Draft Study Material



Documentation Assistant

(QUALIFICATION PACK: Ref. Id. LSC/Q1122)

Sector: LOGISTICS

(Grade XII)



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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

Date: 20 June 2024

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MODULE 1

INBOUND GOODS

Module Overview

Logistics and Warehousing is a systematic and detailed process which involves preparation, execution and control of transportation and storage of materials/articles etc, providing effective and efficient services from one point to another. A Warehouse Documentation Assistant (WDA) role is to understand this process effectively and manage the document requirement at various stages efficiently. A WDA maintains records and information of goods/materials in the warehouse which are being brought into the warehouse and also of materials taken out of the warehouse.

The WDA has to understand the process of inbound and outbound logistics which helps him to understand the purpose of marinating the documents and records. This knowledge assists the WDA to execute his task efficiently and effectively.

For any industry raw materials purchase and storage is a mammoth activity. Companies spend huge capital to maximize and optimize the efficiency of Warehouse storage and inventory maintenance. This process begins at the inbound goods management. Small industries may have designated allocated space for inbound material; however, large industry has to maintain separate place or area for maintaining the inbound goods for proper and correct distribution of materials.

If purchasing is the first pillar in the foundation of an industry, then the inbound goods can be termed as its cement. It adds value to core business and purchasing till the goods are delivered to the end consumer.

Understanding the concept of Inbound goods will help the WDA for proper handling and execution of documentation requirements. The WDA indirectly maintains the relation between the supplier and the company, the quality of purchase material rtc. Hence, the job role of WDA is very important and significant.

Learning Outcomes

After completing this module, you will be able to:

- Describe the inbound goods;
- Explain distribution and sorting of inbound goods;

- Describe inbound logistics services;
- Demonstrate the Testing inbound goods;

Module Structure

Session 1: Introduction of Inbound Goods

Session 2: Distribution and Sorting of Inbound Goods

Session 3: Advantages and Disadvantages of Inbound Goods

Session 4: Testing Inbound Goods

Session 1: Introduction of Inbound Goods

With globalization, no country, manufacturer, supplier or user is restricted to boundary oriented products. For example, a textile manufacturer uses dye from Italy, an electronic manufacturer stores parts from south east Asia, a Hotel in Maldives uses toiletries manufactured in India. Almost all companies all over the globe are using products, inputs or raw material, spares to tools etc which has foreign orientation. This is possible due to efficient and ever progressing logistics system.

The companies all over the world are using inbound and outbound logistics for procurement and marketing of their products. Inbound logistics forms an integral part and efficient management of inbound goods can add to company profitability and asset value.

MEANING OF INBOUND GOODS

Inbound Goods (IGd) refers to transportation, storage of goods which are procured by the company. In very simple words, Inbound Goods are the material received from supplier and stored in the warehouse for distribution.

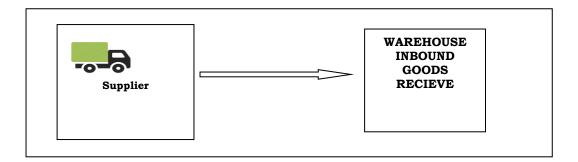


Figure 1.1: Inbound Goods

In very simplified words we can say inbound goods are goods which are incoming into the ware house. For any industry, getting and storing the raw material, goods, spares and tools etc is very important as it lays the base for production process. The size, volume, category, type of inbound goods depends upon its industry.

Proper storage area is a must for any article coming in to the Warehouse. While small industry may have specified designated area for storing inbound goods, large industry may allocate special facilities for same.

OBJECTIVE OF INBOUND GOODS

Effective management of Inbound flow of material is very much essential for a company as it determines the expenditure, value addition, maximization of profits at the end of Financial Year.

Few basic objectives of inbound goods or logistics are mentioned below:

- 1. Reduce the freight or transportation expenses by efficient management and decrease in damage goods storage.
- 2. Improve on time delivery of raw material or material as required.
- 3. Reduce Purchase lead time to maintain smooth flow of material.
- 4. Reduce handling to decrease damage.
- 5. Shrink the Inventory cost to bring profitability by cost saving.
- 6. Improve warehouse productivity and process and lessen the documentation.
- 7. Increase customer service by quick and efficient supply of material.

The above-mentioned objectives can be achieved by focusing on below mentioned areas by continuous improvement process:

- **a. Vendor Compliance:** The purpose and objective of purchase should be defined and transparent. Supplier or Vendor must have clear understanding of what is expected of them and to maintain quality and service. Many companies organize annual meeting with their vendors for better understanding of the purchase objective.
- **b. Payment Method Control:** Payment method, i.e, freight paid or to be paid should be very clear. Any default payment on part of any party may hinder.
- **c. Visibility and System Control:** Companies develop transparent and efficient system for smooth functioning of purchase cycle and vendor management. A WDA must possess good knowledge of the system and its working.

d. Vendor Relationship: Vendor Relationship is very important for achieving efficient inbound goods management. The relationship of a company with is vendor determines the quality and service it receives and base on that performance measure is done.

STORAGE OF INBOUND GOODS

Efficient arrangement of inbound goods is very significant to increase the material shelf storage system. If the inbound goods storage in not done properly it affects directly the whole storage system.

Usually below two strategies are adopted for storing of Inbound goods after proper inspection and checking:

1. Allocation Strategy:

Under this strategy, the inbound goods are stored in defined and allocated space and function of material. For example, many industries have designated allocated area for different category like mechanical, chemical, etc or raw material area, processing area etc.

2. Movement Strategy:

Companies following this strategy store inbound materials according to their use and frequency.

Many companies use combination of the two aforementioned strategy for dynamic and efficient storage system.

INBOUND GOODS PROCESS

The Inbound Goods Process is defined in below few steps:

- 1. The Inbound goods process starts with the placement of purchase order to defined or suitable vendor. The quantity, value, number, quality, after sale service (if any), etc are defined for transparency and accuracy.
- 2. Goods are delivered by vendor in a defined or designated area.
- 3. The Checker will inspect for any damage, shortage, pilferage etc and submit the report.
- 4. The goods to be unloaded and lay down in designated bay area for further inspection and clearance.
- 5. The Ware House Document Assistant will check all the documents such as Invoice, Packing List, Goods Receipt, Manual if any, and compare with Purchase order. The WDA will check the following points:
 - Name and address of vendor and also the store
 - Description of material

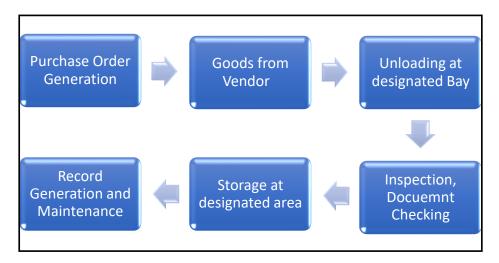


Figure 1.2: Inbound Goods Process

- Number or quantity of material
- Taxes and levies
- Discounts on goods if any
- Freight charges and freight term
- Total quantity and amount
- 6. The WDA will check for label, details and storage instruction on the package and also the documents.
- 7. As per the allocation or movement strategy, the goods will be stored in the warehouse accordingly.
- 8. Prepare record and document of the material stored

Thus the WDA has to understand the inbound goods process system thoroughly for proper management of goods.

Activities

Activity 1: Store Inbound Goods in Given Situation

Materials Required: Pen, Pencil, Eraser, Notebook, Case study (provided by teacher), chart paper.

Step by step procedure:

- 1. The Teacher will first discuss the session the students.
- 2. The Teacher will provide Case study to student and discuss it in the class.
- 3. The students will brainstorm the case study.

- 4. The students will write down their findings and lay out in their notebook.
- 5. The student will share their finding in the class and discuss.
- 6. The students will note down best of the class findings and summarize with help of Teacher.
- 7. They will submit their final report to teacher.

Activity 2: Draw the objective and process of Inbound Goods

Materials Required: Pen, Pencil, Eraser, Notebook, chart paper.

Step by step procedure:

- 1. The Teacher will discuss the objective and process of Inbound goods in the class.
- 2. The Teacher will ask the class to draw the objective and Process of Inbound goods in their notebook.
- 3. The students will draw and submit to teacher.
- 4. The Students may draw the same on chart paper and display in the class.

	Cneck Your	Progress
Α.	. FILL IN THE BLANKS	
		ral part and efficient management of my profitability andvalue.
	2. Inbound Goods are the material warehouse for distribution.	from supplier and stored in the
	3. Proper storage area is a must the	st for any article coming in to
	4. Reduce the freight or transmanagement and decrease in dame	sportationby efficient age goods storage
	5. The relationship of a company with service it receives and base on that	n is vendor determines the quality and tmeasure is done.
В.	B. MATCH THE COLUMNS	
	A. inbound goods are goods	i. for achieving efficient inbound goods management.
	B. Reduce Purchase lead time i	ii. Movement Strategy

C. Vendor Relationship is very important	iii. goods which are incoming into the ware house.
D. Under this strategy store inbound materials according to their use and frequency.	iv. in designated bay area for further inspection and clearance.
E. The goods to be unloaded and lay down	v. to maintain smooth flow of material

C. SHORT ANSWER QUESTIONS

- 1. Describe the meaning of Inbound Goods and its objectives in brief.
- 2. Explain the process of Inbound goods along with a diagram or flowchart.
- 3. How storage of Inbound goods is done.

D.CHECK YOUR PERFORMANCE

1. Perform storage activity with given inventory.

Session 2: Distribution and Sorting of Inbound Goods

The Inbound goods procurement begins with the placement of purchase order to a defined or suitable vendor. The goods which are procured goes through different channels of distribution before incoming into the warehouse. The Channel of Distribution means set of mutually dependent organizations or distributors which help to avail the inbound goods at the warehouse.

CHANNELS OF DISTRIBUTION IN INBOUND GOODS

The inbound goods involve different distribution channels as per below diagram (Figure 1).

1. Procurement Department

The Procurement Department generates the Purchase Order after identifying the vendor. The Purchase Order mentions the name and address of company and vendor, TIN, GST number, Description, quantity and per unit price of the material, total quantity and amount, payment and freight terms and conditions, special conditions if any.

2. Vendor

The vendor on receipt of Purchase Order dispatched the material to Purchase at defined place and as per Terms and Conditions of the Purchase Order and handovers to the Transporter.

3. Transporter

The Transporter carries the material and delivers the material to the Company or Purchaser.

4. Receiver

The Receiver receives the material at the warehouse and issues Goods Receipt on upon Inspection and clearance of material.

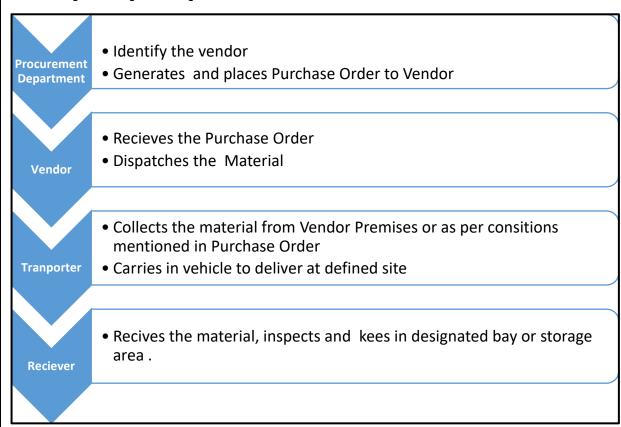


Figure 1.3: Inbound Distribution Channels

The Warehouse Checker will inspect the material for any damage. Pilferage or discrepancy.

The Warehouse Document Assistant inspects and clears the documents and keeps record of the invoice, packing list, Goods receipt note etc.

The Warehouse Clerks keeps the material at designated storage area for further use or for availability of the user.

DELIVERY OPTIMIZATION IN INBOUND GOODS

Delivery Optimization of Inbound Goods means optimization of transportation and cost saving. There are different methods for delivery optimization which are mentioned below:

1. Just In Time Delivery Method

As per namesake, it is the method of procurement of goods just when you need. This is suitable for small and clustered industry and local procurement.

2. Franchising Method

A contractual method of delivery system where in a third party is involved for inbound delivery of goods at designated warehouse.

3. Consolidated Method

In this method the company may procure different material at one assigned place and arrange transportation to its warehouse. This is very effective and cost saving method.

While considering the optimization of inbound deliveries, a WDA must consider the following points:

- Proper Tracking of material
- Continuous updating of Material status
- Choosing the delivery method option
- Choosing the freight payment method

KEY ISSUES FOR OPTIMIZATION OF INBOUND LOGISTICS

Inbound Logistics encompasses both internal and external environmental factors such as inter-departments and vendors respectively. Hence , the smooth working for optimizing depends on various issues .The key issues for optimizing the inbound Logistics are as below:

a. Product Movement

Any Inbound goods moving from source to warehouse must follow in a specified direction and in defined strategy. The fundamental goal of inbound goods is to reach the final consumer fastest possible way with minimum cost and resource utilization.

b. Information Movement

Flow of information between the vendor, companies, transporters recivers etc should be transparent and clear to avoid any mis communication and quick and timely decision making. This flow of information should also be present inter departmental for right information availability.

c. Timely Service

In age of gigantic growth of e-commerce, timely services and delivery gives cut throat competition in the market. Every company wants to deliver quick delivery and quality service to its customer.

d. Cost

Cost plays important factor in any type of logistics – inbound or outbound to perform efficiently. As such , the mantra of today's logistics system is best value for money and service.

e. Integration

Integration of departments, external factors such as suppliers, vendors, building relationship have become one of the key to successful and efficient optimization of inbound logistics cost. Hence, relationship building also plays vital role in optimizing the inbound goods quality and service.

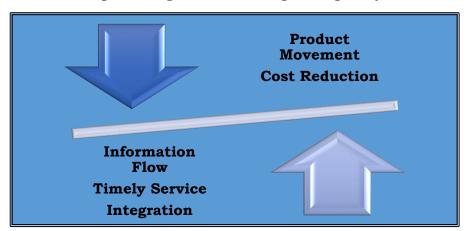


Figure 1.4: Key Issues in Inbound Logistics of Goods

SORTING INBOUND GOODS

When goods are received at the Warehouse, they are also inspected and sorted. Sorting is done based on various factors such as

- Purpose of material use of material
- Type of Material- based on size, volume, weight etc.
- Category of Material Dangerous or Non-Hazardous Product, Automobile or Engineering Product etc.
- Size of Material Large, bulky, quantity etc.
- Nature of Material Fragile, Flammable, Corrosive etc.

Sorting of Inbound goods is done in the following mention process:

Goods are received at designated bay from defined vendor.

- The Checker will check and inspect the goods at the bay.
- The WDA will verify the documents received and compare with Purchase Order.
- After successful inspection of product, details such as label, product description etc is checked.
- As per the Purchase Order issuing department, the material is sorted and stored in the warehouse.
- Inbound Material can also be sorted based on its nature, size, weight, volume etc.
- Few companies have designated areas specified for material and as such sorting of inbound material is done.
- The above is brief explanation of how distribution and sorting of inbound goods is executed.

Activities

Activity 1: Sort the inbound goods following the distribution channel for specified goods.

Materials Required: Pen, Pencil, Eraser, Notebook, Material list (provided by teacher), chart paper.

