment documentation is interpreted.
- 11. Payment documentation are identified.
- 12. Payment documentations are prepared.



Learning Outcome 6.1 – Process the Commercial and Banking Requirements



Contents:

- legal requirements for apparel business.
- INCOTERMS.
- Banking requirements for apparel business.



Assessment criteria:

1. Legal requirement for apparel business is interpreted.
2. Commercial documentation is performed.
3. International commercial terms (INTERCOMS) is identified.
4. Banking requirements for apparel business are identified.
5. Banking requirements and procedures are finalized.



Resources required:

Students/trainees must be provided with the following resources:

- Stationery, calculator, learning manuals and banking papers



LEARNING ACTIVITY 6.1

Learning Activity	Resources/Special Instructions/References
Identifying legal requirements and banking requirements for apparel business	<ul style="list-style-type: none">▪ Information Sheet: 6.1▪ Self-Check Quiz: 6.1▪ Answer Key: 6.1



INFORMATION SHEET 6.1

Learning Objective: to Identify legal requirements and banking requirements for apparel business.

Documents required for Export:

Trade License:

This license is used for business permission. It is issued by City Corporation or Poroshova.

Bank current account:

This account will be any scheduled commercial bank.

TIN (Tax Identification Number) certificate:

It is issued by NBR (National Board of Revenue).

Membership of BGMEA or BKMEA or DCCI or BGBA:

This membership which protect from any kind of accident such as conflict between any industry.

Note:

BGMEA = Bangladesh Garment Manufacturers & Exporters Association.

BKMEA = Bangladesh Knitwear Manufacturers & Exporters Association.

DCCI = Dhaka Chamber of Commerce & Industry.

BGBA = Bangladesh Garment Buying House Association.

ERC (Export Registration Certificate):

It is issued by office of the controller of export & import.

VRC (Vat Registration Certificate):

It is issued by customs. It does not need to renew.

EXP (Export Permission):

It is issued by any scheduled commercial bank. For each order this EXP is issued separately.

Memorandum of association:

It is a document that is issued by RJSC (Registered of Joint Stock Companies and Firms) which indicates the partnership specially share percentage, profit percentage and any kind of partnership details in case of limited company.

Certification of incorporation:

It is issued by RJSC (Registered of Joint Stock Companies and Firms) include member details.

Note:

1-5 and 7 all points are renewing every year.

Documents required for Import:

Trade License:

This license is used for business permission. It is issued by City Corporation or Poroshova.

Bank current account:

This account will be any scheduled commercial bank.

TIN (Tax Identification Number) certificate:

It is issued by NBR (National Board of Revenue).

Membership of BGMEA or BKMEA or DCCI or BGBA:

This membership which protect from any kind of accident such as conflict between any industry.

Note:

BGMEA = Bangladesh Garment Manufacturers & Exporters Association.

BKMEA = Bangladesh Knitwear Manufacturers & Exporters Association.

DCCI = Dhaka Chamber of Commerce & Industry.

BGBA = Bangladesh Garment Buying House Association.

IRC (Import Registration Certificate):

It is issued by office of the controller of export & import.

VRC (Vat Registration Certificate):

It is issued by customs. It does not need to renew.

IMP (Import Permission):

It is issued by any scheduled commercial bank. For each order this EXP is issued separately.

Memorandum of association:

It is a document that is issued by RJSC (Registered of Joint Stock Companies and Firms) which indicates the partnership specially share percentage, profit percentage and any kind of partnership details in case of limited company.

- **Certification of incorporation:**

It is issued by RJSC (Registered Joint Stock Company) include member details.

Note:

1-5 and 7 all points are renewing every year.

Garment Export Process:

Normally the documents which are to be submitted by a C & F to the customs authority for exporting goods are called export documents. This export process is same in almost all countries with slight variation. I hope this post helps you in getting a basic training on how to export various products.

When garment manufacturers or exporters of garment buying house want to garment goods to other countries they need to prepare export documentation. For exporting apparel goods to the buyer's country normally following documentation are required.

Individual Activity:

- *Identify legal requirements and banking requirements for apparel business.*
- *Apply garment export process.*

**SELF-CHECK QUIZ 6.1**

Write the correct answer for the following questions.

1. What are the documents required for garments export? (any five)
2. What is the elaboration of TIN?
3. Which organization issuing EXP (export permission)?



Learning Outcome 6.2 - Perform the Procedures for Letter of Credit (L/C)



Contents:

- Letter of credit (L/C).
- L/C procedures and followed.



Assessment criteria:

1. Purpose of letter of credit (L/C) is recognized.
2. Different types of letter of credit are interpreted.
3. L/C procedures are followed.
4. L/C documentation are prepared and executed.



