

DRAFT STUDY MATERIAL



STORE KEEPER

(Qualification Pack: Ref. Id. AMH/Q0501)

Sector: Apparel, Made-ups & Home Furnishing

(Grade XI)



PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION

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Preface

Vocational Education is a dynamic and evolving field, and ensuring that every student has access to quality learning materials is of paramount importance. The journey of the PSS Central Institute of Vocational Education (PSSCIVE) toward producing comprehensive and inclusive study material is rigorous and time-consuming, requiring thorough research, expert consultation, and publication by the National Council of Educational Research and Training (NCERT). However, the absence of finalized study material should not impede the educational progress of our students. In response to this necessity, we present the draft study material, a provisional yet comprehensive guide, designed to bridge the gap between teaching and learning, until the official version of the study material is made available by the NCERT. The draft study material provides a structured and accessible set of materials for teachers and students to utilize in the interim period. The content is aligned with the prescribed curriculum to ensure that students remain on track with their learning objectives.

The contents of the modules are curated to provide continuity in education and maintain the momentum of teaching-learning in vocational education. It encompasses essential concepts and skills aligned with the curriculum and educational standards. We extend our gratitude to the academicians, vocational educators, subject matter experts, industry experts, academic consultants, and all other people who contributed their expertise and insights to the creation of the draft study material.

Teachers are encouraged to use the draft modules of the study material as a guide and supplement their teaching with additional resources and activities that cater to their students' unique learning styles and needs. Collaboration and feedback are vital; therefore, we welcome suggestions for improvement, especially by the teachers, in improving upon the content of the study material.

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Deepak Paliwal
(Joint Director)
PSSCIVE, Bhopal

20 June 2024

STUDY MATERIAL DEVELOPMENT COMMITTEE

MEMBERS

Amita Walia Professor, Fabric and Apparel Science, Institute of Home Economics, University of Delhi

Nupur Shrivastava, Assistant Professor, Apparel, Made-Ups and Home Finishing Sector, Department of Home Science and Hospitality Management, PSSICVE, Bhopal

Shivangi Vig, Specialized Resource Person, Delhi Board of School Education, New Delhi

Rachna Mohan, Associate Professor, Fabric and Apparel Science, Institute of Home Economics, University of Delhi

Sabika Raza, Fashion and Textile Expert, Bhopal

Srikant Gadge, Textile Consultant, Nagpur

Shazia Mehtab, Assistant Professor, Clothing and Textiles, Delhi University

Meeta Siddhu, Assistant Professor, Design Department & Freelance Fashion Designer, Symbiosis University, Pune

Sneha Gyanchandani, Freelance Fashion Designer, Bhopal

Nishi Sharma, Guest Faculty Nutan College Bhopal

Harsha Jharia, CAO, LAD college for Women, Nagpur

Member-Coordinator

Pinki Khanna, Professor and Head, Department of Home Science and Hospitality Management, PSSCIVE, Bhopal (M.P.)

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Module 1**Introduction to Store Keeping and Accounting of Material****Module Overview**

Apparel Production or Garment Production means manufacturing of apparel or clothing or garments on a mass level in a factory. Thus apparel production means converting fabrics into apparel or garments in a factory.

Before industrial revolution garments were produced by hand or in home based cottage industry. After industrial revolution, apparel or garment production became mechanized and automated. Slowly technological advancements came and today apparel production is a very systematic, automated and mechanized process. It has different departments and provides employment to a large number of people globally.

Today apparel production is carried out systematically and involves many departments and processes. One such department is Store. Store department is very crucial for any apparel factory as all the raw material required for apparel production such as fabrics, yarns, threads, buttons, trims, labels, poly bags etc. are stored here in order for an uninterrupted and hassle free production process.

Store is looked after by a store keeper or store supervisor. A Store supervisor is also responsible for receiving and issuing material in a store as well as maintenance and preservation of stored material. Thus we can say that a storekeeper is an important part of apparel production chain.

Storekeepers must have good interpersonal and communication skills since they have to deal with people all the time.

They should also be good in accounting and book keeping. Store keeping functions also involve documentation such as purchase order, memos etc.

Thus we can say that a store keeper should be a multi tasker and have an eye for detail also.

Learning Outcomes	
After completing this module, you will be able to:	
<ul style="list-style-type: none"> • Role and responsibility of store keeper • Inspect and check while receiving materials • Inspect and check materials while issuing • Packaging symbols and interpretations • Write letters, memos and mails clearly and legibly 	
Module Structure	
Session-1	Roles and responsibilities of Store Keeper
Session-2	Inspection and checking of material received in store
Session-3	Inspect and check material while issuing
Session-4	Identifying and interpreting different packaging symbols
Session-5	Writing letters, memos and mails clearly and legibly

Session 1: Roles and Responsibilities of Store Keeper

Introduction to apparel production

Apparel means any item of clothing such as shirt, pants, kurta, blouse and so on. It is one of the basic needs of human. Apparel Production is also known as Garment Production and involves converting fabrics into apparels or garments. It is done in a factory and provides employment to large number of people. In fact Textile and apparel companies have been the driving force for many developed countries. They not only provide jobs but raise the standard of living and help in creation of economic wealth. China, Korea, India, Mexico are examples for us to see. Apparel Production is categorized into two broad categories as per target markets:

1. Apparel production for Domestic Market:

Domestic market refers to local market that fulfills the demand of the country.

2. Apparel production for Export Market:

Export market refers the market of countries other than our own country. For example, India exports apparel items, handloom and handicrafts to countries such as USA, UK and Italy etc.. It is a big source of foreign exchange for India.

Earlier apparel items or garments were sewn by hand, then came hand sewing machine and from 18th century onwards apparel production became mechanized and that gave rise to advent of Textile and Apparel industries, readymade garment industries etc.. Apparel production involves designing, cutting, stitching, finishing, packing apparel items as per the buyer's orders. The buyer or buying house can be local/domestic or from export market. It also involves other subsidiary operations such as buying raw material, testing of raw material, storage of items required in apparel production and so on and so forth. Over a period of time the working pattern has seen gradual changes in production processes and other allied activities in industry. The products are produced in factories where workers of different skills are employed to work at designated place. They need to follow the procedures, systems & use tools supplied to them. The cost of the product depends on controlled process with set parameters.

DIFFERENT DEPARTMENTS IN APPAREL PRODUCTION COMPANY / FACTORY:

1. Merchandising Department

Merchandising means to arrange for all the raw material and supplies needed for apparel production and to make products ready for selling. It works in close coordination with marketing and production department.

2. Sampling Department:

It is one of the most important departments in an apparel industry and takes care of preparation of samples for the buyers. The buyer will place the order only after being satisfied from the sample. Thus sample preparation has to be done very carefully.

3. Stores:

The stores department is concerned with receiving, issuing and preservation and maintenance of all the raw material required for uninterrupted and flawless garment production. It stores fabrics, interlinings, fusing, sewing threads, chanks, pins etc.. It is managed by a store keeper or store supervisor.



Fig.:1.1 Store department

4. Cutting Department (or Spreading and Cutting Department):

In this department the fabric is spread on cutting tables prior to cutting. The fabric is spread in layers so that large number of pieces can be cut at one time. Layering of fabrics saves time and labor. After layering and spreading the fabric is cut as per the approved samples and designs.

5. Sewing Department:

Sewing department is responsible for receiving the garment components from cutting section and sewing them sequentially. A large number of sewing machines of different types are arranged in this section or department.

6. Washing Department:

The garments gather dirt, stains etc. during sewing operation. Thus after sewing, the garments are sent to washing department for washing and cleaning.

7. Finishing and Packaging Department:

Finishing department is concerned with finishing of the stitched apparel items. It also involves checking garments for stains and measurements. Spot removal of stains is done specially during finishing. Any loose or left over threads are also cut during finishing process etc.. After this, ironing of the garments is done. After finishing the garments are folded and packed inside polybags with all tags and labels etc. in place.



Fig.:1.2 Finishing and Packaging Department

8. Quality Assurance Department:

It is concerned with checking the quality of final garment as per the buyer's specifications and standards.

9. Maintenance and Housekeeping Department:

This is responsible for maintenance and housekeeping of the premises. It is responsible for the cleanliness, maintenance and general upkeep of the premises.

10. Finance and Accounts Department

This department is responsible for accounting of budgeting, payments and finances of the company. It deals with issues pertaining to payrolls, payment of raw material, loans etc.

11. HR/Admin Department

This department is concerned with hiring and recruitment of employees, performance evaluation, wage and salary administration, policies pertaining to discipline and behavior of employees etc..



Fig.:1.3 Different Departments of An Apparel Manufacturing Unit

A basic apparel production or garment manufacturing flow chart is as follows:

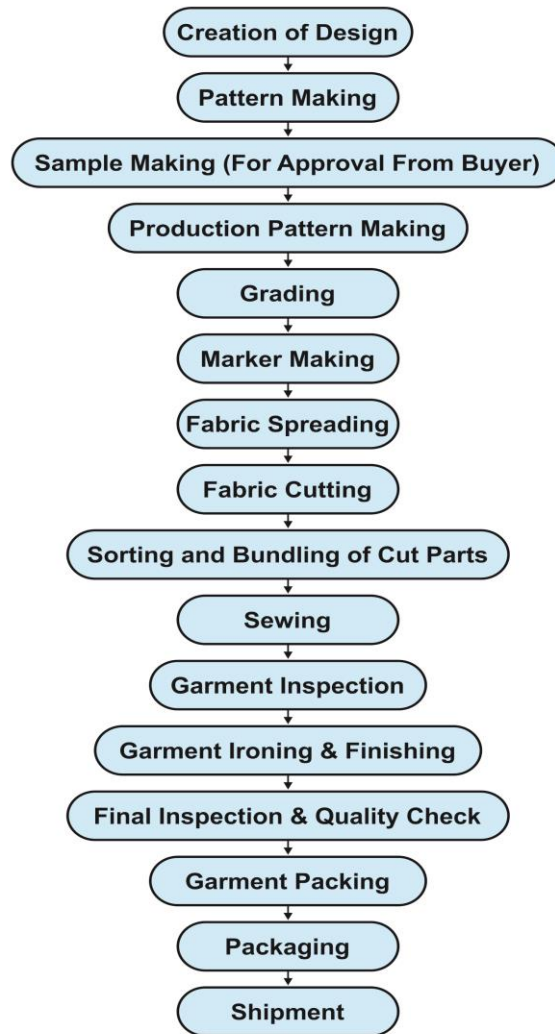


Fig.:1.4 Apparel Production Process

Each step in process of garment manufacturing as per above flowchart is explained as follows:

1. Creation of Design:

Apparel manufacturing starts with creation of design. Design is either sent by the buyer or the designer of the apparel production unit presents his designs to the buyer. The presented design is taken up by the buyer after sample approval and selection. If the design is sent by the buyer, after placing an order buyer shares the product specification sheets with all the necessary details required for production.

2. Pattern Making:

On the basis of specification sheet, patterns of each garment style should be made. It's done both manually and by using computerized method.

3. Fit Sample Making:

The main target of making a fit sample is to follow the detail instructions about that garment style. After making, it is sent to the buyer for approval or any modifications.

4. Production Pattern Making:

For bulk production, allowance added here with net dimension. Production Pattern Making is done by both manually and by using computer.

5. Grading:

While confirming an order, the buyer suggests about the size ratio of that order, so that order should be graded according to the buyer's instruction. Grading is done by manually or by using computer.

6. Marker Making:

A marker is a sheet of paper containing layout of all the pattern pieces to be cut at one time for production. Layout of pattern pieces is an important step for achieving maximum efficiency of marker to minimize fabric wastage. Marker making process can be done both manually and by using computer.

7. Fabric Spreading:

To cut the fabric properly fabric is spread in layer form in certain quantity. Spreading of fabric is done manually or by using computerized spreading machine /method.

8. Fabric Cutting:

Layered Fabrics is cut here according to marker of garments. Fabric Cutting process is done by using manual method or computerized method.

9. Sorting and bundling of cut parts:

The various parts which were cut are sort out and bundles are made to send these easily into the next process of sewing operation . This process is done manually.

10. Sewing:

All the parts of a garment are joined here to make a complete garment. Sewing process is done manually.

11. Garments Inspection:

After completing sewing, inspection should be done here to make fault free garments. Inspection of garments is done majorly by visual examination.

12. Garments Ironing and Finishing:

Here garments are treated by steam for removal of wrinkles or any crush lines; also required finishing should be completed here. This process is done by using manual method.

13. Final Inspection and quality check:

Finally the complete garments are re-inspected here according to the buyer's specification.

14. Garments Packing:

After final inspection, approved garments are packed on the basis of buyers packing instructions.

15. Packaging:

To minimize the damages of garments during transportation, all the garments are packaged in boxes or cartons, containers etc. following buyer's specifications.

16. Shipment:

After completing all the required processes it's finally sent to the buyer.

ROLE OF STORE KEEPER IN APPAREL PRODUCTION PROCESS:

Store department is one of the most crucial departments of apparel production chain as it has all the necessary raw material required for smooth production of apparel items. In a general setup, depending on the size of the production unit, store department is essentially divided into two sections-

1. **Fabric store-** A fabric store is used to store different fabrics which is the major raw material of an apparel production unit. Fabric store keeper must have good knowledge about fabrics and interlinings. He should keep stock based on type of fabric. He must know how to check and inspect quality of received fabric.
2. **Trims store-** A trims store is used to store raw material and spare parts other than fabric that are required in a production unit such as buttons, laces, labels, tags, kimble, kimble gun, threads, needles, machine spares , packing accessories, etc.. A trims store keeper must have knowledge of garmenting.

For small scale production units the above two sections can be a part of one dissolved department that is a store department. The working principle and duties of the store keeper remain unchanged irrespective of the division of the store department.

A store is managed by a store keeper or a store supervisor. The job of store keeper is important from the point of view of better inventory control and thus saving company's revenue, which is only possible if the individual job roles are well defined and trained man power are employed in industry. The apparel industry uses number of items for producing the final product right from simple needle to complex structured fabric. The resources include process fabric, trims, machine parts and spares in large quantities and also of various qualities.

Basically, a store keeper connects to all the departments of an apparel production unit. He acts as a facilitator and serve all the departments. For example he serves following departments in various ways as follows:

- Merchandising department- As soon as store keeper receives material, he informs the concerned merchandiser about receipt and quality.
- Cutting department- The store keeper keeps adequate amount of supplies for cutting department such as blades, marker rolls, chalks, ticket rolls, ticketing machines, spare parts of cutting machines etc.. He also issues the fabric to the cutting department for production.
- Sewing or Production department- Trims, threads, machine spare parts are issued to the production department from the store. A store keeper has to keep minimum inventory to issue the materials as requested by the production department.
- Washing department- For this department, store keeper keeps inventory for finishing chemicals, bleaches, detergents and machine spare parts.
- Finishing and packing department- Packing and packaging material, stationary supplies and machine spare parts are issued to the department from the store.
- Housekeeping- Cleaning agents and equipments are issued from the store to this department.
- Finance/ accounts and HR department- all necessary printed formats, stationary etc.. required in these departments is supplied by the store department.

The services offered by Stores and thus the role of store keeper involves following:

- To make available a balanced and uninterrupted flow of raw materials, components, tools, equipments and any other material needed to meet operational requirements.
- To provide maintenance materials, spare parts and general store

requirements.

- To accept and store scrap and other discarded material as they arise.
- To effectively dispose off the unwanted materials.



Fig.:1.5: Store and Store Keeper

A store keeper plays an important part in the textile and apparel industry irrespective of the scale of production of industry. In this textbook we will learn about every aspect of store department, store keeper and store keeping operations in detail with context to apparel production unit.

Store keeping on every scale of industry works on the basic principles as explained in the text. Job role of the store keeper, store keeping operations and store management in a smaller scale units or industry works on the same principles, the only difference lies in the work culture. Since small scale industries/ units are either remotely organized or unorganized the operation of store lies on same lines as for whole organization.

STORE:

Store department is a very important and crucial part of apparel industry. The main responsibility of store department is to store all the necessary raw material required for apparel production. A well-stocked store department aids in smooth production. Usually a store has following items in its inventory:

- Fabrics
- Trims and Accessories
- Threads
- Interlining

- Labels
- Neck board
- Poly bags
- Stationary
- Hangtags



Fig.:1.6 Store Department

Apart from the above materials, a store has many other items like machine oil, dyes, pigments etc.. In short, a store stocks variety of material. All these material are stored in various types of bins, racks, shelves or containers in a store.

WORKING OF A STORE DEPARTMENT:

An Apparel industry is seasonal and trend based industry, where styles change frequently. It is the duty of the store keeper to acquire all the raw material such as fabric, trims etc. timely. To achieve this goal a store department works in a manner so that there is minimal wastage of resources. The basic working of a store department is as follow-

1. Receiving Fabrics and Material
2. Inventory Management
3. Issuing of Material
4. Maintenance and Preservation of material and stock in store
5. Notifying the Procurement or Purchase Department for restocking



Fig.: 1.7 Raw material and supplies in a store

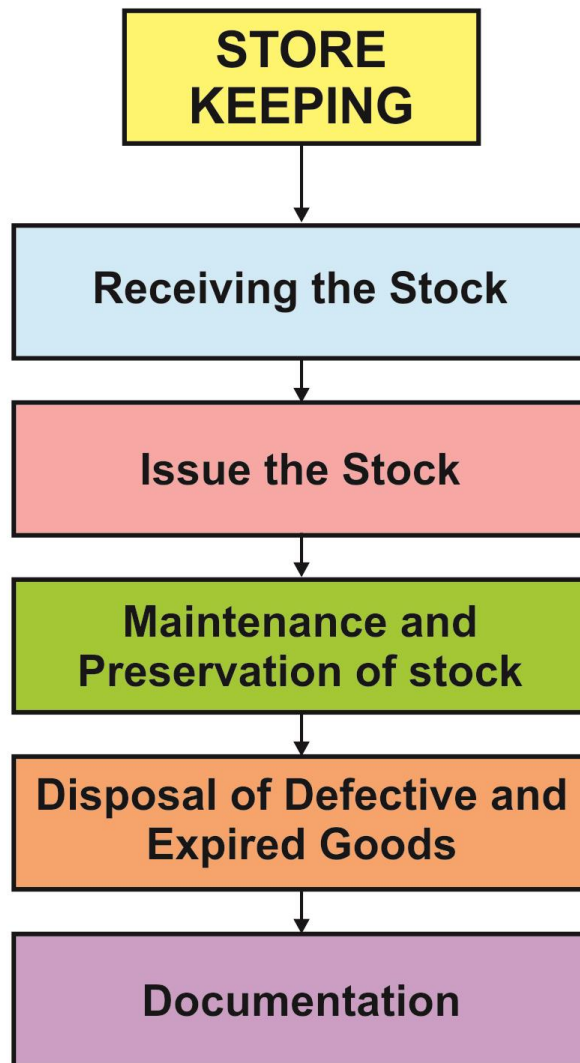


Fig.: 1.8 Functions of store keeping department

PRINCIPLES OF GOOD STORE LOCATION AND LAYOUT:

The store location should be such that unnecessary material handling is avoided. The store department should be located near to the place of work where material is frequently/regularly consumed (generally near production department). The following points are taken in to consideration:

- 1) Economy of transportation
- 2) Proper Ventilation
- 3) Low fire risk

- 4) Safety and security
- 5) Minimization of risk of spoilage and deterioration
- 6) Flexibility for future expansion
- 7) Overall integration of factors

The stores system starts with planning according to the need for materials. It is necessary to forecast with a considerable degree of accuracy. The forecasting is always subjected to periodic review by concerned authority. The efficiency of store management is largely related to optimizing the use of resources so that actual needs can be met in an efficient manner.

Efficiency of stores function is measured on the basis of the number of times the inventories have turned over. The blocking of working capital due to high inventory has to be avoided.

REQUIREMENTS FOR A STOREKEEPER'S JOB:

A store keeper, also known as a store supervisor, is responsible for all the stock in the store, its inventory management, receiving and issuing of material, upkeep of the store and its maintenance. The main requirements for a store keeper's job profile are:

- Organized or punctual
- Good knowledge of fabric and trims
- Basic accountancy skills
- Basic computer skills
- Attention to detail
- Analytical mind with ability to make accurate mathematical computations
- Physical ability to frequently lift and carry material such as cartons, fabric rolls etc.
- Excellent interpersonal and written communication skills

Stores keeper's job function as an element of materials management department & has an interface with many user departments in its daily operations. The basic purpose of stores is to provide uninterrupted supply of resources for manufacturing activities. The stores act as a cushion between purchase and manufacturing on one hand and manufacturing and marketing on the other. Usually the stores function as an inseparable part of all business and non – business concerns, whether they are industrial or service oriented,

public or private, small or large. The task of store keeper relates to safe custody and stocking of materials, their receipts, issues, and accounting. Another function is of efficiently and economically providing the right material at the right time whenever required in the right condition to all user departments.

MAIN FUNCTIONS OF A STORE:

Usually it is said that store keeping doesn't add any value to the product in the normal sense but it is an essential function and just cannot be neglected. At times stores may add time utility or value by preserving scarce material that may be required in future. Store department by proper preservation and storage avoids any depreciation in the value of inventory.

The following are the principal functions of a store:

- To receive raw materials, components, tools, spares, supplies, equipment and other items and maintain account of all items.
- To provide adequate, proper and efficient storage and preservation for all the items.
- Periodically physical checking of all incoming materials as per the delivery challan / invoice and proper maintenance of daily goods receipt register or records.
- Issue materials to the consuming departments against authorized requisitions and account for the same.
- Maintain accurate and up – to – date records of material received, issued, rejected, disposed, and quantity on hand of all the items.
- It is necessary to ensure that all documents relating to receipts and issue are sent to stock control, accounts and other concerned departments.
- Routine stock verification as per approved procedure, to highlight stock accumulation, discrepancies and abnormal consumption and initiate appropriate control action.
- Make trim card and get it approved by concerned merchandiser or personnel. Place the trim card in display unit and issue material after checking and verifying with the trim card.

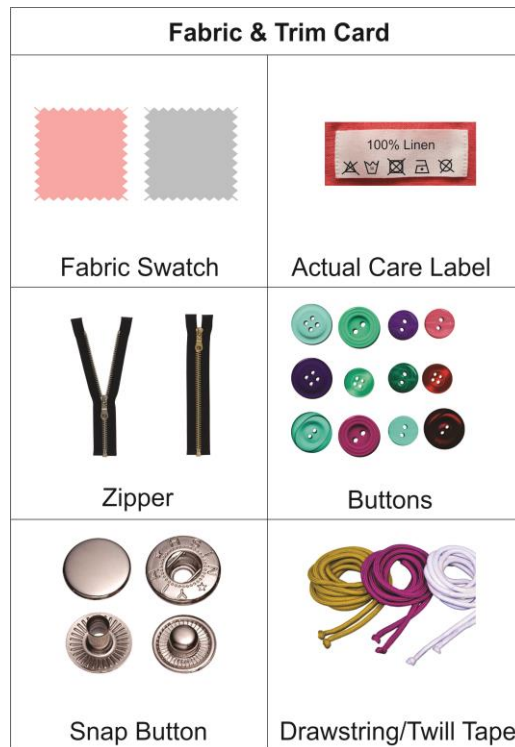


Fig.: 1.9 Trim Card

DUTIES AND RESPONSIBILITIES OF STORE KEEPER:

Store Keeper is the in charge of the store department and also responsible for store control. He must be a skilled person and takes care of the store. He keeps a watch full eye on the movement of the materials with a view to control the materials in the store. He is known as chief-store keeper or store superintendent. Storekeeper has to minimize obsolescence, surplus and scrap through proper codification, standardization, preservation and handling. It is necessary to ensure good housekeeping so as to minimize the need for material handling. If needed he has to accept and store scrap and other discarded materials also.

A store keeper should have technical knowledge and experience in the maintenance of the store. He should have organizing ability and undoubted integrity. Following are the main duties and responsibilities of a store keeper:

1. **Receiving material:** The primary duty of the store keeper is to receive the material from the supplier. At the time of receipt of material, he has to see that the materials have been sent by the supplier on the basis of purchase order.
2. **Arranging materials:** The materials received by the store keeper must be arranged in a proper manner. Bins or racks should be allotted to each and every item.

3. **Handling of material:** Store keeper may also be required to unload, pick and shelve supplies.
4. **Inspection of received material:** Inspect deliveries for damage or discrepancies; report those to accounting for reimbursements and record keeping.
5. **Stock Verification:** He may also be required to take care of other stock-related duties, including returning, packing, pricing, and labeling supplies.
6. **Documentation and Record Keeping:** It is the duty of the store keeper to record the receipt and issue of material in the respective bin card regularly. It will indicate the quantity of stock held by the store every time. For recording, the store keeper maintains store ledger and bin cards. Ensure adequate record keeping and manage all documentation to confirm proper stock levels and maintain inventory control
7. **Issuing of Purchasing Requisition:** When the stock is almost finishing and reaches at ordering level, the store keeper sends requisition for fresh purchase of the required material to the purchase department.
8. **Preservation of the material:** After the receipt of material they are to be preserved properly. It is the duty of the store-keeper to keep the material in store on safe custody. Unless the quality may deteriorate loss of material may be possible.
9. **Disposal of surplus stock and damaged, outdated goods:** Store keeper is also supposed to rotate stock and coordinate the disposal of surplus items as well as damaged and outdated stock.
10. **Coordination with supplier:** Coordinate the handling of freight, the movement of equipment, and necessary minor repairs
11. **Communication for transportation:** Oversees mail handling and courier service.
12. **Selection and Training of Subordinates and Support Staff for Store:** May participate in the selection, training and supervision of subordinates, when applicable.
Performs related and peripheral site-specific duties as required.

Activities

ACTIVITY 1:

Make a power point presentation on importance of store in an apparel production company and raw material generally stocked in the store of any apparel company. Use lot of pictures to support your presentation. Present in the class.

Materials Required:

1. Computer

2. Pens and Markers
3. Pencil
4. Eraser
5. Sharpener
6. Ruler

Procedure:

1. Plan a visit to any nearby apparel factory and observe working of different departments in the unit.
2. Collect information on various departments, their working and the processes followed in that factory.
3. Prepare a report on various departments and their functions in apparel industry.
4. With the help of the collected information make a power point presentation on importance of store in an apparel production unit.

Activity 2:

Write a sample email for informing the purchase department for buying to replenish stock of zippers, buttons and sewing threads required for denim trouser order for export market.

Materials Required:

1. Practical File
2. Chart paper
3. Pens and Markers
4. Pencil
5. Eraser
6. Sharpener
7. Ruler

Procedure:

1. Learn about email writing and formal format for email.
2. Draft an email.
3. Describe the precautions and guidelines to be kept in mind for writing effective mails.
4. Write final email in your practical file.

Activity 3:**Materials Required:**

1. Computer
2. Pens and Markers
3. Pencil
4. Eraser
5. Sharpener
6. Ruler

Procedure-

1. Prepare a power point presentation on duties and responsibilities of a store keeper.
2. Choose proper heading, layout and font size for the presentation.
3. Present it in the class along with oral explanation.

Check Your Progress**A. Fill in the Blanks:**

1. Apparel Production is also known as _____ Production.
2. _____ is a very important and crucial part of apparel industry.
3. A well-stocked store department aids in _____ .
4. The store department should be located near to the _____.
5. Usually a store has _____, _____ and _____ in its inventory.

B. Briefly (2-3 lines) answer the following questions:

1. What do you mean by apparel production?
2. Write any three job requirements for a store keeper's job.
3. Why is store department a crucial part of apparel production chain?

Session 2: Inspection and Checking of Material Received in Store

The resources which are received in stores include raw material such as fabrics, buttons, yarns and threads, chemicals, spares parts of machines and accessories required for production. These material are received from various vendors and suppliers. Whenever any apparel production company places an order for fabrics, trims, yarns etc. to its vendors, a copy of its purchase order is sent to the store. This is done so that the store department can make necessary arrangement for the receipt, unloading and storage of the material.

On receiving the material, the store department and store keeper tallies and verifies the quantity and quality against purchase order and dispatch form. The supply or the material is also physically verified for size, quality, quantity and appearance. Receiving material is the main duty of a store and has to be performed very carefully.

It involves a series of operations like unloading of material, its checking and inspection, related documentation etc.



Fig.: 1.10 Inspection and checking while receiving stock

PROCEDURE FOLLOWED FOR INSPECTION AND CHECKING OF RECEIVED MATERIAL:**NEED FOR INSPECTION:**

Inspection and approval of materials used is an important aspect of production process as it affects the quality of the final product. The word quality has numerous meanings. The most appropriate meaning of quality in the present context is “CONFORMANCE TO ORDERED SPECIFICATION & FITNESS FOR USE”, whether for products or services. The received items have to be inspected to avoid faulty stock, expired or outdated stock, inferior quality etc.

Types of Inspection or Checks:

Depending upon the nature, criticality & value of items, inspection is conducted at stores after receipt. There are several ways of carrying out inspection. The following checks are conducted depending on the nature of item:

1. Visual check

It is a very basic or rudimentary method of inspection and involves visually inspecting the stock. The accepted materials are marked by stamping/punching/stickers/ seal/tag etc. as a mark of acceptance. On receipt of test results, and verification according to specification, clearance is given to store for the material.

2. Physical Check

The goods that are received are checked for quality and quantity. This is done by checking the goods against the purchase order. The number of packets and number of fabric rolls are also checked.

3. By feel

Textile fabrics, interlining etc. are also inspected or checked by touching them and checking their texture etc.

4. By odor

Chemicals, powders, oils etc. are checked for any leakages by this method.