Step by Step Procedure:

- 1. The teacher will discuss the session in detail in the class.
- 2. The teacher will provide list of few materials to the students.
- 3. The students will draw a chart in their notebook showing sorting process using different distribution channel for inbound goods.

Activity 2: Observe and write report on sorting of Inbound goods after your visit to nearby Warehouse.

Materials Required: Pen, Pencil, Eraser, Notebook, Checklist (provided by teacher), chart paper.

Step by Step Procedure:

- 1. The teacher will take batch of 20-30 students to nearby warehouse.
- 2. At the beginning of the visit the teacher will provide checklist for observing the sorting method
- 3. The teacher will give overview of visit and discuss the purpose of visit.

- 4. The student will observe the sorting of inbound goods and note down observation in their notebook.
- 5. The students will write report based on their observation and submit to their teacher.

	Cneck for	IF PTO	gress
A.	FILL IN THE BLANKS		
	1. The Inbound goods procurent to a		
	2. Theinspect record of the invoice, packing list		
	3of Inbound Goods and cost saving.	s mea	ns optimization of transportation
	4 is a contractu third party is involved for inbowarehouse		chod of delivery system where in a delivery of goods at designated
D	5. Every company wants to deliver its customer.	quick	and quality service to
ъ.	MATCH THE COLUMNS		
	a. Vendor	vi.	Method of procurement of goods just when you need.
	b. Transporter	vii.	Channel of distribution
	c. Just- in –time delivery	viii.	Carries in vehicle to deliver at defined site
	d. Sorting of Inbound goods.	ix.	Key issue in optimizing the inbound goods.

C. SHORT ANSWER QUESTIONS

e. Product Movement

1. Describe different channels of distribution of inbound goods in brief.

x.

Purpose of goods

- 2. Explain how delivery optimization of inbound goods can be achieved.
- 3. Define process of sorting of inbound goods.

D. CHECK YOUR PERFORMANCE

1. Perform sorting in store of your school.

Session 3: Advantages and Disadvantages of Inbound Goods

Logistics forms a large share in the cost of manufacture of any product, hence, the companies strive to minimize this expense by adopting various methods. Inbound goods purchasing, transportation and handling forms a major chunk of transportation expense.

Inbound Logistics means transportation and flow of material from supplier to central warehouse or factory as opposite to outbound where transportation and flow of material is from factory or manufacturer to a central warehouse for distribution and supply to end consumer.

Usually the companies and industry lay their focus on the outbound logistics, however, with change of times, companies are also focusing on Inbound Logistics to create more efficiency and cost savings. Compared to Outbound Logistics Inbound is more complex as there is many to one relationship structure, i.e, many suppliers to one vendor.

INBOUND LOGISTICS CONCEPT

With the advancement in the e-commerce, the need of inbound logistics has increased due to cost saving and improved service efficiency advantages. As such studies were conducted to find ways to increase efficiency and reduce lead time cycle. Based on the studies done over few years, following four concepts have emerged:

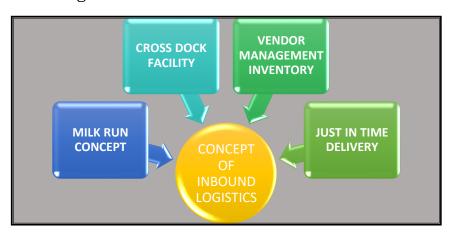
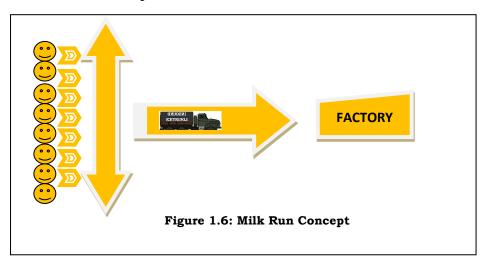


Figure 1.5 CONCEPTS OF INBOUND LOGISTICS

1. Milk Run Concept

Milk Run concept can also be called as Inverse distribution concept. In such model, a vehicle picks up load from supplier and transports to the factory

after it has attended all the suppliers. It is most suitable for partial loads and short lead time delivery.



2. Cross Dock Facility

Under this facility, all supplier ship to one central warehouse from where the material is trans shipped to the factory in another vehicle. It is advantageous where the factory is located far away from suppliers and suppliers are clustered in one area.

3. Vendor Management Inventory

In this method, the supplier maintains the supply transportation according to demand and need. High quality service and fewer inventories is its advantages.

However, this method is applicable only if there is single source supplying party.

4. Just -in -Time Delivery

This is hand to mouth supply system and is applicable only when supplier are domestic or in nearby area. Low inventory, quick deliveries are its advantages.

ADVANTAGES OF INBOUND LOGISTICS

The advantages of inbound logistics are as followings:

a. Diminish Supply Chain Risk and control:

The inbound logistics is most advantageous as it is very flexible and the company or buyer has full control over the transportation of the material. The Company can keep tight tracking on the flow of material, thereby, lessening the supply chain risk.

b. Reduce delay shipment

Due to control over the flow of material, the vendor or buyer enjoys the reduction in delay of shipment.

c. Third Party Cost

Third party cost such as inter-mediatory, distributor etc is eliminated and thereby saves additional expense. This saves huge capital to company.

d. Lead Time Reduction

The reduction in delay shipment is directly portioned to lead time. Reduced lead time increases the production efficiency, quick deliveries to customer etc.

e. Control Over Transportation

The vendor and/or the buyer have control over the flow of transportation, freight payments and delivery schedule, thereby, increasing the transportation efficiency.

f. Better Inventory Management

Inbound logistic is being focused on by many companies due to their Inventory Management efficiency increment. Inventory cost, space, maintenance is lessening due to proper and effective Inbound logistics.

g. Domestic Growth

The indirect advantage of inbound logistics is growth of domestic industry. As goods are procured inbound or domestic, indirectly leads to development of domestic industry.

The inbound logistics increases the visibility of supply chain system and thus the companies can have real time data so that they can identify the flaw in the system and resolve to increase efficiency.

DISADVANTAGES OF INBOUND LOGISTICS

Although there are many advantages of the Inbound Logistics, the same is not applicable to every industry due to its variance in size, material etc. Few disadvantages of inbound logistics are mentioned in below given points:

1. Complicated Process

Inbound logistics is complicated process at inter departmental and intermediately level. As operational hangs occur and additional functions on the part of inter department increases, thus, making the process complex internally. For example, track and trace of material at regular interval by the department.

2. Initial Expense

The initial expense while introducing the Inbound Logistics system is heavy. Introduction of Transportation Management system, training the employees, etc bears expense to company's pocket.

3. Ambiguity

Any ambiguity in the relationship between the vendor and buyer can lead to lead time delay, poor quality and service, transportation cost expense etc. Hence, the terms and conditions for inbound logistics between the two or more parties should be clear.

4. Stock Shortage

One of the dis-advantages of Inbound logistic is stock shortage scenario, especially in case of Just-In-Time delivery. If there is any delay in transportation, or shortage at vendor's end, this may affect the time cycle

5. Time Bound

The inbound logistics is open relationship between the distribution channels and to develop such relationship is not possible in a day. It takes time to develop trust between the parties to further the step of inbound logistics.

6. Competitiveness

One of the dis-advantage of inbound logistics is openness in the channels. This may lead to loss of knowledge base among the channels or competitors by the channels if there is no confidentiality clause among the parties.

The above are few advantages and disadvantages of the inbound logistics.

Activities

Activity 1: Prepare a chart of inbound logistics services and its advantages.

Materials Required: Pen, Pencil, Eraser, Notebook, chart paper.

Step by Step Procedure:

- 1. The teacher will discuss the session in detail in the class.
- 2. The teacher will provide overview of topic to the students.
- 3. The students will discuss the topic in the class and resolve any doubt.
- 4. The students will draw a chart in their notebook showing and disadvantages of Inbound Logistics.

5. The students will display the chart paper in the class.

Activity 2: Case Study – Concepts of Logistics

Materials Required: Pen, Pencil, Eraser, Notebook, Case study (provided by teacher), chart paper.

Step by Step Procedure:

- 1. The teacher will discuss the topic in the class with the students.
- 2. The teacher will provide case study to the students.
- 3. The student will discuss the case study in the class nad with the teacher.
- 4. The student will write report based on the discussion for case study solution.

Check Your Progress

A. FILL IN THE BLANKS		
Inbound goods purchasing chunk ofex		sportation and handling forms a major
Compared to Outbound Lomany tostreet.	_	s Inbound is more complex as there is e.
3. The need of inbound logis improved service		has increased due to cost saving and vantages.
4is most suitab	le for	partial loads and short lead time deliver
5. The Company can keep tig lessening theB. MULTIPLE CHOICE QUESTIGE	risk	acking on the flow of material, thereby,
A. Milk Run	i.	Increases the transportation efficiency.
B. Vendor Management Inventory	ii.	Low inventory, quick deliveries are its advantages.
C. Just- in –time delivery	iii.	in the relationship between the vendor and buyer can lead to lead time delay
D. Control over Transportation	iv.	also be called as Inverse distribution concept.

E. Ambiguity	v.	this method is applicable only if there
		is single source supplying party.

C. SHORT ANSWER QUESTIONS

- 1. Describe different concepts of inbound logistics in brief.
- 2. Explain advantages and disadvantages of inbound logistics

D.CHECK YOUR PERFORMANCE

1. Prepare a chart of advantages logistic services.

Session 4: Testing Inbound Goods

Inbound goods can proceed for storage or further handover to other entity once it is verified. It is very important that the goods which are incoming in the warehouse are adhering to laid down standards in quality and service. With the growth of e commerce, quality assurance and concept of quality consistency have become mantra for success. In this sword edge competition in the market best quality service is expected by the consumer. Be it a manufacturer procuring raw material from a supplier to an end consumer procuring from manufacturer, at each and every stage quality is lifeline. Hence, all inbound goods must be of standard quality for best outbound good quality.

In this session, we will learn how this quality maintenance can be executed by the WDA to achieve quality inbound goods.

As a WDA, he/ she is responsible for proper maintenance of records, files, documents etc. Since quality is a tangible aspect of the product, the WDA is indirectly responsible for maintenance of quality inbound goods.

TESTING INBOUND GOODS AS PER STANDARD

Every company has to maintain a standard procedure for testing and inspection of goods under ISO 9001:2015. The companies have to prepare and maintain manual

- Who will be responsible for inspection
- What will be inspected?
- How inspection will be done?
- What all check list have to be considered while carrying out inspection?
- When the inspection should be done?

Although as per ISO standard, the quality control should start from the very beginning of placement of Purchase Order which should mention testing criteria, quality standard as expected from supplier.

However, it is the job of the WDA to supervise and follow the criteria as set up by the company standards.

INSPECTION CHECKLIST FOR INBOUND GOODS

A WDA has to maintain a checklist describing the process as to how the inspection of inbound goods should be done. As a WDA, he/she is responsible for inspection and verification of documents of inbound goods.

If the raw material is not good, then the final output or product will not be up to the standard. Hence, it is very necessary for WDA to maintain goods check list for quality inbound goods.

1. Checklist for how inspection of inbound goods to be done

- The inbound goods should be compact and in good condition.
- The inbound good should match the specification as per purchase order description.
- The inbound goods should not be damage; there should not be any crack, or any kind of physical discrepancy.
- The inbound goods should have clear and legible label.
- The label should have all information like:
- Description and serial number of good
- Purchase order number
- Shelf life of product, if required.
- Precaution to take while handling the product.
- Marks and Labels on the product.

2. Checklist for inspection of documents of inbound goods to be done

The inbound good documents should match the specification as per purchase order.

The documents should be complete consisting invoice, packing list, specification sheet, copy of purchase order; goods receipt note, manual or brochure if any.

The invoice should have all details like product description, serial number, manufacturer details. Date of manufacturing and expiry, shelf life etc.

The invoice should mention per unit price, total quantity, total amount in digits and words.

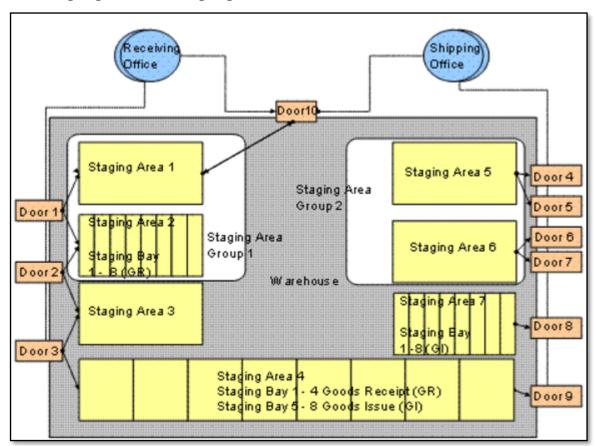
It is very important that the WDA should check the taxes and levies mention in the invoice.

If the raw material is machinery or anything related to technical aspect, it should contain manual or brochure.

The WDA has to maintain record, file of all documents inspected and verified. The record should be updated time to time and if any discrepancy id found, it should be reported to the immediate superior spontaneously.

SELECTION OF INBOUND GOODS IN STAGING AREA

Staging area used for temporary storage of material in the warehouse. They are located near the door for quick access usually. A staging area can seven different purpose or multipurpose.



Picture 1.1: Typical staging area in a warehouse

Source: https://www.tkreddy.com/2016/09/11/understanding-staging-area-and-door-determination-in-sap-ewm/

Usually, the inbound goods are kept in staging area for relabelling, inspection, cross docking or reshipment.

Checklist for keeping goods in staging area:

The WDA has to manage a checklist to determine the inbound goods to be kept in staging area. The check list should contain following points:

- Type of goods and its handling
- Type of packaging, label etc
- Product performance activity
- Handling activity
- Special category product allocation, handling etc.
- Labour required for handling the inbound goods

FACTORS AFFECTING INBOUND DOCUMENTS LOT SIZE

Though the WDA is responsible for managing the documents of inbound goods and their inspection and checking, but, sometime it may happen that the documents will not be in proper order. The document discrepancy, miss placement may occur which affect the inbound good inspection and passing into the warehouse. The following factors may affect the documents of inbound goods:

1. Natural Calamity:

This is involuntary and uncontrollable factor such as rainfall, landslide, flood, etc. which may hamper transportation and package of inbound goods and their documents.

2. Unrest or Strike:

Unforeseen and uncontrollable factor such as unrest, strike, chakkajam etc may affect the movement of inbound goods and its documents.

3. Lost or miss placement:

Human error such as misplacement, mixing, or lost may be cause of inbound goods movement and its documents.

4. Mixing or confusion:

Sometimes illegible label, bad handwriting may cause confusion in name or address and as a result mixing and confusion in inbound goods movement may occur.

In case such discrepancy occurs, the WDA must immediately report it to his/her immediate superior for further action.

Thus it is very important job of WDA to understand and execute the testing of inbound goods.

Activities

Activity 1: Test the inbound goods in a situation as given.

Materials Required: Pen, Pencil, Eraser, Notebook, chart paper.