Resources required:

Students/trainees must be provided with the following resources:

- Letter of credit (L/C), calculator, measuring chart and measuring device and approved sample



LEARNING ACTIVITY 6.2

Learning Activity	Resources/Special Instructions/References
Identify different types letter of credit (L/C).	<ul style="list-style-type: none">▪ Information Sheet: 6.2▪ Self-Check Quiz: 6.2▪ Answer Key: 6.2



INFORMATION SHEET 6.2

Learning Objective: to identify different types letter of credit (L/C).

Different types of Payment methods in Garments Trade:

L/C (Letter of Credit):

A guarantee letter of payment. This letter ensures that seller will get his payment after delivery of the goods.

Types of L/Ca)

- L/C at sight: In case of L/C at sight after delivery of the goods and documents seller will get his payment instantly.
- Deferred at sight: In case of deferred at sight after delivery of the goods and documents seller will not get his payment instantly. Such as-
 - ✓ L/C at 30 days deferred
 - ✓ L/C at 45 days deferred
 - ✓ L/C at 60 days deferred
 - ✓ L/C at 90 days deferred
 - ✓ L/C at 120 days deferred
 - ✓ L/C at 180 days deferred

T/T (Telegraphic Transfer):

T/T means Cash Taka. When order quantity is very small and need urgent delivery, in that case, buyer gives purchase contract instead of L/C and sends money to seller bank by T/T. After getting money, the seller sends the goods to buyer. Now it is not use.

Types of T/Ta

Open T/T: Buyer will pay open either 100% or 70% or 50% or 30%.

Conditional T/T: Buyer will pay advance but cannot money without showing documents.

D/P (Documents against payment): Buyer gives order by sales contract instead of L/C but it is risky method. After delivery of the goods and documents seller will not get his payment guaranteed.

D/A (Documents against acceptance): This is the riskiest method. After delivery of the good send documents buyer will delay the payment.

Individual Activity:

- *Identify different types payment methods in garments.*
- *Identify types of letter of credit (L.C).*



SELF-CHECK QUIZ 6.2

Write the correct answer for the following questions.

1. What are the payment methods exist in garments trade?
2. What is Telegraphic Transfer (TT)?
3. What is L/C?
4. What are the types of L/C?



Learning Outcome 6.3 – Perform Documentation for Payment



Contents:

- Payment documentation.



Assessment criteria:

1. Purpose of payment documentation is interpreted.
2. Payment documentation are identified.
3. Payment documents are prepared.



Resources required:

Students/trainees must be provided with the following resources:

- Payment documentation, calculator and sample/product



LEARNING ACTIVITY 6.3

Learning Activity	Resources/Special Instructions/References
Identify payment documentation	<ul style="list-style-type: none">▪ Information Sheet: 6.3▪ Self-Check Quiz: 6.3▪ Answer Key: 6.3



INFORMATION SHEET 6.3

Learning Objective: to Identify payment documentation for apparel merchandising.

Documentation

Exporters should seriously consider having the freight forwarder handle the formidable amount of documentation that exporting requires as forwarders are specialists in this process. The following documents are commonly used in exporting; but which of them are necessary in a particular transaction depends on the requirements of the U.S. government and the government of the importing country.

1. Air freight shipments are handled by air waybills, which can never be made in negotiable form
2. A bill of lading is a contract between the owner of the goods and the carrier (as with domestic shipments). For vessels, there are two types: a straight bill of lading which is non-negotiable and a negotiable or shipper's order bill of lading. The latter can be bought, sold, or traded while the goods are in transit. The customer usually needs an original as proof of ownership to take possession.

It is a major document if the goods are dispatched by sea.

Documents required for Payment:

Commercial invoice:

It is a very important document in readymade garments business which is sent with the goods to the buyer. The invoice includes name & address of importer and exporter, description of goods, price, number of cartons, number of goods in every carton, details of shipment etc. A shipment is not allowed without a commercial invoice.

Packing List:

This is a document that indicates the contents of each individual carton/ package in the container. The packing list includes the cubic measurement of the cartons/package, the weight, the number of cartons/packages, the breakdown of the goods by size/colour/quantity. This document is prepared by the seller or the ship owner, and the buyer can specify which information should be included.

Bill of Landing or Air Way Bill:

Bill of Landing is a document which is issued by the shipping company acknowledging that the goods have been shipped on board or air and undertaking that the goods as received will be delivered to the consignee (Buyer). When the export contract is CIF, then the exporter makes payment of the freight and gets "freight paid" Bill of Landing. On the other hand, if the contract is FOB, the freight has to be paid by the importer. In that case, the shipping company will issue a "freight collect" Bill of Landing.