5. Checking of bulk supply

Supply of material is checked by comparing the specimen samples given by the suppliers during negotiations for awarding contracts.

In addition to above methods few other methods of inspection such as by actual testing by metrological equipment, statistical quality control and related concepts such as acceptable quality level (AQL) may also be used for inspection.

Generally, material received by nominated supplier already has test reports but many a times buyer nominates third party laboratory for quality checks. It is the duty of the store keeper to send samples to lab or to concerned merchants as per the policy of the organization.

PROCEDURE OF INSPECTION:

- Receipt of the challans and invoices of the material
- Unloading of the material
- Making a physical survey regarding the number of packs, physical conditions etc.
- Opening the packs, marking them and making physical verification of the quantity received. This verification is to be made with the challan and the purchase order
- Informing the purchase department, supplier and concerned authority if any disputed goods or short materials found
- Make a quality test of the materials. In case of fabric; GSM, thread count, colour fastness, shrinkage test must be done before issuing to other departments, if fabric testing machine is available, the store keeper must check rolls before stacking the fabric in the store. Also, trims must be inspected and checked keeping in mind various parameters such as wet rubbing, dry rubbing, washing, colour fastness etc.. In case of rejection, rejected material must be kept separately with tag of rejection and reason.
- Sign the challan and return a copy to the supplier as the acknowledgment of receipt
- After all the above have been compiled, the receiving department will prepare the “Goods Received Note” in “Five Copies”. Original copy to be retained, the others are to be sent to the purchasing department, the accounts department, the storekeeper and the department making the purchase requisition.
- Finally, on the basis of “Goods Received Note” entries are made in Store Ledger.

Proforma or Invoice and Order

An pro forma invoice is a list of material and its price. It also has many other details like name of the supplier or vendor, quantity etc. The term pro forma (Latin for “as a matter of form” or “for the sake of form”) is often used to

describe a practice or document that provides minimum requirements, conforms to a norm. Pro forma order/ invoice is a document that gives detailed information regarding the particulars of the goods and/or services yet to be delivered to the buyer/customer. It includes estimated prices of the goods and/or services. It also includes the estimate of any commissions, applicable taxes, weight of shipment, shipping costs etc.

It is issued by a supplier/retailer to an enquiring buyer/customer. It is a commitment on part of the seller to deliver the goods or services as notified to the buyer for a specific price. After verifying the supplies with pro forma, a final invoice is generated for the payment of supplies.

INVOICE				
COMPANY NAME				
STREET ADDRESS			DATE-.....	
CITY, PIN CODE			INVOICE-.....	
CONTACT NO, WEBSITE AND E-MAIL				
BILL TO-			SHIP TO-	
A&C COMPANY			NAME	
ADDRESS			ADDRESS	
CITY, PIN NO.			CITY, PIN NO.	
COUNTRY			COUNTRY	
PRODUCT ID	DESCRIPTION	QUANTITY	UNIT PRICE	LINE TOTAL
U001	FABRIC	10 METER	200	2000
U009	BUTTONS	30	5	150
U0056	CHAIN	20	7	140
U0034	LINNING	25 METER	28	700
SUBTOTAL				2,990
PST 6.50%				194.35
GST 3.20%				95.68
SHIPPING				
TOTAL				3,280.03

Fig.: 1.11 Sample of Invoice

The Invoice should include following information:

- 1) Invoice Number
- 2) Name and Address of Seller/Supplier
- 3) Name and Address of Buyer/ Customer
- 4) Description of the order in terms of goods, services involved.
- 5) Detailed information regarding costs.
- 6) Validity of the invoice

- 7) Proposed terms of Sale
- 8) Proposed terms of Payment
- 9) Certifications required by regulatory bodies
- 10) Signature, Stamp and Seal of the supplier company

STORES / RECEIPT INSPECTION:

Majority of items are inspected accepted based on visual examination and verification of documents. Materials in the receiving bay are segregated into several categories, based on their quality control status and destination

In the stores the items are received in categories as:

- 1) Awaiting inspection – This category consists of material that has been received and is awaiting inspection before being moved into stock.
- 2) Acceptance upon certification – This category consists of material that may be accepted pending certification.
- 3) Return – This category contains materials that are defective and will be returned to the supplier for credit or replacement.

TALLYING THE RECEIVED MATERIAL:

The word tally means to count or to keep a record. Tally is an important part of store keeping operations. It is very important to check and tally the received consignment or material to avoid poor quality, less quantity, faulty material, wrong material etc. The tally is done by checking each and every item of the consignment against the purchase order. It is physically verified regarding quantity, size etc. If required, material can be unpacked for physical verification.

The material is received and stored in the store only after completing its tally. This helps in identifying if the goods / material is in broken/ damaged condition, or is inferior than the standards.

The quantity of material in the store at any time should tally with the records in the store ledger.



Fig.: 1.12 Tally of Material in a Store

Activities**ACTIVITY 1:**

Make a poster on Types of inspection methods followed in a store.

Materials Required:

1. A4 size papers
2. Pens and markers
3. Pencil
4. Eraser
5. Sharpener
6. Ruler

Procedure:

1. Read about various inspection methods.
2. Write in the poster in neat and legible handwriting.

ACTIVITY 2:

Prepare an invoice of material received in any imaginary store of an apparel factory with all necessary details. Paste it in your file and write a short note on it.

Materials Required:

1. A4 size papers
2. Pens and markers
3. Pencil
4. Eraser
5. Sharpener
6. Ruler

Procedure:

1. Observe a few invoice or proforma.
2. Create invoice of at least 12 items received in any store of an imaginary apparel company.
3. Paste it in your file.

4. Write a short note on its contents and importance.

Check Your Progress

A. Write true or false:

1. Store department receives material from various vendors and suppliers. (True)
2. Tally is not an important part of store keeping operations. (False)
3. Visual check is a very basic or rudimentary method of inspection. (True)
4. Inspection and approval of materials is an important aspect of production process. (True)

B. Answer the given questions:

1. What do you mean by tally of the received material?
2. Why is inspection of goods necessary at the time of receiving the material in the stores?
3. What is an invoice? Why is it important?

Session 3: Inspect and Check Material While Issuing

A store not only receives and stores the goods, it also issues the raw material or goods to various departments such as cutting department, stitching department, finishing and packing departments etc. In fact it is one of the main duty or function of store, is to issue the stored raw material to concerned department. There is always some department in need of material and issuing of material from store is a routine affair. Every organization, has system to run the production. During Pre-production (PP) meeting, the merchandiser and all production HODs explain their requirements. Apart from this meeting, the store keeper also receives requisitions slips and production plan.

For example how much fabric he has to issue to cutting department. The amount of thread rolls, labels, washcare labels, mobiline tapes, other accessories such as buttons, collar bones, laces, threads, etc. is conveyed to the store department through the production plan. Store keeper cannot issue extra material other than that specified in production plan.

In case of emergencies or some defective material, the department must specify and ask the store department for extra supplies. For example-The cutting department may need more fabric, the finishing department might require labels and tags. Since all material is stored centrally in the store so it has to be issued from the store. Raw material costs money, so it has to be issued with utmost care and in a systematic fashion.

Written records have to be maintained for issue of the material and it cannot be issued without a written request from the concerned department. The request for issue of material is done on a material requisition note. After issuing the material the balance has to be refreshed in the store ledger. If some material is in the finishing stage then requisition of fresh purchase has to be sent to the purchase department. Thus issue of material involved a lot of documentation also. Inspection and checking of material is also done while issuing like it is done while receiving.

MATERIAL REQUISITION NOTE/SLIP

A store keeper can issue the material only on the basis of material requisition form. The request for issue of materials is invariably made in written form or documents. It is the primary responsibility of the storekeeper to verify all such documents for proper authorization before the materials are issued.

MATERIAL STOCK REQUEST FORM

Company/Organisation.....
 Customer ID (if available).....
 Requested By.....
 Contact Information (e-mail, Phone, Fax).....

ITEM ID	ITEM DISCRIPTION	QTY TO STOCK	REASON FOR STOCKING

FOR INTERNAL USE ONLY

ITEM ID..... ITEM DESCRIPTION.....
 MINIMUM..... MAXIMUM.....
 LOCATION.....
 APPROVED BY..... DATE.....

NAME-.....
 ADDRESS-.....
 CONTACT NO.-.....
 FAX-.....
 E-MAIL-.....

Fig.: 1.13 Material Requisition Form

It is the voucher issued by user authority as regards issue of material for use in the departments in standard pro forma. The requisition notes are made out in triplicate.

- The copies are distributed in the following manner
- One copy for the store-keeper
- One copy for the Purchase Department
- One Copy for the Department requiring it
-

For store management's efficient operation three factors are very crucial for efficient issuing of correct material. These are as follows and should be necessarily considered:

- (a) Authorization of issues
- (b) Identification of requirements
- (c) Timing of issues

(a) Authorization of Issues: Only people authorized by the management or officers can get the material issued from the store. The stores should have clear directives about whom to issue the material.

The inventory needs money to purchase, for the issue of materials there must be some authorization by responsible officers nominated by the management. Authorization is given clearly in the form of a directive circular by higher management. The objective is to avoid misunderstanding and unpleasantness which may arise due to the refusal by the storekeeper to issue materials in certain conditions.

The request for issue of materials has to be made in written form or documents for proper authorization. It is the primary responsibility of the storekeeper to verify all such documents for proper authorization before the materials are issued.

(b) Identification of Requirement: While issuing the material, details about materials such as part number, code number, etc. are noted to ensure the supply without delay and unnecessary correspondence. The material requisition slip should have clear details about the material required. Details about material requirements such as style number, code number etc. should be correctly filled to ensure that correct material is supplied and that too without delay and unnecessary correspondence. Sometimes the description in the material requisition form does not match with the description of the goods in store. In such conditions the storekeeper should use their intelligence and experience to identify the correct item and suggest necessary changes in the form to the indenter. This will help in issuing correct material.

(c) Timing of Issue: The store keeper usually ensures that the certain fixed timing for issuing material to indenting departments in normal working hours. It is his discretion to issue material in specific situation like machine break down or emergency besides normal routine hours. The issue of material should be done on fixed timing and each department should be given a separate time schedule for issue of material from store. It should be ensured by the store keeper that all the departments are fully aware about the respective timings for issue of material.

VARIOUS METHODS FOR ISSUE OF MATERIALS:

Issues of materials from stores to user department must be efficiently handled so that the production/operations in department does not suffer.

1. Issue on request:

This is the most normal way of issuing method wherein the user department normally sends a man with indent / requisition and collects the materials from stores.

2. Issue per schedule:

In production department, the requisition for issue of material, maintaining department stock of important material are well periodical activity. The time and weekly schedule is well planned. The stores department will keep the material ready and issue the materials as per schedule. This is done in order to prevent any loss of man-hour caused by sudden shortage of material in the production department.

3. Replacement issue:

In most of industries a large number of machines are used and to maintain them considerable requirements of tools and gauges is necessary. When a fresh issue of spares has to be made for machine maintenance, engineering department may be asked to return the old ones to the stores and obtain new one for replacement. The storekeeper has to maintain proper records of such replacement.

5. Stock records:

In a store-house where large number of items are stored and issued as per requirement of user department. A large number of transactions takes place for which records are to be maintained properly. This makes it possible for the storekeeper to make an entry of all transactions.

WRITTEN INSTRUCTIONS RELATED TO THE PROCESS OF ISSUING:

The process of issuing material from the store department must be properly recorded and should not be done without an official written request or approval. It is the duty of the storekeeper to check that the requisition / indent has been duly authorized by an officer of the user department nominated for the purpose. Signature of the authorized officer and their designations should be available with the store staff to verify the authenticity and genuineness of the requisition. The storekeeper must ensure a smooth production cycle without any delays. Therefore, it is advisable to issue the material in prefixed time period to meet the convenience of production department and prevent any losses due to unavailability of material between the production cycles.

The storekeeper maintains a store register for entries of all the materials issued. While issuing the material, the storekeeper should record details for the materials issued, the quantity of material, date, purpose and department to which the material along with the name and signature of the person from

the department who collects the material for record purposes. Apart from physical registers, entries can be made in excel, tally, or any other software for easy access and inventory control and records.

Activities

Activity 1:

Make a sample material requisition form and paste in your file. Also write a few lines explaining it.

Materials Required:

1. A4 size papers
2. Practical File
3. Pens and Markers
4. Pencil
5. Eraser
6. Sharpener
7. Ruler



Procedure:

1. Observe different material requisition forms for different apparel production units.
2. Based on your observations prepare a format for material requisition form and paste in your practical file.
3. Fill imaginary details in the form prepared.

Activity 2:

Prepare a chart on various methods of issue of material practiced in store department.

Materials Required:

1. Chart papers
2. Practical File
3. Pens and Markers
4. Pencil
5. Eraser
6. Sharpener

7. Ruler

Procedure:

1. Learn and revise various methods for issue of material from store.
2. List all the methods.
3. Prepare a chart for the methods with brief description.

Check Your Progress**A. Match the left hand side with right hand side:**

i. Material Requisition Form	a) receiving, issuing, storing raw material
ii. Issue on Request	b) compulsory for issue of material
iii. Store function	c) most common method of material issue

B. Write short answers for the given questions:

1. What is a material requisition form? Why is it needed?
2. Why a store keeper should be careful about issuing material? What points should be kept in mind while issuing material?

Session 4: Identifying and Interpreting Different Packaging Symbols

PACKAGING AND ITS PURPOSE

Packaging is the outer covering or layer such as a cardboard box, a carton, a plastic box or any such item, which is used for protecting the material from dust, moisture, damage etc. It is often printed with details such as company logo, contents, instructions, price etc.

Packaging also refers to all the activities involved in wrapping and placing the goods inside a package to protect the goods from damages and for handling them without causing any harm to the product. The other purposes of packaging are:

- Easy identification of the product
- Sorting and segregation of products
- Maintenance and preservation

TYPES OF PACKAGING MATERIAL

- **Plastic:** The most common package material, plastic can be rigid or flexible, and it's light in weight. Plastic resin ranges from polyethylene to terephthalate. Later is used for bottles, while low-density polythene is used for boxes to low-density polyethylene used storing buttons, pins, trims etc.
- **Glass:** Glass bottles and jars are used to pack/store. These include bottles and jars for chemicals, dyes and pigments.
- **Cardboard:** is used mostly in the form of boxes of varying sizes for storing chinks, trims etc.
- **Paper and paperboard:** It is mainly used for packaging yarns, trims, accessories etc.
- **Wood and Ply:** is mostly used for packaging of spares and parts of machines, trims etc.

TYPES OF PACKAGING

Packaging is classified as follows based on their areas of usage:

Primary packaging - is the packaging that surrounds the product when it's sold to the final consumer. Includes the packaging that is in direct contact with the product and the other packaging components (i.e. lid, label) needed to complete the sales unit.

Secondary packaging or group packaging - This packaging system used to bundle together the sold units for easy transportation in the sales environment. This process could be done by bundling the products to sell to the consumer (i.e. shrink film wrap and corrugated cardboard box).

Tertiary packaging or transport packaging - is used to make the material safe for transport/delivery in order to prevent physical damage that may occur during packaging/delivery (i.e. bigger corrugated cardboard box with a pack of more than one secondary packaging).



Fig.:1.14 Types of Packaging

All the material used in packaging should be recyclable and reusable in order to maintain environmental balance and also in accordance with the regulation regarding Control of Packaging Waste. Packaging wastes are treated like garbage. With lack of awareness about disposal and importance of packaging, we might end destroying world's crucial resources.



Fig.: 1.15 Various packaging symbols

Symbols are non-verbal form of communication and are very powerful medium of conveying the exact meaning to observer.

The material stored in store are of different varieties and have different characteristics (physical and chemical). Some of the material may be hazardous in nature, susceptible to degradation due to temperature and moisture the stock in store varies from single unit to large in numbers. While storing in different bins or containers most of the times the alphabetical system is used. The major concerns is the shelf life and ease of handling. It is necessary for stores personnel to understand the characteristic to keep those items safe from degradation in quality or also quantity due to environmental conditions. The manufactures while packing sticks labels indicating the details about the handling, necessary precautions while storing. The symbols are of different natures having pictures, graphs, geometrical patterns representing specific instructions about the material.

PACKAGING LABELS AND THEIR MEANING:

Packaging labels are different from symbols in the sense that symbols are only visual whereas labels have written information on them. They give complete information of the product as well as manufacturer, care instructions, date of manufacture and expiry, invoice, price etc.

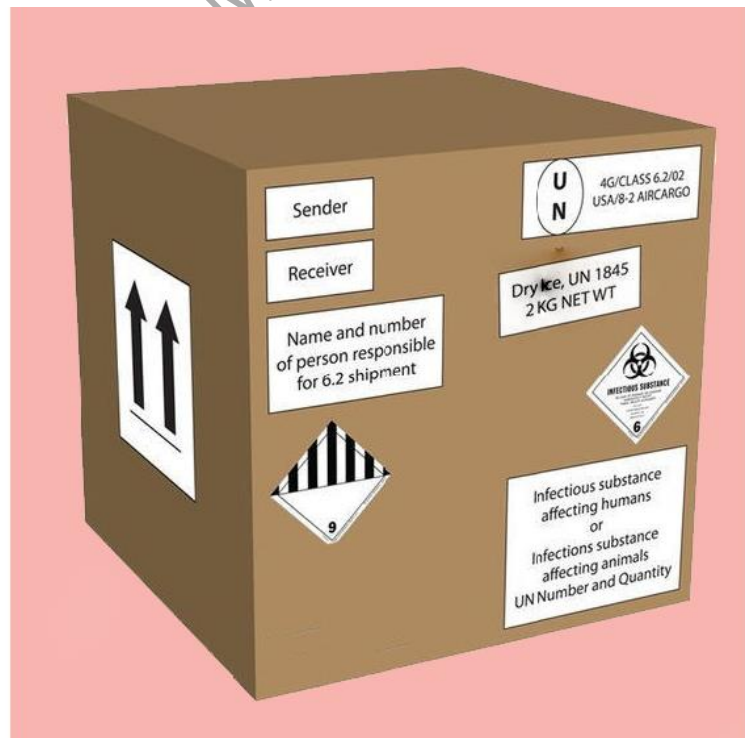


Fig.: 1.16 Packaging Labels

DIFFERENCE BETWEEN PACKAGING SYMBOLS AND LABELS

SYMBOLS	LABELS
1. These are only visual and do not have any written information with them.	These are visual as well as have written information with them.
2. They do not convey any direct information about the product.	They convey information about the product and the package to which they are attached.
3. To identify symbols we need prior knowledge of these or a glossary.	These are easy to understand as there is written information along with these.

Activities**Activity 1:**

Prepare a poster on packaging labels (any 10) and their uses.

Materials Required:

1. Chart paper
2. Coloured pens and pencils
3. Pencil, eraser
4. Sharpener

Procedure:

1. Collect required information on packaging labels and pictures of various packaging labels.
2. Paste relevant pictures and write the information along with it.
3. Decorate your poster with colours, Borders etc.
4. Pin it on the drawing board of your classroom.

Activity 2:

Prepare a chart with 10 packaging symbols and their meaning and uses.

Materials Required:

1. Chart paper
2. Coloured pens and pencils
3. Pencil, eraser
4. Sharpener

Procedure:

5. Collect required information on packaging labels and pictures of various packaging labels.
6. Paste relevant pictures and write the information along with it.
7. Decorate your poster with colours, Borders etc.
8. Pin it on the drawing board of your classroom.

Check Your Progress**A. Fill in the blanks:**

1. Packaging is the _____ covering or layer.
2. Symbols are _____ form of communication and very _____medium of conveying the exact meaning to observer.
3. Primary packaging includes the packaging that is in _____with the product.
3. Tertiary packaging is used to make the material safe for_____.

B. Answer the given questions briefly:

1. What is packaging and what are its purposes?
2. What are the various material used for packaging?
3. What are packaging symbols? How are they different from labels?

Session 5: Writing Letters Memos and Mails Clearly and Legibly

A store keeper is responsible for receiving, storing and preserving and issuing of raw material. So a store keeper has to deal with different departments and people all the time.

He/She is required to maintain written records, documentation and communication. Thus a store keeper should have excellent written communication skills.

Usually a store keeper is required to write letters and memos to different departments and authorities. Letters and memos are formal written communication and can be sent through mails or as a hard copy. Now a days most of the communication is done through emails and rarely hard copies or paper is used.

Emails:

Emails are sent within and outside the organization. Formality depends on the audience (can be formal or informal in tone), and they are usually kept brief, with extra information included as attachments.

Memos:

Memos are also known as memoranda. These are usually sent within the organization (internally, to colleagues), and are usually brief and written to the point. These are slightly less formal in tone, and usually brief, but sometimes over a page or two (e.g., proposals). These are used for requesting information, making proposals etc.

Letters:

These are sent outside the organization (externally), and are usually more formal and courteous, as they represent an organization.

They are usually 1 to 2 pages but could be longer (e.g., reports).

Activities

Activity 1:

Write a sample email to a vendor enquiring about latest products.

Materials Required:

1. A4 size papers
2. Practical file
3. Pen, pencils, markers
4. Eraser
5. Ruler

Procedure:

1. Learn about email writing and formal format for email.
2. Draft an email to a vendor enquiring about latest products.
3. Write final email in your practical file.

Check Your Progress

A. Fill in The Blanks:

1. A _____ should have excellent written communication skills.
2. _____ are usually sent within the organization.
3. _____ are sent outside the organization.

B. Answer the given questions briefly:

1. Why should a store keeper have excellent communication skills?
2. What are memos?
3. What points should be kept in mind while writing emails

Module 2**Organization/Arrangement of Store Items****Module Overview**

Smooth operations of store are very necessary for uninterrupted production cycle. For store operations to be smooth, it needs to be very organized and systematic. It's the responsibility of a store keeper to periodically inspect and organize the store. Various housekeeping systems such as 5S are a great help in this. Apart from various housekeeping systems different storage options such as racks, shelves, bins, boxes etc. are normally used for stocking the raw material in a neat and organized fashion. These also make the periodic checking smooth and functional. A store keeper needs to check all the stored items periodically. This is done to ensure uninterrupted supply of material to the production department. Periodic checking is very essential for items having an expiry date or a low shelf life for example – In a store of an apparel industry there are many dyes, chemicals and auxiliaries have low shelf life. If they are not used in a specific time it will result in wastage of material as well as the cost involved. Checking the store from time to time also helps in maintaining a neat, clean and hygienic store which is free from rodents and insects. Different types of approved or permissible preservatives are also used in store department to keep the material safe and to keep the store free from insects, fungi etc. We should also ensure the suitability of preservatives with specific materials stored.

Learning Outcomes

After completing this module, you will be able to:

- Housekeeping of store premises including organization of store items
- Demonstrate Arrangement of materials
- Stock checking of material periodically
- Identify approved preservative used for stores

Module Structure

Session-1	Describing and demonstrating implementation and monitoring of housekeeping norms
Session-2	Demonstrate the arrangement of materials, racks or shelves as per lot
Session-3	Stock checking of material periodically
Session-4	Identify different type of approved preservatives for stores

Session: 1 Describing and Demonstrating Implementation and Monitoring Of House Keeping Norms

Introduction to housekeeping

Housekeeping involves every phase of industrial operations and should apply to entire premises. It is more than cleanliness and requires orderly conditions, avoiding congestions, and paying attention to details such as a suitable layout of the whole workplace, the marking of aisles, adequate storage arrangements, and suitable provision for cleaning and maintenance.

Good housekeeping helps to create:

- Better working conditions.
- Safer workplaces.
- Increased efficiency among workers.

THE GENERAL UPKEEP OF WORKSPACE AND ARRANGEMENT OF MATERIALS AS PER HOUSEKEEPING NORMS

A professionally managed store has a process and an allocated space within, to receive the incoming materials, keep them for as long as they are required for use and then to move them out of stores. In a manufacturing firm this process forms a cycle to maintain and run the activities of Stores. The basic responsibilities of stores are to act as custodian and controlling agent for parts, supplies and materials, and to provide service to users of those goods.

A store keeper has the following activities to perform -

- Receiving of incoming goods.
- Safe keeping of goods in custody.
- Inventory Management.
- Housekeeping and record maintenance.
- Disposal of undesirable or perished goods.

Housekeeping is an operational department in a store. The main functions of housekeeping are overall cleanliness, ensuring maintenance of the store area and its infrastructure, pest control, safety and security of the workers.

Tidiness and orderly arrangements are essential in overcoming storage problems. Good storage utilizes air space instead of floor space, and also saves time wasting delays. It's important to prevent scraps accumulating on the floor and around machines. We should never keep extra storage materials other than necessary material near machines and provide proper store facilities (such as bins, shelves, boxes, racks, etc.)

Effective storing leads to ease of handling materials. It results in fewer accidents and slipping incidents in clutter-free and spill-free work areas. The decreased fire hazards lower worker exposures to hazardous products (e.g. dusts, vapours). The working in stores becomes more efficient leading to improved performance. It ultimately results in better inventory control there by reducing cost of production.

ARRANGEMENTS FOR MATERIALS AS PER HOUSEKEEPING NORMS

Following arrangements should to be made for materials as per the house keeping norms-

- 1- Adequate and convenient space arrangements for materials and tools.
- 2- Wide enough space for traffic movements, marked by floor lines from work areas to store areas.
- 3- Aisle space should be kept clear and reserved for the movement of products and materials. It should be kept clean and should never be used till bottleneck for storing purposes. This also applies to passageways and emergency exits.
- 4- Blind corners should be eliminated or be adequately protected by warning signs.
- 5- Adequate facilities for removal of waste to prevent congestion and disorder.

FUNCTIONING OF ORGANISATION'S LAID DOWN SYSTEM OF HOUSEKEEPING LIKE 5S (SORT, SET IN ORDER, SHINE, STANDARDIZE AND SUSTAIN).

5S is a system for organizing spaces so work can be performed efficiently, effectively, and safely. This system focuses on putting everything where it belongs to while keeping the workplace clean, which makes it easier for people to do their jobs without wasting time or risking any injury. The 5s are as follows- **S**ort, **S**et in Order, **S**hine, **S**tandardize and **S**ustain

- **Sort** –

The first step of 5S is to “Sort”. It involves going through all the tools, furniture, materials and equipment’s in a work area to determine what needs to be present and what can be disposed.

- **Set in Order –**

Once the extra clutter is gone, housekeeping workers can set in order the materials and equipment’s required in a most logical arrangement which will lead to easy handling and use.

- **Shine –**

The third step of 5S is Shine, which means “cleanliness.” While the first and second steps cleared up space and arranged the area efficiently, this step focuses on cleaning the dirt and dust particles of the workplace.

- **Standardize –**

This step involves creating a set of standards for both organization and processes. At this stage one can consider the first three S's and make rules on how and when these tasks should be performed. These standards involve schedules, charts, lists, etc..

- **Sustain –**

This step makes sure that one shows their commitment towards the first 4s. One should follow the ongoing cycle with discipline and include these 5s as their part of normal routine.

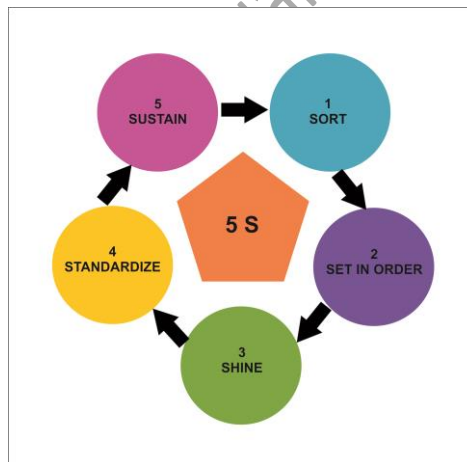


Fig.: 2.1 5S System

Some benefits of implementing 5S in housekeeping are as follows-

- 1- Reduced cost
- 2- Improved Quality of work
- 3- Increased productivity
- 4- Increased employee satisfaction
- 5- A safer working environment
- 6- Better asset utilization

- 7- Enhanced company's image to customers, suppliers, employees, and management.

Activities

ACTIVITY 1:

Prepare a chart which describe and demonstrate the implementation and monitoring of housekeeping system in an apparel industry.

Materials Required:

1. Pen/Pencil
2. Chart Sheet
3. Color Pencils
4. Eraser
5. Ruler

Procedure:

1. Visit an apparel industry and collect information about the working of housekeeping department.
2. Place the collected information and pictures on the chart sheet.
3. Label the pictures and different process followed by the house keeping departments.
4. Place the chart in your classroom.

Check Your Progress

A. Fill in the blanks.

1.is more than cleanliness and requires orderly conditions, avoiding congestions, and paying attention to details as the marking of aisles, adequate storage arrangements, and suitable provision for cleaning and maintenance.
2. Good housekeeping helps to create better working conditions,..... and increased efficiency among workers.
3. The basic responsibilities of stores are to act asand agent for parts, supplies and materials.
6.should be eliminated or be adequately protected by warning signs.

5. Following system leads to enhanced company's image to customers, suppliers, employees, and management.

B. Write short answers for the following questions.

1. Mention arrangements that should be made for materials as per housekeeping norms.
2. Explain the system of 5S.

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Session: 2	Demonstrate the Arrangement of Materials, Racks or Shelves as per Lot
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A key to smooth functioning of a store is to have an organized system of how to arrange the materials. The task of store keeping relates to safe custody and preservation of the materials, stock to their receipts and issue. The objective is to be able to provide the right material at right the time. Therefore, we should arrange and segregate these by their departments, color, size, style, etc..