Step by Step Procedure:

- 1. The teacher will discuss the session in detail in the class.
- 2. The teacher will provide overview of topic or situation to the students.
- 3. The students will discuss the situation in the class and resolve any doubt
- 4. The students will note down the solution individually in their notebook.
- 5. The students will discuss their solutions and measures in the class.
- 6. The students will make report based upon the discussion.

Activity 2: Draw staging area for a warehouse after visit to a warehouse...

Materials Required: Pen, Pencil, Eraser, Notebook, chart paper.

Step by Step Procedure:

- 1. The teacher will discuss the topic in the class.
- 2. The teacher will demonstrate the importance of staging area.
- 3. The students will observe the staging area in the warehouse.
- 4. The students will write report based on their observations.
- 5. The students will submit their report along with drawings.

Check Your Progress

A .	FILL IN THE BLANKS
1.	All inbound goods must be ofquality for best outbound good quality.
2.	The inbound good should match the specification as perdescription.
3.	In case any discrepancy occurs, the WDA must immediately report it to his/ her immediate
4.	If the raw material is machinery or anything related to technical aspect, it should contain manual or
5.	Human error such as, mixing, or lost may be cause of inbound goods movement and its documents.

B. MATCH THE COLUMNS

A. It is the job of the WDA to supervise and	I. The inbound goods should have clear and legible label.
B. If the raw material is not good,	II. follow the criteria as set up by the company standards.
C. Checklist for how inspection of inbound goods to be done	III. then the final output or product will not be up to the standard.
D. Checklist for inspection of documents of inbound goods to be done	IV. Checklist for keeping goods in staging area:
E. Labour required for handling the inbound goods	V. The invoice should have all details like product description, serial number, manufacturer details.

C. SHORT ANSWER QUESTIONS

- 1. Describe checklist for inbound goods document inspection.
- 2. Explain how you will test the inbound goods documents in a given situation.
- 3. What are the factors which may affect the inbound doos document lot size

D.CHECK YOUR PERFORMANCE

1. Prepare checklist for inspecting inbound goods.

MODULE 2

INBOUND DOCUMENTATION

Module Overview

Warehousing plays a very vital role in making whole distribution process successful. With a view for overall growth, development and to boost efficiency of warehousing operations it is divided in to various processes to deal with the complexities of the whole operations

Warehouse has three main processes: inbound, storage and outbound. This is applicable whether the warehouse is small or big. Warehouses get materials coming in, store it and take out. All processes are equally important and missing anyone will have effect on the other processes. This means it is important to consider each process according to the specific business needs. The changing nature of warehouse and distribution operations is both a curse and a blessing. On the one hand, it cannot be predicted making planning a challenge and, on another hand, it is systematic in nature and reduces the various workloads. It is dynamic in nature therefore there is always a scope of continuous improvement

The inbound process in a warehouse starts when items arrive in the warehouse premises of the company. Executive registers the items, usually by scanning a bar code. From the receiving area, warehouse activities are performed at different levels to bring the items into the storage area.

So, all possible aspects of inbound documentation are dealt with in theory and practical and for this the unit is divided into the four sessions as under:

- (1) Basics of Inbound documentation
- (2) Preparation of inbound documentation
- (3) Evaluation of documentation for inbound consignments
- (4) Resolve Issues in Inbound Documentation

Learning Outcomes

After completing this module, you will be able to:

- Identify the required document;
- Prepare documentation for inbound consignments;
- Evaluate documentation for inbound consignments;
- Resolve issues in Documentation;

Module Structure

Session 1: Documents and Its Types

Session 2: Inbound Documentation and Preparation

Session 3: Evaluate Checklist

Session 4: Importance of Inbound Documentation

Session 1: Documents and Its Types

Good documentation practice is very important part of our life, not only in inbound process but it also helps us to manage our personal as well as professional life smoothly. The systematic records of documents make very easy to identify, authenticate and proves the accuracy. When the documentation process is good then the record maintenance automatically becomes better.

Meaning of Documentation Document: It is commonly said that "a document can either be represented in electronic form (i.e. Word document, Spreadsheet file, Movie file, Sound clip, etc.) or as a traditional hardcopy consisting of one to thousands of pages".



Picture 2.1: Document handling

Documentation: It is a process taken with document within an organization, with respect to the creation, distribution and deletion of documents.

What is documentation in inbound process?

"Recording of the goods manually or operationally is known as documentation."

TYPES OF DOCUMENTS

The discussions done till now has brought out the fact that documentation plays a vital role in whole inbound process. The incorrect documentation may

lead to misplacing of goods or they can be kept at wrong places or there is also a possibility that they can reach to some other destination. It is therefore advisable to the team handling the inbound documentation process to take due care in the process and must keep updating knowledge base of good practices.

On the basis of functions to be performed, the documentation can be sub divided in two parts:



Figure 2.2: Documentation

Commercial_Documents: These documents can be defined as the documents which records the different things of any commercial process such as commercial invoices, order copy etc.

Regulatory Documents: These documents can be defined as the documents which are required for complying with various set of rules and regulations governing the inbound documentation in warehousing.

NEED OF DOCUMENTATION IN INBOUND PROCESS

It is a process which is needed because of following:

- **Recording of data:**It helps in recording of data on various parameters. This data is available for future uses in event of any need.
- **Proof of the event:** The documents are required because it is the proof of the event that happened in past for business.
- **Regulatory aspects:** The documentation is required because keeping the documents are not only necessary from business point but this is also equally important from legal and regulatory perspective.
- *Making the business process transparent and smoother:* The documentation is needed because of its nature which makes a business transparent towards their tax liability and subsequently it smooth's the whole steps involved in doing a business.
- *Improves the business performance:* The documentation helps in streamlining any wrong practice in doing business and hence increases overall performance.

IMPORTANCE OF DOCUMENTATION

Documentation is one of the most important parts of the inbound process in logistics. At the beginning, an individual may find it difficult and irritating but gradually by practice he or she can master it. Proper documentation is the only key to secure the peace of mind and making future things smoother to process.

The importance of documentation in inbound process can be explained as:

- Proof of fact
- Record
- Quality maintenance
- Regulatory requirements
- End user requirement
- Improve performance
- Enables important messages to be communicated clearly and accurately.

DOCUMENT MANAGEMENT

A **document management system** (DMS) provides the technology and methods needed to capture, manage, share, and secure information within an organization. In the case of Document Locator, this includes electronic documents, images, email messages, and other computer files, as well as scanned paper documents, electronic forms, and more. Virtually any Windowsbased file format, electronic file, or converted paper document can be managed within the document management system.

Document management systems transform how you manage business information in your organization. From basic operations such as search and retrieval, to the most complex business functions like regulatory document control. Learn about the many areas of improvement that are possible in business with solutions using a document management system.

Benefits of a document management system

- Efficiency and productivity in business processes
- Compliance with regulatory, legal, and quality requirements
- Consistency and repeatability of business operations
- Faster process cycle times
- Elimination of paper-based costs, storage fees, and shipping
- Improved business continuity planning

Elements of an electronic document management system (EDMS)

The many features and functions of a document management system are designed to support these general categories of information management:

- Document Scanning: Convert paper to digital files.
- Document Storage: Store files electronically.
- Document Workflow: Automate processes, electronically route information, and record an audit trail.
- Version Control: Capture a record of every change.
- Document Search: Search and retrieve files.
- Records Management: Apply records polices.
- Open-source alternatives: Create your own open-source document management customizations.

Activities

Activity 1: Basics of documentation

Material Required: 1. Pen/Pencil 2. Chart paper 3. C 4.Blank Sheets 5. Sketch Pens

(Teacher to schedule a visit to school / training office where documents are maintained)

Precautions:

- 1. Observe minutely and write carefully.
- 2. Do not talk while observation?
- 3. Do not touch / operate any other thing in premises.

Step by step procedure:

- 1. Reach to your school office or training institute on time.
- 2. Ask your office in charge to take all of you through various documents required at the time of admission
- 3. Ask your office in charge after each document "why it is necessary at the time of admission"
- 4. Discuss about categories of documents which are useful only for the purpose of school or institute and documents which are necessary to be collected and filed as per regulation.
- 5. Discuss how the documents are arranged in files in office.

- 6. Prepare charts post completion of your visit on learnings acquired about documentation, its types and necessity of documentation.
- 7. Present your charts in front of the class.

Activity 2: Basics of documentation and its importance

Focus Group Discussion:

Students to discuss on their past experiences when they came to know about the importance of any documents which they did not have when it was most required.

The focus group discussion should contain following broader points:

- Brief about the happening.
- Particular of document which was required.
- Loss or penalty when it was not available.
- Learning out of the instance.

Check Your Progress

Α.	Fil	l in the blanks
	1.	Documentation can be in the or form.
	2.	Documentation is a process of recording and keeping different types of
	3.	Documentation improves the overall by highlighting the gaps in different processes.
	4.	There are namely two types of documents and they are &
	5.	Record maintenance becomes better and better by following proper process.
В.	Tr	ue or False
	1.	documents are most important in documentation.
	2.	The law of a Documentation is a process of recording the facts and figures.
	3.	Documents can be represented in only one form.

4. Transparency and smoothness in processes are two features which are

outcome of documentation.

an

5. Only commercial country is not important in preparation of documents.

C. Multiple choice question

- 1. The proper set of documentation makes which of the following processes easy
 - a) Identification of events
 - b) Authentication
 - c) Accuracy
 - d) All of the above
- 2. Documents can be in various forma such as
 - a) Word File
 - a) Spread sheet
 - b) Audio clip
 - c) All of the above
- 3. Importance of documentation lies in
 - a) Regulatory Requirements
 - a) Commercial requirements
 - b) (a) and (b) both
 - c) None of the above
- 4. Commercial processes are recorded in
 - a) Commercial documents
 - b) Regulatory documents
 - c) Only (b)
 - d) (a) and (b) both

D.CHECK YOUR PERFORMANCE

Prepare a chart of types of documents.

Session 2: Inbound Documentation and Preparation

FUNCTIONS IN INBOUND LOGISTICS

The inbound logistic function focuses on physical movement of goods from supplier and storage of these goods at proper places and later on out warding the physical goods for supply. The proper organization of inbound process is necessary for incoming and outgoing goods. During this incoming and

outgoing of goods there are different stages involved to complete the process. The different functions which are performed broadly in inbound logistics are:

- Receiving the incoming goods or materials.
- Proper inspection of received goods.
- Preparation of Goods Inward Note or Goods Receipt Note
- To inform different departments about availability or non-availability of materials.
- To inform purchase department about any excess, shortage, defect about the supply.
- To arrange appropriate place for storage
- To update the record keeping.
- To prepare goods for outward supply.

Now we will have a detailed discussion on these stages and various documentation related to it(Fig. 1).



Figure 2.1: Functions of Inbound Logistics

DESCRIPTION OF FUNCTIONS AND DOCUMENTS OF INBOUND LOGISTICS

- (1) Receiving of Goods: The receiving of goods can be defined as "materials or goods received in the premises of warehouse". The details of goods received are entered into the daily goods receipt register also called as "goods inward/receipt register". The content of the goods inward/receipt register are as follows.
 - Date and time of receipt.
 - Name and address of the supplier/consignor.
 - Carrier details.
 - Challan no with date.
 - Item details with description.
 - Number of packages and their condition
 - Value of packages
 - Received by
 - Purchase order number, if applicable
 - Remarks
- (2) Storage of Goods: When the inspection report clears the goods as acceptable then now it is the turn of storage of goods in warehouse. The storage of goods depends upon the nature of business. When an executive receives the goods for storage they are stored in different bins, racks, almirahs etc. It is important to know that a bin is place where goods are materials are stored for future uses. For each bin, a card is maintained and it is called as "Bin card". Bin card is prepared in duplicate. The one copy is kept with each bin and another copy remains with the executive. A bin card is a numeric record of receipts, issues, and balances of materials in warehouse. It contains particulars such as number, description of material, code number of materials etc.

BENEFITS OF BIN CARD

The Bin card has the following benefits:

- It gives exact record of receipts, items stored and closing balances of items in warehouse.
- It is helpful in placing request for replenishment whenever necessary.
- It makes warehousing inventory system meaningful by matching physical stock with balance as shown in the bin card.

- It helps to control material cost as stocks available are in the prescribed limit.
- It is the best measure to observe quantity balance of stocks in warehouse. Also, it helps in checking much information related to warehouse as they are available in bin card.

		Bin	Card				
Mater Locati	ial Code: ial Descrip on: f Measurei			M	aximum Le inimum Le eorder Lev	vel:	
Date	Doc No.	Received from/Issued to	Receipt	Issue	Balance	Verification	

Picture 2.1: Bin Card

http://keydifferences.com/difference-between-bin-card-and-stores-ledger.html#Definition

INVENTORY CONTROL CARD

It is an individual stock keeping record that keeps information about all the available lots of a single product. This mean to say that one inventory control card for each product. The inventory control card may be a summary of many bin cards for a particular product. For example, one inventory control card can have the information about all the good "X" in the storage facility. It should tell the total stock of "X" in the warehouse, as well as the total losses and adjustments, irrespective of number or location where product is located in the warehouse.

GOODS RECEIPT NOTE / DAILY RECEIPT VOUCHER

Goods receipt note or daily receipt voucher is prepared once the recording is made in the goods inward register. The daily receipt voucher is generally prepared in three copies and along with it three different reports namely damage report, shortage report and excess report are prepared. To reduce the burden of using different proformas these three reports are combined in a single proforma also. Post completion of all these activities goods are then transferred to inspection department for inspection purpose.

	nting of Inventor		eived N	ote			
Name and Name of Carrie Date of Deliver		Purchase	XYZ Ltd. RECEIVED NO Order No or Challan No		G.R.N. No Date		
S. No.	Description	Code No.	Quantity	Date	Amount	Remarks	
Store Keep	yer posted by				Approv	ted by	

Picture 2.2: Goods Receive Note

GOODS INSPECTION NOTE

Once the goods are received the quality of the goods is inspected and any goods that are found faulty or not able to be used are recorded in this note. The purchase department upon information informs the supplier for replacement of goods free of cost. If payment is already made then the accounts department raise a debit note on the name of supplier for the faulty goods. The goods inspection note contains the following things.

- Consignor or Supplier details with invoice no / Challan no.
- Purchase order number reference.
- Transportation mode.
- Description of materials.
- Remarks accepted or rejected or any other.
- Goods inspection note number.
- Damage/Undamaged/Short/Excess remarks.
- Signature of inspecting authority.
- Signature of receiving authority.
- (3) Accounting of goods: Accounting in general term means "process of identifying, recording, measuring, classifying, verifying, summarizing, interpreting and communicating financial information. It reveals profit and loss for a given period, value of firm's assets and liabilities. As far as accounting in inbound logistics is concerned it refers to the process of revealing the quantity, quality and value of goods kept in warehouse on a specified date for a specified period.

Merits of accounting of goods in inbound logistics process

- It provides shield again shortage of materials and its subsequent consequences.
- It prevents overstocking of products.
- It protects blockage of capital by preventing over storage of products.
- It prevents waste in manufacturing process.
- It creates knowledge about good and bad buying of products.
- It creates knowledge about replenishment of stocks.
- It creates complete record of all receipts, issues, damages, excess etc.
- It reduces the overall cost of the organization.