Certificate of origin:

Certificate of origin is a document that is required in certain nations. It is a signed statement as to the origin of the export item. Certificate of origin are usually signed through a semi-official organization, such as a local chamber of commerce. A certificate may still be required even if the commercial invoice contains the information

Inspection Certificate:

Inspection certificate or IC is required for some of the buyers who are using buying agency or third party to inspect their goods.

Individual Activity:

- *Identify payment documentation.*
- *Prepare payment documents.*

**SELF-CHECK QUIZ 6.3**

Write the correct answer of the following:

1. What are the required documents for payment?
2. What is commercial invoice?
3. What is packing list?
4. What is bill of lading?
5. What is certificate of origin?



REVIEW OF COMPETENCY

Final Checklist <i>(for the performance criteria of the module interpreting the process of commercial and banking activities)</i>		
Performance Criteria	Yes	No
1. Legal requirement for apparel business is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
2. Commercial documentation is performed.	<input type="checkbox"/>	<input type="checkbox"/>
3. International commercial terms (INTERCOMS) is identified.	<input type="checkbox"/>	<input type="checkbox"/>
4. Banking requirements for apparel business are identified.	<input type="checkbox"/>	<input type="checkbox"/>
5. Banking requirements and procedures are finalized.	<input type="checkbox"/>	<input type="checkbox"/>
6. Purpose of letter of credit (L/C) is recognized.	<input type="checkbox"/>	<input type="checkbox"/>
7. Different types of letter of credits are interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
8. L/C procedures are followed.	<input type="checkbox"/>	<input type="checkbox"/>
9. L/C documentation are prepared and executed.	<input type="checkbox"/>	<input type="checkbox"/>
10. Purpose of payment documentation is interpreted.	<input type="checkbox"/>	<input type="checkbox"/>
11. Payment documentation are identified.	<input type="checkbox"/>	<input type="checkbox"/>
12. Payment documents are prepared.	<input type="checkbox"/>	<input type="checkbox"/>

Now I feel ready to undertake my formal competency assessment.

Signed: _____

Date: _____



ANSWER KEYS

ANSWER KEY 6.1

1. Documents required for Export:
 - Trade license
 - Bank current account
 - TIN (Tax Identification Number) certificate
 - Membership of BGMEA or BKMEA or DCCI or BGBA.
2. Tax Identification Number (TIN).
3. It is issued by any scheduled commercial bank. For each order this EXP is issued separately.

ANSWER KEY 6.2

1. Different types of Payment methods in Garments Trade:
 - L/C (Letter of Credit)
 - T/T (Telegraphic Transfer)
 - D/P (Documents against payment)
 - D/A (Documents against acceptance)
2. T/T means Cash Taka. When order quantity is very small and need urgent delivery, in that case, buyer gives purchase contract instead of L/C and sends money to seller bank by T/T. After getting money, the seller sends the goods to buyer. Now it is not use.
3. A guarantee letter of payment. This letter ensures that seller will get his payment after delivery of the goods.
4. Types of L/C:
 - L/C at sight: In case of L/C at sight after delivery of the goods and documents seller will get his payment instantly.
 - Deferred at sight: In case of deferred at sight after delivery of the goods and documents seller will not get his payment instantly. Such as-
 - ✓ L/C at 30 days sight
 - ✓ L/C at 45 days sight
 - ✓ L/C at 60 days sight
 - ✓ L/C at 90 days sight
 - ✓ L/C at 120 days sight
 - ✓ L/C at 180 days sight

ANSWER KEY 6.3

1. Documents required for payment:
 - Commercial invoice
 - Packing list
 - Bill of landing or air way bill
 - Certificate of origin
 - Inspection certificate

2. Commercial invoice:

It is a very important document in readymade garments business which is sent with the goods to the buyer. The invoice includes name & address of importer and exporter, description of goods, price, number of cartons, number of goods in every carton, details of shipment etc. A shipment is not allowed without a commercial invoice.

3. Packing List:

This is a document that indicates the contents of each individual carton/ package in the container. The packing list includes the cubic measurement of the cartons/package, the weight, the number of cartons/packages, the breakdown of the goods by size/colour/quantity. This document is prepared by the seller or the ship owner, and the buyer can specify which information should be included.

4. Bill of Landing or Air Way Bill:

Bill of Landing is a document which is issued by the shipping company acknowledging that the goods have been shipped on board or air and undertaking that the goods as received will be delivered to the consignee (Buyer). When the export contract is CIF, then the exporter makes payment of the freight and gets "freight paid" Bill of Landing. On the other hand, if the contract is FOB, the freight has to be paid by the importer. In that case, the shipping company will issue a "freight collect" Bill of Landing.

5. Certificate of origin:

Certificate of origin is a document that is required in certain nations. It is a signed statement as to the origin of the export item. Certificate of origin are usually signed through a semi-official organization, such as a local chamber of commerce. A certificate may still be required even if the commercial invoice contains the information.