ARRANGEMENT OF MATERIALS ON RACKS OR SHELVES AS PER LOT, MATERIAL, NATURE, PACKAGE SIZE

Materials required in manufacturing operations has to be stored, and handled to prevent deterioration and damage to the materials, along with ensuring safety of workmen in handling operations. Materials should be placed on flat, unbending and firm surface. Materials should be separated according to type, size, nature, package size and quantity and should be placed in neat and orderly manner. All passageways should be kept dry and without greasy surface and debris. For any store, there should be proper planning of the layout for stacking and storage of different materials, components and equipment with proper access and proper movability. Special and specified care should be taken for inflammable and destructive chemicals and explosive during storage to avoid any fire accidents.

As the store keeper arranges the material, following points should be taken care of in a textile industry.

As the basic raw material of a garment manufacturing industry is fabric, it should be arranged as per the lot size and as per the correct colour shade. Lot size refers to the quantity of an item ordered for manufacturing for a single production run. Fabrics should be separated on the basis of their weight (light weight like cottons and heavy weight like denim or canvas), fabric types (Woven, Non-Woven or Knitted), colours/shade (pastels and dark shade), style like solids or prints (baby prints or bold prints), decorative fabrics (quilted or surface embellished fabrics) and based on weaves or knits such as single jersey, fleece, jacquard, dobby etc.. All the rolls should have card which shows various details-

- Lot number
- Supplier name

- Shade/ pantone number
- Fabric name
- Fabric booked for buyer/ style number
- Shelf life
- Weight/ meterage of roll

Place Sample Here	Bin Stored In	
	Description	
	Lot no.	
	Supplier name	
	Shade/ Pantone number	
	Fabric name	
	Fabric Booked for buyer/ Style no.	
	Shelf life	
	Weight / Meterage of roll	

Fig.: 2.2: Material detail card



Fig.: 2.3 Arrangement of material as per lot/shade/type in the store

In garment manufacturing unit after fabric various additional material are also required to make a complete garment.

These additional or supplementary materials are called trims and accessories. Garment trims and accessories are very important to make garments aesthetic, functional and commercially accepted. Trims and accessories are not same. They vary in their functions and appearance.

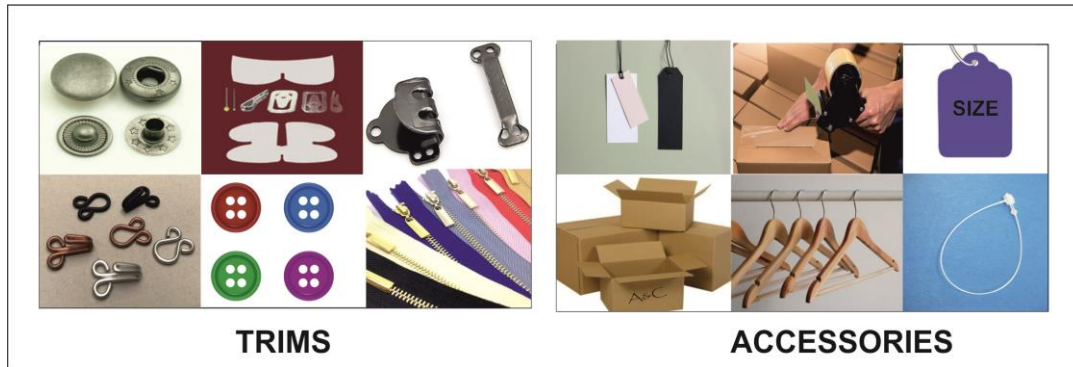


Fig.: 2.4 Trims & Accessories

Trims are materials which are attached to the body of garments by sewing. These are used for functional purposes and are attached with the garments for the end users. Trims should be kept separately with details marked on tags attached on racks/ bins.

List of trimmings or trims used in apparel industry are as follows-

1. Sewing thread
2. Button
3. Zipper
4. Lining
5. Interlining
6. Motif
7. Rivet
8. Stopper
9. Lace
10. Braid
11. Elastic tape
12. All types of labels
13. Shoulder pad
14. Hook & loop tape (Velcro)
15. Twill tape
16. Hook & eye closure
17. Seam sealing tape
18. Shoulder tape
19. Fusing material
20. Pompom

21. Ribbon
22. String/draw cord
23. Piping cord
24. Emblem
25. Logo Print
26. Eyelet/ grommet
27. Collar stay
28. Cord bell
29. Buckle
30. Weaving belt
31. Adjuster
32. Elastic threads
33. Snap fastener

Accessories are not directly attached with garment by sewing. These are used to make a garment attractive for sale and packing. In a word, accessories are used for decorative purposes.

List of accessories used in garment manufacturing:

1. All varieties of hanger
2. Hangtag
3. Poly bag
4. Collar stand
5. Size tag
6. Tissue paper
7. Backboard
8. Neck board
9. Paper band
10. Pin/clip
11. Tag pin
12. Carton sticker
13. Safety sticker
14. Arrow sticker
15. Elastic bag

16. Mini poly bag
17. Gum tape
18. Scotch tape
19. Inner carton
20. Outer carton
21. Iron seal
22. Tarpaulin paper
23. Butterfly
24. Double sided tapes
25. Plastic staple
26. Barcode, UPC
27. Ball chain
28. Carton pad
29. Size stickers
30. Numbering stickers
31. Defect indicator
32. Safety pin
33. Brass pin
34. Size clip
35. Master carton

All the materials should be kept in a systemized and segregated fashion in the store so that we can easily locate and issue the specific material as when required by the production department.

The materials are stored using bins and containers of different sizes and types as per the requirement of the items. Some of the storage bins used in a store are as follows –

Stacking Bins:

These storage bins stack on each other to save room on shelving or in cabinets. They will hang on panels or rails and can be divided to accommodate different parts in one container. These are usually used for storing trims and stationary items.

Shelf Bins:

These are used on shelving or in cabinets. These are mostly used for storing accessories.

Dividers:

Dividers are used to create smaller compartments within a bin. These dividers create unique spaces within a container for item segregation.

Carton Flow Racks:

Carton flow racks feature a slight slope so that cartons can "flow" or can be rolled to the front. This type of industrial shelf system is ideal for first in, first out products, and it is perfect for fast-moving items or a high-traffic store.

File Shelves:

These are used to store files and documents.

Closed Shelves:

These shelves are multi-functional and are used to store multiple items.

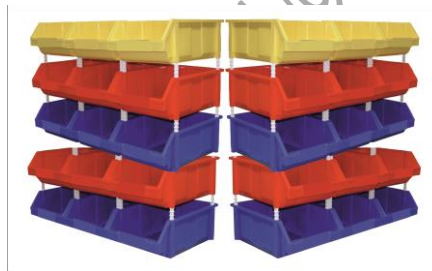


Fig.: 2.5 Divider Bins

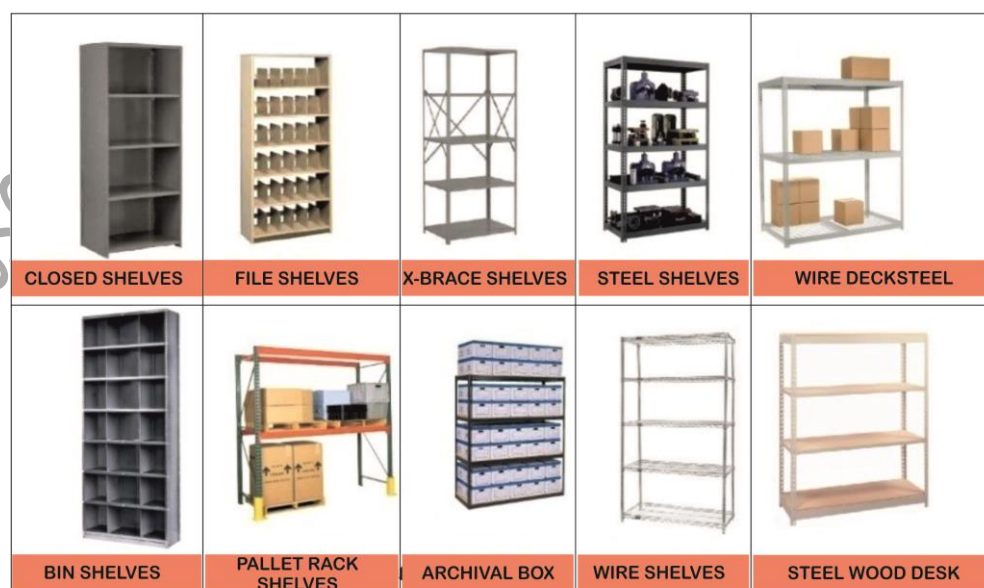


Fig.: 2.6 Types of storing racks/shelves

The objective of a store keeper is to ensure a balanced, continuous and unhindered flow of material through the stores so that the production process is not affected and can operate continuously. The non-availability of required material from the store can lead to delay in production and in delivery of orders.

Maintaining accurate and up - to - date records of material received, stored, issued, rejected and disposed is the key to good store management. In short, stores should have a systematic coordination and combination of efforts in a manner that results in optimum efficiency in work and minimum expenditure of the company.



Fig.: 2.7 Stock Keeping Shelves

Activities

ACTIVITY 1:

Prepare a report of different types of materials required in the store of an apparel industry.

Materials Required:

1. Pen/Pencil
2. Register
3. Color Pencils
4. Eraser
5. Ruler

Procedure:

1. Visit an apparel industry and collect information about the type of materials required in the store.
2. Place the collected information and pictures in the register.
3. Label the pictures and different materials.
4. Prepare and submit a report.

Check Your Progress**A. Fill in the blanks:**

1. The objective of ais to be able to provide the right material at right the time.
5. Materials should be separated according to.....,,, package size and quantity and should be placed in neat and orderly manner.
6. refers to the quantity of an item ordered for manufacturing for a single production run.
7. are materials which are attached to the body of garments by sewing.

B. Write short answer for the following:

1. Explain the term “trims” and list any 5 types of trims.
2. Explain the term “accessories” and list any 5 types of accessories.

Session 3: Stock Checking of Material Periodically

Ensuring periodic checking of stock material in the store

A store keeper is responsible for receiving, storing and issuing of material. Apart from this the material is also checked periodically for preserving them and to check the stock level. The responsibilities of a store keeper are ‘to receive materials from the supplier/vendors, to protect them while in storage from damage or unauthorized removal, to maintain and check adequate stock periodically, issue the materials in the right quantities, at the right time, to the right place and to provide these services at the least cost.’

Stock management also known as inventory management, it is an important function of a store keeper. This function aims at keeping periodic check on how much stock we have at any given time, and how much quantity we need to maintain for smooth flow of production process.

<u>BIN CARD</u>							
Material Code-.....				Maximum Level-.....			
Material Description-.....				Minimum Level-.....			
Location-.....				Recorder Level-.....			
Unit of Measurement-.....							
Date	Doc No.	Received from/Issued to	Receipt	Issue	Balance	Verification with SI Date & Verified by	

Fig.: 2.8 Bin/Stock Card

Bin card is the record maintained under the stock management/inventory control system by the store department to show the quantities of materials received, issued and balance left after every receipt and issue. It is also known as stock card. Bin Card minimizes the chances of any errors as the entries are done at the same time the goods are received or issued by the store keeper. It

increases the control over the stock due to continuous updates and the balance left for any material can be checked whenever required.

It helps the organization in the following ways –

1- Periodic follow up of stock with purchase and production departments, helps to avoid stock outs during requirement of stock and hence, reduces down time in production and increases profit.

2- Periodic reviews also detect obsolete and non-moving items and help the firm to get rid of unproductive/accumulative inventory.

Efficient stock control allows to have the right amount of stock in the right place at the right time. It ensures that working capital is not blocked unnecessarily, and ensures production continuity even if problem arises with the supply chain.

The detail system for stock/inventory control works on the following guidelines:

- Type of stocks
- How much stock should be kept?
- Stock control methods
- Stock control systems - keeping track manually
- Stock control systems - keeping track using computer software
- Using RFID for inventory control, security and quality management
- Controlling the quality of stock
- Stock control administration

Type of stock

Everything used for manufacturing products including raw materials, accessories, trims and parts of machines, product in process and finished goods refers to stock.

There are four main types of stock:

- Raw materials and components for ready to use in production.
- Work in progress stocks of unfinished goods in production.
- Finished goods ready for sale.

- Daily Consumables Items - for example, fuel and stationery items, machine parts & spares. The type of stock & price can influence how much we should keep in stock.

We can categorise stock further, on the basis of its value. For example, we can place items into low, medium and high value categories (ABC analysis). If our stock levels are limited due to working capital, this analysis will help us to plan our expenditure on new and replacement stock.

How much stock should be kept?

Maintaining of inventory /stock limit depends on the size and nature of the business and the type of stock involved. Keeping little or no stock and negotiating with suppliers to deliver stock as needed may not be a good idea, in case of emergencies production may suffer. Inventory or stock is one of the major investment of any firm. Hence stock must essentially be managed judiciously. In this competing era, where buyers are price sensitive and competitors are ready to give price as low as minimal margin, it is the duty of the store keeper to fetch competitive prices from vendors and invest on inventory judiciously. Inventory or stock levels must carefully be maintained to avoid misuse of surplus material.

Advantages of keeping low inventory can be as follows-

- 1) As keeping stock more than the requirement will lead to additional insurance cost, capital blocking, expiry of stock life etc., low inventory level can help minimizing storage cost.
- 2) No extra efforts/ cost is required to preserve goods.
- 3) Perishable goods can be a loss for organization.
- 4) Space- extra material consume space which can be utilized to keep new inventory/ stock.
- 5) Housekeeping and pest control cost is required to maintain goods in right form.
- 6) While there is plenty of stock available, chances are high to misuse or pilferage stock.

Advantages of keeping higher quantity of inventory can be as follows-

- 1) Smooth supply of raw material to avoid any uncertainty in supply change causing loss of production and losing market share.
- 2) Easy to manage production cycle.
- 3) Buying in bulk reduce the cost.

A balanced quantity of stock has to be maintained by any organization for smooth working and avoiding any undesirable losses. The quantity in stock usually depends upon-

- a) Reliability of supplier /vendor.
- b) Alternate source of supply available.
- c) Prediction of the demand and fluctuations in its price.

STOCK CONTROL METHODS

There are various methods for controlling stock, which are all designed to provide an efficient system for taking decision about what, when and how much material/stock to order. Mostly one method or a mix of two methods is used. These methods can be explained as follows-

Minimum and maximum stock level – The storekeeper needs to identify a minimum stock level, on reaching that level the storekeeper needs to reorder the stock. Also, a maximum stock level has to be decided on reaching that level one needs to stop the further purchases.

Stock review – The storekeeper has to have regular reviews of stock. At every review the storekeeper place an order to maintain stocks to a predetermined level.

Just In Time (JIT) - This method aims to reduce costs by cutting stock to a minimum level. Items are delivered when they are needed and used immediately. There is a risk of running out of stock; one needs to be confident that suppliers can deliver on demand.

Economic Order Quantity (EOQ) – It is a standard formula used to arrive at a balance between holding too much or too little stock. The EOQ is used as part of a continuous review inventory system in which the level of inventory is monitored at all times and a fixed quantity is ordered each time, when the inventory level reaches a specific reorder point. The EOQ provides a model for calculating the appropriate reorder point and the optimal reorder quantity to ensure the replenishment of inventory with no shortages.

First in, first out(FIFO)– It is a system which ensures that perishable stock is used efficiently so that it doesn't deteriorate. In this system stocks are identified by date on which the stock is received and moves on through each stage of production in strict order. The stock which is bought first is moved to the production stage first. FIFO is one of the best method of inventory control for any production store. For example- old stock of perishable fabric if stored

for longer duration might lead to loss in their original strength, durability and appearance. There are chances of patchiness, oil marks, stains, dirt marks, rust marks etc.. So it is mandatory to consume fabric which is received first. Similarly, in case of trims, there are chances of trims getting degraded or damaged with time.

Last in, first out – In this system the cost of the most recent products purchased are the first to be expensed as cost of goods sold (COGS)—which means the lower cost of older products will be reported as inventory. In this system also stocks are identified by date on which the stock is received and moves on through each stage of production in strict order. The stock which is bought last is moved to the production stage first.

Stock control systems – Tracking manually or using computer software

The stores functions deals with three major activities:

- Receipt.
- Stocking.
- Issues.

Receipt Section:

The receipt function is the last step in the purchasing activity and the first link in the stores function. This deals with the function of receiving and physically handling delivered materials. Also to verify that the deliveries correspond exactly as to the nature and quantity as per specified in purchase order. Inspection of incoming materials ranges from simple counting to elaborate laboratory testing. All incoming supplies are received, checked and duly inspected before further processing of storage or use. This section is also called as goods inward section. When materials are received from suppliers an entry is made in the 'daily goods receipt register'.

The Contents of the Daily Goods Receipt Register:

- Date and time of receipt.
- Name of the supplier.
- Name of the carrier.
- Challan number and date.
- Item details and description.
- Quantity and value of items.
- Purchase order reference.
- Carrier details (RR number, lorry number etc.)
- Goods inward note reference.
- Rejected memo reference.

- Received by.
- Inspected by.

On filling up these details the next step is physical verification by counting, weighing or measuring and tallying the outcome with the challan or delivery note. The same is also tallied with the purchase order. Any discrepancies present have to be notified within a time frame so as to inform the suppliers about follow up action.

Stocking:

If the goods received passes the inspection they are stocked to ensure no damages till they are required by the production department for further use. Goods needs to be stocked in a condition where they are easy to locate and ensures proper movability. Store Keeper needs to maintain a record in the store register of all the different types and varieties of goods receipt and the racks/shelves (with rack number or name) they are stored at.

Issue Section:

The term issue implies the normal supply of materials from stores to various user departments. The issues are recorded in the store ledger/register against the authorized materials requisitions with the date of issue, department to whom the material is issued and name of the person who issued the material.

The simplest form of checking and keeping the record of the stock is manual system in which the entries are made in the stock register. This is suitable for small type businesses with limited stock. In big type businesses where the quantity of stock to be maintained in huge numbers a stock card is associated. Each item in stock has an associated card, with information such as description, value, location, re-order levels, quantities. It usually also contains details & information of the supplier and the past stock history.

The modern manual systems incorporate coding to classify items. Codes might indicate the value of the stock, its location and which batch it belongs. This computerized stock control systems works on similar principles of manual ones, but are more flexible and information is easier to retrieve. One can quickly get the stock quantity, its valuation and all other details related to a particular item with a particular code. A computerized system is a good option for store dealing with many different types of items in stock with large quantity.

Radio Frequency Identification (RFID) allows a business to identify and track individual products. It is a tiny microchip which contains a range of digital information about the particular item. Radio Frequency Identification (RFID) enables to manage/track individual products or components throughout the supply chain. Using RFID tagging for stock control offers several advantages such as:

- 1) Tags can be read remotely, often at a distance of several meters.
- 2) Tags can have unique identification codes, so that individual products can be tracked known as barcodes.
- 3) This system prevents over-stocking or under-stocking a product or component.

Quality control is also a vital aspect of stock control - especially as it may affect the safety of operator and the quality of the finished product. Items in stock should be checked systematically for its quality. In case of any faults identified proper action should be taken in the shape of rejection or replacement.

STOCK CONTROL ADMINISTRATION

There are many administrative steps associated with stock control. Typical paperwork which is adopted includes:

- 1) Delivery and supplier notes for incoming goods.
- 2) Purchase orders, receipts and credit notes, returns notes, requisitions and issue notes for outgoing goods.

Stock blocks large amount of working capital of business, so accurate information about stock levels and values is essential for company's accounting.

Activities

ACTIVITY 1:

Prepare a stock register of a store in an apparel industry.

Materials Required:

1. Pen/pencil
2. Register
3. Eraser
4. Ruler

Procedure:

1. Visit an apparel industry and collect information about the layout and the details of a stock register.
2. Place the collected information in the register.
3. Prepare and submit the stock register.

Check Your Progress**A. Fill in the blanks:**

1. _____ aims at keeping periodic check on how much stock you have at any given time, and how much quantity you need to maintain for smooth flow of production process.
2. _____ is the record maintained under the stock management/inventory control system by the store department to shows the quantities of materials received, issued and balance left after every receipt and issue.
3. Maintaining of _____ depends on the size and nature of the business and the type of stock involved.
4. _____ method aims to reduce costs by cutting stock to a minimum level.
5. _____ enables us to manage/track individual products or components throughout the supply chain
6. The _____ function is the last step in the purchasing activity and the first link in the stores function.

B. Write short type answer for the following:

1. Write the contents of daily goods receipt register.
2. Mention in detail about any three stock control methods.

Session: 4 Identify Different Type of Approved Preservatives for Stores

A preservative is a substance or a chemical which is used to prevent decomposition by any microbial growth or undesirable chemical changes in product. The degradation happens due to structural changes in product. In general, preservation is achieved by implementing in two methods either by using chemical or changing physical parameters.

Chemical preservation is usually achieved by addition of chemical compounds to the product while processing or while storing. Physical preservation is possible by changing physical or environmental parameters in processing. Chemical preservation and physical preservation techniques are sometimes combined.

An ideal preservative should be effective at low concentrations against all possible micro-organism. It should be non-toxic and compatible and stable for the shelf-life.

The ideal properties of preservatives needs to be understood before using it in stores.

These can be desired as follows:

- 1) It should not be irritant and toxic.
- 2) It should have physical and chemical stability
- 3) Preservative should be compatible with other ingredients used in formulation.
- 4) It should act as good antimicrobial agent and should have wide spectrum of activity.
- 5) It should act as a preservative in small concentrations also.
- 6) It should maintain activity throughout product manufacturing, shelf life and usage.

Classification of preservatives:

Preservatives can be natural or synthetic. For both natural and synthetic there are further categories which can be learned while being on the job. Neem leaves, naphthalene balls, insecticide sprays/chalks, anti-termite sprays, etc. are commonly used as preservatives in store.

Suitability of different types of preservations on specific materials

The main reason for degradation of textiles is because of the environmental factors in which they are stored. Depending on their intensity, light, temperature and humidity mainly contributes to textile's deterioration process. Additionally, pests, chemicals, and pollutants also cause damage to the textile material. Airborne chemicals, such as smog or chemical fumes/ smoke are also harmful to the textiles. The basic guidelines for preservation of textile materials in stores and in process are as follows-

- **Light-** printed and solid coloured natural fabrics are prone to degradation and dullness if exposed to excessive light, while synthetics are less prone to light degradation. Also, Under prolonged exposure to non-visible light, such as ultraviolet and infrared rays also leads to the degradation of the fibers. Hence fabrics like wool, cotton, silks, prints, dark shades should be kept in little light. Similarly, chemicals which evaporate easily if exposed to light should be kept in shade)
- **Moisture-** Most fabrics, metal zippers, buttons, hook and eye closures etc. degrade and get rust when exposed to moisture for a prolonged duration. Hence such material should be kept away from moist places
- **Temperature-** High temperature can harm a lot to chemicals used in the industry, these should be kept in moderate temperatures. Also, increase in temperature leads to increase in moth growth which eventually leads to degradation of textiles material. Hence fabrics should also be kept in moderate ideal temperatures.
- **Periodical Requirement of specific material-** Some material require periodic attention for their preservation. For Example- Silk if not used for a longer duration might degrade from the site of folds, hence the folds should be changed periodically.
- **Protection from Moths and Pests-**Textiles, specially natural textiles are prone to moth and pest attacks. Hence these fabrics should be kept in conditions which are unfavorable for the moths and pests, chemical preservatives such as naphthalene balls can also be used. It is necessary to avoid chemicals for pest control as much as possible as the chemicals may cause damage to the textile materials. For rodents, snap traps may be effective. For insects, keeping storage area clean and hygienic is the best method of prevention.

Activities**ACTIVITY 1:**

Identify different type of approved preservatives for a store and make a report.

Materials Required:

1. Pen/Pencil
2. Register
3. Eraser
4. Ruler

Procedure:

1. Visit an apparel industry and collect information about the various preservatives used in a store.
2. Place the collected information in the register.
3. Prepare and submit the report.

Check Your Progress**A. Fill in the blanks:**

1. A is a substance or a chemical which is used to prevent decomposition by microbial growth or by undesirable chemical changes in product.
2. Preservatives have to be and with other constituent of the preparation.
3. Under prolonged exposure..... may lead to fading or discoloration of the textile material.
4. Clothes moths attacks fibers, especially silk, wool.
5. Growth of pests usually happens in

B. Write short type answer for the following:

1. Mention any four ideal properties of a preservative.
2. Mention any three guidelines for preservation of textile material in a store.

Module 3**Maintaining Records as Evidence to Conform to the Processes****Module Overview**

Store keeping is the task of stocking, safe guarding, preserving and maintaining raw material and supplies. Since a lot of money goes into procuring raw material, it is very vital for stores to maintain proper records of all incoming, stored and outgoing material. This will also help in accounting and audit of the material. Store department is the centralized department in an apparel industry as all the fabrics and accessories come to the store first from the supplier. These are then audited here and kept until it is distributed to other units. The main responsibility of this department is to store all the raw materials like fabrics, trims and accessories necessary to produce apparel. Different types fabrics, trims and accessories are purchased for fulfilling orders and inventory of these items are also maintained. It is necessary to maintain sufficient stock of inventories of raw materials to keep the production cycle running without any break. To maintain right inventory level, one should know how much inventory is in store of all type of items and how much inventory is expected to receive in store. It is storekeeper's main responsibility to maintain minimum / optimum stock of all items (regular items) and controlling the inventory level by reordering.

A tool is needed to record all incoming materials, their quantity and other information against each item. Spreadsheet like Excel sheet is one of the good option which is used by them who don't have software for inventory management and control. Excel sheets are preferred due to its user friendly recording techniques for maintaining inventories manually.

How to create an inventory tracking format in Excel Sheet

- 1) Prepare an excel format for recording data for inventory purchase and inventory consumption.
- 2) In the excel template make columns for all necessary information that are required.
- 3) Update files regularly.

An Inventory Sheet is an essential tool for small and medium businesses as it helps them keeping track of the items which are used or the products they sell.

The use of sheet helps an organization to increase efficiency in the inventory management.

Learning Outcomes	
After completing this module, you will be able to:	
<ul style="list-style-type: none"> • Learn to Maintain records of store performance • Learn to Maintain records for approved vendors • Learn to Maintain records of vendor complaints 	
Module Structure	
Session-1	Preparing documents to maintain records of store performance
Session-2	List and maintain records of approved vendors
Session-3	List & maintain records of vendor complaints

Session 1: Preparing Documents to Maintain Records of Store Performance

IMPORTANCE OF RECORD KEEPING

Store or store department is very important part of any industry or factory. It deals with storing, issuing, maintaining and preserving of all the raw material required for apparel production. Store is also responsible for disposal of obsolete or waste material and giving demand for stock replenishment. All this has to be properly recorded. Thus store keeping operations involve many records. These can be prepared manually or with the help of a computer. Thus a store keeper has to prepare and maintain many records and should be proficient in record keeping.

Record Keeping is thus very important as it aids in smooth store operations and management. Record Keeping involves maintaining and preparing records for:

- Incoming material
- Outgoing material
- Perished/expired stock
- Quality rejected stock



Fig.: 3.1 Cabinet for keeping records

IMPORTANCE AND IMPACT OF RECORD KEEPING ON OVERALL ORGANIZATIONAL PERFORMANCE

Record Keeping is a part of store management and is very vital for any organization as it helps in tracking expenditure and movement of material, managing costs, budgeting etc.. Thus we can say that record keeping as a part of store management has an impact on overall organizational working.

Records help us:

- To indicate the quantity and values of stores held.
- To provide information about values of receipts and issues.
- To determine ordering level without physically checking the stock.
- To keep account of total expenditure.
- To provide basis for material costing.
- To help in locating and preventing wastage, pilferages, and misappropriation.
- To help in keeping the level of inventory at a reasonable level.
- To provide date/ history for future production cost analysis.

It is desirable to know at all times as to how much working capital is represented by stores in stock. The value of stock is also needed to be shown in balance sheet as an asset. Value of the stock at the start and at the end of the accounting year is used in preparing profit and loss account.

The importance of documentation in store management

In store management documentation and record keeping are important to ensure accountability, facilitate coordination of user and providers and also for service improvement. However, it is observed that due to the importance of documentation and record keeping is overlooked by management.

1. The records provide a case history and a more holistic approach in order to follow-up on services and better cost control. This is especially for user with complex needs for production. Accurate and up-to-date recording is important especially when there is an emergency and the staff-in-charge is not available (due to illness, vacation, resignation, etc.). Good records and documentation will develop good communication between production department and top management to ensure coordinated, rather than fragmented control.

2. It is important to be ensure relevant information at any given time and the proper decisions are taken to their needs. The information may be needed to respond to queries from stakeholders. One important source of information is the store records. Documentation forms the nature of the professional relationship within all department. Information on problems encountered and the response would assist in the event of a crisis or investigations.

3. Well-documented records can also lead to improved services to the department by helping the staff to organize optimum level . The information can also form primary data to conduct evidence-based research.

4. Documentation is the evidence of the movement of goods as it accounts for evidence in respect of all its process. In fact it provides evidence, for litigation, customer service including dealing with complaints if any.

Records management programs used in stores management must manage organizational information so that it is timely, accurate, complete, cost-effective, accessible and useable. Better information, at the right time, makes better business.

Record management helps:

1. To Control the Creation and Growth of Records
2. To Reduce Operating Costs
3. To Improve Efficiency and Productivity
4. To Safeguard Vital Information
5. To Support Better Management Decision Making

Both hard (on paper) and soft (in computer) documentation are important for smooth and safe running of any business. Hence it applies to store management as well.

Documentation is the most important factor in storage process. It serves the purpose of inventory status, demand and needs for knowing the non-moving for disposal, for knowing obsolescent and pilferage and mall-practices existing in the stores handling. Periodic auditing and reconciliations helps stores and systems modifications minimizes and in few cases eliminates the discrepancies arising due to flaws in stores / warehouses.