Stores ledger: is a ledger account that maintains the record of the transit of goods in and out both in quantitative and monetary terms.

DEFINITION OF STORES LEDGER

Stores ledger may be defined as a record maintained by the cost accounting department of the organization. It is a gathering of cards which are maintained to keep a record of quantity and cost of material received, transferred and left in stock. It comprises of an account for each item in the stock room that keeps the record of:

- Quantity
- Type
- Rate
- Amount

A stores ledger can be used for the following purposes:

- Auditors, to check how well the company's inventory records matches with available quantities.
- Purchasing staff, to determine when and in what quantities to purchase items.

Accounting staff, to use as the base of calculating the ending cost of inventory on hand.

Ordering Qty:

Stores Ledger	
	Maximum Qty:
	Minimum Qty:

Location:

Bin No.:

Material Code:

Material Description:

Data		Rece	eipts			Iss	ues	,		Balance	Balance	
Date	GR No	Qty	Rate	Amount	SR No	Qty	Rate	Amount	Qty	Rate	Amount	
						-2				100		

Picture 2.3: Store Ledger

http://keydifferences.com/difference-between-bin-card-and-stores-ledger.html

(4) Issuance/Outward of Goods:

The primary objective of the issuance of goods is to dispatch goods or materials from the warehouse to consignee or local distribution center situated in different areas. It may also be possible that goods are issued to internal departments as well on demand but this will depend upon the type of logistics operations. As far as issuance of goods are concerned if a warehouse is meant for company's own production then a material requisition note is sent to the stores section mentioning it's details of the items required. Upon verification by stores department that the material requisition note is signed by competent authority the store's person moves to storage area to check the availability of the product. If the item is not available then it will be marked as "NA" means not available.

FORMAT I	NO.:		ERIAL REQUES			
Request No.: Location / Area:		Request Date: Requested by:		Request Qty / Unit: Signature:		
Request	ter signature	M	anager – Purchase	Manag	er – Works / Pro	duction

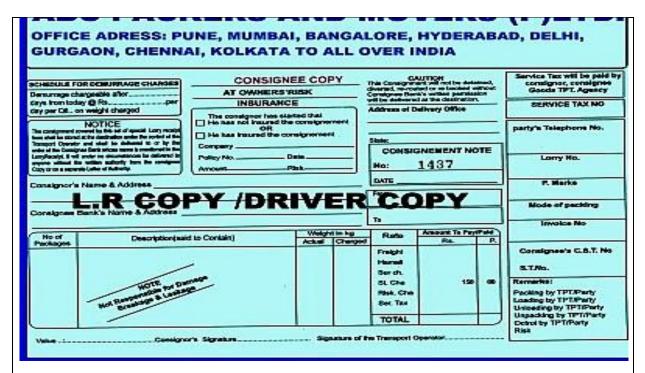
Picture 2.4: Material Request Form

https://www.google.co.in/search?q=material+requisition+note&rlz=1C1RLN S_enIN735IN735&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiC4P_68fvV AhUKqo8KHXpMBhcQ_AUICigB&biw=1366&bih=638#imgrc=W7AvINObDu-o5M:

If goods are being moved to outside of logistics area then it must have following things before the goods are materials are sent to other locations.

Consignment Note: It is the document which is prepared by consignor and countersigned by the carrier or goods transport agency as a proof of receipt of consignment at carrier's place for delivery at the destination mentioned. It is an alternative to bill of lading in inland transport. It is neither a contract of carriage nor a negotiable instrument.

Lorry receipt: It is issued by the transporter, when goods are sent by road. Lorry receipt contains information about the name and address of the transporter, name of the consignor, date of booking of the goods for transport, name of the consignee, name of place of origin and destination, description of goods, number of packages, their total weight and freight charges.



Picture 2.5: Lory Copy

https://www.google.co.in/search?q=lorry+receipt+in+india&tbm=isch&tbs=rimg:CfyRRkgXj40nIjg2Kmb08kpIoHIuXhLg2YZc8ZU3YO7uNiWk3-JGeVsOaM9FLpk2cQ5RjX33S1yY15LKc5aM3HG9ICoSCTYqZvTySkigEZN4gjWKRdYzKhIJci5eEuDZhlwR3h8UuxxtljwqEgnxlTdg7u42JRGJDt8-tWqtWyoSCaTf4kZ5Ww5oEdrG40XL0CKBKhIJz0UumTZxDlER3pzXYBWP1A0qEgmNffdLXJjXkhHeHxS7HG2WPCoSCcpzlozccb0gEd4fFLscbZY8&tbo=u&sa=X&ved=0ahUKEwjikfTpn_zVAhUIo48KHUhwAf0Q9C8IHw&biw=1366&bih=638&dpr=1#imgrc=07_D6JXKfcP5XM:

TRANSIT INSURANCE

Transit Insurance covers goods against loss or damage when sent by a third-party carrier. The sum **insured** may depend on each package, each vehicle or total consignment.

STEPS INVOLVED IN PREPARING DOCUMENTS:

The different steps involved in preparation of documents are:

- Identify the process: First of all it is mandatory to identify the process for which documentation is to be done.
- Check the relevant inputs: Once process is identified then check all the inputs to be entered are correct.
- Enter the details in particular formats: When inputs are checked then process for entering the details in required format.

• Validate the inputs given in format: When all the details are entered then validate all these details with the source of information from where it was taken.

Identify the process

Check the relevant inputs

Enter the details in formats

Validate the inputs in format

Figure 2.2. Steps in preparation of documents

D. DO'S AND DONT'S WHILE PREPARING DOCUMENTS:

Do's:

- Identify the right process for documentation
- Take the entered data from authentic source such as goods received register, bin cards etc.
- Take utmost care in filling right details in given format
- Always ensure proper signatures of designated officials at appropriate places.
- Process the documentation as FTR i.e. First time right.
- Give due care in filing of documents post completion.

Don'ts:

- Do not overwrite in documents
- Do not rush for completion of documents as it arises proportion of mistakes.
- Do not make unnecessary changes in formats as per an individual's suitability.

- Do not leave any row or column blank.
- Do not fold or tear the documents.
- Do not keep other departments copies with yourself.

PARAMETERS AND CONSIDERATIONS BEFORE SCHEDULING ACTIVITIES

"A best practice program, if done right, never ends," he says. "Opportunity to improve is always there."

Usage of advance shipping notification:

The advance notification is important because, this will help to find the place at bay area to keep the arrived goods safely.

Implement a vendor compliance program:

If you want notification ahead of time, and you also want to communicate with vendors exactly how their product should arrive." This may include specific labelling requirements, and standard case quantities for each individual item.

Use automatic data collection technology.

"People writing numbers on pads of paper or keying strings of numbers into a keyboard is a bad sign,"

Preplan picking waves.

"Picks should be pre-planned, so companies have the right number of properly equipped pickers,"

Record every product movement as a transaction.

"Any time you move product in the warehouse, the move needs to be reflected by a transaction," Loosely run facilities may scan product when it's received and put away, but not scan further moves within a transaction, affecting the integrity of inventory data.

Use a hands-free order selection process.

"Having operators hold a piece of paper, read its contents, then go to a picking location is inefficient," McKnight says. "Even using a handheld gun, workers have to scan, set the gun down, then make their pick."

Minimize touches.

Several techniques help eliminate touches in the warehouse, including picking to a shipping carton rather than picking to a tote. A robust warehouse management system can enable picking directly to the carton, eliminating dedicated packing stations.

Have portions of orders arrive simultaneously on the dock.

Various portions of orders—full pallet, case pick, and loose pick—should arrive as closely as possible on the dock, so the order goes directly to the trailer rather than being set down.

Use system-directed replenishment.

If the inbound product isn't put into a pick location immediately, using system-directed replenishment is a best practice.

Evaluate crossdocking.

Crossdocking can be a best practice in certain industries for the safer movement of goods.

Consider dynamic slotting.

Slotting a stockkeeping unit in the optimum location requires ongoing analysis. As items move through the maturity cycle, their velocity changes. Other items are seasonal in nature; slow-sellers may become fast sellers during peak months of the year.

Manage returns.

Returns management is another important best practice area. Warehouse managers need to be able to control the returned goods inventory so they know what is coming back into inventory and can be sold, what requires repair, and what needs to be disposed of.

Implement an ongoing cycle count program.

A good, ongoing cycle count program enables you to eliminate taking a physical inventory count. While many firms do cycle counting, they have not yet eliminated the physical inventory. Doing so cuts time and costs substantially.

Use best practices in measurement.

Be careful how you develop metrics and measure performance.

Take an order picking accuracy example: Your selectors pick 1,000 units, and in one order, pick two of Item A instead of two of Item B. Some customers may identify that as two errors, and say you've shipped two of the wrong item, achieving 99.98-percent accuracy.

Continually evaluate requirements.

"Customer requirements keep changing and accelerating. That means you need to be looking at your customers' requirements every few months to see how they are changing,"

PRIORITIZE THE ACTIVITIES FOR THE DAY / WORK ORDER PROCESSING

The work will prioritize on the following basis:

1. Yard and Dock Management

Check-in to check-out management of yard equipment, inventory movements, dock doors and personnel, including:

- Gate check-in and check-out
- Yard and dock location assignments
- Inventory and asset tracking
- System-directed movements via wireless devices

2.Cross-Docking

Hot receipt functionality to prioritize inbound inventory with outbound orders, reducing handling, storage and costs while improving service.

- Real-time demand assessment and prioritization
- Put-to-store synchronization
- Integration with dock scheduling

3. Receiving and Put away

- Optimized receipt and stowage, including:
- Receipt check-in by paper, RF or RFID
- Detailed SKU attribute capture and verification
- Cart/container optimization
- System-directed put away based on cube, weight, dimensions, nesting and stacking, commonality, location availability, zoning and product demand
- Operator-managed overrides and exceptions
- Optimized task interleaving
- Store distribution flow-through processing
- Put-to-store
- Merge-in-transit

4. Inbound Services

System-directed work assignments for:

- Vendor/carrier compliance statistical sampling
- QA workflow control

5.Duty Management

A complete solution for managing bonded warehouses, including:

- Compliance with excise and customs legislation
- Detailed audit trails for customs controls and audit

6. Reverse Logistics/Returns Processing

System-directed work assignments for:

- Evaluation and breakdown
- Disassembly/de-kitting
- Clean/rework/repackage
- Putaway or return to vendor
- Dispose or destroy

AGREEMENT SHEET FOR INBOUND CONSIGNMENT

Consignment of Warehouse Agreement is between Name of Company and warehouse.

The Consignment Agreement encloses the following goods and inventory limits:

Article#

Description

Minimum Inventory

Maximum Inventory

Deadline for consumption report

Note: With signature of a new issue of this Appendix, all previous Appendix's (dated before) will automatically loose its validity.

Signed for: Name of the company and warehouse

Signed for: Name of Company Street Postal Code City /

Signature Name in block letters Date

The following terms and conditions are applicable while signing the agreement sheet of warehouse.

- This Agreement may not be amended or modified, except in writing and in one single document duly and validly executed by all Parties. The compliance with any condition or covenant set forth herein may not be waived, except on writing duly and validly executed by the waiving party.
- All Annexes attached hereto form an integral part of this Agreement.

- This Agreement and any rights and obligations hereunder cannot be transferred or assigned in whole or in part without the prior written consent of the other party; provided, however, that CONTEC may transfer or assign this Agreement and/or any rights or obligations hereunder in the course of or any reorganization or restructuring of the company or to any of its affiliates. In the case of the sale of the company or similar measures (e.g. spin-off), universal succession or other succession prior approved of by exceed electronics Supplier ensures that the rights and obligations under this Agreement are effectively transferred onto the legal successor.
- Each party shall bear its own costs and expenses in connection with the preparation, execution and consummation of this Agreement, including, without limitation, any and all professional fees and charges of its advisors.
- If any provision of this Agreement is or becomes invalid, ineffective or unenforceable as a whole or in part, the validity, effectiveness and enforceability of the remaining provisions under this Agreement shall not be affected thereby. Any such invalid, ineffective or unenforceable provision shall, to the extent permitted by law, be deemed replaced by such valid, effective and enforceable provision as comes closest to the economic intent and purpose of such invalid, ineffective or unenforceable provision.
- This Agreement, including the Annexes hereto, constitutes the entire agreement between the parties with respect to the subject matter hereof. Except as expressly provided herein, all prior agreements or understandings, if any, between the parties with respect to the subject matter hereof shall, upon the execution of this Agreement be null and void. Agreements of a general type or such that were closed with respect to another subject matter shall remain in full effect.
- This Agreement shall be executed in two counterparts, one for each of the Parties hereto, each of which shall be an original, but all of which together shall constitute one and the same Agreement.

REPORTS, COST SHEETS, RECEIVING DOCUMENTS

Warehousing management has following types of reports, cost sheets and other required documents at their warehouse. These documents are required for different purposes. The details of each are given below.

WAREHO	USE INVEN	TORY LIST
--------	-----------	-----------

TOTAL INVENTORY VALUE BIN COUNT: INVENTORY ITEMS: 19

\$7,566.00

SKU	DESCRIPTION	BIN#	LOCATION	UNIT	QTY	REORDER QTY	COST
SP7875	Item 1	T345		Each	20	10	\$30.00
TR87680	Item 2	T345		Each	30	15	\$40.00
MK676554	Item 3	T5789		Each	10	5	\$5.00
YE98767	Item 4	T9876		Box (10 ct)	40	10	\$15.00
XR23423	Item 5	T098		Each	12	10	\$26.00
PW98762	Item 6	T345		Each	7	10	\$50.00
BM 87684	Item 7	T349		Each	10	5	\$10.00
BH67655	Item 8	T5789		Each	19	10	\$3.00
WT98768	Item 9	T9875		Package (5 ct)	20	30	\$14.00
TS3456	Item 10	T349		Each	15	8	\$60.00
WDG123	Item 11	T349		Each	25	15	\$8.00
BM 87684	Item 7	T349		Each	10	5	\$10.00
BH67655	Item 8	T5789		Each	19	10	\$3.00
WT98768	Item 9	T9875		Package (5 ct)	20	30	\$14.00
TS3456	Item 10	T349		Each	15	8	\$60.00
WDG123	Item 11	T349		Each	25	15	\$8.00
WT98768	Item 9	T9875		Package (5 ct)	20	30	\$14.00
TS3456	Item 10	T349		Each	15	8	\$60.00
WDG123	Item 11	T349		Each	25	15	\$8.00

WAREHOUSE INVENTORY LIST

A warehouse inventory consists of all warehouse processes, orders, items of the warehouse, employees and working loads. The inventory is based on the statistics and reports generated for warehouse based on current and previous data. Through warehouse inventory we can track and access the performance of workers, follow the stream of items flowing through a warehouse, we can analyze how much burden is carried by each warehouse process. Timely and error free warehouse inventory can control unforeseen circumstances like theft or be missing of the goods.

STACK CARDS OR BIN CARDS

Stack cards are also known as Bin cards, the following are important points required to kept in mind for preparing these cards.

Format

Single sheet of thick paper (because it will be handled a lot by many different people, so it should be strong). They should be numbered. No carbon copies needed.