RECORDS TO BE MAINTAINED IN THE STORES

1. Bin Card: This is a card which is attached to each bin, rack, shelf or other container for stores. A record of all materials entering or leaving the bin and balance of material in hand is kept in this card. The details are also entered by the store-keeper in master file. Periodically it is tallied with the quantities of material shown in the relevant account in the stores ledger. This will enable the store-keeper to maintain the flow of any material in stock and remind him to order fresh stock, when the minimum stock has been reached.

Now-a-days in industries, to avoid delay in production, an ordering level or safety level is also introduced between the maximum quantity and minimum quantity.

A sample of bin card preform a is given below:

<u>BIN CARD</u>							
Material Code-.....				Maximum Level-.....			
Material Description-.....				Minimum Level-.....			
Location-.....				Recorder Level-.....			
Unit of Measurement-.....							
Date	Doc No.	Received from/Issued to	Receipt	Issue	Balance	Verification with SI Date & Verified by	

Fig.: 3.2 Bin Card

2. Records maintained while receiving materials:

1. Material is received in the stores from;
 - (i) Outside suppliers,
 - (ii) Production department, and
 - (iii) Various departments as return of material on material returned note.
2. When the material is dispatched by the supplier, its intimation is received in the stores, which indicates expected date of receipt of material, as per the order to enable stores for organizing quick and easy clearance.
3. Received material is then tallied from the purchase order, dispatch intimation and other documents. It is physically verified regarding quantity, size etc. If required, material can be unpacked for physical verification.
4. After physical verification, 'Store Receipt Vouchers', generally known as SRVs are prepared and sent to the inspection department.
5. After inspection of material, if it is acceptable, inspection department records the certificate on SRV and return back to the stores, with intimation to the purchase and accounts department.
6. Stores department keeps the material in the store.
7. Rejected material is retained in the rejection cell till they are returned to the supplier or replaced by him.

3. Records maintained while issuing material:

1. Materials are issued only on receipt of a properly authorized withdrawal form, which is usually called a 'Material Issue Requisition Form' or 'Store Issue Voucher' i.e., SIV.
2. On receipt of SIVs, store department issues the materials and records the quantities disbursed.
3. A copy of SIV, duly entered by the stores regarding issue of material, is then sent to the accounts department for pricing and entry in the stock ledger.
4. One copy of SIV is sent to the department who has initiated it for withdrawal of material.

Indent on Store:

It is also called material issue requisition. An important rule, which is strictly followed, is not to issue any materials from the stores department into the works without the authority of written requisition. Such indents on stores are made out in triplicate from bound books supplied to each department. They

contain the date, the necessary particulars of the stores requisitioned, such as quantity and description, order or job number to which the material is to be charged, department number, signature of the indenter, space for the initial of the issuing store-keeper and the signature of the person receiving the material.

The original copy is sent to the purchase department for costing, duplicate retained by the store-keeper and triplicate in the bound book by the Indenter as a permanent record.

A sample of indent on store is given below:

MATERIAL INDENT FORM					
A&C					
Format No.:					
S.No.	Product/Material	Qty.	Unit	Expected Date	Remarks

Required for/Purpose of indent

Issued by

Verified & Approved by

Fig.: 3.3 Sample of Store Indent

Material Returned Note:

Material issued for departmental use sometimes are not actually used and returned to the store-keeper. They must be properly recorded and their value may be duly entered in the store records and these values may be credited to the accounts of the department concerned by the purchase department. For this purpose, Material Returned Notes are written out in triplicate.

Two copies being sent to the store-keeper along with the returned material. One of these is returned to the department with the store-keeper's acknowledgement. The copy retained by store-keeper is entered by him on the bin cards and then passed on to the stores accountant to be priced and entered by him in the relative stores card.

It will then be dealt with by the purchase department, the account of the department concerned being given credit in respect thereof.

STORE ACCOUNTING

Accepted materials are accounted in the stores. The account of stores is maintained by the store keeper in the same way as that of cash by the cashier.

Main objectives of maintaining proper accounts are:

- (i) To indicate the quantity and values of stores held.
- (ii) To provide information about values of receipts and issues.
- (iii) To determine ordering level without physically checking the stock.
- (iv) To keep account of total expenditure.
- (v) To provide basis for material costing.
- (vi) To help in locating and preventing wastage, pilferages, and misappropriation.
- (vii) To help in keeping the level of inventory at a reasonable level.

Stores Accounting Records:

In order to maintain an efficient record to stores, following books and records will be required and these are maintained separately for different types of materials:

(a) Inward and Outward Registers:

When the material is dispatched by the supplier through transport he will send its receipt issued by the transporter called challan. After showing the receipt to agencies, material can be received by the consignee. A separate register is maintained by the store-keeper in which daily entries of received are made and known as "Inward Register".

In the same way, when some material goes out of the store to other place, entries of memos are made by store-keeper in Outward Register and that is also sent to the customer. On production of which, he can take the material from logistic agencies.

(b) Stock Register: These are of following types:

(i) Dead Stock or Non-Consumable Register:

This is maintained by store-keeper, in which entries of non-consumable articles such as all machinery, equipment, furniture etc. are made. The register shows complete details of articles together with accessories.

(ii) Consumable Register:

The store-keeper maintains record of consumable received by the store such as fabric, sewing threads, accessories, chemicals, packaging material etc. used in garment manufacturing. All the transactions about a particular item are entered in one page. The different items are entered on different pages.

(c) Daily Receipt Register:

Whenever any material comes in the store, it is entered date wise in daily receipt register. Material is then inspected and if found suitable, is entered in stock register.

If the material is found defective, it will be rejected and either the material or its reports will be sent to the supplier.

(d) Issue Register:

This may be in register or loose leaf form. All stores issued are entered date wise in it by store-keeper. From the receipt and issue register, store ledger is prepared by accounts section.

(e) Surplus Stock Register:

Sometimes some purchases are made, which do not come in use for long time, such materials are then declared surplus and are recorded in a separate register called Surplus Stock Register.

(f) Suspense Register:

The defective item or items received in excess are stored separately & kept in “Suspense cell”, A separate register is maintained by store-keeper for all such items placed in suspense and is known as suspense register.

Items in stock should be checked systematically for quality, faults identified and the rejected batch replaced. Quality control is a vital aspect of stock control - especially as it may affect the safety of operator and the quality of the finished product.

STOCK CONTROL ADMINISTRATION

There are many administrative steps associated with stock control. Typical paperwork which is adopted includes:

- 1) Delivery and supplier notes for incoming goods,
- 2) Purchase orders, receipts and credit notes return notes and requisitions and issue notes for outgoing goods

Stock blocks large amount of working capital of business, so accurate information about stock levels and values is essential for company's accounting.

Health and safety:

Health and safety aspects of stock control are related to the nature of the stock, layout and skill of work force. The system should be such that it provides information as where and how items are stored, how and by whom they are moved is important for health and safety of the workforce.

RECORDS FOR INCOMING MATERIAL:

The store department starts with documentation even before the incoming material reaches the store. The demand for goods is sent by purchase section and is recorded in the purchase order. One copy of purchase order is also sent to the store so that adequate requirements can be made for unloading, inspection and storing of the material. Apart from this some other records are also maintained by the store department. Let's now see the records for incoming material:

i) Purchase Order:

Whenever any order is placed for purchasing of material, it is done through purchase order. A copy of purchase order is also sent to the store section. The purchase order contains the name of the supplier, order date, quantity, quality and grade of material, delivery date etc. All incoming material is checked against the purchase order. A copy of purchase order is kept as record in the store department. This copy is used to verify and document the materials received.

PURCHASE ORDER TEMPLATE

COMPANY NAME

COMPANY PHONE..... DATED AS.....
 WEBSITE..... PURCHASE ORDER.....
 E-MAIL.....
 COMPANY ADDRESS.....
 CITY . STATE . ZIP CODE.....

ABOUT VENDOR: **Target inward date:**

VENDOR NAME.....
 COMPANY NAME.....
 ADDRESS.....
 CITY, STATE, ZIP CODE.....PHONE.....

DETAILS	QUANTITY	UNIT PRICE	TOTAL
(Signature of Authorized Person) (Write Designation Here)			SUBTOTAL
			TAX
			TOTAL

Fig.:3.4 Documents in a store—purchase order sample

ii) Advice Note:

An advice note is sent by the supplier at the time of the dispatch of the goods. It consists of details like dispatch date, vehicle details, instructions for handling, reference of the corresponding purchase order, consignment details etc. for stores department.

iii) Consignment Note:

A consignment note is a written document which contains information about the goods sent from the vendor to the organization/store department. It is a written agreement of receipt of the consignment when it is delivered.

iv) Delivery Note:

Whenever goods or material are delivered to the store appropriate entries are made on the delivery note. A copy of the same is returned to the carrier. The consignment is deemed to be fit or OK if the delivery note is returned with signatures only and doesn't contain any remarks.

v) Daily Goods Receipt Register:

When materials are received from suppliers an entry is made in the 'daily goods receipt register'. The daily goods register contains the

- Date and time of receipt.
- Name of the supplier.
- Name of the carrier.
- Challan number and date.
- Item details and description.
- Quantity and value of items. Purchase order reference.
- Carrier details (RR number, lorry number etc.)
- Goods inward note reference.
- Rejected memo reference.
- Received by.
- Inspected by.

vi) Goods Inspection Note:

It is the inspection report prepared by the staff after the inspection of delivered goods.

vii) Discrepancy Report and Covering Letter:

Sometimes when vendor supplies the stock there may be some discrepancy in it such as broken package, wrong item, less quantity etc.. This is notified to the supplier in discrepancy report. A covering letter is also sent with the discrepancy report. Copies of the same are also sent to the purchase department and accounts section.

viii) Rejection Note Form:

If goods are rejected then the same has to be informed to the supplier. This is done by rejection note form. A copy of it is also sent to the purchase department.

RECORDS FOR OUTGOING MATERIAL:**i) STORE LEDGER:**

Whenever any material is issued to any department its entry is made in the store ledger and the cost of material is debited to the department which is getting the material issued.

<u>STORE LEDGER</u>											
MATERIAL CODE- BIN NO.- MATERIAL DESCRIPTION- LOCATION-				MAXIMUM QTY- MINIMUM QTY- ORDERING QTY-							
DATE	RECEIPT				ISSUES				BALANCE		
	PO. NO.	QTY	UNIT COST	TOTAL	R. NO.	QTY	UNIT COST	TOTAL	QTY	UNIT COST	TOTAL

PO. NO. – Purchase order no.
R. No. – Requisition No.

Fig.: 3.5 Documents in a store—Store ledger

- ii) **MATERIAL ISSUE REQUISITION FORM’ OR ‘STORE ISSUE VOUCHER’** i.e., SIV:

The material or stock in the store is issued to various departments only on authorized material requisition form. It is also known as store issue voucher.

- iii) **MATERIAL RETURNED NOTE:**

Sometimes unused or extra material is returned to the store by the department which got it issued. Such material is returned on a material returned note to the store.

RECORDS OF RETURNED EXCESS MATERIAL

Any material issued to the concerned department in case of excess or other reason if returned to the store after production is recorded by store keeper. For example if cutting department needs 25Kg fabric, but the fabric roll has 30Kg then excess 5Kg is returned to the store department after cutting. The records for these returned material has to be maintained in store for easy access to store and efficient management.

- Material return note- This is a form that the concerned department gives to the store at the time of returning material.

MATERIAL RETURN NOTE			
A&C			
Deptt.:		P.O. No./ Style No.	
Job. No.:		Date.....	
Material	Qty.	Reason for Return	Remarks
Sign. of Storekeeper.....		Sign. of Foreman.....	

Fig.: 3.6 Sample of Material Return Note

ORGANIZE THE RECORDS AS PER THE TARGET DATES

Record keeping is an important role of a storekeeper. Organizing records manually is a difficult task, but organizing them in accordance to a system for example- as per target dates makes it a less tedious job.

For a smooth flow of production cycle, it is important for the store department to be well organized and function systematically. Delays in issuing of material may result in huge losses to business and stagnant production cycle. To avoid this situation the storekeeper must maintain records in a systematic and organized manner. One method to keep the records organized is to maintain them according to target dates.

One of the main criteria of storing the received goods as well as organizing their records is their shelf life, expiry date and their ready availability.

Material with low shelf life or which is perishable needs to be used first. Fabrics and trims don't fall in this category but this is especially true for chemicals, dyes and auxiliaries.

Once the buyer places an order the copy of Purchase Order should be maintained by the store keeper to meet requirements of the production department beforehand. All the Purchase order copies should be arranged and maintained as per Time and Action Plan dates, the order whose shipping date is near should be taken as first priority while ordering and receiving material from vendor. The receipt date of material needs to be recorded carefully.

While issuing the material the requisition slip should be verified with the target dates. The material should be issued only as per prior time and action plan (TNA). Keeping track for issuing material on right time is done through maintaining records. The issuing date should also be mentioned in the store ledger and vouchers.

Activities**ACTIVITY 1:**

Prepare a pictorial chart on various documents maintained in a store (any 5).

Materials Required:

1. Chart paper
2. Coloured pen and pencils
3. Pencil
4. Eraser
5. Sharpener

Procedure:

1. Collect all the information.
2. Write it in the chart along with relevant pictures.
3. Decorate your chart.
4. Paste it in the class.

ACTIVITY 2:

Prepare a sample purchase order.

Materials Required:

1. A4 size papers
2. Coloured pen and pencils
3. Pencil
4. Eraser
5. Sharpener

Procedure:

1. Visit the store in any shop, your school or any nearby factory.
2. Check their purchase orders.
3. Collect all the information.
4. Prepare a sample purchase order.

5. Paste it in your file.

Check Your Progress

A. Fill in the blanks:

1. Whenever any order is placed for purchasing of material, it is done through _____.
2. Whenever any material is issued to any department its entry is made in the _____.
3. Record Keeping involves maintaining and preparing records for _____, _____ and perished/expired stock.
4. All records should be maintained as per _____ in accordance to the production cycle.

B. Answer the given questions briefly:

1. Why is record keeping important?
2. List records to be maintained for incoming material and explain any one in detail.
3. List all the records required for issuing of material and explain any one in detail.

Session 2: List and Maintain Records of Approved Vendors

A vendor is basically a supplier. A vendor is any establishment in the supply chain that supplies goods and services available to companies or consumers.

The term "vendor" is typically used to describe the entity that is paid for goods that are needed by manufacturing units. A vendor, known as a supplier, is a person or a business entity that sells something. For example: fabric vendors, machine vendor, spare parts vendor etc. All organizations generally have a list of vendors from which they purchase materials at wholesale / competitive prices and with good or required quality that is needed in periodical manner for running garment manufacturing unit.

The term vendor management is used for describing the activities included in researching and sourcing vendors, obtaining quotes, capabilities, turnaround time, quality of work, negotiating contracts, managing relationships, assigning jobs, evaluating performance, and ensuring that payments are made. It requires a lot of skills, resources, and time.

With effective vendor management processes in place, we can properly establish service, quality, cost, and satisfaction goals. We also choose and manage third-party suppliers that help us achieve business goals.

The vendor management system has four steps:

- 1) The first is the defining the business goals which makes easier to select and manage vendors because we have clearly defined performance parameters to compare and contrast.
- 2) The second part of the process is to select the best vendors which will match our company's performance characteristics. Every vendor does have its strengths and weaknesses, and choosing the right one is a very critical task for optimizing operational results.
- 3) Third is managing suppliers. On a daily basis store managers need to monitor and ensure contract terms are being followed, approve or disapprove changes, provide feedback, and develop relationships through effective communication, honesty, and integrity.
- 4) The fourth aspect of vendor management is meeting goals on a consistent basis. This requires continuous interaction with vendors to meet performance objectives to ensure profitability.

MAKING THE LIST OF APPROVED VENDORS

Every organization has a list of vendors from whom they take the material regularly. Taking material from listed or approved vendors saves time and ensures quality material at competitive prices. While making the list of approved vendors both known vendors as well as new vendors with good reputation must be considered. Also the list must be reviewed and edited from time to time.

The following steps are followed to identify and list vendors for providing goods and services:

- Review the list of existing/ future contracts for inventory required in the definite period
- Identify and assign each vendor to the appropriate requirement.
- Confirm each vendor's contact, contract, and performance information.
- List the goods or services provided by each vendor.
- Classify the vendor's role as:
 - Critical—Vendor supplies goods and services essential to the continued operation and success of your organization.
 - Important—Vendor supplies goods and services that could be costly to replace in an emergency without effectively contingency planning, but would not affect the business.
 - Useful—All of our company's suppliers are useful. Update the list with any vendors not already included.
- Create, monitor, and manage a master approved vendor list based on feedback from stakeholders.

APPROVED OR PREFERRED VENDORS

Every company or factory has a list of preferred vendors or approved vendors with whom they conduct routine business. They are the trusted suppliers and provide them the best quality material at most competitive or economical rate, within the desired timeframe and place.

ADVANTAGES OF BUYING FROM APPROVED OR PREFERRED VENDORS

Ordering supplies from a new vendor every time can be risky and time consuming. Vendors who are known and have been working with the company or factory since a long time, knows the exact quality requirements and standards for supplying the material. Thus every firm or factory or organization has a list of approved or preferred vendors with which they

conduct business. For example: an apparel company will have fixed vendors or suppliers for fabrics, threads, trims etc.

Sometimes new vendors are also added to the list due to various reasons.



Fig.:3.7 Vendor List

MAINTAINING LIST AND RECORDS OF APPROVED VENDORS

The term vendor management is used for describing the activities included in researching and sourcing vendors, obtaining quotes with pricing, capabilities, turnaround times, and quality of work, negotiating contracts, managing relationships, assigning jobs, evaluating performance, and ensuring payments are made. It requires a lot of skills, resources, and time.

With effective vendor management processes in place, proper service, quality, cost, and satisfaction can be established easily. We also choose and manage third-party suppliers that helps to achieve business goals.

The approved vendor list should be reviewed from time to time and necessary changes in vendors or suppliers should be amended in the list from time to time.

Activities

ACTIVITY 1:

Visit any big showroom in your vicinity. Speak to them and enquire about their suppliers / vendors with respect to following points:

- i. How many vendors do they deal with?
- ii. Which is their oldest vendor and how old?
- iii. How do they select a vendor for their firm?

Make a report and write in your practical file.

Materials Required:

1. A4 size papers
2. Coloured pens, markers
3. Pencils
4. Erasers
5. Sharpeners

Procedure:

1. Collect all the required information.
2. Prepare a report and write it in your practical file.
3. Paste relevant pictures.

Check Your Progress**A. Fill in the Blanks:**

1. A _____ is basically a supplier.
2. With _____ processes in place, proper service, quality, cost, and satisfaction can be established easily.
3. Taking material from _____ vendors saves time and ensures quality material at competitive prices.

Session 3: List and Maintain Records of Vendor Complaints

MAINTAIN RECORDS OF VENDOR COMPLAINTS AND FOLLOW-UPS

Apparel production is a lengthy process which requires a variety of raw materials such as fabric, buttons, laces, zippers, thread, stickers etc. Each of these raw material directly affect the overall look of final garment. A small defective button can completely ruin the aesthetics of any garment. Therefore quality of each raw material is of utmost concern while producing a garment of predetermined quality and aesthetics.

Sometimes the products or services offered by the vendors may be unsatisfactory or not as per the desired standards. For example- while receiving and inspecting stock in the store, a storekeeper may find that the quality of buttons are inferior than promised or the number of packets are less. If the stock is not as per the specifications and desired standards then the vendor needs to be notified and this is done with the help of vendor complaint letter.

This may happen due to variety of reasons. In such a scenario the vendor needs to be made aware about the discrepancies in the supply and a complaint needs to be registered with the vendor. This is done by writing a formal complaint letter to the vendor. Records of vendor complaints also need to be maintained and reviewed as there may be some vendors with frequent complaints.

Such vendors need to be replaced with new vendors or may be given strict warning. Maintaining records of vendor complaint is also necessary for follow-ups. Sometimes it may so happen that some deadline is approaching and some trim or button required in the production is of inferior quality or is not as per the ordered quality. This may interrupt the production cycle. Thus a close follow up of vendor complaints is also necessary. Almost all vendor complaints require swift follow up action.

Based on the responses received from vendor end while communicating quality failures or service failures, a company many a times black list certain vendors. This is why there is a need of reviewing vendor list time to time. This review is done by the store keeper along with the authorized personnel from purchase department.

Activities

Activity 1:

Draft a complaint letter to a vendor for complaining about substandard raw material and asking the vendor to either replace or refund the cost. Paste it in your file.

Materials Required:

1. Register
2. File
3. Pens/pencils
4. Eraser

Procedure:

1. Draft a letter of complaint in a register/copy.
2. Paste the letter in a file.
3. Submit to your teacher.

Activity 2:

Write a follow up email to the vendor about your complaint letter enquiring about the status of progress on your complaint.

Materials Required

1. Desktop/Laptop
2. Rough sheets
3. Pens/Pencils
4. Eraser

Procedure:

- 1- Draft a sample email for the follow up of your complaint to the vendor.

Check Your Progress**A. Fill in the blanks:**

1. Every company or factory has a list of preferred _____ with whom they conduct routine business.
2. A vendor is basically a _____.
4. Whenever any material is issued to any department its entry is made in the _____.
5. Almost all vendor complaints require swift -----.

B. Answer the given questions briefly:

1. What do you mean by approved vendor list?
2. What do you mean by vendor complaints and how are these addressed?
3. Name various documents to be maintained

Module 4	Maintaining a Clean and Hazard Free Working Area
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Module Overview

All industries have different type of tools, equipments and machineries. There is always a risk of hazard while operating machines. Therefore, while handling of tools and machines, workers and employees must follow all precautionary measures and safety instructions. They should also understand the importance of maintaining a clean and hygienic work environment. Improvements in working conditions can result in increased productivity and operating efficiency. In an apparel industry, an efficient process of manufacturing, distribution and transportation will lead to enhanced customer service, reduced inventory cost and further reduce/shorten the delivery time. While we design a material handling system for an industry, it is important to understand and refer to best industrial practices to ensure that all the equipments and processes including manual, semi-automated and automated in the industry work together as a unified system. By analyzing the goals of the material handling process, aligning and using them as per guidelines of material handling and waste management will improve customer services, reduce inventory & delivery time, and lower overall handling costs in manufacturing, distribution and transportation.

Learning Outcomes

After completing this module, you will be able to:

- Operate and handle tools, material
- Organize and store material safely and correctly
- Identify Proper Storage and Disposal Of Waste Material
- Identify and list different cleaning substances and equipment
- Personal hygiene and health

Module Structure

Session-1	Material handling, cleaning and maintenance of tools
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Session-2	Safe and correct storage of material
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Session-3	Guidelines for proper storage and disposal of waste material
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Session-4	Use of different cleaning substances
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Session-5	Personal hygiene and health
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Session 1: Material Handling, Cleaning and Maintenance of Tools

Handling tools and material safely and correctly

Material handling is the movement, protection, storage and control of *materials* and products throughout manufacturing, warehousing, distribution, consumption and disposal.

By reducing, combining, or eliminating unnecessary movement, material handling processes can be simplified. For example, use of gravity to help in movement of material with minimum manual force.



Fig. 4.1 Proper Handling of Material

The following points should be considered.

1. **Ergonomics:** Work and working conditions should be adapted to support the abilities of a worker, reduce repetitive and strenuous manual labor, and emphasize safety. Moreover the work area should have plenty of space for the task, should be clean and ventilated.
2. **Unit load:** One must ensure that fewer efforts are required for movement of individual items as they should be carried together as a single load instead of moving many items one at a time. Thus, equipments such as pallets, containers or totes of items should be used.
3. **Space utilization:** We should focus on maximizing efficient use of space within a facility. It is important to keep work areas organized and free of unwanted clutter. We should try to maximize density in storage areas without compromising accessibility and flexibility, and to utilize overhead spaces efficiently.
4. **System:** All the movements of packages and storage should be coordinated throughout the production cycle i.e. from receiving, inspection,

storage, production, assembly, packaging, unitizing and order selection, to shipping, transportation and the handling of returns.

5. Environment: We should take into consideration the use of energy and its potential environmental impact while designing the system and including/implementing the practices of reusability and recycling processes wherever possible. We should also try to incorporate safe practices for handling of hazardous materials.

6. Automation: Automation should be introduced to improve operational efficiency, responsiveness, consistency, predictability, automated material handling technologies as and when feasible/possible and where they are required and make sense.

Tools that are mostly used for the purpose of store keeping operations are as follows

1. Hand Scissor
2. Vacuum Cleaner is used for cleaning purposes.
3. Trolleys for loading and unloading of material.
4. Racks of various kinds such as drive in rack, push back rack, sliding rack, pallet rack etc.
5. Shredder for disposal purpose
6. Measuring tapes
7. Markers, Highlighters and Calculators
8. Computer and its peripherals – These are used for generating bills, record keeping and maintaining inventory.
9. Trash cans/Dustbins
10. Counting Scale
11. Fork Lift



A.



B.

Fig.: 4.2 (A & B): Counting scale and fork lift

One should take care of the following points for proper handling of material and tools -

- Fewer and more efficient lifting operations. Don't lift loads higher than necessary. Use correct lifting and handling procedures. Make lifting more efficient and safer.
- Move materials and perform tasks at safe, comfortable and working heights.
- Make transport and handling operations fewer, shorter and more efficient.
- All the passageways/aisle should be clean and clearly marked.
- Ensure that the correct machine guards are in place for safety of workers.
- All materials and tool should be handled safely and correctly as per the standard operating procedures.
- Use jigs and other mechanical devices to save time and effort.

CLEANING AND MAINTENANCE OF TOOLS

Regular cleaning and maintenance of tools goes a long way in increasing the life and efficiency of tools. Thus the output or quality of work is also ensured if we take care of our tools and equipment.

High levels of dust interfere with efficient production and require cleaning and maintenance operations that may otherwise spoil materials and finished products. Proper cleaning procedure and maintenance protocol is an immediate, low-cost measure to enhance overall cleanliness, consistency and contamination control within workstations. Best practices should be followed with application of specific techniques of wipe down and particle control. Some of the most common contamination include solid dust, liquid, bacteria, fungus, human skin cells and hair, spills and leaks, lint, fibers, and more.

Improved conditions usually mean increased output, higher productivity and quality. There are simple and inexpensive ways to control most of the environmental problems. Maintenance of tools often result in cost savings, productivity benefits and increased safety of workers.

Points to be considered to clean and maintain the tools are as follows-

- Avoid leaving scissors, counting scale and other tools on the floor to avoid any damages or accidents.

- Keep all the tools and material at their designated places. Make use of racks, shelves which are properly marked for this purpose.
- Keep the store free of any unwanted material like empty cartons, bins etc.
- All the storage equipments such as racks, shelves, bins etc. should be cleaned and disinfected regularly.
- Ensure regular cleaning and checking of all the tools after every use.
- Keep all the tools and material back into their covering after use. This will not only prevent them from dust but will also prevent any accidents or injuries.
- Allocate proper space for store keeping operations such as receiving and issuing of material and goods.
- Provide a fix and clean space for each tool and work item and ensure keeping each tool at its designated location after use.
- A regular system of inspecting, cleaning and repairing is an essential part of cleaning and maintenance of tools.

Activities

ACTIVITY 1:

Visit an apparel industry and prepare a report on different types of tools and equipments used for store keeping and write about its maintenance and cleaning method used.

Materials used:

1. Register/File
2. Pens and pencils
3. Eraser
4. Ruler

Procedure:

- 1- Visit an apparel industry.
- 2- Study the tools and equipments used for fabric checking and its cleaning and maintenance methods.
- 3- Prepare a report and submit the same.

Check Your Progress**A. Fill in the blanks:**

- 1- processes should be simplified by reducing, combining, shortening or eliminating unnecessary movement that will impede productivity.
- 2- Work area should have plenty of space for the task to be accomplished and should be and
- 3- We should move materials and perform tasks at, and working heights.
- 4- We should keep all the and at their designated places.
- 5- A regular system of inspecting, cleaning and repairing is an essential part of and of tools.

B. Write Short Answers for the following:

- 1- Mention any four points on how to handle material and tools properly.
- 2- Mention any four points to be considered to clean and maintain the tools.

Session: 2 Safe and Correct Storage of Material

Safe working practices, risk assessments, maintaining standards are recommended practices in the industrial environment. The factors of risk are high since the workers constantly interact with numerous machinery, processes, and practices. The risk can be reduced by assessing and listing them, training the workers, introducing safety measures, emergency incident practice drills, displaying signboards, and following standard procedures and practices.

Health and safety at work is the responsibility of both employers and the employees. Manufacturers are required by law to follow strict rules and regulations to make sure that the workers are protected from possible dangers and using machinery and handling materials. The workers must follow all safety rules and instructions to keep themselves and those around them safe.

STORING THE MATERIAL SAFELY AND CORRECTLY

The dangers, hazards or risks involved in making a product can be identified, described and listed. This is known as risk assessment. In the workplace, it is essential to know what might cause harm or injury to people or the environment, so that safety precautions and systems can be put in place to prevent accidents. The following precautions need to be followed -

- Carry out risk assessments.
- Display warning notices, safety rules and fire exit signs.
- Ensure that machinery, equipment, tools and materials are stored safely, have safety guards, are safe to use and are regularly tested for safety.
- Ensure that chemicals and auxiliaries stocked in the store are recorded, stored and used safely, then recycled or disposed of safely.
- Check that the environment is safe with clean, tidy and clearly marked work areas, aisles, passages. Also ensure adequate ventilation to remove dust and fumes and noise control.
- The best approach is to provide special storage and containers for each productive item.
- Install storage racks, shelves and containers. For heavy items use wooden pallets. For light items use overhead space by installing overhead racks along walls that are less frequently used. Gain productive space by introducing multi-level racks which saves the floor space.
- Savings in floor space results in easy accessibility to work items and tools, and improved inventory control.

- Provide a place for each tool and work item- Consider the quantity, size, shape and weight of the necessary items in order to select the most appropriate means and place of storage.
- Identify tools that are most frequently used. Place the most frequently used tools such as spot guns and scissors which are constantly used in a location where they can easily be reached without leaning. Avoid placing materials on the floor. Provide a place for each tool and work item.
- Provide a stable work surface where items can be firmly placed. Place materials, tools and controls where they can be reached easily by the worker without bending or twisting the body.
- Move materials and perform tasks at working heights. Don't lift loads higher than necessary. Make lifting more efficient and safer.
- Regularly check the condition of the light, guard and other fittings of store section.
- Report hazards and potential risks/ threats to supervisors or other authorized personnel.
- Follow organization procedures for shutdown and evacuation when required.
- Environmental control measures such as clean regularly and properly, do not spread dust, make local ventilation cost-effective and replace dangerous substances with safer ones.

Guidelines for safe storage of chemicals

- All containers, bins and bottles of chemicals should be well labelled.
- Only authorized personnel should be allowed to handle the chemicals and they should also be aware about handling instructions.
- Chemical material should always be stored in designated areas that are designed and constructed for that use.
- The storage location should be out of direct sunlight and heat.
- The chemical storage areas should also be away from high occupancy areas like emergency exit and evacuation areas.
- The floor surfaces of the chemical storage areas should be made of a material which is impervious to the types of chemicals being stored therein.
- Mostly we require some kind of ventilation facility like a mechanical exhaust fan for providing adequate ventilation and avoid collection of highly flammable or toxic fumes in the work area in the event/time of a chemical leak or a spill.
- All chemical storage areas should be secured (i.e. locked) when the factory is not in operation and only authorized personnel should be allowed to handle the chemicals.

- Operations involving smoke and heat should not be performed near the chemical storage.
- Electrical supply, switches, wiring etc. should preferably be outside the chemical storage areas.
- Equipment such as generators, boilers, etc. should not share the same space as chemical storage
- Provision of fire extinguisher should be there but these should also be kept outside the storage room and not inside.
- While storing chemicals their nature and compatibility issues should be kept in mind. For example chemicals which are corrosive or oxidizing in nature should not be stored with flammable material. There should be a distance of at least 5 meters between such chemicals if a separate storage is not possible.
- One must ensure availability of any absorbent material near the storage area to remove/absorb any liquid chemical from the floor or other surfaces after a chemical spill or leak. One may use sand for this purpose, although commercial adsorbent products are preferable. In addition to this, one should also ensure availability of equipments such as shovels, a container and suitable PPE protective gloves, eyewear, etc. depending upon the extent of the spill and the hazards of the particular chemical.

PROPER USAGE OF MATERIALS TO MINIMIZE WASTE

Manufacturing waste will be generated in every manufacturing plant. Apparel manufacturing units and all departments including store department also generate waste of various kinds. These include left over fabric rolls, chemicals etc. Therefore we need to establish practices to minimize the generation of waste. Textiles and apparel manufacturers undertake a range of waste-generating activities such as washing/drying, warp preparation, weaving, dyeing, printing, finishing, quality control, and warehousing. Some types of commonly observed wastes in manufacturing facilities include waste from overproduction, defects, inventory, unnecessary motion and transportation. This waste generated in a store can be minimized in the following ways –

1. Efficient Inventory Management

One can reduce manufacturing waste, by controlling the excess/not required materials being used in the manufacturing process. Inventory should be managed efficiently and only required quantity of raw material should be procured to minimize wastage.

2. Reduce Packaging Materials

Product packaging may be redesigned to ensure that minimum amount of materials are used. Incorporation of reusable or recyclable packaging content should be incorporated for packaging.

3. Reuse

Reusable material should be returned to the store. In the store these should be properly marked and kept so that they can be issued for future use. For example : Unused/ Extra Interlinings, fusing, trims and accessories from one production cycle should be returned to store for use in next production cycle.

4. Establish a Preventative Maintenance Schedule

Regular maintenance in the store department goes a long way in preventing the material getting perished and degraded. It is more beneficial to control the costs to prevent a breakdown instead of reacting to a breakdown later. Thus the store department should have a preventive maintenance schedule for keeping the store clean and minimizing waste generation.

5. Label and Organize the Store Properly

All the locations of inventory, tools, supplies, and assets necessary to manufacturing processes must be clearly marked throughout the warehouse. This may result in decreased time being spent on searching for the right tool needed for an urgent repair. One should always replace the faded tags and repaint the floor lines regularly.

6. Volume Reduction

Volume reduction refers to the segregation techniques that remove the hazardous portion of waste from the non-hazardous portion. These methods help in reducing the volume and the cost of waste disposal.

They can be broadly divided into two categories — waste concentration and source segregation. The former may increase the likelihood of the material being reused or recycled and the latter consists of different types of materials within the waste being treated separately so that the cloth value in the bulk can be recovered.

DISPOSAL OF WASTE AT DESIGNATED LOCATIONS

The requirement for an efficient and effective waste management is motivated by the increasing cost and decreasing availability of natural resources. It helps in reducing input and waste disposal costs, improve your environmental performance and be more competitive. Disposal of waste at designated location is of utmost importance as if the waste is not packaged and transported safely, hazardous materials may leak or spill and cause harm to factories, industry

workers, transportation workers, communities involved in these work and the environment.

One should follow the following ways of waste disposal –

- The types and amounts of hazardous wastes such as expired dyes, auxiliaries in the store should be identified and segregated and the waste disposal method for each category of waste should be determined.
- Sorting the waste ensures that the recyclable items are getting to the right place. For example: Empty packaging which is recyclable can be kept for further use after storing its content. Assign a worker the responsibility of monitoring the bins and finding a viable solution for eliminating, reducing or reusing the generated waste.
- Hazardous and nonhazardous wastes should not be mixed. Disposal of hazardous waste that cannot be treated or recycled should be done at a secure, permitted and designated place which has no access to the general public or any unauthorized personnel.
- Industrial shredders can be used to reduce waste generated by the store department like damaged cloth material, wood, rubber, and plastics to a fraction of their original size. The shredded waste can be further utilized for various purposes like CSR (Corporate Social Responsibility), Filling for mattress and pillows etc.
- Bins/Containers containing waste should always be kept covered only except when workers are transferring hazardous waste into them.
- The benefits of reducing the volume of solid waste generated in a store include a positive effect on the environment, an economic advantage to the industry and better community relations.

Activities

ACTIVITY 1:

Visit an apparel industry and study their methods and ways of waste disposal and prepare a report on the same.

Materials Required:

1. Register/File
2. Pens and pencils
3. Eraser
4. Ruler

Procedure:

- 1- Visit an apparel industry.
- 2- Study the methods and ways of waste disposal.
- 3- Prepare a report and submit the same.

Check Your Progress**A. Fill in the blanks :**

- 1- We have to ensure that machinery, equipment, tools and materials are stored safely, have....., are safe to use and are regularly tested for their safety standards.
- A. 2-Savings in results in easy accessibility to work items and tools, and improved inventory control.
- 2- at designated location is of utmost importance as if the waste is not packaged and transported safely, hazardous materials may leak or spill and cause harm to the environment.
- 3- The types and amounts of hazardous wastes generated should be and and the waste disposal method for each category of waste should be determined.
- 4- The benefits of reducing the volume of solid waste generated at a factory include a positive effect on the environment, anto the industry and better.....

B. Write short answer for the following:

1. Explain any five ways of disposal of waste at its designated location

Session 3: Guidelines for Proper Storage and Disposal of Waste Material

What will happen if you don't empty the dustbins in your house for a month?

The waste will start to spill and overflow from the dustbins, it will give foul smell and the waste will also attract rodents and insects. Now imagine same situation in a factory, let's say any apparel factory. Lot of fabric pieces, threads, empty cans and bottles, packaging material, chemical is generated as waste in these factories. If all this is not emptied regularly, it will start spilling over to work areas and give a foul smell. Also, some of the chemical waste is hazardous which can cause dizziness, irritation of eyes and may also result in fire hazards or accidents. The debris of waste if not disposed off properly and timely may cause employees to trip over and fall, may catch fire or get caught in machines and result in interrupted work cycle.

Apparel production involves converting raw material such as fabrics, buttons etc. to finished apparel items or garments such as kurta, tops, trousers, shirts, skirts etc. Apparel manufacturing companies thus have different departments such as cutting department, sewing department, store department, fabric checking or fabric inspection department. Any production process, apart from producing useful products, also results in generation of waste material and apparel production process is no exception to this. Every department in apparel manufacturing unit generates its own waste. This waste is in the form of fabric scraps, loose threads and fibres, chemicals such as dye paste / dye solution, auxiliaries, detergent and enzyme solutions of different kinds, polythenes and labels, papers etc.

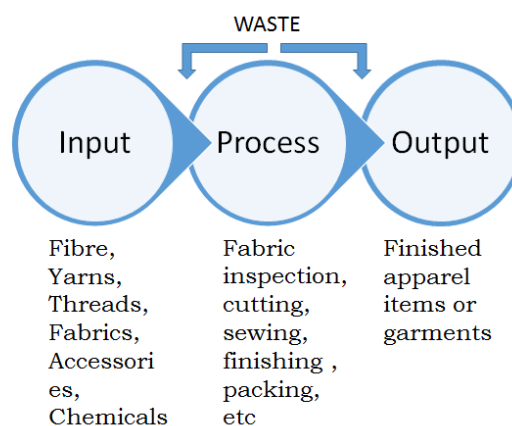


Fig.:4.3 Production Process

Now the raw material such as leftover yarn, fabric, accessories can be recycled and turned into various other products such as mattress and carpet lining, etc. However, most chemical material is harmful to workers and to the environment.

Let's have a look at some of the chemicals used in the apparel production:

- Chemicals used for maintenance purposes, such as machine oils and cleaning products
- Chemicals used as fuel for machines and equipment.
- Chemicals used for washing, dyeing and fabric treatment etc.
- Chemical used in housekeeping and maintenance of the premises.

FACT SHOTS:

Textile and apparel industries come second in the list of most polluting industries and are a major source of waste.

Thus the waste material needs to be disposed off carefully because not only is it hazardous but it also makes the surroundings and premises unhygienic (and) unsafe.

WHAT IS WASTE?

Waste, also called trash, garbage, junk, etc., is generated during the production process and is unwanted material with no direct use. Waste cannot be used for further production, transformation, or consumption. It has no further use or value. Waste is perceived to be a problem because most of it is harmful to human health and environment, occupies space, and has no utility.

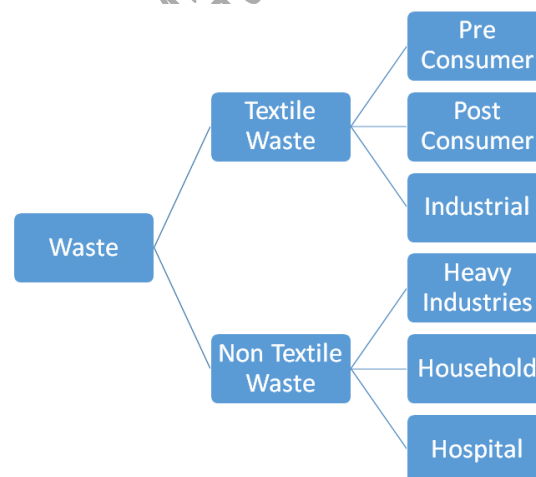


Fig.:4.4 Waste and its Types

WHAT IS TEXTILE WASTE?

Waste generated by textile and apparel companies is called textile waste. It can be fibers, yarns, or fabrics. Fabric scrap, threads, packaging material of fabrics, accessories, and chemical wastes are the main waste material generated during the apparel production process.

Different departments generate a variety of waste products as a result of their activities. One such is waste by Store Keeping Department.

WASTE GENERATED IN STORE KEEPING DEPARTMENT:

Store keeping mainly involves receiving, checking, issuing and maintaining various items stocked in it. The waste generated includes the following:

- Empty Cans of expired Chemicals and solvents used for cleaning, oiling, and maintenance of various machines
- Empty cans of Chemicals for spot removal of stains, dyes, auxiliaries etc.
- Leftovers Cleaning agents, detergents, and their empty packing.
- Rejected fabric rolls
- Packaging waste such as empty polythene, labels, twin tape, brown tape, etc.
- Broken and degraded items.

GUIDELINES FOR STORAGE AND DISPOSAL OF WASTE MATERIAL

A systematic approach has to be followed for the storage and disposal of waste material in apparel manufacturing industries so that they don't pose a threat to humans and the environment.

Compliance managers, site supervisors as well as shop floor workers, everyone needs to be very careful while dealing with factory waste, especially chemical waste.

Waste needs to be segregated, stored, and then disposed off. Disposal of the waste should be done on a preplanned basis and in a scheduled manner like a daily, weekly, or monthly basis as requisite.

Waste disposal forms a primal component of the management of every corporation, as it is governed by health and environment legislation.

All this comes under waste management.

Indiscriminate disposal of these wastes into the environment without proper treatment could lead to frightening environmental repercussions and could lead to pollution of river water, land, and groundwater resources. Various precautionary measures are required for the handling of hazardous wastes generated in the industry.

SAFE DISPOSAL OF WASTE MATERIAL AND RETURNING REUSABLE MATERIAL

Since the waste material is not only hazardous to human health but also to the environment. Hence, even before the disposal of the waste, it must be classified and acted upon.

To classify the waste, the following things have to be kept in mind

- Is waste biodegradable or not?
- Can it be recycled or reused?
- Does the waste require any treatment before disposal?

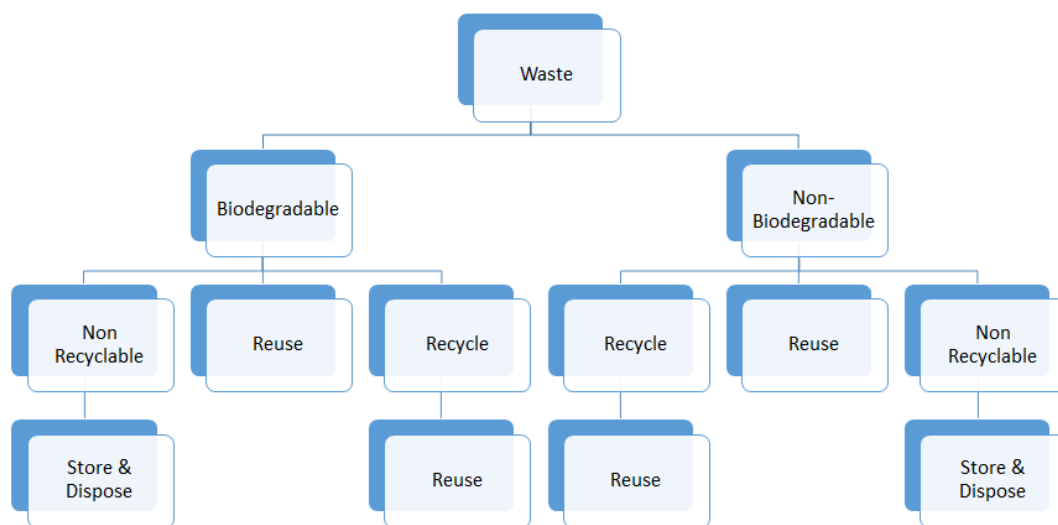


Fig.: 4.5 Classification of the Waste on the basis of Recyclability

As can be seen in the Fig.: above, some of the waste generated cannot be immediately disposed off, and hence it needs to be collected at a designated spot before disposal.

The various guidelines for safe storage and disposal of waste are as follows:

- Staff needs to be adequately trained
 - Clear demarcation of the designated spot
 - Restricted entry at the spot
 - Set a defined process for cleaning and storage
 - Specific time allocation in the working hours

Once the waste is stored at the designated spot, it must be recycled keeping in mind source, condition, composition, and resale value. This is referred to as Textile Recovery and Recycling.

Efficient and effective disposal of waste requires paying attention to safety measures along with ensuring no spillage of the same.

The methods of Waste disposal apart from recycling are as follows:

- Disposal at Landfills
- Incineration

Since the above-mentioned procedures again lead to a vicious trap whereby they further lead to health hazards by entering the food and water cycle. Hence, the norms laid under the legislation guide us to follow the 3Rs model.

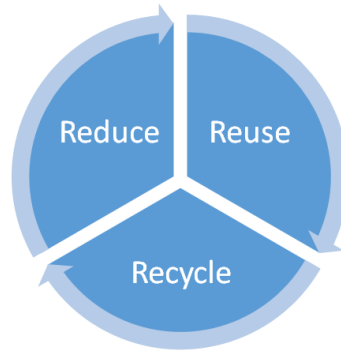


Fig.: 4.6 3R's of Waste Management

RESPONSIBILITIES UNDER HEALTH, SAFETY, AND ENVIRONMENTAL LEGISLATION

Environment health and safety is a primal tool in reducing and preventing health issues, emergencies and accidents at work, together with any environmental damage which could consequence from work practice. Hence, it consists of all processes, guidance, rules and laws structured to help protect the environment , the public and employees from harm.

The focus of the EHS (Environment, Health and Safety) is to reduce carbon footprint of business and manage waste keeping in mind the general safety and health of the workers by providing a healthy and safe working environment.

The motives behind having an Environmental, Health and Safety discipline in place are as follows:

- Protection of workers from various hazards and natural environment
- Strict compliance and adherence with regulatory standards and legal requirements
- To improve the morale of the workers thereby increasing profit and productivity in the long run

EHS departments also supervise an array of hazards which include heavy machinery, height falls, carcinogens exposure, and ergonomic hazards.

As the Environmental, Health, and Safety Legislation play an important role in the overall management of the organization by the provision of a safe working environment to ensure an increase in both profits and productivity in the long run. Hence, there are several responsibilities of the legislation:

- To ensure proper implementation of laws and regulations
- To ensure development and implementation of all safety and health programs in the company
- To ensure right protective measures are applied to ensure workers safety
- To lower injuries risks by supervision of dangerous procedures
- To ensure timely communication of hazards by having systems in place
- To review and align environmental policies from time to time, advocating progress in all arenas
- To design and develop a book of general safety rules
- To ensure proper training of workers on the use of their respective working machines, equipment or chemicals
- To enable proper inspection of equipment before use and proper maintenance
- To perform risk assessment at the workplace

POTENTIAL HAZARDS ASSOCIATED WITH THE MACHINES AND THE SAFETY PRECAUTIONS

As the primary role of the Environmental, Health and Safety legislation is to prevent hazards that affect not only health of the workers but also the environment, hence it is necessary to understand the types and nature of hazards. The various hazards are as follows:

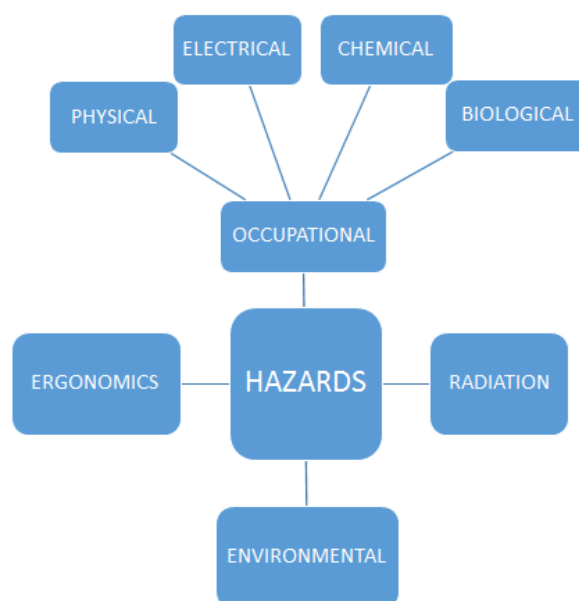


Fig.: 4.7 Types of Occupational Hazards

The above mentioned flowchart briefly summarize the various hazards associated with the working environment but neglects the hazards caused as a result of the negligence of workers while working, which results from either of the following:

- Psychological disturbance
- Physical fatigue

The various hazards falling under the various categories mentioned above are as follows:

- **Occupational Hazards**

- Physical hazards: These arise as a result of mechanical equipment accidents. They can include burns, cuts, and broken body parts among others.
- Electrical hazards: These basically include electrocution arising out of various factors including negligence.
- Chemical hazards: These include chemical burns, inhaling chemicals, eye splash, and skin irritation among others
- Biological hazards: These include viral, bacterial infections among other things.
- **Radiation hazards:** These would include various skin diseases caused due to exposure to harmful rays emitted by machinery and tools
- **Ergonomic hazards:** These arise due to incorrect posture of working emanating from the incorrect design of the machine, inadequate training, etc
- **Environmental hazards:** These mainly include the various types of pollution caused by the waste generated by the organization

The various hazards could be dealt with by using the various control methods, which are as follows:

- Installing personal protective equipment in place to prevent injuries during operations such as gloves, helmet, goggles, overall, and boots among others
- To develop administrative control to alter how people work by devising new rules and procedures
- To set in place engineering controls to isolate workers from hazards by structuring the workspace in a more secure manner
- To substitute harmful substances with those having least harmful effects to avoid hazards
- To eliminate substances which might involve physical hazard

Activities

ACTIVITY-1:

Discuss in a group of five students, the potential hazards that you anticipate and ways to mitigate while working in the laboratory. Present the findings in the form of a report

Materials Required:

1. Register/File
2. Pens and pencils
3. Eraser/ Sharpener

Procedure:

1. Gather in a group of five and anticipate the hazards associated with working in the textile laboratory
2. Write the anticipated hazards on an individual basis
3. Discuss and narrow down to five most common hazards
4. Present the findings in the form of a Report in front of the class

Activity 2:

Prepare a roadmap to effectively manage the waste generated in the textile laboratory and explore ways to apply the 3Rs model

Materials Required :

1. Dustbin
2. Empty buckets for segregation

Procedure:

1. Accumulate all the waste generated in a common area
2. Classify the waste into biodegradable and non-biodegradable
3. Further segregate it into recyclable, Reusable and non-recyclable
4. Now, discuss the ways in which the recyclable waste could be reused
5. Dispose the non-recyclable waste into a dustbin

Check Your Progress**A. Fill in the blanks with the most appropriate word:**

- a. _____ is a primal tool in reducing and preventing health issues, emergencies and accidents at work, together with any environmental damage which could result from work practice
- b. _____ include various skin diseases caused due to exposure to harmful rays emitted by machinery and tools

B. Answer the questions briefly:

- a. Explain the term hazard in the context of occupation. Also state and define the types of potential hazards
- b. Why is environmental, health and safety legislation required in an organization? Substantiate with a real life example.
- c. What is waste. How is Textile waste different from Non-textile waste and what do they include?
- d. List the various types of wastes generated in a fabric checking department of a company.

Session 4: Use of Different Cleaning Substances

Cleaning substances are referred to as materials which are primarily used for cleaning purposes. These cleaning substances can be further classified into:

- Cleaning agents
- Cleaning equipments

Cleaning agents as the name suggests, are referred to as strong chemicals which are used for spot removal of stains on fabrics, floors of premises. Store keeping operation does not involve any cleaning agent as such. However the store needs to be kept clean, hygienic and disinfected at all times so that no damage is caused to stored goods. Mostly cleaning agents required in housekeeping need to be stored here apart from other chemicals such as dyes, pigments etc.

Cleaning agents for general housekeeping of the store

General housekeeping involves regular operations of cleaning and maintenance, thereby making the role of cleaning agents a primal one. The most common cleaning agents used include floor cleaners, disinfectants etc.

Cleaning agents for fabrics and accessories in the store

Sometimes the stored fabrics and accessories may get spoiled due to unforeseen reasons such as spillage, seepage etc. Thus cleaning agents may be required to ensure freshness and spotless fabrics prior to production. The primary purpose of the cleaning agents is spot removal but can also involve dyeing and washing if required. Apart from this cleaning agents are also used for keeping the premises of fabric inspection clean and tidy.

Though cleaning agents play an important role in various processes involved in the business and are widely used, still they must be handled with care and precautions.

The points to be kept in mind while using the cleaning agents are as follows:

- They should not be touched directly as it might lead to skin irritation.
- They should be stored in a separate, designated area as coming in contact with them would lead to fatigue, headache and dizziness.
- All the containers with cleaning agents should be well labeled and only authorized or limited personnel should be allowed to handle them.
- Protective gear such as apron, skullcaps and gloves, etc should be made use of while handling cleaning agents as it might lead to breathing issues and damage of lungs.

Many of these problems can be prevented and solved at little or no cost. If you use organic solvents, keep them properly stored and labeled. They should be very carefully handled and used sparingly.

These points must be kept in mind as if they are ignored, they would lead to reduction of productivity and product quality, increased absenteeism and turnover of staff.

Some of cleaning agents which are widely used could be be classified based on usage as follows:

- Cleaning agents for regular cleaning
- Cleaning agents for hard surface care formulations
- Cleaning agents for maintenance of machinery and space

Cleaning agents for regular cleaning

These are primarily used to ensure upkeep, shine and functionality of the fabric. They include Antifoams, surfactants, chelants, solvents, dispersants and polymers which ensure high performance fabric care.

Cleaning agents for hard surface care formulations

When the stains on the fabric are not easily removable by application of above mentioned cleaning agents, they are required to be treated with hard surface care substances. These include Surfactants, dispersants, chelants, solvents and rheology modifiers that clean more efficiently and improve fabric performance.

Cleaning agents for maintenance of machinery and space

The substances that are used to ensure the upkeep of the machinery used and keep the space neat and tidy are referred to as cleaning agents for machinery and space. They include disinfectants, floor cleaners, etc.

The job of the cleaning agents can not be possible without the application of cleaning equipment. Hence, cleaning equipment plays an important role.

Cleaning Equipments

The tools that are put to use to apply cleaning agents for the purpose of stain removal both for the purpose of housekeeping and fabric checking are referred to as Cleaning Equipments.

The different types of Cleaning Equipments are as follows:

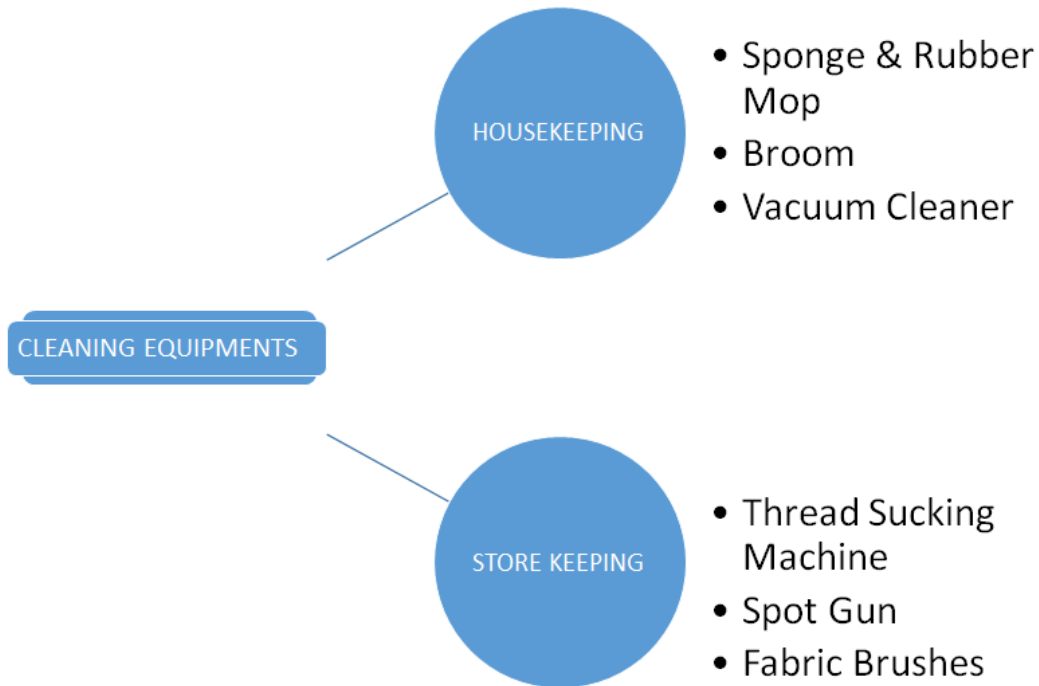


Fig.: 4.8 Cleaning Equipments for Housekeeping

1. Sponge and Rubber mop -They are used to clean all the plastic pallets as well as the floor with the help of a wet mop
2. Broom – Their use is to sweep the working areas
3. Dustbin –This is used to store all accumulated unused cloth waste rags, trash and dust of the working area prior to cleaning
4. Vacuum cleaner - It is used to remove the dust and powder in floors, the exterior surface of the machine walls, ceilings and ventilators.

Cleaning Equipments for Store Keeping

1. Thread sucking machine -This machine has a crucial role as it primarily used to remove the loose threads on the top of the fabric
2. Spot Gun - It is used to remove the stains if they are detected prior to issuing of the fabric.
3. Brushes — To brush off the loose dust.

Activities

ACTIVITY 1:

Imagine that the apparel and textile laboratory in your school had to be closed for a long duration say, 5 months. Clean the laboratory with the help from

other students and support staff and make it fully functional again. Write the procedure followed in a chart.

Materials Required:

1. Chart Sheet
2. Colourful Pens & pencils
3. Pencil
4. Eraser
5. Ruler

Procedure:

Write the steps you followed for the cleaning of the laboratory. List all the cleaning agents and equipment used in the process.