Purpose

This card is located with the group of items. It has the details of those items (DSPN, expiration date, etc) on the top. Warehouse staff will write on it every time they take items out of or put items into the group.

Stack Card

The stack cards give information on the name of the commodity, quantity of the stack and records on movement in and out of the stack. Used to complete Stock Control sheets.

MAREHOUSE:		STACK	CARD		WHS 03 STACK No:	
OMMODITY TO				SHIPMENT NO. PROJECT NO. WEIGHT PER UNIT	r IN Kgs:	
DATE	WAYBILL	TRUCK REG No.	DESTINATION	IN	оит	BALANCE
		4				
		1				

Picture 2.6: Stack Card

How to Use

Each time an item is taken from or added to the group, the person who has done the action will write down the details of the transaction on the card and sign it. Also, when staff take an inventory count, they will compare their counts to these cards, and verify the count by initialing the cards.

How to Distribute Copies

There are no carbon copies of this form. However, when a card is complete (in other words, when there is no more space to enter data), you should get a new card, write the beginning balance on the new card, and file the old card in the warehouse files.

Loss Damage Report

This is a record of a loss that has been incurred. It details the amount of commodity lost, where the loss occurred and the persons responsible. It is also used for compiling the loss claim register.

PROVINCE:	LOSS/DAMAG	JE KEI OKT	WHS (ю
PROVINCE: DISTRICT :	COMMODITY: SHIPMENT NO.		PROJECT NO.	
DISTRICT .	SHIPMENT NO.		PROJECT NO.	
LOCATION:	Donor id no.			
1 Detail TIME, PLACE and TY 2. Describe amount lost below				
MARTHAMARATA	MARITHMAN MARITHMAN	Number of Units	Net Kgs. Each	TOTAL
1. Units Damaged (Potential L	oss)			-
2. Quantity Recovered	i di			
3. Loss by Damage (1-2)				
4. Missing Entirely				
TOTAL LOST (3+4)	10			
5. Detail the circumstances un	nder which the Loss or Damage to	look place:		
5. Detail the circumstances un 6. Current location or disposi 7. What actions have been tal	nder which the Loss or Damage t	ook place:		
5. Detail the circumstances up 6. Current location or disposi 7. What actions have been tal 8. What actions have been tal	nder which the Loss or Damage t tion of commodities: ken to effect recovery or restitution	on?d/or damages?		
5. Detail the circumstances up 6. Current location or disposi 7. What actions have been tal 8. What actions have been tal	nder which the Loss or Damage to tion of commodities:	on?d/or damages?		
5. Detail the circumstances un 6. Current location or disposi 7. What actions have been tal 8. What actions have been tal 9. Other Comments:	nder which the Loss or Damage to tion of commodities:	on?		
5. Detail the circumstances un 6. Current location or disposi 7. What actions have been tal 8. What actions have been tal 9. Other Comments:	nder which the Loss or Damage to tion of commodities:	ook place:		

Picture 2.7: Loss Damage Report

Form Details

Our loss damage report is designed for mobile devices, such as smartphones and tablets, as workers can use them in warehouses or transportation vehicles when picking up or delivering products, equipment and raw materials. The worker can enter the damage information the moment the problem is discovered, as they can indicate how many cartons or pallets are damaged, the type of damage that occurred and who was the responsible party. With the details provided by the damage report, you can make accurate records for warehousing purposes and when filing damage claims. You can

also provide the information to distribution and delivery staff to address transportation issues and develop better supply chain strategies so your items can reach their destinations in top condition. Your workers can place details about damages right into the form template that has the following pre-built categories:

- Commodity details
- Time and date
- Type of damage
- Location where damage occurred
- Number of units damaged
- Number of items that were recovered
- Details about incident
- People responsible for items when the damage happened
- Actions that were taken
- Other comments
- Signature

Cost Academy Cost Accounting- 19

Cost Sheet

Messer's (name of the company)

Cost Sheet for the product..... from To......... Units produced....

Elements of costs	Amount (Rs.)
Direct material	Xx
Direct Labour	Xx
Direct expenses	Xx
Prime Cost —	→ Xx
Production or Works or Factory Overheads:	800
Administration overhead of Production nature	Xx
Research & development cost	Xx
Quality control cost	Xx
Factory Cost	→ Xx
Add: Opening WIP	Xx
Less: Closing WIP	Xx
Works Cost	→ Xx
Add: Packing cost	Xx
Less: Credit for scrap	Xx
Cost of product	on \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Add: Opening stock of finished goods	
Less: Closing stock of finished goods	Xx
Cost of goods s	old Xx
Marketing overheads:	Xx
Administration overhead of marketing nature	xx
selling overhead	xx
Distribution overhead	Xx
Cost of sales	XXX
Add: Profit	xx
Estimated sales price	xxx

Note:

 <u>Direct expenses</u> are the expenses other than direct material cost and direct employees costs which can be identified with the product. Generally these items are lumpsum nature & not a common for the products.

Direct expenses include:

- i) Cost of utilities such as fuel, power, water, steam, etc.,
- ii) Royalty based on production
- iii) Technical Assistance / know how fees (releted to Project Managers)
- iv) Amortized cost of moulds, patterns, patents, etc.
- v) Job charges
- vi) Hire charges for tools and equipment
- vii) Charges for a particular product designing, etc.,

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Activities

Activity 1: Receiving of goods in inbound logistics

Materials Required: Pen, Pencil, Note book, Checklist, Chart paper, Blank Paper for report preparation

(The teacher will arrange a visit of the students possibly a group of students from class to get an idea of receiving of goods in warehouse as per suitable circumstances)

Precautions:

- 1. Observe minutely and write carefully.
- 2. Be polite and natural in behavior.
- 3.Do not touch / operate any equipment.

Step by step procedure:

- 1. Reach the warehouse operational for inbound logistics operations on time.
- 2. Observe how the goods are received by warehouse executive seeing the different details note carefully.
- 3. Observe the documentation process post receiving of goods at receipt section note carefully.
- 4.Observe the step which is being followed next post documentation at receipt section note carefully
- 5. Observe the storage process inside the warehouse and documents used in it note carefully.
- 6.Observe the outward movement of goods and documents used in it note carefully.
- 7.Discuss the notes prepared with executive or manager available at the facility and confirm the whole process and documentation.
- 8. Prepare a report for discussion.
- 9. Play a role of goods received at warehouse in the class.
- 10. Develop charts on the activity for submission and display.

Activity 2: Model preparation of an inbound logistics facility.

Materials required: Thermacol sheet, pen ,paper, sketch pens, gum or glue sticks,pin,chart paper.

(Teacher to ensure the availability of materials in class for model preparation)

Precautions:

- Do not talk while preparation of model with other group
- Use the materials genuinely
- Take care of softer materials.

Step by step procedure:

- 1. Teacher to divide the whole class in four groups.
- 2. Allot them the four different functions as mentioned in inbound logistics process above.
- 3. Teacher to ensure all groups are ready with required materials.
- 4. Brief the groups about the function to be performed.
- 5. Groups to prepare a single model for overall function.
- 6. Prepare the sample documents used across different functions according to the functions allotted to each group.
- 7. Each group to present before whole class about their functions and relevance of it into the model prepared.
- 8. Based on overall performance a group may be declared as winner.

Check Your Progress

۱.	FI	LL IN THE BLANKS
	1.	Inbound logistics function includes of goods at premises.
	2.	Goods inspection is the process which is followed after goods are
	3.	When goods are received then the details are entered into
	4.	is an important document used in storage of goods.
	5.	All the available lots of each product is determined by
	6.	Material requisition form is used forof goods.
	7.	is used in movement of goods through carrier to protect against loss of goods or damage.

B. TRUE OR FALSE

- 1. Warehousing is an important function of inbound logistics process.
- 2. Receiving of goods is recorded into goods receipt register.
- 3. Only damage report is prepared upon receipt of goods.
- 4. Consignment note signifies that goods are received at carrier for delivery.
- 5. Stores ledger is a document which is used by stores department.
- 6. The merit of accounting is, it prevents overstocking of goods.
- 7. Total freight charges are mentioned in lorry receipt.
- 8. Identification of process is the first step in document preparation.

C. MULTIPLE CHOICES

- 1. Goods received register contains the details of goods received at receipt section. Which particulars are part of goods received register.
 - a) Consignor or Supplier details.
 - b) Items description
 - c) Only (a)
 - d) Both (a) and (b)
- 2. Goods receipt note is followed by preparation of different reports. Which of the following is not one out of them?
 - a) Damage report
 - b) Short report
 - c) Rejection report
 - d) Excess report
- 3. A product is acceptable to move inside the warehouse. Which document establishes this fact?
 - a) Goods receipt note
 - b) Goods inspection note
 - c) Bin card
 - d) Consignment note.
- 4.In documentation, FTR is the full form of:
 - a) First time right
 - b) Free trade right

- c) Full truck receipt
- d) Final total record

D. SHORT ANSWER QUESTIONS

- a) Goods receipt note
- b) Bin card
- c) Material requisition form
- d) Consignment note
- e) Lorry receipt

E. CHECK YOUR PERFORMANCE

1. Prepare a report of loss and damage.

Session 3: Evaluate Checklist

WAREHOUSE OPERATIONS DOCUMENTS ALONG WITH CHECK LIST

RECEIVING		
Are warehouse operating procedures current and on file?	yes	no
Are receiving documents available at time shipment is received?	yes	no
Are they adequate for complete identification of material in the shipment?	yes	no
Are items checked for description, quantity and condition at the arrival of shipment & before accepting the bill of lading and	yes	no
Are receiving reports being processed properly?	yes	no
Is management informed of any abnormal backlogs of unprocessed receiving reports?	yes	no
PRODUCT/ INVENTORY/ORDERS		
Are spot checks conducted to determine the location of the material as reflected on the stock records?	yes	no
Are the stock records reflecting shelf-life information retained in a follow-up file?	yes	no
Are the inspectors notified when shelf-life items are scheduled	yes	no

Are periodic inventories being made?	yes	no
Are periodic spot checks conducted to verify the quantity and condition of material indicated on the stock records?	yes	no
Is the proper procedure being used when discrepancies exist?	yes	no
Is material in storage reviewed periodically to determine the necessity for reprocessing?	yes	no
Are orders received in sufficient detail to readily identify the material that is to be withdrawn?	yes	no
Are orders being handled promptly by the picker?	yes	no
Does a backlog of orders exist? If so, is management informed of the fact?	yes	no
SHIPPING		
Is any action taken to reconcile a shipment with the order?	yes	no
re outbound shipments properly manifested? yes		no
carriers promptly billed at the completion of loading?		no
re carrier tariffs being observed?		no
What percentage of orders meets the promised delivery date?	yes	no

STORING		
Are storage methods best suited to the characteristics of the	yes	no
Does the storage plan permit flexibility of operations and provide for adequate small-lot storage space?	yes	no
Are stored materials adequately and accurately marked for proper identification and easily located through use of the locator file?	yes	no
Are materials of similar categories grouped together as much as practicable?	yes	no
Are hazardous and flammable materials stored separately?	yes	no

Are materials stacked correctly to ensure the greatest safety to personnel, protection of material and accessibility?	yes	no
Are all materials that are not palletized raised off the floor by	yes	no
Is stacking to maximum height permitted by equipment and storage layout?	yes	no
Are open or damaged cases of cartons removed from stacks	yes	no
Are packing, crating and other preparations for shipment adequate?	yes	no
Are they excessive?	yes	no
Are items generally properly packaged and processed prior to	yes	no
Is an adequate inspection made of the condition of incoming items?	yes	no
Are adequate and proper steps taken to care and preserve	yes	no

MATERIAL HANDLING EQUIPMENT (MHE)				
Is MHE utilized to the maximum?	yes	no		
Is MHE adequate for a balanced operation?	yes	no		
Is inadequate maintenance of equipment interfering with operations?	yes	no		
Could operations be made more efficient by exchanging one type and size of equipment for another?	yes	no		
Is MHE centrally controlled and properly distributed for maximum utilization?	yes	no		
Is an adequate checkout system in operation governing use of	yes	no		
Is available MHE the proper size and type for efficient handling of items in storage?	yes	no		
Are additional or different types of equipment needed? If so, have specific requirements been	yes	No		

Are items on MHE properly reported as to "idle" and "out-of-service" time based on actual working days a month and actual tonnage handled?	yes	No
Is all equipment maintained in good operating condition?	yes	No
Are routine adjustments and minor repairs made promptly?	yes	No
Are preventative maintenance inspections and lubrication made on each MHE item?	yes	No
Are operators instructed in the necessity of preventive maintenance?	yes	No
Is MHE being misused or abused?	yes	No
Are thorough periodic checkups made of all motorized equipment?	yes	No
Has any equipment been out of operation for an abnormal period of time awaiting parts? Are such cases reported?	yes yes	no no
Are MHE records maintained so information is readily available to meet inventory and accounting requirements?	yes	No
Have any MHE items been improvised locally which would prove advantageous at other storage facilities? If so, has a detailed report been submitted?	yes	No

WAREHOUSELAYOUT		
Is a diagrammatic plan of the warehouse layout available and in use?	yes	No
Is it used to preplan storage space?	yes	No
Are closed and open storage areas designated on the plan and clearly marked?	yes	No
Are bay area's broken down into sufficiently small areas so that material can be located readily?	yes	No

Is maximum storage space being utilized considering type of commodities, cube, floor load capacity, aisle space and accessibility?	yes	No
Is space used for non-storage activities kept to a minimum?	yes	No
Is aisle accessibility for inspection and withdrawals being carried to an extreme?	yes	No
Is repeated re warehousing necessary due to excessive honeycombing?	yes	No
Are pallet racks used where practical to obtain maximum cube and facilitate withdrawals?	yes	No
Are sufficient pallets on hand?	yes	No
Are they of proper type and size?	yes	No
Are excess pallets reported as available for use elsewhere?	yes	No
Are receiving and shipping bays located and sized so that loading and unloading, "in and out checking," and moving materials can be done efficiently?	yes	No
loading and unloading, "in and out checking," and moving	yes	No
loading and unloading, "in and out checking," and moving materials can be done efficiently?	yes	No
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the		
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the warehouse operation recommended? Is receiving properly notified in advance of all inbound	yes	No
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the warehouse operation recommended? Is receiving properly notified in advance of all inbound shipments? Is the storage space utilization preplanned from this advance	yes	No No
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the warehouse operation recommended? Is receiving properly notified in advance of all inbound shipments? Is the storage space utilization preplanned from this advance information?	yes yes yes	No No
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the warehouse operation recommended? Is receiving properly notified in advance of all inbound shipments? Is the storage space utilization preplanned from this advance information? Are proper and efficient materials handling methods used? Is remanding of material excessive?	yes yes yes	No No No
loading and unloading, "in and out checking," and moving materials can be done efficiently? WAREHOUSING Are major alterations to increase the efficiency of the warehouse operation recommended? Is receiving properly notified in advance of all inbound shipments? Is the storage space utilization preplanned from this advance information? Are proper and efficient materials handling methods used?	yes yes yes	No No No

Are bin stocks adequately processed for storage?	yes	No
Is there adequate material on hand for packaging and processing?	yes	No
Are out shipments properly packaged, marked, loaded, etc.?	yes	No
What major warehousing projects are in progress?	yes	No

Activity

Activity 1: Using of checklist in simulated situation.