1. Prepare the chart.
2. Decorate it.
3. Now, present a comparison of the pre and post scenario of the laboratory by pasting adequate number of photos of various stages in the cleaning process
4. Attach the chart on the drawing board of the classroom.

Activity 2:

Prepare a chart on various storage equipment (any 10) used in the store department of an apparel company.

Materials Required:

1. Chart Sheet
2. Colourful Pens & pencils
3. Pencil
4. Eraser
5. Ruler

Procedure:

1. Collect the information on storage equipment from various sources.
2. Write it in your chart along with relevant pictures.
3. Decorate your chart.

4. Display in the class and also hold a group discussion on the same.

Check Your Progress

A. Fill in the blanks with the most appropriate word :

1. Sometimes the stored fabrics and accessories may get spoiled due to unforeseen reasons such as _____ , _____ etc.
2. _____ is primarily used to remove the loose threads on the top of the fabric.
3. _____ should be made use of while handling cleaning agents as it might lead to breathing issues and damage of lungs.

B. Write short answers for the questions that follow:

1. Describe the precautionary measures used while handling cleaning agents.
2. Explain the various problems associated with the cleaning of the machinery, space and fabrics and the various cleaning agents and Equipments used for the same.

Session 5: Personal Hygiene And Health

Introduction to personal hygiene and health

Personal hygiene refers to all those habits and practices which help in maintaining good health and keeping illness away. Taking daily baths, wearing clean clothes, keeping neat and tidy hair are all examples of good personal hygiene. It helps in keeping healthy and maintaining a neat and pleasant appearance.

A healthy worker is also a productive worker. Poor health is the most common reason workers take a leave of absence from the workplace. Many illnesses are a result of the lack of knowledge of personal hygiene among workers and can be prevented by following simple rules of hygiene. Basic health education can help reduce the incidence of these illnesses. The factory can benefit by identifying common health issues that the workers face and by training them on the prevention and control of these problems. At the same time, factory management must remain alert and respond to health issues that emerge in the community. Good personal hygiene habits are directly related to less illnesses and better health. Poor personal hygiene habits, however, can lead to some minor side effects, like body odor and greasy skin. They can also lead to more troublesome or even serious issues.

Importance of Personal Hygiene

Personal hygiene is important mainly because it saves us from illnesses and ensures good health. It also has many other benefits. These include:

- Neat and Tidy appearance
- Improved stamina and efficiency
- Boosts self confidence
- Acceptance and
- Lesser leaves and absenteeism

PERSONAL HYGIENE, TAKING CARE OF BODY, FOOD HABITS:

Unsatisfactory quality and quantity of drinking water, lack of sanitation and hygiene can cause a number of illnesses. These factors can affect individually

or in combination also. The diseases caused by poor sanitation and hygiene mostly affect individual employees and are not communicable. Thus they can be controlled but there are situation where lack of hygiene and sanitation may simultaneously affect many employees or group of employees. Such a situation is difficult to control and may result in huge loss of work. The latter is often indicative of poor working conditions in the factory.

The prevention of diseases related to water, sanitation and hygiene is possible with the institution of simple control measures at the factory level. Workers must be regularly trained in hygiene and sanitation practices to avoid loss.

The following mentioned are few tips on dealing issues regarding good personal hygiene at work and also some workplace health and safety tips:

NEAT AND TIDY WORKPLACE

The employers must ensure to provide neat and clean workplace for the workers. A hygienic environment at work will result in increased motivation and satisfaction among workers. The workers must also ensure that they keep their work area/station free from any clutter and clean it regularly.

ENSURING PERSONAL HYGIENE AND CARE OF BODY:

While wearing gloves in a clean room is standard practice, those who wear gloves are less likely to wash or clean their hands prior to donning gloves. Poor hand hygiene increase the vulnerability of store department to bacteria and potential transfer or introduction of microbes such as viruses and fungus.

- Hand Wash :Hands should be washed thoroughly with effective soaps.
- Wear clean uniforms/ Protective clothes during working in the area along with cap, eye glass, face mask and footwear that adequately covers their feet to protect products from human particles such as skin flakes or hairs.

SAFE WORKING PRACTICES AND ORGANIZATIONAL PROCEDURES

Safety measures include proper training of machine operators, which is essential throughout the production line and across the workplace. Safety can be greatly enhanced by introducing automation in machinery and processes for materials handling, particularly for heavy loads or wherever fast-running machinery is used or where heat or sharp blades or needles are involved. Safety devices are used to check that machine setting is correct and to stop machinery in an emergency.

- All Organizational policies and procedures should be followed for issues related to security, material handling, potential hazards etc.

- All compliances should be strictly followed. Special care and attention should be paid to health and safety regulations and procedures in case of fire, chemical hazards, bio-hazards, etc.
- Maintain distance between moving machinery and stay within designated areas.
- Maintain a clean, neat and orderly working area
- Safety measures: Ventilation to remove vapors from heat sealers.
- Safety guards and protective clothing, gloves and footwear should be worn.
- Displaying educational posters is a powerful way to educate workers. These are very effective because they deliver a consistent message, and use pictures which are a strong form of communication targeting specific behavior. Examples which have been used in other garment factories include posters on lifting postures, proper mask wearing, and reproductive health.

Safety Measures

- Workers should use and maintain personal protective equipment as instructed.
- They should also carry out their activities in line with approved guidelines and procedures
- Use and dependency of intoxicants such as liquor, cigarettes etc. Should be totally avoided and a healthy lifestyle should be maintained.
- Faults and malfunctions in machinery and equipment should be dealt with urgently and with utmost sincerity.
- Storage of materials and equipment should be done in line with manufacturer and organizational requirements.
- Waste material should be handled carefully and safely
- Seek clarifications, from supervisors or other authorized personnel in case of perceived risks.
- Keep checking the workplace and work processes at regular intervals for potential risks and threats.
- Workers must report risk of potential threats, accidents to supervisors or any other authorized personnel.
- Workers should undertake all training and drills related to first aid, fire-fighting and emergency response very sincerely and should not do it just for the sake of formality
- Take action, based on instructions in the event of fire, emergencies or accidents
- In situations where shutdown and evacuation is mandatory or compulsory, workers should follow standard organizational procedures

- Environmental hygiene should not be neglected – regular checks of waste disposal, drainage, sewage and effluent treatment systems should be instituted.

Hazard Controls

- a) Sharp Objects – Store keeper should not handle broken sharp objects or broken glass by hand. Use tongs, forceps, tweezers, magnets or other devices to pick up and discard the broken object.
 - b) While disinfecting contaminated areas or equipment, store-keeper should wear protective gloves such as latex or other watertight gloves, safety glasses or goggles and cleansing wipes.
 - c) If work surfaces or equipment have come in contact with blood or other body fluids for example, a worker's finger has been cut and has bled onto the equipment surface, these surfaces should be cleaned and disinfected immediately.
- Use only lint free sterile sponges and mops for cleaning and disinfection in the sterile area. Wipe the entire sterile area using sponges and mops wet with the required concentration of the sterile disinfectant solution, the areas include walls, floors and doors.
 - All exposed surfaces of equipment and glass panels should be sprayed and wiped with sterile solutions. Spillage or leaks if any should be cleaned and mopped immediately using sponge and sterile disinfectant solution.

GOOD HOUSEKEEPING PRACTICES AND ORGANIZATIONAL PROCEDURES

Introduction to Housekeeping

Efficient production and good working environment are complimentary and go hand in hand for achieving organizational goals. A clean, orderly and attractive environment encourages tidy work habits in employees and also boosts their efficiency. Good housekeeping is more than just the cleanliness. It also involves minimizing risks due to accidents and hazards. Good housekeeping is mandatory in every phase of industrial operation. Entire premises that is indoor areas such as work area, reception, washrooms etc. as well as outdoor areas such as lounge, parking lot, garden etc. should be maintained and governed by housekeeping practices as followed in the organization.

Poor housekeeping leads to a sense of chaos, accidents and also gives rise to:

- Excessive material, waste or chips in the working area
- Congested aisles

- Tools left on machines
- overflowing waste bins
- Lockers and workrooms in disorder
- Chemicals and Acids in open containers
- Broken glass
- Electric leads or air lines across aisles
- Unclean light fittings, windows and skylights
- Accumulated piles of paper and other packing materials
- infestation by pests such as rodents and cockroaches

GOOD HOUSEKEEPING PRACTICES AND ITS BENEFITS

Housekeeping refers to cleaning, organizing a place as well as minimizing risks, accidents and hazards due to unkempt and untidy premises such as loose and dangling wires, overflowing bins and containers, slippery floors etc. Good housekeeping practices help in keeping the premises clean, systematic and hazard free and thus boost the efficiency and productivity of employees.

SOME GOOD HOUSEKEEPING PRACTICES

REGULAR CLEANING AND MAINTENANCE

Workspace should be regularly cleaned with disinfectants.

REPAIR AND CHECK OF ALL ELECTRICAL SWITCHES, WIRING AND SUPPLY

All power supplies and electrical wiring and switches also fall under housekeeping and should be checked and maintained regularly with utmost sincerity.

AISLES:

Aisles should have clearly marked floor lines to keep them segregated for work areas and storage areas. Also these should not have any debris, scrap or boxes in their way.

FLOORS AND WALLS:

These should be clean and free from dust, dirt and marked clearly with signboards and placards. Spilt oil and other liquids should be cleaned up at once. Chips, shavings, dust, and similar wastes should never be allowed to accumulate. They should be removed frequently.

1. WELL-MAINTAINED AMENITIES:

Facilities or amenities such as washrooms and lockers for clothing should be clean and up to date. Lunchroom should be clean, well-maintained and inviting.

2. WASTE REMOVAL:

There should be a proper waste disposal schedule along with cleaning agents and equipment. There should be adequate facilities to prevent congestion and disorder in the premises.

3. MAINTAIN THE LIGHT FITTINGS:

Any good housekeeping programme will pay attention to light fittings and care and maintenance of all light fittings in the premises is an integral part of such a programme. Lamp shades and lights become dirty with use and often accumulate dirt and dust around them. This reduces their efficiency and the workers are devoid of essential light which puts strain on their eyes. Simple cleaning of lamps, reflectors and tube lights is known to improve the lighting efficiency may by 20 to 30 percent.

4. CLEAN THE WINDOWS:

Clean windows help in optimizing the availability of day light and dirty ones keep it out. Improper lighting arrangements at the workstation can lead to eye strain and accidents because of low visibility. Efficient housekeeping ensures that windows are not blocked by stacked materials, equipment or articles on the ledges and are dust free.

5. VENTILATION:

There should be adequate ventilation in the premises. The ventilators and exhaust fans should be clean and free from dust, cobwebs, grease etc.

6. FULLY FUNCTIONAL FIRST AID GEAR:

First aid facilities and equipment should be kept under spotlessly clean conditions and fully stocked so that they are always ready in the event of accidents or illness.

7. INSPECT FIRE-CONTROL EQUIPMENT:

Regular inspection of all fire-fighting equipment such as extinguishers and fire hoses is vital for keeping them in good working condition. Fire protection facilities such as door and exits, automatic alarms, etc must be in excellent working condition. Care should be taken to check and avoid any jammed or

blocked fire exits and doors. Doors and exits should always be kept clear of obstructions.

BENEFITS OF GOOD HOUSEKEEPING PRACTICES

Good housekeeping is an important factor of quality assurance. Manufacturing and other operational areas need regular cleaning and disinfection, in order to remove spillage powders, dust and dirt. Cleaning ensures avoidance of cross contamination and to maintain working environment tidy and safe. Though good housekeeping practices require time, effort and planning but they are worth of investing time and energy. Every organization has housekeeping practices as these not only help in keeping the premises clean but have several advantages and benefits too. Some of the benefits of a good housekeeping programme are:

- Well maintained and up to date premises
- Better working conditions
- Reduced risk of accidents
- Better efficiency and productivity of staff
- Safe and healthy work environment

HAZARDS OF POOR HOUSEKEEPING PRACTICES

Regular and timely housekeeping has many benefits. If however, housekeeping is not practices regularly and efficiently it may pose serious problems. Some of the hazards and problems associated with poor and irregular housekeeping practices are:

1. Untidy and unsafe premises
2. Accidents
3. Fire Hazards
4. Chemical and oil spillage
5. Dusty walls and windows
6. Slippery floors and handles
7. Jammed doors and knobs
8. Unkempt, smelly washrooms and change rooms etc.
9. Falling and tripping over objects lying on floors, stairs and platforms
10. Accidents due to falling objects

11. Wet or dirty surfaces causing slipping and falls
12. Striking against items kept in undesignated or wrong locations or items piled up in stacks near aisles and exits
13. Projecting nails, wire or steel rods which may cause injuries such as piercing any body part, tearing skin etc.
14. All this has a direct bearing on the efficiency and productivity of employees and may bring down their morale also.

Activities

Activity 1: Prepare a chart on importance of personal hygiene.

Material Required:

1. Chart paper
2. Colored pencils/pens
3. Ruler
4. Eraser
5. Markers

Procedure:

- 1- Collect information on the importance of personal hygiene.
- 2- Prepare a chart and place the collected information on it.
- 3- Place the completed chart in your classroom.

Activity 2:

Prepare a skit on various hazards of poor housekeeping practices and enact it in your class. Also conduct a discussion on the same.

Materials Required:

1. Pencil/Pen
2. Eraser
3. Chart paper

Procedure:

1. Plan your skit on any situation related to hazards of poor housekeeping practices.
2. Distribute dialogue and roles among all the participants.

3. Enact the skit in your class.

Check Your Progress

A. Fill in the blanks with the most appropriate word :

1. Regular and timely _____ has many benefits.
2. Regular _____ of all fire-fighting equipment such as _____ and fire hoses is vital for keeping them in good working condition.
3. Good housekeeping practices help in keeping the premises _____, _____ and _____.
4. Good housekeeping is an important factor of _____.

B. Briefly answer the following questions:

1. What do you mean by good housekeeping practices? Mention any 3 good housekeeping practices.
4. Describe a few benefits of good housekeeping practices.
5. What is meant by poor housekeeping practices? Explain briefly.
6. Mention a few hazards of poor housekeeping practices.

Module 5**Health and Safety Related Practices
Applicable at the Workplace****Module Overview**

In any industry workers are exposed to many activities and have to handle various tools machineries, chemicals etc.. In apparel and textile industry also workers are exposed to a number of chemicals, pigments, machines and associated heat, dust, smoke etc.

The health and safety of workers has a direct bearing on their productivity and efficiency and hence company's output and profits. Therefore, it is of utmost importance to take care of their health and safety and to provide them with a safe working environment. Some issues can be extremely harmful and can even lead to accidents, hazards and permanent damage to the worker as well as the property.

Hence, we need to know about various potential health and safety hazards, risks. In addition to this we also need to understand and follow various health and safety related practices which should be followed in any organization to keep the workers and premises safe. The workplace related injuries usually start as minor aches and pains but can further develop into severe injuries that affect all day activities. At other times if these practices are not followed they can also result into severe workplace accidents and mishaps. People's efficiency in their working environment aims at preventing injuries by monitoring the risk factors such as force, repetition, posture and vibration that may cause injuries to develop.

Some basic ergonomic principles that should be followed at store area are:

- Proper tools/equipment's.
- Keep repetitive/continuous motions to a minimum level.
- Avoid unbalanced postures.
- Safe weight lifting procedures.
- Appropriate resting time.
- Other aspects to monitor which can have potential risk factors.

Learning Outcomes

After completing this module, you will be able to:

- List and analyze Potential hazards at workplace
- Demonstrate safe handling of equipment
- Describe the benefits of a healthy lifestyle
- Explain environmental management procedures, security details, potential accidents and emergencies
- Identify and implement safety measures at workplace

Module Structure

Session-1 Potential hazards at work place

Session-2 Safe handling of equipment

Session-3 Benefits of a healthy lifestyle

Session-4 Environmental management procedures, security details, potential accidents and emergencies

Session-5 Safety measures at workplace

Session 1: Potential Hazards at Work Place

Hazard is a potential source of harm that can cause temporary and permanent damage or even death in severe case.

The first step towards workplace risk assessment is to identify the potential risks/hazards at the workplace. To overcome these hazards in a nominated person is appointed for conducting formal risk assessments; however, it is everyone's responsibility to be careful and mindful of hazards at the workplace and minimize the risk.

Not all hazards are obvious, and they will be unique to every workplace depending on the type of process flow. This can make it difficult to immediately identify and protect all the employees from the hazards; therefore it is important to study various types of hazards and how to keep store area free from potential hazards.

DIFFERENT TYPE OF POTENTIAL HAZARDS

- **Biological.** Biological hazards includes viruses, bacteria, insects, animals, etc., that can cause adverse effects on the material lying in the store and

also lead to negative health impacts. For example, any fungi attack on the fabric rolls can deteriorate the condition of the fabric lying in the store.

- **Chemical.** Chemical hazards are hazardous substances that can cause harm. These hazards can result in both health and physical impacts, such as skin irritation, respiratory system irritation, blindness, corrosion and explosions. For Example – Any hazardous chemical leakage in store can lead to damage in the raw materials/products stored.
- **Physical.** Physical hazards are one of the most common types of hazard occurring at the workplace and often cause physical injuries to workers. These include any such factor or condition which can cause harm to an employee without essentially touching them, including heights, noise, radiation and pressure. Some physical hazards may result due to coming in contact with machines or bumping into boxes or material lying here and there.
- **Safety.** These hazards create unsafe working conditions. For example, exposed or open electric wires or blind corner can be injurious in the store. These are mostly included in the category of physical hazards.
- **Ergonomic.** Ergonomic hazards are a result of poor and faulty designs of infrastructure, machinery that can result in physical injuries. For example, if the heights of the racks are not designed according to the height of the workers it may lead will result in body aches, stiffening and thus will lead to reduce productivity.
- **Psychosocial.** Psychosocial hazards adversely affect an employee's mental health or wellbeing. For example, sexual harassment, victimization, stress and workplace violence.

KEEPING WORK AREA FREE FROM POTENTIAL HAZARDS

Workstations have to be kept free from any potential hazard to ensure the safety of workers and the work place. Therefore, following measures can be followed to maintain the safety and security –

1. Environmental Control Measures

Hazardous substances in one form or another can be found in almost all small and medium-sized enterprises. The garment industry generates a lot of dust from fabrics being cut and sewn, heat and noise from machinery. There are simple and inexpensive ways to control most of the environmental problems. Improvements often result in cost savings, higher productivity and increased safety of workers.

2. Regular and Proper Cleaning

Dust originates from fabrics and threads, from cutting and sewing to packing operations. It is very common to see small clothing enterprises with ceilings and walls full of dusty cobwebs.

One low-cost cleaning method is sweeping the floor carefully with an appropriate broom and accompanying dust pan to prevent dust from spreading. Spraying water on the floor before sweeping will avoid dust remaining airborne.

3. Cost-effective Local Ventilation

Local ventilation should only be considered as a means of reducing chemical hazards when other means have failed.

There are cost-effective ways of improving ventilation:

- **Use proper fans**

Apart from those used for ventilating workstations, fans may be utilized to remove dangerous substances from the workplace.

Contaminated air can be pushed or blown outside by having more open windows.

- **Good Lighting for Quality Products**

Good lighting does not mean more light bulbs and more use of electricity. Natural lighting is usually a better option than the bulbs. But if there is a difficulty in arranging for a natural lighting through windows and ventilators, it's important that the bulbs and other elements of artificial lights should be well-maintained. A good lighting arrangement is directly proportionate to an efficient workforce.

Lighting requirements are reliant on three main features:

- The environment of the working area
- The nature of the task
- The sharpness of the worker's eyesight

- **Full use of Daylight**

If there are too many machineries omitting heat, it isn't a great idea to allow the natural heat to come in and add up to the temperature.

The higher the window, the more light is in.

It is important to paint the walls in lighter shades which not just give a sense of space to a room, but the workstation would look illuminated. In a store we should have be very careful with the light as long time exposure to light can cause degradation of fabric color/shade.

Activities

Activity 1:

Collect the data and make a report on risk and hazards of industry.

Materials Required:

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser
5. Pictures of different hazards in an industry

Procedure:

- 1- Search and collect the data and pictures of different types of hazards of an industry.
- 2- Place the pictures in the practical file and label the same.
- 3- Write the description and make a report.

Check Your Progress

A. Fill in the blanks :

1. is a potential source of harm that can cause temporary and permanent damage or even death in severe case
2. hazards create unsafe working conditions.
4. Psychosocial hazards include those that can have an adverse effect on an employee's..... and.....
5. should only be considered as a means of reducing chemical hazards when other means have failed.

B. Write short answers for the following:

1. What do you mean by potential hazards? Name any three.
2. Describe any two measures for keeping the store area free from potential hazards.

Session: 2 Safe Handling of Equipment

Safe and correct procedure of handling equipment and machinery

It is very important to handle the equipment carefully and safely in the garment industry and train all workers in a manufacturing unit to use the same effectively. Following are the suggested ways of handling the equipment safely:

1- Clothing and Personal Protection

Clothing and personal protection must be worn wherever they are prescribed. Close fitting clothing should be worn near machinery with moving parts. Loosely, draped garments like scarves, dupatta, bows, ribbons and loose sleeves are dangerous. Long hair should be tied up tightly and covered with Cap. Jewelry, watches and rings should not be worn. There are personal protection equipment's such as hair protectors, ear protectors, gloves, safety glasses and shoes.

Types of Personal protective equipment's

Latex Gloves

Purpose: - To avoid any chemical contamination while handling Chemicals.

Acid-Alkali Hand Gloves

Purpose: - Used for handling Acid/Alkali

Chemical Splash Safety Goggle / Mechanical Safety Goggle

Purpose: -For protection of eyes against chemicals.

Different types of Masks:

Organic Vapor Mask

Purpose: - For protection against Organic Chemical vapors.

Particulate Respirator

Purpose: - For protection against chemical Dust.

Chemical Mask

Purpose: -Used for protection against high concentration of organic vapors.

Dust Mask

Purpose: - For protection against normal repairable Dust.

Gum Boot

Purpose: -For protection of foot while working in wet process. (For Washing & ETP (Effluent Treatment Plant) operators.

Ear Muff

Purpose: - For protection of ears while working in high noise areas

Ear Plug

Purpose: - For protection of ears while working in high noise areas.

Leather Apron

Purpose: - For protection of body while working at heat. (For Boiler Operator)

Safety Helmet

Purpose: - For protection of head against falling objects.

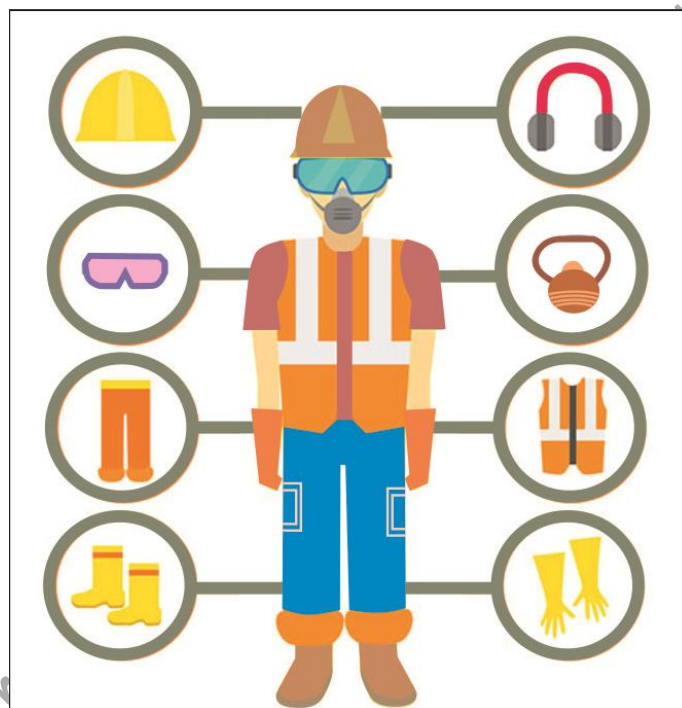


Fig.: 5.1 Protective Equipments

2- Clear demarcations and sign boards:

Clear demarcation of areas is required at places where there is possibility of hazards or accidents.

Prohibited areas which are marked are as follows-

1. Storage of chemicals
2. Operation of machinery
3. Presence of water on the floor
4. Loud noise areas
5. High voltage current

6. Release of poisonous fumes

There are threats based on the nature of the operations and workers have to be trained to understand these hazards and take proper precautions.

3- Compliance towards – Noise Protection, Cleanliness and maintenance

a- Technical measures should be taken to reduce noise generation. In case noise level cannot be reduced then wearing of ear protectors should be a must.

b- For maintaining cleanliness waste should be placed in the bins provided. Traffic lanes, fire appliances and emergency exits should not be obstructed and kept free.

c- Ladder should be secured and kept in a proper tilting position to avoid slipping. Do not use damaged ladders.

d- When transporting hot water in a bucket, use apron and boots and do not fill bucket to its full capacity.

e- Maintenance of the equipment should be regularly done to avoid hazards.

4- Reporting an Accident

All the employees should be aware of potential hazards and correct reporting processes. If a potentially hazardous situation is noticed, e.g.: a client expressing violent behavior, it is important to report it immediately to the management and fill out the appropriate forms as legally required by you.

If injured at work, one must:

Report the injury to the management as soon as possible, maximum within 24 hours and seek proper treatment for the same.

Always work in a safe manner to prevent accidents from occurring in the first place. Make sure that you have been given adequate information and on-the-job training about the first aid facilities and services available at the workplace, including:

- Location of first aid rooms and first aid kits.
- Complete, up-to-date contact details of trained first aid officers in the workplace procedures for critical accidents – such as who should be responsible for calling.
- The contact details of ambulance/doctor/nurse and the best method of contact, measures for evacuation of the injured person/s.

5. Essential facilities required at the workplace:

Drinking water -

Drinking water is indispensable for all workers; if not provided, they become thirsty and gradually dehydrated. This greatly increases fatigue and lowers productivity, especially in a hot environment.

Water vessels should be placed near each group of workers or provide taps or cascades with clean water in a central place.

Sanitary Facilities-

Like water facilities, sanitation facilities are also very important. The importance of proper sanitation facilities increases in the public context as improper facilities or unhygienic conditions can deteriorate the health of the employees by being breeding ground for several diseases.

- The toilet bowl should be free from stain or odour and function properly.
- The walls of the toilet should be clean and tiles should be unstained.
- The ceiling of the toilet should be free from cobwebs and dust.
- Floors should be clean and safe (no broken tiles, nor slippery surface).
- Proper illumination should be provided inside the toilet.
- Toilets must have a continuous supply of water; in case water is limited in the area, water it should be stocked in containers and refilled regularly.
- Mirrors and rubbish bins should be provided in the washroom.
- Soap and toilet paper should be provided.
- The washroom should provide complete privacy to users and should be fully ventilated.

6. Follow Proper Rules and Regulations – Workers should read the manuals provided with the machinery and equipments and follow safety principles efficiently. They should also follow the rules and regulations set up by the company like not using the machinery with wet hands, avoiding use of mobile phones during working hours etc.

POTENTIAL HAZARDS RISKS AND THREATS BASED ON NATURE OF OPERATIONS

Identifying potential hazards and risks at workplace involves finding things and situations that could potentially cause harm to people based on the nature of operations. Hazards generally arise from the following aspects of work –

- Physical work environment
- Equipment and Materials
- Working tasks and how the way they are performed

In a manufacturing unit the work process may have to face different types of hazards. Each of these hazards needs to be identified. For example, a

workplace may have moving parts, noise, hazards associated with manual tasks and psychological hazards due to the pace of work. Some of them can be explained as follows-

Hazard /Risk	Potential Harm/Loss
Manual Task	Overexertion or repetitive movement can cause muscular strain.
Electricity	Exposure to live electrical wires can cause shock, burns or death from electrocution.
Machinery and Equipments	Being caught by moving parts of machinery can cause fractures, bruises, lacerations, dislocations, permanent injuries or death.
NOISE	Exposure to loud noise can cause temporary/permanent hearing damage
Working Environment	Falling objects, falls, slips and trips of people can cause fractures, bruises, lacerations, dislocations, concussion, permanent injuries or death.
Extreme Conditions	Heat can cause burns; heat stroke or fatigue Cold can cause hypothermia or frost bite.
Psychosocial hazards	Effects of work-related stress, bullying, violence and work related fatigue.

Activities

Activity 1:

Visit a factory and make a list of sign boards seen in store department.

Materials Required:

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser

Procedure:

1. Visit an apparel production unit.
2. Observe all the safety signs and sign boards in the store department.
3. Gather information about the safety signs observed.
4. List the sign boards in your practical file.

ACTIVITY 2:

Visit an industry and check the requirement of equipments for ensuring no faults/defects and efficient working.

Materials Required:

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser
5. Report of daily checks and condition of equipments.

Procedure :

- 1- Search and collect the data and pictures of checklist of equipments.
- 2- Place the pictures in the practical file and label the same.
- 3- Write the description of checklist of equipments and make a report.

Check Your Progress**A. Fill in the blanks:**

- 1- clothing should be worn near machinery with moving parts.
- 2- In cases of high noise level, wearing of should be a must.
- 3- Injury should be reported to the..... as soon as possible.
- 4- Effects of work-related stress, bullying, violence and work related fatigue leads to

B. Write short answers for the following:

1. Describe about any five types of protective equipments.
2. Describe any five potential hazards, risks based on nature of operations.

Session: 3 Benefits of A Healthy Lifestyle

The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being”.

It's not an exaggeration when we say that health is wealth because it affects a person's productivity, efficiency, energy and hence behavior. Some of the benefits of a healthy lifestyle are increased concentration, sharp memory and also gives an emotional boost.