Materials required: Checklist, pen, paper

Step by step procedure:

- 1. Teacher to divide the whole class into groups of 4 students.
- 2. Allot them the four different functions as mentioned in inbound logistics process above.
- 3. Teacher to ensure all groups are ready with required materials.
- 4. Brief the groups about the function to be performed.
- 5. Give each group a different situation in the class.
- 6. Ask them to use given checklist and check as per given situation
- 7. Ask each group to present their situation and work they did
- **8.** Ask them to write report with precautions they need to take and submit it.

Check Your Progress

A. FILL IN THE BLANKS									
	1.	Spot checks reflected or			e the		_of the	mate	rial as
	2.	repeated excessive_			O	necessary	7 d	ue	to
	3.	Periodic spo of material			· ·		an	d con	dition
	4.	Materials to Personnel		J		sure the f material	•		J

B. TRUE OR FALSE

- 1. Should receiving documents available at time shipment is received.
- 2. Proper procedure should be used when discrepancies exist.
- 3. Storage methods do not suit to the characteristics of the storage areas.
- 4. Available MHE should be of proper size and type for efficient handling of items in
- 5. Space used for non-storage activities should kept to a minimum.
- 6. Management should not be informed of any abnormal backlogs of unprocessed receiving reports.

C.SHORT ANSWER QUESTIONS:

- 1. Prepare a checklist for receiving
- 2. Prepare a checklist for warehouse

D.CHECK YOUR PERFORMANCE

1. Prepare a checklist for warehouse layout

Session 4: Importance of Inbound Documentation

Fundamentally, warehouse management is the physical management of inventory. In some cases, inventory may be stored for an extended time. In other warehouses that implement just in time practices inventory experiences rapid turnover and the warehouse functions as a distribution center. A warehouse can contain raw materials, work-in-process inventory, finished goods, supplies, and possibly repair parts. As with other elements in the any distribution system, the objective of the warehouse is to minimize costs and maximize customer service. To do this, efficient warehouse operations perform the following:

- Provide timely customer service.
- Keep track of items so they are located readily and correctly.
- Minimize the type of physical effort and thus the costs of moving goods in and out of storage.
- Provide communication links with customers.

The costs of operating a warehouse can be broken down into **capital** and **operating** costs. Capital costs are those of space and

materials handling equipment. The space needed depends on the peak quantities that must be stored, the methods of storage, and the need for ancillary aisles, docks, offices etc. The major operating cost is labor, and the measure of labor productivity is the number of units that an operator can move in a day. This depends on the type of material handling equipment used, the location and accessibility of stock, warehouse layout stock location system, and the order-picking system used.

WAREHOUSE SETUP

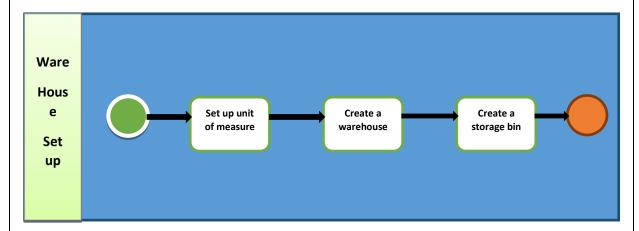


Figure 2.1: warehouse setup

WAREHOUSE ACTIVITIES

Operating a warehouse involves several processing activities. The efficiency of a warehouse depends on how efficiently it can perform the following activities:

- Receive goods.
- Identify the goods.
- Dispatch goods to storage.
- Hold goods. Keep goods in storage and under proper protections until needed.
- Pick goods. Select goods from storage and bring them to a marshaling area.
- Marshall the shipments. Combine goods that contribute to a single order. Check for omissions or errors. Update order records.
- Dispatch the shipments. Package orders, prepare shipping documents and load goods onto the right vehicle.
- Operate an information system. A record must be maintained for each item in stock showing the quantity on hand, quantity received, quantity issued, and location in the warehouse. This system can be very simple,

depending on minimum of written information and human memory, or it may be a sophisticated computer-based system.

These are activities that take place in any warehouse. The complexity depends on the number of part numbers, quantities of each part number and the number of orders received and filled.

INBOUND INVENTORY

- Panning inbound receipt procedures.
- Storage formalities e.g. Location management, Inventory control, Occupational health and safety
- Outbound delivery procedures.

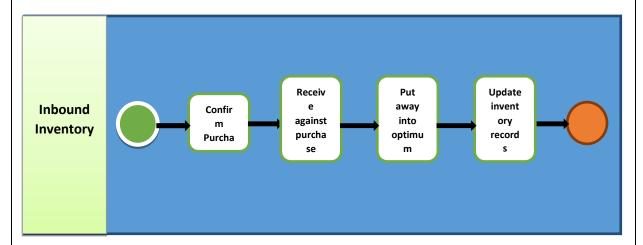


Figure 2.2: Inbound inventory

OUTBOUND INVENTORY

The movement of material associated with storing, transporting, and distributing goods to its customers or distribution centers.

Physical Inventory

Physical Inventory is a process where a business physically counts its entire inventory. It represents an opportunity to correct any inaccuracies in the records. This helps planners as they are concerned with item detail. The physical inventory is usually taken by the materials manager. A good plan must exist and be followed.

Taking a physical inventory consists of four steps:

- 1. Count items and record the count on the ticket left on the item.
- 2. Verify this count by recounting or by sampling.

- 3. When the verification is finished, collect the tickets and list the items in each department.
- 4. Reconcile the inventory records for differences between the physical count and inventory records. Financially, this step is the job of the accountants, but material and personnel are involved in adjusting item records to reflect what is actually in the hand.

Goods Movement

A Goods Movement transfers inventory between storage bins or warehouses:

- From one stocking location to another
- From a stocking location to a project
- From a consigned location to a regular location.

Bills of materials production

A bill of materials is a list that specifies the parts used to build a product. When a company produces a product, it must keep track of the materials and components used in its creation.

Incoming Shipment

It is important for a warehouse to manage the receiving and warehousing of raw materials and incoming goods providing companies with real-time information about the state and location of every order and incoming shipment. This enables a company to optimize their inventory. The Openbravo ERP incoming shipments functionality details the type of receipt, delivery location and freight rules of shipments being received by a company.

Generate Average Cost

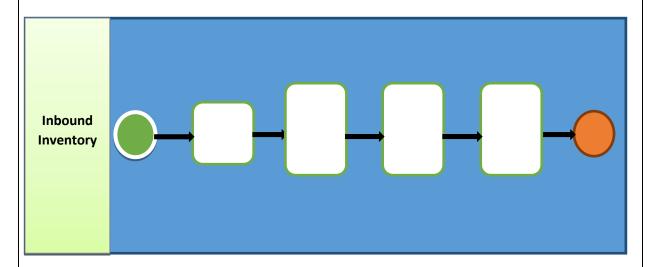
Average cost is equal to total cost divided by the number of goods produced. It is also equal to the sum of average variable costs plus average fixed costs. Average costs may be dependent on the time period considered. Average costs affect the supply curve and are a fundamental component of supply and demand.

Goods Transaction

There are multiple ways in which inventory can be stored and shipped to and from a warehouse. Goods transaction is a generic term that encompasses all of the different movement types that can accomplish this. Goods Transaction functionality offers a read only view that shows the user all transactions processed by the warehouse.

Traceability

Traceability is the ability to verify the history, location, or application of an item by means of documented recorded identification. In logistics, traceability refers to the capability for tracing goods along the distribution chain on a batch number or series number basis. Traceability is an important aspect for example in the automotive industry, where it makes recalls possible, or in the food industry where it contributes to food safety. The Traceability Report allows a user to display the full lifecycle of an item showing initial receipt, creation, movement and shipment.



Activity

A Activity 1: Fill the given chart

Material Required: 1. Pen/Pencil 2. Chart paper 3. C 4.Blank Sheets 5. Sketch Pens

(Teacher to schedule a visit to school / training office where documents are maintained)

Precautions:

- 1. Observe minutely and write carefully.
- 2. Do not talk while observation?
- 3. Do not touch / operate any other thing in premises.

Step by step procedure:

- Collect the picture sheet
- Fill the blank space in sequence
- Submit the filled sheet to the teacher

Activity 2: Basics of documentation and its importance

Group Discussion

Students to discuss on their past experiences when they came to know about the importance of any documents which they did not have when it was most required.

The focus group discussion should contain following broader points:

- Brief about the happening.
- Particular of document which was required.
- Loss or penalty when it was not available.
- Learning out of the instance.

CHECK YOUR PROGRESS

A.	FILL IN THE BLANKS
1.	The costs of operating a warehouse can be broken down into costs.
2.	A warehouse can contain, work-in-process inventory, finished goods, supplies, and possibly repair parts.
3.	is the ability to verify the history, location, or application of an item by means of documented recorded identification.
4.	is a generic term that encompasses all of the different movement types that can accomplish this. Goods transaction
5.	is a process where a business physically counts its entire inventory.
В.	TRUE OR FALSE
1.	The measure of labor productivity is the number of units that an operator can keep in a day.
2.	Goods transaction is a generic term that encompasses all of the different movement types that can accomplish this.
3.	A bill of materials is a list that do not specifies the parts used to build a product.
4.	Average cost is equal to total cost divided by the number of goods produced.
5.	Goods Transaction functionality offers a read only view that shows the user all transactions processed by the warehouse.

C. SHORT ANSWER QUESTIONS:

- 1. Define traceability
- 2. Write a note on goods transaction
- 3. Discuss a generate average cost
- 4. What is incoming shipment
- 5. Describe warehouse activities

D. CHECK YOUR PERFORMANCE

1. Prepare a chart of importance of documentation

MODULE 03

CHALLENGES IN DOCUMENTATION

Module Overview

The Module focuses on the concept of documents—its meaning, importance and its types. It also focuses on the knowledge of updating data and details related to documentation in system. As documents are the only tangible objects which can be treated as an evidence for any type of transaction, it also helps in important operations which involves various departments engaged in the entire process like accounting, trading, financial, storage, transportation, etc. The use of various techniques like standard procedure for documentation, types of important documents in logistics, significance of transport documents, and checklist for all information in documents will guide the students with relevant knowledge to find missing goods, reporting, type of employees work in warehouse etc.

Trucks used in logistic face various hurdles at check points and by police for varied reasons, needs appropriate monitoring in their respective areas. Different reasons for detention of trucks, the role played by various government agencies for the resolution of issues at work place and how to manage the workforce related to the truck drivers, their concerns, their training, etc.

The concept of documentation to be one of the important means of communication in the transportation system as it's also a piece of written, printed or electronically generated matter that provides information. The knowledge about the documents required for Inbound & Outbound, knowledge of updating data and details related to documentation in system, different types of reports and their needs for smooth flow of transportation and communication awareness and its importance in the work process.

As per the rapid development in the field of technology, many logistic companies have a great demand for a large computer system that can store their variety of documents and data. Hence, it has become very important for the computer executives/clerks to gain appropriate knowledge of the operating system and to upgrade and adapt certain measures in organizing the workplace much more effectively keeping in mind its purpose and advantages at the same time.

Learning Outcomes

After completing this module, you will be able to:

Complete post documentation activities;

- Resolve Documentation issue;
- Compile details and report to management;
- Organise workspace;

Module Structure

Session 1: Documentation Procedure and Its Significance

Session 2: Documentation Issues

Session 3: Compilation and Reporting to Management

Session 4: Organise Workplace

Session 1: Documentation Procedure and Its Significance

STANDARD PROCEDURE FOR DOCUMENTATION

Documents are paperwork which is an official information/evidence that serves as a record. It serves as an evidence about a transaction. Logistics sector has to maintain various documentations as it plays a vital role in smooth functioning of business. When goods are transported from one place to another, either domestically or internationally, the consignment must be accompanied by relevant documentation. The amount and type of documentation depends on whether goods are transported within the country or abroad. Documentation becomes important as logistics operations involves various departments engaged in the entire process like accounting process, trading, financials, storage, transportation, etc. Hence, each transaction is different and must be able to recognize each consignment through proper documentation.

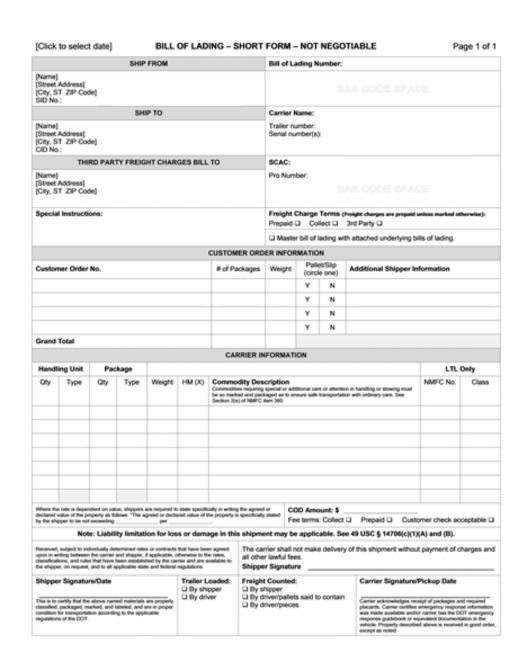
As documents are the only tangible objects which can be treated as an evidence of a transaction. Standard documents must have simple appearance with proper format structure which will enable to read and understand the document easily.

Nowadays, most of the logistics companies use software applications which helps in preparing standardized documentation templates and modules which reduces time and effort involved in preparing documentation.

TYPES OF IMPORTANT DOCUMENTS IN LOGISTICS

Bill of Lading: A Bill of Lading is an important legal document used in transporting goods. It is a contract between shipper of goods and the transporter/carrier. The Bill of Lading also serves as receipt of shipment when goods are delivered at the predefined destination. This document provides all the information needed by the transporter like origin of the shipment, name and address of the consignor and consignee, nature and quantity of goods, weight and any other details related to the shipment.

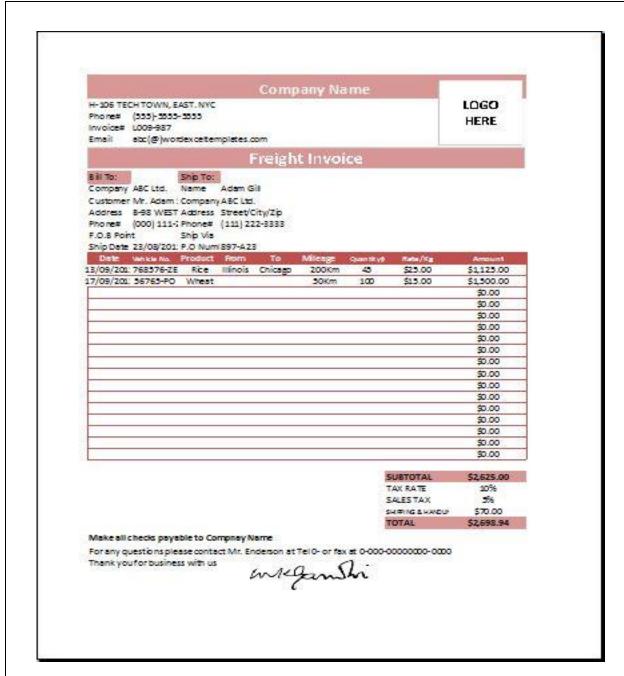
The Bill of Lading agreement has various important terms picture 3.1 which are discussed below.



Picture 3.1: Format of Bill of Lading

(Source: https://templates.office.com/en-us/Bill-of-lading-TM02802873_)

- a. Carrier liability: The transporter or carrier is liable for loss and damage of goods being transported unless it is not properly packed by the shipper.
- b. Delay in transit: The transporter is not liable if the loss or damage is due to delay in the transportation of goods.
- c. Freight not accepted: If consignment is not accepted due to some reason within time allotted, the logistics company then store such consignment but the cost should be beared by the owner of the goods.
- d. Goods with extraordinary value: This type of high-value goods needs a special agreement between the shipper and the transport company. As carrier is not liable if such extraordinary value goods are not intimated or mentioned in the Bill of Lading.
- e. Explosives: Dangerous and hazardous goods should be mentioned and given with full disclosure to the carrier, otherwise they are not liable for any losses or damage.
- f. Claims: After delivery of goods, if the receiver/consignee wants to claim for loss or damage of goods while in transit, the details on how to file a claim and the time frame within which he can lodge the complaint is specified in this bill.
- 1. Freight Bill: Freight bill/ freight invoice provides information about all the charges that the transporter incurred. It includes the details of shipment like name and address of the consignee, the origin and destination, total weight and quantity of goods and total charges itemwise picture 3.2.



Picture 3.2: Format of Freight Bill

(source: http://www.wordexceltemplates.com/freight-invoice-template/)

2. Free on Board (FOB): FOB is a document which contains terms of sale as to which party will be liable to pay the transportation cost and will control the movement of goods and ensure transfer of title of ownership to the buyer.

If FOB Destination is the terms of sale, it implies that the shipper is responsible for all the transportation cost and will get paid at the time of delivery and the transfer of ownership will take place at destination point.

If FOB origin/shipping point is the terms of sale, it implies that the buyer will take the title of goods when they are shipped and he will incur all transportation cost picture 3.3



Picture 3.3: FOB Shipping Point/ FOB Desination

(Source: http://ugghani.blogspot.in/2015/10/what-is-fob-price-in-exports-and.html)

SIGNIFICANCE OF TRANSPORT DOCUMENTS

- 1. Contract of carriage: It is a document containing the conditions of shipping transaction. It provides all terms and conditions under which transport operation will take place.
- 2. Proof of goods delivered: Documents serve as a proof that carrier has transported goods to the customer.
- 3. Goods delivered in good condition: The transporter will not accept any damage goods noticeable at the time of booking and convey the same to the consignor immediately.
- 4. Ownership of goods: This document determines who is authorized to receive goods as owner. It allows the purchaser of the goods to transfer the ownership to someone else.

- 5. Date of boarding: The date of transport document prepared is of great importance as it helps in compliance or breaches of the terms and conditions agreed upon.
- 6. Description and nature of merchandise: The documents must mention the description and nature of goods and must match the invoice, certificate or origin and other documents related to operations.
- 7. Weight and quantity: It is important to declare correctly and precisely the weight and quantity of merchandise and should match at the time of arrival and destination point.
- 8. Payment terms: It indicates whether the freight is paid by the seller/consignor or will be paid at the destination by the consignee.
- 9. Signature: The bill of lading must be signed by the carrier or his agent and the consignor.
- 10. Notice: The transport documents must mention to whom to be notified once the cargo arrives at destination.
- 11. Consignee information: The consignee's correct and accurate information should be included in the documentation like name, address, phone/mobile number, email address etc.
- 12. Set of copies: The original copies of the transport document must be triplicate (three copies). The recipient of the shipment should receive one complete set, as this document represents the ownership of merchandise.

CHECKLIST FOR ALL INFORMATION IN DOCUMENTS

The Document requires the Consignor to submit details such as

- 1. His own details,
- 2. Invoice number with date,
- 3. Details of the consignee and buyer (if the buyer is other than consignee),
- 4. Buyer's order number with date,
- 5. Origin place of the goods,
- 6. Final destination,
- 7. Terms of payment and delivery,
- 8. Pre-carriage details (Road/Rail),
- 9. Truck/Vessel/flight number,
- 10. Number and kind of packaging,
- 11. Detailed description of goods,
- 12. Quantity,
- 13. Rate and
- 14. Total amount chargeable etc.

Activities

Activity 1: Types of documents and its significance

Material Required: 1. Note Book 2. Pen/Pencil 3. Chart papers 4. Computer printouts 5. Checklist

(The teacher will take Computer printouts of important types of documents used in logistics and its significance, students will prepare charts of format of types of documents and check list of important information in documents. The teacher will also prepare a checklist – what to observe and tell the students)

Step by step procedure:

- 1. Make a group of students to prepare charts
- 2. Take computer printouts of types of Documents
- 3. Discuss with him:
 - Standard Procedure for documentation.
 - Types of Documents.
 - Important terms used in bill of lading
 - Need and significance of documents
 - Checklist of important information in documents
- 4. Note down every point in your note book
- 5. Confirm the points which you have written with the teacher
- 6. Discuss all the notes with your classmates and show the teacher
- 7. Arrange a discussion on the topic in the class present your notes and feelings
- 8. Discuss with classmate and teacher and submit a report
- 9. Draw a chart to explain types of documents.
- 10. Draw a chart on important terms used in bill of lading
- 11.Draw a chart on checklist of important information in documents

Check Your Progress

A. FILL IN THE BLANKS

1. _____ are paperwork which is an official information/evidence that serves as a record.

2.	A is an important legal document used in
	transporting goods.
3.	provides information about all the charges that the transporter incurred.
4.	Documents serve as a that carrier has transported goods to the customer.
5.	The bill of lading must be signed by the carrier or his agent and the

B. MATCH THE COLUMNS

	Column A		Column B
1	Set of copies	A	Buyer will pay the transportation cost
2	FOB Destination	В	Information about all the charges
3	FOB Origin	С	Triplicate
4	Freight Bill	D	Legal document
5	Bill of Lading	Е	Shipper will pay transportation cost

C. TRUE OR FALSE

- 1. The transporter is not liable if the loss or damage is due to delay in the transportation of goods.
- 2. The transporter will not accept any damage goods noticeable at the time of booking and convey the same to the consignor immediately.
- 3. The bill of lading must not be signed by the carrier or his agent and the consignor.
- 4. The transporter is liable if the loss or damage is due to delay in the transportation of goods.
- 5. Documents are paperwork which is not an official information/evidence that serves as a record.

D.SHORT ANSWER QUESTIONS

- 1. What is Document
- 2. What are the standard procedure of documentation
- 3. What is Bill of Lading
- 4. Explain the importance of documentation in transportation

- 5. Discuss in detail the types of important documents
- 6. What is Freight Bill
- 7. Discuss Free on Board (FOB)
- 8. Describe checklist of important information in documents
- 9. State the important terms used in Bill of Lading
- 10. Differentiate between Bill of Lading and Freight Bill
- 11. Differentiate between Freight Bill and Free on Board (FOB)

D.CHECK YOUR PERFORMANCE

1. Prepare a chart of documentation procedure and its significance.

Session 2: Documentation Issues

Documentation plays very important role in logistics sector. Consignments moving from place of origin to place of destination needs proper and accurate documentation, as vehicle detention is the greatest problem for transporting company. There are variety of reasons for frequent stoppage of vehicles which hampers the smooth flow of goods. As trucks used in logistic face various hurdles at check points and by police for varied reasons. Trucks operate in wide range of areas like inter/ intra-state permits, road tax, load checks, police check post etc. Vehicles are detained for various reasons for checking essential documents like sales tax, octroi, entry permits, movement of essential goods, weights and measures, black marketing, hazardous chemicals, food adulteration and many legal provisions. Vehicles can be detained for any type of above violation or breaking any traffic related rules. Detention of vehicle causes problems of wastage of time, more fuel consumption, under-utilization of transport capacity etc.

REASON FOR DETENTION OF TRUCKS:

There are various reason for detention of trucks which causes delay in transportation, loss of time, more fuel consumption and affects reputation of the logistic company. Some of such reasons are discussed below.

1. RTO Check post: RTO (Regional Transport Office) is the department of Indian Government and responsible for maintaining a database of vehicles and drivers for various states of india. It has various powers to check documents related to vehicles, permits, load requirements, road tax etc. Trucks used for transportation of consignments must follow all the necessary rules and regulations.

Driver of the vehicle must possess all necessary documents of vehicle and himself. He must possess valid driving licence, Truck registration

- certificate, copy of national permit, fitness certificate of truck, emission norms etc.
- 2. Police Checkpost: These checkpost are to maintain law and order situation. The truck driver must follow traffic rules and parking rules, maintaining traffic safety, not to overload the truck beyond capacity etc.
- 3. Goods related checkpost: These checkpost verify whether all necessary taxes related to the consignment are paid or not, is there any tax evasion. Movement of essential goods must have proper documents and weighed accurately with necessary permission.
- 4. Checking by flying squad: There are various government agencies which check goods on regular basis on getting complaints about any illegal activity or breaking law. Flying squads are alerted if any such activities take place and hence detention of trucks takes place.

PROBLEMS AND RESOLUTION OF ISSUES AT WORK PLACE

Problems related to work, working conditions, behavioural issues of colleagues or superiors are some of the work related challenges, can happen anytime. Truck driver/employee must talk to managers about any such issues. These are termed as grievances. Employees must solve any such issues between themselves wherever possible before moving the complaint to managers. If any employee have any problem related to work must find a way to resolve it either in formal or informal way before taking any hasty decision.

The grievance redressal provide an employee to clarify a situation that the employee thinks as a violation of the rules and regulations of employment. The grievances redressal on be carried out formally or informally as follows:

- 1. An Informal Approach: This is the best way to try to resolve a problem. Each employee must be motivated and encouraged to resolve their problems informally with mutual respect. An employee should always bring any work related problem in front of his immediate supervisor so that the problem can get resolved immediately. The supervisor on the other hand should take necessary action and effort to resolve the problem in a timely manner.
- **2. A Formal Approach:** The formal complaint procedure may be initiated if informal approach fails. In formal approach the employee files a written complaint with the supervisor. Supervisor than investigates the matter in the light of evidences provided by the complainant and will take statement of all persons involved in the complaint. The judgement taken by the supervisor will than be intimated in writing to complainant and a copy to manager. If still complainant is not satisfied with the judgement, he can go for an appeal.

3. Appeal Process: If the employee is not satisfied with the superiors decision, he can make an appeal to manager within a specified time period as per companies law. The manager than further investigate the matter and will communicate the same to the complainant and a copy will be sent to management/ owner. The decision is final at the organizational level but still if complainant is dissatisfied, he can move to court for further proceedings.

These are the basic procedure followed for work related challenges in warehouses.

MANAGE THE WORKFORCE:

Workforce while consignment in transit is mainly the role of truck drivers. Proper taining to them will ease the flow of work. Truck drivers play multiple roles in logistic and transport companies. Apart for driving trucks, they also act as a supervisor while loading and unloading of goods take and in exceptional cases of short labour supply, they even transforms into a lobourer.

Truck drivers should be trained to sort out problems related to documentation issues at various check post or with police while in transit. Detention of trucks at various check post can be done by Police, RTO, Tax authorities or any official government agencies on flimsy grounds. Even if all documents are in order, all norms are satisfied, then also these agencies can still find means to detain and challan the truck, hence proper training must be provided to each driver to tackle these problems. The Company should ensure that drivers are fit for duty and complete all necessary training activities, particularly how to deal with documentation related issues at check post with police, RTO or any other government agencies. Some of the important contents of training for driver are discussed below.

- a. Truck drivers must be able to communicate in local language as well as regional language with limited expressions in English.
- b. On regular basis the driver have to check that the vehicle and all necessary equipment's are fit for the operation to be carried out as per instructions.
- c. Drivers must be trained about emergency procedures, parking restrictions, details about route to follow and general information such as prohibition of smoking, alcohol and drugs, prohibition of use of mobile phones while driving, speed limit etc.
- d. Driver must be trained in depth in handling documentation and must be briefed about its importance. He must know about arrival and departure timings, delivery note, transport documents, number of packages, volume and weights, signature of concerned authorities in all copies of documents etc. He must be trained to communicate if any deviations while loading or

- unloading of goods to the concerned authority before departure. He should ascertain that proper markings amd placards are fixed on the vehicle.
- e. He should know the maximum permissible vehicle gross weight is not exceeded. He should take all precautions not to exceed the permissible axle weight.
- f. He must be trained to prepare report of unloading problems, unsafe conditions, near misses and incidents as per company policy.
- g. He must know the existing taxes applicable while transporting the goods, which will be beneficial if truck is detaine by tax authorities at check post.
- h. All documents related to himself and vehicle must be checked from time to time like Driving licence, Truck registration certificate, copy of national permit, fitness certificate of truck, emission norms etc.

Training to drivers will be an added advantage to the company as it will reduce the time cycle for delivering the consignment, proper documentation will give more confidence to driver to resolve issues at check post, it will be cost efficient etc.

Activities

Activity 1: Demonstration on documentation issues

Material Required: 1. Note Book 2. Pen/Pencil 3. Chart papers 4. Computer printouts 5. Checklist

(The teacher will take Computer printouts of various documentation related issues. The teacher will also prepare a checklist – what to observe and tell the students)

Step by step procedure:

- a. Make a group of students to prepare charts of various document related issues
- b. Take computer printouts of various documents needed by truck driver while in transit
- c. Discuss:
 - Meaning of documentation issues
 - What are the reasons for detention of trucks
 - How to manage documentation related issues at check post
 - Why to train truck drivers
 - What are the important contents included in training truck drivers

- What are the advantages of training
- d. Note down every point in your note book
- e. Confirm the points which you have written with the executives and the teacher
- f. Discuss all the notes with your classmates and show the teacher
- g. Arrange a discussion on the topic in the class present your notes and feelings
- h. Discuss with classmate and teacher and submit a report
- i. Draw a chart on reasons for detention of trucks

Activity 2: Role play forReasons for detention of trucks and manage the workforce through training

Material Required: 1.Note Book 2. Pen/Pencil 3. Chart papers 4. Computer printouts 5. Checklist

(The teacher will take Computer printouts of reasons for detention by various autorities. The teacher will also prepare a checklist – what to observe and tell the students)

Step by step procedure:

- 1. Make eight groups of students
- 2. Four groups will play the role of various authorities who are at check post and enquires about document related issues
- 3. Another four group of students will demonstrate on important contents of training to truck drivers
- 4. Take computer printouts of various documents needed by truck driver while in transit
- 5. Note down every point in your note book
- 6. Confirm the points which you have written with the executives and the teacher
- 7. Discuss all the notes with your classmates and show the teacher
- 8. Arrange a discussion on the topic in the class present your notes and feelings
- 9. Discuss with classmate and teacher and submit a report

Check Your Progress

FILL IN THE BLANKS

1.	RTO means	
2.	Truck drivers must be able to communicate in	language as

well as regional language with limited expressions in English.