MINIMIZING HEALTH AND SAFETY RISKS TO SELF AND OTHERS BY OUR OWN ACTIONS

1- Identify and reduce the risks – Once the hazard has been identified at the workplace, appropriate steps for reduction of risk and work related injuries must be taken.

2- Reducing workplace stress - Common causes of workplace stress includes long working hours, heavy workload, job insecurity and conflicts with co-workers and seniors. Stress can lead to depression, sleeping difficulties and often lowers the ability to concentrate.

3- Using correct tools and equipments - Use ergonomically designed furniture, tools and equipments, and arrange your work area in a manner that everything you need is well within your reach.

4- Wear suitable protective equipments – Correctly worn equipments such as earplugs, earmuffs, hard hat, safety goggles, gloves or full-face mask can dramatically reduce risk of injury.

5- Staying sober - Alcohol and drugs are a contributing factor in around three percent of workplace fatalities. Workers should avoid indulging in such unethical practices at work.

THE VALUE OF PHYSICAL FITNESS, PERSONAL HYGIENE AND GOOD HABITS

Performance of a worker is directly related to the health of the worker. Hence it is important to train and educate the workers on good health and hygienic habits.

1- Physical Fitness - Physical activities have many health benefits for workers, regardless of whether or not physical fitness is a requirement for their jobs. However, a fit and healthy workforce is one of the most valuable assets of the company. Therefore, employers need to make more effort to encourage physical activity. Periodical health check-ups and workshops should be arranged by the company to maintain good health of the employees.

2- Personal Hygiene and Good Habits –Personal hygiene refers to the cleanliness, appearance and habits of employees. Personal hygiene and good habits doesn't only make workers look and feel good, but also makes their co-workers feel safe and comfortable. Personal hygiene improves employee's confidence and helps in maintaining employee productivity. It promotes a safe and healthy environment at the work place.

Do and Don'ts of Personal Hygiene at the Workplace

- Workers should clean after themselves and should not indulge in littering
- Workstations should be kept clean and dust free by wiping by wiping them regularly.
- Tea and food should always be consumed in designated spaces and all the utensils and crockery should be cleaned immediately and regularly.
- Workers should be trained in proper hygiene and practices and should follow it too sincerely.
- All the workers and employees should adhere to organizational hygiene policy
- Unhygienic practices like sneezing and coughing in open should be avoided.
- Washrooms must be kept clean and workers must wash their hands thoroughly after using wash rooms.

ILL EFFECTS OF TOBACCO

Consumption of tobacco in any form is injurious to health. Inhaling tobacco smoke can cause a person exposure to about 7000 toxicants and at least 70 carcinogens. All these can damage the body and result in critical illnesses like cancer, respiratory disorders etc. Both smokers as well as passive smokers are at equal risk. Passive smokers are people who don't smoke but are present near the people who smoke and thus get affected by smoke.

Tobacco use is one of the most important preventable causes of premature death in the world. Limiting use of tobacco can save a lot of lives and improve well-being of the workers as well as their families.

Effect of smoking on the body

Smoking cigarettes and *beedis* is very common among workers. It not only costs money for buying cigarettes but can result in many adverse effects on the body. Smoking can also lead to life-threatening complications such as:

1. Lung damage

Smoking is linked to chronic bronchitis and can also trigger or exacerbate an asthma attack besides lung cancer.

2. Heart disease

Vital body parts such as the heart, blood vessels, and blood cells are damaged by smoking and this may also result in heart diseases. Smoking can also increase the risk of peripheral artery disease (PAD), that is narrowing the arteries of the arms and legs. This may result in restriction of blood flow and can also cause blood clots. Some of the diseases related to smoking are angina, or chest pain, stroke, heart attack.

3. Risk of type 2 diabetes

It is observed that people who smoke regularly have a higher risk of developing type 2 diabetes than to those who don't smoke. The condition of people who suffer from diabetes gets more adverse due to smoking.

4. Weakened immune system

Smoking not only results in severe diseases but it can also weaken a person's immune system permanently making them more susceptible to various illnesses.

It can also result in additional inflammation in the body.

5. Vision problems

Smoking can also result in eye problems. Some of the eye problems that can happen in smokers include greater risk of cataracts and age-related macular degeneration.

Other vision problems related to smoking include:

- dry eyes
- glaucoma

- diabetic retinopathy

6. Poor oral hygiene

Poor oral hygiene is one of the ill effects of smoking and is directly related to incidences of gum diseases. People who smoke suffer from higher risk of gum disease. Smoking can cause swollen and tender gums, foul breath, discoloration of teeth and rashes in the oral cavity. It can also make the teeth sensitive.

Smoking tobacco can limit a person's ability to taste and smell things properly.

7. Unhealthy skin and hair

Smoking tobacco can affect a person's skin and hair. A person who smokes may experience premature aging, wrinkled skin. They suffer from a higher risk of developing skin cancer. Smoking can also cause loss of hair and can eventually lead to baldness

8. Risk of other cancers

Smoking cigarettes can also contribute to other forms of cancer like pancreatic cancer, lung cancer etc.

ILL -EFFECTS OF DRUGS AND ALCOHOL

Problems such as work pressures, family tension, financial problems etc. many a times lead to consumption of drugs and alcohol. However drugs and alcohol consumption has its own ill effects. It may lead to life threatening diseases such as abnormal heart rates and heart attacks. Injecting drugs can result in collapsed veins and infections in heart valves.

Some drugs can even result in severe muscle cramping and general weakness leading to reduced work efficiency. Prolonged use of substances like drugs and alcohol can lead to kidney and liver damage.

Infections

Sharing the needles used to inject certain drugs can lead to diseases like hepatitis C, hepatitis B, and HIV. One can also spread common cold, flu, etc. by sharing pipes and bongs.

Legal Consequences

Drug and alcohol abuse has negative effects on the health and can also lead to legal consequences/actions that have to be dealt for the rest of the life. Many employers suggest taking a drug test before offering a job to an employee. Refusing to give up drugs could lead to loss of jobs for the employees.

Driving under the influence of drugs or alcohol can lead to a suspension of one's driving license, usually for a period of 6 months to 2 years. Sometime also need to pay heavy fines and may even spend some time in jail.

Financial Problems

Drugs and alcohol are expensive, one cannot meet out a quality life especially when the consumption is more and constant. Substance abuse also impacts the productivity and success at work and in school. The time spent searching for, using and recuperating from drugs can be better spent in learning new skills to advance the career.

The legal issues tied to drug use will increase the bills as well. Health insurance rates may increase and one has to find a way to pay for arrest warrants, DUIs (Driving Under Influence), and legal counsel.

Injuries and Death

Use of drugs and alcohol, lead to physical injury or be involved in car accidents. Even worse, is an increased risk of death through both suicide and homicides.

These drug-related deaths are on the rise, doubling since the early 1980s. Alcohol consumption leads to 5.2 million accidental injuries and 1.8 million deaths each year. It's estimated that 1 out of every 4 deaths is caused by drugs and alcohol, according to the World Health Organization.

The short-term effects of alcohol

The short-term effects of a single occasion of drinking too much alcohol can include:

- lowered inhibitions
- interpersonal conflict
- falls and accidents
- altered behaviour – including risky or violent behaviour
- hangover
- Alcohol poisoning

The long-term effects of alcohol

Historically it has been believed that consuming on average more than two standard drinks a day may cause many long-term health problems and other harms, though current research states that no level of alcohol consumption poses reduced risks of chronic disease development.

The World Health Organization (WHO) says alcohol contributes to more than 200 different types of disease and injury.

Some of the most common alcohol-related harms include:

- road and other accidents
- domestic and public violence
- crime
- family breakdown
- social dysfunction
- cardiovascular disease
- cancers, including of the oral cavity, pharynx, larynx, oesophagus, liver, colorectal and female breast
- diabetes
- nutrition-related conditions, such as folate deficiency and malnutrition
- overweight and obesity
- risks to unborn babies
- liver diseases
- mental health conditions, such as anxiety and depression, and interference with antidepressant medication
- alcohol tolerance and alcohol dependence or addiction
- long-term cognitive impairment
- Self-harm (suicide)

The WHO reports that in 2012, nearly 6 per cent of all deaths globally were caused by alcohol consumption. Worldwide, more men die as a result of alcohol consumption than women.

In the long term, alcohol consumption can affect all aspects of a person's life: their physical and mental health, work, finances and relationships.

Activities

Activity 1:

Prepare a report after interviewing the store workers regarding their personal health and hygiene.

Materials Required :

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser

Procedure:

- 1- Prepare a questionnaire on health and hygiene practices.
- 2- Interview the industry workers on their views about health and hygiene.
- 3- Prepare a report on the same.

Check Your Progress

A - Fill in the following blanks :

- 1-of a worker is directly related to the health of the worker.
- 2-promotes a safe and healthy environment at the work place.
- 3- A workforce is one of the most valuable assets of the company.
- 4- Inhalingexposes users to more than 7000 toxicants and at least 70 carcinogens.
- 5- consumption leads to 5.2 million accidental injuries and 1.8 million deaths each year.

B- Write long type answers for the following:

- Q1- Write about the benefits of personal hygiene.
- Q2- Write in detail about the ill effects of alcohol consumption.

Session: 4 Environmental Management Procedures, Security Details, Potential Accidents and Emergencies

Environmental management system related procedures at the workplace

An Environmental Management System (EMS) is a framework that helps an organization in achieving its environmental goals through consistent reviewing, evaluation, and improvement of its environmental performance. This approach helps in reducing the risk of non-compliance and improves health and safety practices of the workers. Basic procedures followed under EMS are as follows –

- Reviewing the organization's environmental goals.
- Analyzing its environmental impacts and legal requirements.
- Setting environmental objectives and targets to reduce environmental impacts and comply with legal requirements.
- Establishing programs to meet these objectives and targets.
- Monitoring and measuring progress in achieving the objectives.
- Ensuring employees' environmental awareness and competence.
- Reviewing progress of the EMS and making improvements.

Potential Benefits of implementing EMS –

- Improved environmental performance.
- Enhanced compliance
- Pollution prevention
- Resource conservation
- Increased efficiency leads to reduced costs.
- Enhanced morale of workers
- Enhanced image with public, regulators, lenders and investors.
- Employee awareness of environmental issues and responsibilities.

Layout of the plant and details of emergency exits/routes, emergency Equipments and assembly points –

Plant layout is the most effective physical arrangements of machines, processing equipments and service departments. A good plant layout helps in achieving proper coordination of men, materials and machines. The adequacy of layout affects the efficiency of daily operations in any company/organization. A plant layout involves the allocation of space and the arrangements of equipments in such a manner that overall operating costs are minimized. Plant layout is planning the path each component/part of the product is to follow through the plant.

Plant layout also affects the security and stability of the company. While deciding the layout of the plant and allocating space for various machines and operations, security should never be compromised. It should utilize the space most effectively while maintaining the security of the men, machines and the premises. It should provide workers convenience; promote job satisfaction and safety for them. A well designed plant layout helps in achieving the following objectives-

- Proper utilization of available floor space.
- Ease of transportation.
- Efficient utilization of production capacity.
- Reduction in material handling cost.
- Reduction in number of accidents.
- Provide ease of supervision and control.
- Ensures employee safety and health.

Plant layout ensures the following measures of safety at the workplace-

- Firefighting equipment list and its placement.
- Fire safety plan for evacuation in case of emergency.
- Emergency evacuation diagrams (details of emergency escape/exit routes).
- Assembly points at the time of emergency.
- Appropriate placement of machineries.
- Allocation of proper space for waste disposal.
- Proper placement of First Aid Boxes in case of medical emergencies.
- Allocation of proper space for drinking water and sanitization facilities.



Fig.: 5.2 Fire Extinguishers symbol and equipment

POTENTIAL ACCIDENTS AND EMERGENCIES ,AND RESPONSE TO THESE SCENARIOS.

Nobody wishes to have an emergency or disaster at work place, especially one that affects them, their employees, and their business premises. Yet the simple truth is that emergencies and disasters can strike anyone, anytime, and anywhere. At time of emergencies, employees could be forced to evacuate company when they least expect it. At such difficult times the corrective measures are necessary to overcome such situations.

An incident/potential accident that can occur during the process of production or services if left unintended can lead to injuries, complication leading to disability, death, or prolonged hospital stay for a worker.

Awareness of high potential incidents at other workplaces is a key factor in preventing them at yours. Following are some of the most common causes of accidents at the workplace:

- 1) Heavy Lifting
- 2) Fatigue
- 3) Dehydration
- 4) Poor Lighting
- 5) Hazardous Materials
- 6) Fire Accidents
- 7) Acts of Workplace Violence

- 8) Trips and fall
- 9) Stress
- 10) Explosions
- 11) Chemical spills
- 12) Heat Waves

The best way is to prepare one selves to respond to an emergency before it happens. Few people can think clearly and logically in a crisis, so it is important to do so in advance, when we have time to prevent any crisis as rightly said “prevention is better than cure”.

Emergency Response Plan

The actions taken in the initial minutes of an emergency are critical. A prompt warning to employees to evacuate, shelter or lockdown can save lives. A call for help to public emergency services that provides full and accurate information will help right responses with right equipment. An employee trained to administer first aid or perform CPR can be lifesaving. Action by employees with knowledge of building and process systems can help control a leak and minimize damage to the facility and the environment.

The first step when developing an emergency response plan is to conduct a risk assessment to identify potential emergency scenarios. An understanding of what can happen will enable us to determine resource requirements and to develop plans and procedures to prevent them. The emergency plan should be consistent with our performance objectives.

It is vital for every industry to develop and implement an emergency plan for protecting employees, visitors, contractors and anyone else in the facility. This part of the emergency plan is called “protective actions for life safety” and includes building evacuation (“fire drills”), sheltering from severe weather such as tornadoes, “shelter-in-place” from an exterior airborne hazard such as a chemical release.

When an emergency occurs, the first priority is always safety of life. The second priority is the stabilization of the incident. There are many actions that can be taken to stabilize an incident and minimize potential damage. Use of fire extinguishers by trained employees can extinguish a small fire. Containment of a small chemical spill and supervision of building utilities and systems can minimize damage to a building and can help prevent any environmental damage. A plan should be well established and resources should be on hand, or quickly available as response to any potential accident or emergency.

Activities

Activity 1:

Study and make a layout of the factory by visiting a factory.

Materials Required:

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser

Procedure:

- 1- Visit an industry.
- 2- Study the layout of a factory.
- 3- Make the layout in a practical file and label the details.

Check Your Progress

A. Fill in the following blanks :

1. Anis a framework that helps an organization in achieving its environmental goals through consistent reviewing, evaluation, and improvement of its environmental performance.
2. is the most effective physical arrangements of machines, processing equipments and service departments.
2. A good plant layout helps in achieving proper coordination of, and

B- Write short answers for the following questions:

Q1- State some potential benefits of implementing EMS.

Q2- State measures of safety at the workplace ensured by a plant layout.

Session: 5 Safety Measures at Workplace

DIFFERENT TYPE OF SAFETY MEASURES AT WORKPLACE AND THEIR APPLICATION

At any workplace, there are certain rules and regulations which have to be followed –Rules regarding organizational hierarchy, process flow chart, safety SOP's (Standard Operating Procedures).

Every organization adapts different safety measures which are generally displayed as safety signs and signboards. These signs include:



Fig.: 5.3 Safety Signs

Safety Signs: Sign providing information or instruction about safety or health at work by means of a signboard, a colour, an illuminated sign or acoustic signal, a verbal communication or hand signal

Signboard: A sign which provides information or instructions by a combination of shape, colour and a symbol or pictogram which is rendered visible by lighting of sufficient intensity.

Signboards can be of the following four types:

Prohibition sign:

This sign is generally meant for warning against dangerous situations or for safeguarding privacy.

Warning sign:

A sign giving warning of a hazard or danger (example - 'danger: electricity').

Mandatory sign:

A sign prescribing specific behavior for example "Staying away from hazardous chemicals stored in the store area."

Emergency escape, Fire and First-aid signs:

A sign giving information on emergency exits, first aid, or rescue facilities (example 'emergency exit/escape route').

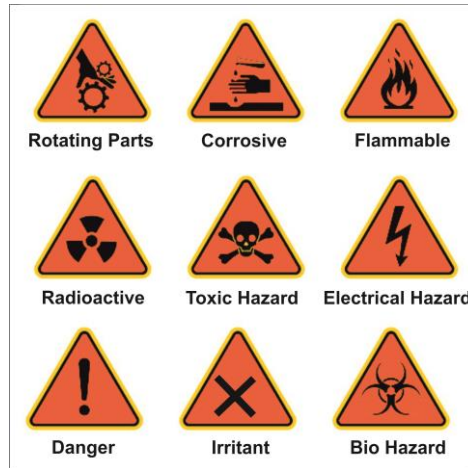


Fig.: 5.4 Warning Sign

ORIENTATION AND TRAINING ON SAFETY MEASURES AT WORKPLACE/ ACTION TO BE TAKEN

Mock Drills/ Evacuations –

In case of an accident notify the health and safety office immediately. All employees must be trained to recognize work hazards and to know what to do in an emergency. They should know whom to inform. Staff duties and accountabilities should be clearly defined for emergency situation.

Regular training is required to prepare employees for emergency situations.

Fire safety and evacuation plans sketch should be placed at proper exit locations. Fire drill should be performed, and workers should be trained to handle fire extinguishing equipment.

Firefighting trainings serve as a prospect for staff members to validate, under replicated fire conditions, that they can perform those duties and responsibilities safely and efficiently.

First Aid Measures

- Get help.
- You can call on emergency numbers
- Reassure and comfort the people
- Check critical life functions
- Remove casualty from dangerous zone
- Place blanket under and /or over
- Check critical life functions

General recovery Position
Removing the casualty from Dangerous Zone





Postures	Evacuation from surface area
	<p>Casualty is too heavy to be lifted</p>
	<p>An upright position will reduce intracranial pressure, essential for head injuries, and assist breathing.</p>
	<p>In case of injury on the back, make sure the injured area is covered and taken care of.</p>
	<p>In case of burns keep the head low and make sure the injured area is completely covered.</p>

Fig.: 5.5: Emergency situations (First Aid)

A typical basic First- Aid kit may include the following items in a dustproof and waterproof box:


- Sufficient quantities of the different sizes of bandages and gauze should be available at all times to treat small cuts and burns.
- Sterile cotton gauze for cleaning wounds
- Scissors, tweezers (for splinters) and safety pins
- An eye bath and eye wash bottle
- Sterile Eye dressings
- Crepe roll bandages
- Disposable sterile gloves


- Medical tapes
- Thermometer
- Ready-to-use antiseptic solution and cream
- Simple over-the-counter medicines such as aspirin, painkiller and antacid
- A booklet or leaflet giving advice on first-aid treatment

HEALTH AND SAFETY MEASURES AT WORKPLACE AND THEIR APPLICATION

Health and safety play a vital role in the garment industry. To summarize the whole chapter, these are the some of the important areas where safety measures are of utmost priority to safeguard from hazards in the day-to-day practices in an organization.

Here are some of the examples of these conditions:

Hazards	Safety Measures
Spreading and Cutting	
Finger and hand injuries from spreading machines	Disengage the spreader carriage while performing the corrective work on the lay
Finger and hand injury from moving or idle cutting devices	Ensure that the finger guard is adjusted to the correct height of the fabric layers before starting to cut. Learn and use the correct handling techniques for the tool.
Finger and hand injury at swinging arm or flat punch machines	Ensure that the two handed control system is functioning properly. A light sensor should stop the machines when a machine operator or a worker goes beyond the working area.
	
Fig.: 5.6 Fusing Machine	

Finger and hand injury in the press	Safety guards should be checked daily for correct operation
Burns from hot beds	Never attempt to retrieve, or adjust the position of components whilst they are being fed, or are on the bed
Finger and hands injury in feeding and unloading	A press which has to be controlled using both hands must be operated by the one person. Operators must be well trained and practiced in laying the parts on the feeding belt conveyor
Inhalation of a healthy weapons	The manufacturer's handling recommendations should be followed. Vapors should be exhausted safely
 <p>Fig.: 5.7 Sewing</p>	
Finger and hand injury during cleaning and repair work	The machine must be switched off, with plug removed and must be stationary before any cleaning or repair work is started
Finger injury from the needle	Correct setting of the finger guard should be checked before work starts
Pulled hair and face injury from the yarn feeder	Long hair should be gathered and pinned up or a hairnet should be worn. A safety guard should be provided for the yarn feeder
Hand and finger injury from fastening devices on hook, eyelet and rivet machines.	Correct setting of the safety guards should be checked. Training must be given in the correct handling techniques for holding and feeding materials
Eye injury from breaking needles or buttons at the button sewer, or	Proper adjustment of eye shield should be checked before work starts.


breaking needles at the loop sewer	Cracked or obscured shields should be replaced, or safety glasses should be issued.
Contact with Scissors and Needles	
Cuts and pricks from sharp points	Sharp pointed scissors should not be left unprotected. They should be kept in special holders (leather holsters cases) carried e.g. on a belt and stowed away properly after use.
Internal injury from swallowed items	Never store items temporarily in the mouth. There is a danger of swallowing them as a result of coughing sneezing or being startled. Place needles in the proper container or in a needle cushion.
	
Fig.: 5.8 Ironing/Pressing	
Burns from hand irons	Hand irons should be protected from overheating by a thermostat. Non-flammable material should be used for the working area.
Scalding from steam	Steam must not be supplied until it is required
Finger and hand injury from the press	A machine which requires two hands to operate ,must never be operated by two people. Never attempt to adjust the position of parts after the closing process has started .A safety bar must be fit which stops and raises the head when it is touched



Fig.: 5.9 Cleaning, Stain Removal

Inhalation of solvent vapors, skin damage or reaction to contact with solvents

Ensure adequate ventilation only the equipment in materials actually required for a given working shift should be present

Fire hazard

An adequate distance must be maintained at least 5 meters from any potential ignition source

Hazardous chemicals


Safety warning instructions on the container should be observed and appropriate working method adopted



Fig.: 5.10 Material Handling

Head injury from overhead transport systems with suspended carriers

Head protection (padded hard hats) should be provided with the transporter rails pass over a

	walkway. The floor should be marked with black and yellow warning strips
Trapped fingers when maneuvering careers over points	Safety guards should be installed and proper training in handling method should be given
Falling from raised service platform and access points	Safety guards have to be in place. Specialized equipment should be used for servicing trolleys and proper handling of goods.
Hand and finger injury from conveyors	Equipment must be guarded, and the safety guards must never be removed
Accidental injuries from tripping over the feet of movable hanger stands	Movable hanger stand should be found only in designated areas. They should not encroach on to marked walkways
	
Fig.: 5.11 Packaging Machinery	
Hand and finger injury at packaging, welding, cutting and folding stations.	Safety devices (two handed operation) should be check every day. Whenever a machine has to be adjusted whilst it is running e.g. for setting up, servicing or clearing of faults, only the engine control should be used.

Activities

Activity 1:

Prepare a detailed report on personnel trained in first aid, firefighting and emergency response.

Materials Required :

1. Practical File
2. Coloured pens and pencils
3. Ruler
4. Eraser

Procedure :

- 1- Visit an industry.
- 2- Prepare a questionnaire.
- 3- Interview people trained for emergency services.
- 4- Document it and prepare a detailed report of the same.

Check Your Progress**A. Answer the following questions:**

1. Explain any two types of Signboards that are used (with diagrams).
2. Describe health and safety measures taken in a garment industry.

Module 6**Compliance to Legal, Regulatory and Ethical Requirements****Module Overview**

In general, **compliance** means conforming to a rule, such as a specification, policy standard or law. Simply speaking compliance means obeying the law. Compliance can also be defined as conformity to a given standard. All the industries, organizations, offices and manufacturing units are required to follow regulations and compliances as decided by the respective governments and countries they operate in. Garment and textile industries are no exception to this.

These are also expected to maintain certain standards to operate. Compliances promote honesty and integrity within the organization and help in maintaining standards. Apart from this, compliances also ensure safety of the men, material, machines and environment. Compliance adherence in industries is also essential as it ensures an amicable working environment. Adherence to compliances is also essential for business growth, safety and wellbeing of employees and customer satisfaction. Some of the common compliances required in garment industry include working hour policy, drug and alcohol policy, child care policy, prevention of sexual harassment policy, holiday compensation, wage for leaves, equal remuneration policy, antidiscrimination policy, no child labor, health, and safety policy etc.

Legal is something which is allowed by the law and is in accordance with various laws. Legal regulations are set by the government to prevent the rights and safety of a common man and society. **Ethical** means something which is morally correct. Ethical regulations are based on human perception of right and wrong. It also means avoiding activities which are harmful for people, organization and environment. For example in recent years customers have started demanding ethical products. **Regulatory** compliance means adherence to various laws, guidelines and specifications issued by the government. **Regulatory compliance** means following relevant laws, policies, and regulations. These differ from business to business and from country to country.

Whether a business organization / company is following these legal, ethical and regulatory compliances or not is checked at regular intervals through audits and inspections. Violating compliances is a punishable offence and may result in legal punishment such as cancellation of business license, fine, jail or any other punishment as decide by the law and the government.

Learning Outcomes

After completing this module, you will be able to:

- Describe the importance and benefits of ethical and value-based approach to management
- Explain company policies, procedures and their benefits
- Demonstrate teamwork and support to supervisor
- Plan and manage work routines

Module Structure

Session-1 Importance of ethics and values

Session-2 Company policies, procedures and its benefits

Session-3 Teamwork and support to supervisor

Session-4 Planning and managing work routines

Session 1: Importance of Ethics and Values

Ethics are a form of self-regulation and normally contain general principles to guide behavior. Ethics is also known as moral philosophy. It is a system of moral principles and simply means what is morally right or wrong. For example it is not ethical on the part of a store keeper to show that fabric in store is damaged when it is not and sell it secretly in the market to earn some extra money. We can also say that ethics mean the intention of doing the right or correct thing. The term ethics is derived from the Greek word *ethos* which can mean custom, habit, character or disposition. Honesty, Integrity, Loyalty, Keeping your promises are all examples of Ethics. Ethics help us in:

- living an honest and good life
- making decisions which are morally correct
- thinking about others and the society
- prevent frauds and corruption in the organization

Value is a somewhat vague term; most people would claim to have values but struggle to elaborate when asked what their values are. Values can vary greatly from one culture to another, from family to family and differ between each individual. A value is something we hold dear, something we see as important and worthy of safeguarding. Values are closely related to ethics. Values are basic and fundamental beliefs that motivate or guide actions of people and can be personal, cultural or professional. Generally speaking,

‘values’ mean desirable, good or worthwhile and are principles and ideals, which help us in making the judgment of right and wrong. Values determine what action is best to do. For example in a store the support staff who unloads the material and gets sick while on duty and the store keeper takes on the duty of unloading the material himself then it shows good values of the store keeper that he is worried about the task completion and deadlines. This will specially help when some deadline is approaching.

Ethics and values are important because they are central to any company or organization and govern business operations and transactions. Together these two form the foundation of trust. Ethics and values help businesses and organizations in achieving their goals, without compromising on security, peace and well being of the society and people at large.

Benefits of Ethical and Value-based approach to Management for the Company and its Workers

Ethical and value – based approach to management is beneficial for both, the company as well as the workers. A company which is ethical and value based is able to build an image of trust whereas the workers who follow this approach enjoy the trust and goodwill of their employers. Both these things lead to positive business environment and hence growth in business too.

Workers who have good ethics and values have very good productivity and hence contribute more to the organization. Such workers also respect company property and don’t indulge in unions, strike etc. Workers who follow ethical and value based approach are self-motivated and hence perform better.

An ethical and value based approach also results in effective organizational control and hence better productivity and efficiency of employees. Companies that follow an ethical and “values-based” approach to ethics may have an advantage in the marketplace. They enjoy healthy returns through employee and customer loyalty as well as public respect for their brand. This in turn will help in smoothly achieving business goals. It also helps in avoiding breaking of regulations and associated punishments. It helps in achieving customers’ and employees’ trust and loyalty. It creates an environment of respect and faith.

Activities

Activity 1:

Visit any industry or company. Talk to its employees and observe the working and employees. Prepare a report on the ethics and values being followed in that organization / industry

Materials Required:

1. A4 papers or file
2. Coloured pen, pencils, permanent marker etc.
3. Scale
4. Eraser and sharpener

Procedure:

1. Visit any industry, organization or head office in your vicinity.
2. Observe the sign boards, working of the employees and also talk to the employees to find out the working environment, various ethics and regulations followed there.
3. Prepare a report and write in your file.

Check Your Progress**A. Fill in the Blanks:**

1. _____ simply means what is right or wrong.
2. Together _____ and _____ form the foundation of trust.
3. _____ and _____ are examples of ethics.
4. _____ are closely related to ethics.
5. Ethics and values help businesses and organizations in achieving their _____, without compromising on _____, _____ and well being of the society and people at large.

B. Write short answers for the questions that follow:

1. What do you mean by ethics? Give one example also.
2. What are the benefits of following an ethical and value based approach to management?
3. What are values? Give one example?
4. What are the benefits of following an ethical and value based approach to workers?

Session: 2 **Company Policies, Procedures and Its Benefits**



Fig.: 6.1 Policies & Procedures

Introduction to Company Policies and Procedures

Policies are rules and guidelines formulated or adopted by an organization or a company to reach its long-term goals.

Policies are typically published in a booklet, manual or in any other form such as a presentation that is widely and easily accessible. Company policies are guidelines which help the management and employer in ensuring employee accountability, health, safety and provide necessary guidelines for interactions with customers. Policies are also guidelines for legal issues, regulatory requirements, and any situation that could lead to serious consequences. A company policy helps achieve employee wellness, fair treatment and also ensures that a company is following laws and regulations.

Procedure is a fixed manner or way in which something is done. Procedures are the specific methods which inform employees as to how the daily duties should be performed. Every department in a company or an organization has an SOP or standard Operating Procedure. This can be in the form of a manual, file or a booklet and is followed by all the staff member including senior management, middle management and all the other workers. Most of the company decisions and working is governed by the standard operating procedure. Any deviation in SOP has to be informed and is scrutinized carefully.

Together, policies and procedures ensure that the company /or the organization is able to achieve its goals and mission in the most efficient and smooth way.

Policies and procedures are different from each other. We can understand the difference between the two by following points:

Policies	Procedures
Policies are the guiding principles.	Procedures means how a particular task will be done, what steps to follow while doing a task.
It is general in nature and relates to overall activities in the company.	It is very specific and related to particular tasks.
It is formulated by top management in the company	It is formulated by middle and lower management in the company
Policies tell us why a thing needs to be done	Procedures tell us how a thing needs to be done

Every company has different policies and procedures which govern their daily business operations. Company policies and procedures also protect their business interests and employees. Procedures for each business can differ depending on the products and/or services provided. Organizations need policies and procedures for a wide range of HR topics.

Some policies which are critical for businesses and are mostly followed by almost all the organizations are as follows:

1. Quality Assurance Policy:

Businesses should strive to offer quality goods and services to the clients. Products offered should meet the customers' expectations and even surpass their expectations. Quality services and products establish a good reputation and will build a successful business.

2. Environment Policy

Businesses should be committed to minimizing their impact on the environment, from simple recycling process to sophisticated water and waste management techniques. Businesses should invest in projects that are aimed to improve the environment.

3. Code of conduct

Employees should act legally, ethically, and work for the best interest of the business. A code of conduct within the business should guide employees on

how to deal with a wide variety of ethical situations. A code of conduct directs employees on how to relate to each other, customers and potential business partners and networks. This is a broad topic and may require multiple, separate policies. Including guidelines on drugs and alcohol use, smoking, performance management and discipline helps employees know what is and is not acceptable behavior at work.

4. Corporate social responsibility

This is a strategic decision where businesses undertake an obligation to the society. For instance, a business may offer sponsorship to the community, take care of the environment. This is not necessary for profit maximization, but for welfare of public.

5. Employment

Managing your employees and ensuring they understand the position within the business is of critical importance. Employees need to understand how Performance Reviews are conducted, the process for rehabilitation, safe working conditions, compensation to workers injured at work, non-discrimination at workplaces, and termination conditions.

6. Purchasing Policy

Businesses must value their suppliers, treat them fairly, honestly, offer fair tenders, offer reasonable terms of payment and pay them in good time. Employees also need to understand what are considered work expenses, how goods for the business are purchased and what is the purchasing process?

7. Use of Internet and E-mail Policy

Internet and email is a necessary part of our daily business. Having internet and email policies and procedures provide employees with guidance on what is expected behavior and acceptable use. Business should also consider having guidelines on Social Media usage within the business. Employees should be made aware that any internet use at work is not private. They should be urged to limit personal internet use and ensure everything they do online in the workplace is legal, ethical and appropriate (and explain what these mean). Add guidelines about what is and is not appropriate to post on social media regarding your organization as well.

8. Equal opportunities Policy

Businesses should offer equal employment opportunities. When hiring employees, there should be no discrimination because of color, gender, race, or disability. Guidelines should also include on how your business handles situations that include a Handicap, Pregnancy, or overall Diversity.

9. Policies and Procedures for Attendance

These documents can include guidelines on tardiness, vacation time, sick leave, appointments and paid volunteer hours. You can also include the amount of notice required before booking time off. Corporate culture can be taken into consideration while developing these rules.

10. Customer service Policy

High quality customer service is the core of every successful business. Good customer service helps businesses prosper and loyal customers often return time and time again, hence increasing sales.

11. Policies and Procedures for Use of Company Property

Employees have to use company property in order to do their jobs. Depending on your industry, this could include electronics, medical equipment, vehicles, tools and uniforms. Include guidelines on how to care for company property, as well as how much (if any) and what types of personal use are permitted using company property.

12. Policies and Procedures for Harassment and Discrimination

Harassment and discrimination affect workplace culture. Employees should be kept safe and treated fairly by developing policies and procedures that prohibit behaviors such as:

- sexual harassment
- bullying
- verbal and physical harassment
- stalking
- hiring discrimination
- workplace discrimination

Employees should be informed on how to report harassment and discrimination at workplace and explain that the company will not retaliate for reporting.

13. Policies and Procedures for Expenses

When employees travel or purchase things for work, having an expense reimbursement policy in place is essential. Employees should be informed what types of expenses are acceptable for reimbursement (airfare class, transportation, meals, etc.). Procedures on how to submit a reimbursement claim, should be explained to employees.

14. Drug and alcohol policy:

Generally, the use of drug and alcohol is prohibited in the organization's premises considering the ill effects of its consumption. Human resource department is responsible for implementation and administration of such policies. They also conduct various seminars and training programs to educate the workers about the ill effects of consumption of drugs and alcohol.

15. Policies and Procedures for Health and Safety

Protecting employees' safety and well-being should be every organization's top priority. While drafting health and safety policies, employees should include information about how to deal with illness or injury at work, equipment safety guidelines and how to report a health or safety concern. Also include procedures to follow in the event of a fire or natural disaster

Policies help in developing a good working operational model and this in turn motivates employees to perform and develop company standards. Business policies drive home what is important to the company and allows business owners and managers to communicate and enforce company policy. Employees need consistent company policies to guide them on their roles and responsibilities, as well as the company's overarching business principles, ethics and beliefs — for compliance reasons and to ensure a healthy company culture. Written policies and procedures also help protect the company from potential legal action. After investing time and resources creating these policies, employer should make sure that employees read, understand and apply them to their daily job responsibilities.

Policies and procedures play a very important role by defining an organization's guiding principles, providing detailed task instructions and forming the basic structure of business operations. As part of risk management, it's important to have clear policies, procedures and processes.

Business processes, procedures and standards are vital for training staff and induction programs, as well as formal processes like staff performance reviews.

Having formalized procedures for the business can save the time and money by increasing efficiency. Staff can get more done in less time by following set processes and procedures, and you can spend less time overseeing the day-to-day running of the business.

Procedures can also improve the consistency of product and service delivery by the staff. It helps in achieving optimum staff performance. These create

standards and help everyone to know how to operate. For example If a store catches fire then what procedure would be followed for evacuation and safety or what procedure would be followed for registering vendor complaints. Developing formal policies and procedures can make it run much more smoothly and efficiently. They communicate the values and vision of the organization, ensuring employees understand exactly what is expected of them in certain situations.

Since both individual and team responsibilities are clearly documented, there is no need for trial-and-error or micromanaging. Upon reading the workplace policies and procedures, employees should clearly understand how to approach their jobs.

Formal policies and procedures save time and stress when handling HR issues. The absence of written policies results in unnecessary time and effort spent trying to agree on a course of action. With strict guidelines already in place, employees simply have to follow the procedures and managers just have to enforce the policies and procedures controlling the way in which businesses operate. Implementing these documents also improves the way an organization looks from the outside. Formal policies and procedures help to ensure that company complies with relevant regulations. They also demonstrate that organizations are efficient, professional and stable. This can lead to stronger business relationships and a better public reputation.

REVIEWING POLICIES AND PROCEDURES

Policies and procedures should not be written once and left alone for decades. Reviewing these documents regularly and updating them when necessary is the key to their success. Various laws and guidelines are amended from time to time by government and hence it becomes important for organizations too to make necessary changes in their policies and procedure to conform to amendments and latest developments.

Thus to summarize we can say that:

Policies

- Are general in nature
- Identify company rules
- Explain why they exist
- Tells when the rule applies
- Describe who it covers
- Shows how the rule is enforced

- Describes the consequences
- Are normally described using simple sentences and paragraphs

Procedures

- Identify specific actions
- Explain when to take actions
- Describe alternatives
- Shows emergency procedures
- Includes warning and cautions
- Gives examples
- Shows how to complete forms
- Are normally written using and outline format

Policies and procedures are required when there is a need for consistency in your day-to-day operational activities. Policies and procedures also provide clarity to the reader when dealing with accountability issues or activities that are of critical importance to the company, such as, health and safety, legal liabilities, regulatory requirements or issues that have serious consequences.

Benefits of Following Company Policies and Procedures

Policies and procedures protect business interests of the company on one hand and they also protect worker's rights on the other hand. They also provide a vision and mission to the company and thus in turn help in achieving standards of customer service. Together the two make sure that the company achieves the desired outcome in the most efficient way.

Benefits of Policies and Procedures

Now that we have a better understanding of policies and procedures, let's take a look at the major benefits they provide.

- Employees understand the constraints of their job without using a 'trial and error' approach, as key points are visible in well-written policies and procedures.
- Policies and procedures enable the workforce to clearly understand individual and team responsibilities, thus saving time and resources. Everyone is working off the same page; employees can get the "official" word on how they should go about their tasks quickly and easily.
- Clearly written policies and procedures allow managers to exercise control by exception rather than 'micro-manage' their staff.

- They send a “We Care!” message. ‘The company wants us to be successful at our jobs.’
- Clearly written policies and procedures provide legal protection. Juries apply the ‘common person’ standard. If written clearly so that outsiders understand, the company has better legal footing if challenged in court.

Activities

Activity 1:

Visit any industry and enquire and study about its policies. Prepare a detailed report of the policies followed by them.

Materials Required:

1. A4 size papers, chart papers and file covers
2. Coloured pen and pencils, permanent markers
3. Eraser and sharpener
4. Scale / Ruler

Procedure:

1. Visit any nearby industry or a company.
2. Meet their human resources manager.
3. Discuss about various policies and procedures followed by their company and also read their policy manuals and presentations.
4. Prepare a detailed report.
5. Write your observations in the form of a report in your file.
6. Paste related photos and pictures.

Activity 2:

Visit any organization or company and enquire about the Procedure for applying for a house loan by an employee.

Materials Required:

1. A4 size papers, chart papers and file covers
2. Coloured pen and pencils, permanent markers
3. Eraser and sharpener
4. Scale / Ruler

Procedure:

1. Visit any nearby industry or a company.
2. Meet their human resources manager.
3. Discuss about various policies and procedures followed by their company and also read their policy manuals and presentations.
4. Prepare a detailed report.
5. Write your observations in the form of a report in your file.
6. Paste related photos and pictures

Check Your Progress**A. FILL IN THE BLANKS:**

1. _____ are rules and guidelines formulated by a company or any organization.
2. Policies tell us _____ something needs to be done.
3. _____ tell us how something needs to be done.
4. Policies and procedures enable the workforce to clearly understand _____ and _____ responsibilities.

B. WRITE SHORT ANSWERS FOR THE FOLLOWING QUESTIONS:

1. Name and briefly explain any two company policies.
2. What do you mean by Procedures?

C. WRITE LONG ANSWERS FOR THE QUESTIONS THAT FOLLOW:

1. Write any 3 differences between policies and procedures.
2. Why it is important to have company policies and procedures?

Session 3: Teamwork and Support to Supervisor

Teamwork: Introduction and Importance

A team is a group of individuals working together to achieve a common goal. We can find teams in sports, business, offices, schools and so on. Example A cricket team, forensic team, quality assurance team. Members of a team collaborate and cooperate with each other for a common cause.



Fig.: 6.2 Teamwork

Teamwork is when a group of people work together to achieve a common goal. It is one of the most important attributes of present times. Ability to work in team is a key requirement for any employee. In teamwork individual strengths and skills are combined to achieve the vision and mission of the company. It requires overcoming personal conflicts and disagreements. Efficient teamwork is crucial to success of any business organization or company.

We can hear the importance of teamwork in almost all business meetings, presentations and dealings. It is very crucial for success of any business task or operation. Almost all companies have teams. It is not only essential to perform well as individuals but also as a member of the team. To do well in a team requires patience, tolerance, and good social skills. Team efforts are associated with many advantages: work gets done faster and is more likely to get done when more people are involved, relations among employees improve, and members of the team learn from each other's characters, feedback and contributions to the team.

Providing Support to Supervisor and Team Members for enforcement of Company Policies and Procedures

A collaborative and supportive work environment is crucial for a successful organization. Implementation of policies and procedures cannot be done without the support of employees. Every employee in turn must provide support and cooperation to the supervisor as well as other team members for effective implementation of company policies and procedures. This will go a long way in achieving the targets and goals set by the company / organisation. Apparel production companies have different departments such as store department, cutting department, stitching department, finishing and quality department, etc. All these departments require supervisors to manage and motivate workers. A supervisor also takes care of work routines, attendance, adherence to company policies etc. For example in a store department, the store supervisor is responsible for guiding and training the support staff about unloading, labeling, storing material.

Supervisors are also responsible for training of new employees as well as continuous training of old staff as equipment, technology and processes keep getting renewed. They are also responsible for performance evaluation, maintaining discipline, creating and managing spreadsheets etc. However a supervisor cannot do this alone. They need the support and cooperation of their teams and employees to achieve all this.

Committed employees bring added value to the organization through their determination, proactive support, relatively high productivity and awareness of quality. These types of employees also display positive behavior within organizations and thus are very sought after or in demand.

There are many direct and indirect ways of showing support to your supervisor. Direct ways relate to following policies and procedures, punctuality, adhering to shift timings and indirect ways of support include maintaining discipline, pitching in extra work or doing someone else's work when they are absent. Support to Supervisors can be given in following ways:

1. Maintaining Effective Communication with The Supervisor:

Always keep your supervisor informed about your work progress. If you need to take leave or arrive late due to some pressing commitment inform your supervisor so that the workflow can be managed and your duties can be assigned to some other employee during your absence. This is essential especially if some deadline is approaching. If you are not happy with some policy or decision then also communicate politely to the supervisor and get things sorted.

2. Being an Effective Listener:

Pay attention and listen carefully whenever the supervisor assigns duties or takes training sessions. This will be helpful in understanding the requirements and hence in performing one's duties correctly.

3. Following all Policies and Procedures:

One of the ways of supporting your supervisor is to understand the company policies and procedures and to follow it also. For ex in a store the support staff should be able to clearly understand the procedure for receipt and issue of material. This will help in smooth store operations without any chaos, confusion or loss in the stock. This will result in achieving the business targets and management of work routine.

4. Be Responsible

If you notice that there is a task that needs to be done and the staff is less or not adequate and you have the skills to accomplish it then offer to do the task and complete it.

5. Be dependable:

Do your duties and assigned tasks seriously, efficiently and well within the time limit. This is one way of showing support to your supervisor and being a valuable employee too. Dependable employees respect deadlines, and make every effort to meet them. For this work hours should be used effectively and time should not be wasted in gossiping or taking longer than authorised lunch breaks. Help your supervisor by doing your share of the work and try to complete assignments in a timely fashion.

6. Prior sanction of leave/late arrival

Always inform your supervisor before taking leaves. Even if some last minute emergency comes up and you need to report late for the duty, do inform your supervisor. One must always inform supervisor about leaving early or late arrival. Keep him/her informed about your leave plan. This will help in assigning your duties or work to someone else. This is essential for meeting deadlines and maintaining the workflow and production cycle.

7. Be Punctual:

Always arrive and leave on scheduled time. Try to arrive and settle a little early then your shift timings as this will help in utilizing the shift time effectively. Do not over extend tea or lunch breaks. Punctuality

helps in maintaining the production cycle and speed thus it is also a way of showing support to your supervisor.

8. Offer useful solutions

If the company or your division is facing a problem and you have a solution in mind, go to your supervisor with a rational decision making model and a detailed action plan.

9. Learn to adapt and be open to learning

Individuals who embrace change and are able to quickly adapt are seen as more valuable than those who cling to outdated principles and concepts that are past their expiry date. Don't be afraid of change but welcome it. Experiment with new ideas that are meant to improve productivity and performance.

10. Make your supervisor and team members' work easier:

Be ready to offer help and to do extra duties in case of emergencies and deadlines. Try to help not only your supervisor but also your team members if there is more work or if there is some situation which requires to put in extra effort. For example- If a consignment has to be received by a certain date and your shift is over, you can voluntarily offer to stay longer and help so that receiving of the consignment can be done on the date given.

This requires a pro-active approach, especially because this work is not part of your assigned duties.

11. Take charge and volunteer:

Many a times your supervisor and/or any of the team members may not be able to perform their duties due to unforeseen factors such as illness, stress, constant juggle between home and work, financial pressure or other factors such as marital discord. This may hamper their productivity and output on certain days. All this can lead to unmet work targets resulting in high anxiety levels, thus pulling down productivity at work. Such times require you to show your support and solidarity by taking charge of the situation and volunteering to do more than your share of duties.

12. Spot real problem

There are times that your anxiety over something at home gets spilled over at work place. You may never realise that the problem is not at work but back at home or vice versa. Identify the reason behind your anxiety.

13. Speak to your supervisor and team members

One of the best ways to deal with workplace anxiety is to actually talk to someone close to you including your supervisor. They may offer useful solution and save you from stress and trauma and this will result in optimum work output and efficiency which in turn will be a way of supporting your supervisor.

14. Prioritize and organize

Doing the same task repeatedly over days, long commute to work, financial stress may take a toll on your work. This may result in low productivity, reduced efficiency and a pile of unmanaged work. Work can take a toll, especially when not managed well. If you don't do your duties well your supervisor will not be able to meet the target given to him/her by the senior management and will have to bear the brunt. So prioritize your time and organize your daily routine and work routine to avoid unmanaged work pile. Learn to do high priority tasks first.

Putting it simply, here are some of the ways in which you can show support to your supervisor:

- Reaching on time
- Keeping your work area clean and hygienic
- Understanding expectations of Supervisors and Seniors and working accordingly
- Understanding and maintaining acceptable behaviour
- Not indulging in negative behaviour, gossip and negative practices
- Not indulge in illegal or banned work practices
- Reporting any spurious or illegal activity to your supervisor immediately
- Following proper channel while reporting deviations in company policies and procedures
- Being cordial with your team members
- Reporting accidents, damages, faults immediately.

The workers should immediately alert the supervisor and management about any serious deviations such as lapse in safety and security, workplace harassment etc in the company. Proper channel and procedure should be followed while reporting such things.

All the workers and employees must conduct themselves as per the company's or organization's vision and mission. In order to achieve the goals or targets set by the company it is also very important to follow the company's policies and procedures. Employees or workers should avoid breaking rules

Activities

Activity 1:

Imagine you are the assistant to the store supervisor in ABC apparel production company. A big supply of fabrics and accessories is being unloaded in the store and you and 3-4 other support staff are helping in unloading and storing. Suddenly there is a fire outbreak how will you support your supervisor in controlling the situation. Present a skit in your class on this situation.

Materials Required:

1. Placards
2. Furniture
3. Costumes
4. Bags and boxes

Procedure:

1. Plan the script and dialogues.
2. Arrange for the setting of a store.
3. Enact the skit.

Check Your Progress

A. FILL IN THE BLANKS:

1. A _____ is a group of individuals working together to achieve a common goal.
2. _____ is very crucial for success of any business task or operation.
3. There are many _____ and _____ ways of showing support to your supervisor.

B. WRITE SHORT ANSWERS FOR THE FOLLOWING QUESTIONS:

1. What do you mean by teamwork?
2. What are the benefits of teamwork?
3. Briefly write some of the duties of a supervisor.
4. How can workers in any organization provide support to their supervisor? Write any 3 ways.

Session: 4 Planning and Managing Work Routines

Routines help to stay focused on the things that are most important. They bring discipline and give a smooth flow to various tasks. Having a proper work routine is known to boost the productivity and efficiency of workers and employees. Work routines help in achieving the assigned goals and daily targets in an efficient and organized manner.

Benefits of Proper Planning of Work Routines

- It gives a direction and purpose to the employees and they are able to give quality output.
- It helps supervisors in management of time and task allocation.
- It also helps the management in performance evaluation.
- It helps in proper resource allocation for the tasks.
- Work routines prevent employees from distraction and helps stay focused on assigned tasks.
- It helps in prioritizing tasks and achieving the target.
- Thus work routines help in accomplishment of assigned tasks and boost efficiency and productivity of the staff.

PLANNING WORK ROUTINES AS PER COMPANY PROCEDURES AND REQUIREMENTS

Every organization or company has specific procedures. Each company or organization has different goals and requirements. For example the requirements and procedures of a packaging company will be entirely different from that of a food and beverage company.

The work routines also differ from organization to organization. Thus it's very important to keep in mind one's organization's policies, procedures and specific requirements while planning as well as managing work routines of one's employees.

- Understand the goals and targets of the company, the resources available for achieving these goals and then plan the work routine.
- The strengths and skills of each employee should be kept in mind while planning work routines and tasks should be assigned as per the capability and efficiency of the employees.
- Due consideration should be given to recreation, entertainment and lunch breaks to keep the monotony away from work routines.

- There should be provision for time to time checking of work routines and managing last minute changes in schedule due to unforeseen causes such as sick leaves by employee, machine breakage etc.
- It should be possible to make quick adjustments in the work routines of the employees due to unforeseen circumstances and communicate it too with workers.

Importance and Benefits of Punctuality and Attendance

Punctuality and regular attendance are vital attributes for all employees. Employees should attend work regularly and arrive at work on time, because it affects work routine and productivity. When employees are absent or late, work and service are interrupted and an additional burden is placed on co-workers and colleagues. Unauthorized absenteeism and late arrival is liable for disciplinary action and may result in termination of employment also. Employees should inform their supervisor or concerned authority if they expect or anticipate to be late for work due to some unavoidable reason. If an employee fails to notify his/her absence for a long period it can be considered as job abandonment and may result in termination of employment. Good attendance and punctuality helps in creating a professional image helps in securing a better position or role in the company

Attendance of workers and employees affects the people with whom they work. If you're present for work, completing your tasks enables others to fulfil their tasks and responsibilities. For example, if you're a store keeper charged with receiving and issuing items, the results of your work could determine whether the products can be produced timely or not. If you're consistently absent, receiving, issuing and hence production and supply of goods will be affected and delayed. This in turn can result in loss to the company



Fig.: 6.3 Punctuality

Punctuality means the habit of being on time. It also means showing consistency and regularity in behavior. Punctuality helps us to appreciate time and use it effectively. It is a virtue that is widely appreciated. Punctuality helps in developing a habit of regularity in behavior and helps prevent procrastination. It enables us to be organized and on time so that we prevent stressful situations. We can't be punctual unless we plan and organize our tasks smoothly. Thus we can say that punctuality makes us more organized

and helps us in managing situations in better ways. It contributes to being more productive in everyday life.

It is an important characteristic of successful people. Success comes from valuing and making productive use of time. Punctuality comes with effective time management of time and completion of tasks. It is also a mark of discipline. It is a virtue that reflects regularity and organized work ethics. These are virtues that come along with punctuality and are important elements for success. For example if we talk about the job of a ‘store keeper’. A ‘store keeper’ who is punctual will arrive at least 15 -20 minutes prior to the start of shift, will not waste time in talking or whiling away and will use time judiciously and meticulously to store the material systematically in given time. Also a punctual person will not leave work prior to the end of assigned/scheduled work time and without prior approval of in charge or supervisor.

Benefits of Punctuality

It helps the individuals to be more productive and successful in their general daily lives as well as professional lives. Punctuality is strongly associated with success and achievement in the undertake endeavors. It is associated with general happiness in everyday life as well as successful achievement in various spheres of life. Inculcating punctuality in our lives go a long way in helping us across various hurdles and challenges. Punctuality demonstrates your respect for co-workers and clients and reinforces your time-management skills. It is a sign of professionalism and helps one to stand out as a reliable, dependable and trustworthy employee / worker. Punctuality is often the key to completing projects and assignments quickly and effectively.

Activities

ACTIVITY 1:

Visit any factory or company. Talk to their manager and find out the ways in which they manage and check the attendance and punctuality of their staff. Also research online for the latest ways of checking the attendance. Make a PowerPoint presentation using pictures as well as text.

Materials Required:

1. Notebook
2. Pen
3. Pencil
4. Eraser
5. Computer

Procedure:

1. Visit the company or browse online.
2. Write down the necessary points as directed in the question.

3. Make a power point presentation.
4. Present in the class and discuss about the same.

Activity 2:

Prepare a chart on the importance of punctuality.

Materials Required:

1. Chart paper
2. Pictures
3. Pen, pencils, markers
4. Eraser
5. Ruler

Procedure:

1. Read and collect material on punctuality
2. Collect pictures.
3. Write about punctuality in the chart
4. Paste related picture

Check Your Progress**A. FILL IN THE BLANKS**

1. _____ help you stay focused on the things that are most important.
2. Punctuality is a sign of _____.
3. Punctuality and regular _____ are vital attributes for all employees.
5. Work routines help in achieving the _____ and daily targets in an efficient and organized manner.
6. _____ is often the key to completing projects and assignments quickly and effectively.

B. WRITE SHORT ANSWERS:

1. What is meant by routine? Why it is important to have routines/
2. What are work routines and how do they affect production cycle?
3. What do you mean by punctuality? Why is it important?
4. Why is attendance necessary in companies?

ANSWER KEY**MODULE 1****Session-1****Fill in the blanks-**

Garment

Store/ Store department

Smooth production

Place of work

Fabrics, sewing threads, trims

Session-2**True/ False-**

True

False

True

True

Session-3**Match-**

(b)

(c)

(a)

Session-4**Fill in the blanks-**

Outer

Non-verbal, powerful

Direct contact

Transport

Session-5

Fill in the blanks-

Store Keeper

Memos

Letters

MODULE 2**Session-1****Fill in the blanks-**

House Keeping

Safer workplaces

Custodian and controlling

Blind corners

5S

Session-2**Fill in the blanks-**

Store Keeper

Type, size, nature

Lot size

Trims

Session-3**Fill in the blanks-**

Stock/Inventory Management

Bin Card

The inventory/stock limit

Just In Time

Radio Frequency Identification

Receipt Function

Session-4**Fill in the blanks-**

Preservative

Nontoxic and compatible

To non-visible light

Natural

High temperature

MODULE 3

Session-1

Fill in the blanks-

Purchase order

Store ledger

Incoming/outgoing material

Target date

Session-2

Fill in the blanks-

Vendor

Effective vendor management

Listed or approved

Session-3

Fill in the blanks-

Vendor

Supplier

Store Ledger

Follow up action

MODULE 4

Session-1

Fill in the blanks-

Material handling process

Clean and ventilated

Safe, comfortable

Tools and Material
Cleaning and maintenance

Session-2

Fill in the blanks-

Safety Guards
Floor Space
Disposal of waste
Identified and segregated
Economic advantage, Community relation

Session-3

Fill in the blanks-

Environment health and safety
Radiation Hazard

Session-4

Fill in the blanks-

Spillage, Seepage
Thread sucking machine
Protective gears

Session-5

Fill in the blanks-

Housekeeping
Inspection, Extinguishers
Clean, Systematic and Hazard free
Quality Assurance

MODULE 5

Session-1

Fill in the blanks-

Hazard

Safety

Mental health and Well being

Local ventilation

Session-2

Fill in the blanks-

Close fitting

Ear muff

Management

Psychological hazards

Session-3

Fill in the blanks-

Performance

Personal hygiene

Fit and healthy

Tobacco smoke

Alcohol

Session-4

Fill in the blanks-

EMS

Plant layout

Men, Materials and Machine

MODULE 6

Session-1

Fill in the blanks-

Ethics

Ethics and Values

Honesty, Integrity, Loyalty, Keeping Promises

Values

Goals

Security, Peace

Session-2**Fill in the blanks-**

Policies

Procedures

Policies

Individual, Team responsibilities

Session-2**Fill in the blanks-**

Team

Teamwork

Direct, Indirect

Session-3**Fill in the blanks-**

Routines

Professionalism

Attendance

Assigned goals

Punctuality

GLOSSARY

Grading – Potentially increasing or decreasing size of a garment to fit different body sizes according to the size range intended for production.

Marker- A full scale diagram used for cutting parts and components of garment. It indicates the most fabric conscience arrangement of all the components of garment.

Pattern- A pattern is a guide which is used to cut parts and components of a garment from fabric for sewing operations.

Approved sample or prototype or fit sample- It is the first sample for garment style which is used as the base for all of the production.

Inspection- Garment inspection refers to the visual examination of garment so that the final product coincides with the perceived quality standards.

Fabric- A fabric is two dimensional structure which is produced by a network of yarns and fibers.

Interlining- Extra layer of fabric which is used to provide warmth and strength to the garment. It is sandwiched between the main fabric and the lining.

Preservation- It is the process of preserving the material. It involves protecting stored material from getting damaged.

Lot- It is the length of fabric that has been woven/dyed/ finished at the same time.

Metrological equipment- These are equipments used to measure various parameters of fabric and other material. For example, thickness gauge, pick glass etc..

Shelf-life- It is the duration for which a material can withstand environmental conditions without being affected.

RFID- Radio frequency identification tags are used to tag the material and products so that it can be easily traced through a barcode.

Inventory- It refers to the array of material and products that are held as stock.

Purchase Order (PO)- A legal contract between the manufacturer/ exporter and buyer.

Antifoams- These are chemicals that prevent formation of foams while using liquids in process.

Surfactants- These are chemicals that lower the surface tension between two mediums.

Chelants- These are chemicals that bind to positively charged metal ions such as magnesium and calcium. They are used in cleaning process while using hard water.

Dispersants- These are chemicals that break oil in small particles which can be removed easily.

SOP- Standard Operating Procedures refer to a step by step instruction set by an organization for a particular work.

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