3. Driver must be trained in depth in handling _____ and must be briefed about its importance.

4. Consignments moving from place of origin to place of destination needs proper and accurate documentation, as vehicle ______ is the greatest problem for transporting company.

5. Detention of vehicle causes problems of wastage of time, more fuel consumption, ______ of transport capacity etc.

B. MATCH THE COLUMNS

	Column A		Column B				
1	Detention of Trucks	A	Whether all necessary taxes are paid or not				
2	Rto check post	В	Maintaining a database of vehicles and drivers				
3	Goods related check post	С	and drivers Maintain law and order situation				
4	Flying squad	D	Complaints about any illegal activity or breaking law				
5	Police check post	E	Wastage of time, more fuel consumption.				

C. TRUE OR FALSE

- 1. Truck drivers must be unable to communicate in local language as well as regional language with limited expressions in English.
- 2. Drivers must be trained to prepare report of unloading problems, unsafe conditions, near misses and incidents as per company policy.
- 3. On regular basis the driver have to check that the vehicle and all necessary equipments are fit for the operation.

- 4. Police checkpost verify whether all necessary taxes related to the consignment are paid or not.
- 5. Driver of the vehicle must possess all necessary documents of vehicle and himself.

D. SHORT ANSWER QUESTIONS

- 1. What are documentation issues
- 2. Explain the importance of documentation
- 3. Discuss in detail reasons of detention of trucks
- 4. State the importance of training to truck drivers.
- 5. Describe the important contents used in training to truck drivers
- 6. Differentiate between Police Checkpostand Flying squad
- 7. Differentiate between Goods related checkpostand RTO Checkpost.

E. CHECK YOUR PERFORMANCE

1. Arrange a play in class to explain contenets used in training to truck drivers

Dramatize various reasons for detention and documentation related issues at check post.

Session3: Compilation and Reporting to Management

A piece of written, printed, or electronically generated matter that provides information or evidence or serves as an official record, is called a document.

A document is an interdependent, interrelated, set of documents, each with a define purpose and a consistent format.

- The information provided by a producer, which enough to establish basis, history, context and to enable its use by others.
- It also needs to be comprehensive enough to enable others to explore the resource fully, and detailed enough to allow someone to understand the process by which it was created.

When materials are transported either domestically (Interstate/Intrastate) or internationally the delivery of items/goods must be accompanied by the relevant documents. The type and number of documentation varies depending on the shipment destination where it has to be transported, it can be within state (intrastate), within country but to other states (Interstate) or across border (International).

Each state as well as countries have different document requirements for inbound and outbound shipments. Most often, domestic shipment should be accompanied by the documents determined by that state authority and international shipments should be accompanied by the documents determined by that nation's authority.

DOCUMENTS PREPARED FOR EACH INBOUND AND OUTBOUND CONSIGNMENT

Documentation should be precise, because slight discrepancies or omissions may prevent merchandise from being transported, may also result in non-payment, or even result in the seizure of the goods by officials. The number and kind of documents the sender (Consignor) and receiver (Consignee) must deal with, varies depending upon the origin & destination of the shipment and description of the goods. Because different state or national official has different set of inbound and outbound regulations, the consignor and consignee must be careful to provide all required documentation in prescribed format with specified no. of copies.



Picture 3.4: Documents preparation

Table 3.1 :Showing Permit Requirement by State

Sr. No.	State	Invoice Copies	LST/CS T & Tin	TIN Series	Permit / Waybill Type	Transit Pass Required
			Req.			

1	Andaman Nicobar	3	YES	N/A	Not Required	
2	Andhra Pradesh	3	YES	28	ST form 10 required for incoming & outgoing material	YES
3	Arunachal Pradesh	3	Only LST & CST	N/A	N/A	YES
4	Assam	ω	YES	18	Form No. 61 for salable goods & form No. 62 for non- salable goods. Validity is Six months.	YES
5	Bihar	3	YES	10	Form DIX	NO
6	Chandigarh	3	YES	4	Not Required	
7	Chattisgarh	3	YES	22	Not Required	YES
8	Delhi	3	YES	7	Not Required	
9	Goa	3 INVOI CE & 3 D.C	YES	30	Not Required	
10	Gujarat	3	YES	24	Form 402 for outgoing & Form 403 for Incoming	NO

					material	
11	Haryana	3	YES	6	Form 38	
12	Himachal Pradesh	3	YES	N/A	Form 26	NO
13	Jammu Kashmir	3	YES	11	Purchase Order copy / Affidavit copy is nessary	
14	Jharkhand	3	YES	20	JVAT 504G	
15	Karnataka	3	YES	29	Not Required	
16	Kerala	3	YES	32	Form no. 16	NO
17	Madhya Pradesh	3	YES	23	Form 49 three copies for all. and also required for rejected/ret urned ready made goods	YES
18	Maharashtra	3	YES	27	Not Required	
19	Manipur	3	YES		Form 35 for	

					saleble and non-saleable goods	
20	Meghalaya	3	YES		Two copies of Form NO. 40 is required(che ck post copy & customer copy)	
21	Mizoram	3	YES		Two copies of Form NO. 33 is required(che ck post copy & customer copy)	
22	Nagaland	3	YES		Unnumbere d Form isrequired(c heck post copy & customer copy)	
23	Orissa	3	YES	21	Form 32 or waybill (Validity is upto 90 Days)	YES
24	Pondicherry	3	YES		VAT-49	NO
25	Punjab	3	YES	3	Not Required	NO
26	Rajasthan	3	YES	8	VAT Form 47 for incoming & Form 49 for	NO

					outgoing	
27	Sikkim	3	YES		Form – 25	
28	Tamilnadu	3	YES	33	Form XX	
29	Tripura	3	YES		Form 26 for salable goods.in-numbered in white for govt. parties	
30	Uttar Pradesh	3	YES	9	Form 38	YES
31	Uttarakhand	3	YES	5	Form 16A- VAT	
32	West Bengal	3	YES	19	Form 50	YES

DO'S AND DON'TS WHILE PREPARING DOCUMENTS

A lot can go wrong if we're not expecting it and taking steps to prevent it. The more documentation that we substantiate, the credibility will be higher.

Here is the list of documentation do's:

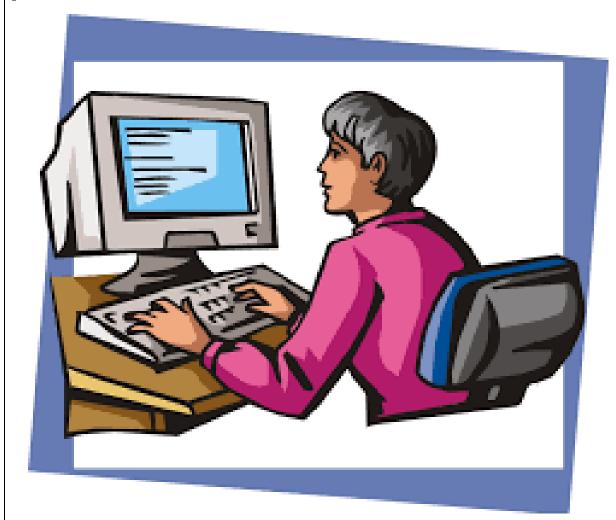
- Do create current dated documents rather than issuing back date or post date, including full name, address & date.
- Do obtain concern's signature to verify the documents , wherever possible or required.
- Do keep the documents themselves clean and fresh.
- Do use a professional tone both in the writing and in the document itself.
- Do avoid bias.

Here is the list we suggest as don'ts while documentation:

- Don't express personal opinions, accusations or judgments apart from the agreed terms of the contract.
- Don't use generalities, overstatements, assumption or exaggerations.
- Don't reach conclusions without all the facts.
- Don't record anything that you have not already communicated to the consignee.

FEEDING DETAILS IN COMPUTER

Computers have created a very effective information system to help streamline the management of any organization. It has become and must needed tool for any business or organization. The data is entered and stored for multiple users within the organization, entering and updating data into computer also enable a user to access it from any corner of the world which saves time and money comparability from paper documentation of everything and sending it from one place to another.



Picture 3.5: Computer Entry of Data

Today every organization relies on the use of computer to keep a track of data about customers, products and their services. Computers are also used to generate data and prepare all sorts of reports related to those entered data.

Similarly, in logistics and transport companies, different dates are entered into the computer system and uploaded to the central server for the ease of accessibility of that data. Data in logistics company is like customer information, the consignment information, destination details and required documents/permits for these destinations.

Once the booking of consignment is done, the document assistant checks the papers attached to the consignment and put an entry of it into the system, in a courier or logistics company. Mainly the waybill/docket or the LR copy's details are feeded in the system. We can see the below picture of a sample LR copy and the major information that is updated into the system.



Picture 3.6: Waybill Copy

As shown in the above picture, these details are required to be filled and updated in the system. Some important details for the system entry have been elaborated for your understanding:

- i. **Consignee address**: Consignee address is the foremost information to be entered in the system, as it is the address where the goods have to be delivered and then only the service provider can claim on completing or rendering their services.
- ii. **Consignor address**: Another important aspect in terms of information regarding a booked consignment is the consignor/sender address. This helps us to keep a track of by whom and which location the consignment has been booked. Also, it is important in terms of paid or credit booking, where we have to collect the service/freight charges from the consignor.

- iii. **PIN code:** PIN code helps in deciding the route plans for delivering a consignment as it's necessary to provide with the consignor and consignee address as well.
- iv. **Invoice no.**: Invoice no. is link between the waybill and the actual consignment, in case of some interchange of boxes these invoice no. Can help a warehouse staff to easily trace the boxes and put it together to the lot it belongs to.
- v. **Description of goods**: Description of goods is important in many of aspects for transporting of materials from origin to destination. Every courier company is liable and accountable to delivered the goods in intact and sound condition as picked from the consignor, thus putting description makes it easy to track which type of goods it is and what necessary care has to be taken while transporting the same.
- vi. **Number of packets**: these are the information which helps in keeping track of the entire consignment as well as putting end to confusion between customer and transporter for mismatch of the lot size of number of packets from actual invoice of that particular consignment.
- vii. **Actual and chargeable weight**: all transport company has its standard set for chargeable weight on the basis of volumetric or actual whichever is higher. So if a customer is booking a light material which density is bigger than its actual weight, the courier or transport company will consider the volumetric weight for such consignments to mitigate the space utilization. So this information has to be updated in system as well for the notice of consignment type and its space utilization in vehicle.
- viii. **Volume (lxbxh=cft)**: this information is required to calculate the volumetric weight of the consignment and according to this the transporter charge their freight to the customer.
- ix. **Insurance policy number and date**: In case of insured goods the information related to the insurance effectiveness has to be mentioned in system as well. Sometime the vehicle meet with accidents of other issues where the goods get damaged and it needs to be settled down.
- x. **Value of goods**: value of goods is another important aspect and it is must for the document assistant to enter it in the system as well. This is also helpful while entertaining the claims and settling it down.
- xi. **Packing type**:packing type is also entered in the system to inform and record the goods packing details and this information make a loading staff aware of which goods has to be loaded in what sequence.
- xii. Particulars rate: Rates are not entered on the waybill/docket or LR copy for all customers as these information are sometime calculated by the

system with already fed contracts and agreed rates by the customers. So in that case system calculate the rates for those customers automatically from other inputs provided by the document assistant in prior for the same consignment.

- xiii. **Waybill/Docket**: this no. Is mentioned on the waybill and it needs to be entered in the system for further reference of the consignment.
- xiv. **Sticker no.**: stickers are placed on the packets which refers to the waybill number of that particular shipment and thus this help in keep the trace for the consignment through out its transit period.
- xv. **Special instruction**: some consignments are instructed by the consignor regarding payment terms or for the collection of COD/DOD (cheque/Draft on delivery)

COMMUNICATION FOR THE MISSED AND DELAY DELIVERIES

Communication plays a vital role in tracking and updating the information to both the internal as well as the external concerns regarding any shipments till the time of its delivery, once the delivery is done and the waybill is closed in system the information of entire transit along with the delivery details are updated for further reference in future. These communication helps the customer to get the update about their consignment and also the expected time for reaching the consignment to its destination, but in case if consignment gets delayed in transit or may uphold by the courier company due to some document issue or other factors this needs to be updated through a communication.



Picture 3.7: Mail communication

1. Missed Deliveries report- once the vehicle arrives at the destination the local concern needs to arrange the delivery of each consignment within the stipulated time frame and also has to update it in system with particular remarks against each consignments but it may not be possible every time to close all the arrived consignment in a single day. Thus, this report adds value to the customer and at the same time it is an important string for the management to overcome that particular issue due to which the delivery has failed. Each reports has a fixed format depending on the size and work practice of a company. Below format will give an idea of report where important information related to the consignment with specific remarks for missed delivery.

Table 3.2: Format1 Missed Delivery Report

WAY BIL L NO	PI C K D	CONS IGNE R	CONS IGNE E	BRA NC H	M O D	DESTI NATIO N	INV OIC E NO.	DO D/ DO CC	C H G W	P K G	ST AT US	MSS REM RK

This report includes multiple customer data and is share with the management for the performance evaluation of the operation team, where as customers are communicated with there respective data through individual mail.

2. Delay Delivery Report- Delay delivery is another concern in the courier company which affects the customer and also impact negative on the operation team performance. Delivery delay report is much of customer concern where their other works get affected and this also results into monetary losses for the customer. These reports are shared as well as the customers are informed over the telephone regarding the delay in delivering their materials also. Delay can happen due to several reason such as vehicle breakdown, route closed due to traffic rules (no entry for particular time), political issues or natural calamities like flood/land slide etc. Below format will enlighten the idea of delay report and its important aspects covered within.

WA CON CON **DEST** INV DLY R P BR M D C P ST Н YBI **SIGN SIGN** AN 0 INATI OIC 0 \mathbf{K} ΑT **EMAR** Ι LLC ER EE CH D ON D/ G G US K \mathbf{E} K NO NO. D W D Т 0 T C C

Table 3.3: Format 2 Delay Delivery Report

These reports are shared to the customers for their entire consignment, either it can be a single lot or a club of various waybills for each consignment.

PREPARATION OF REPORTS ON DOCUMENTATION ISSUES:

As we are aware about the importance of documents for transportation of any goods/material, thus the unavailability of any of the required documents can affect the smooth flow of an consignment and will create a issue in delivering it to the end customer. The issues that occurs due to incomplete or improper documents are mentioned below:

1. Truck enroute: the trucks enroute crosses various borders either state or international where the checkposts are established to examine the goods and its documentation. If the checking authority finds any of the consignment with incomplete/improper or manipulation in the document they can hold the entire truck till the time the issue get resolved. In this situation the concern department or designated person

of the courier company circulates an information to the entire team with all details of the faulty consignment/document and ask the team to get this resolved within shortest period of time so that the truck can be released from the checking authority and it can reach the destination in the committed time frame. Report looks like the below shown format, sometimes it may be bit different depending on the format used by a particular courier company.

VEHICLE HOLD REPORT WAINVORI Sr. BODECOCOGOPKWEIVAARREG YBIOKIOIC GINSTINSI NSI ODGHLURIVASNo TLLNGENAGNGNS EALONNO DANO TIO OREEDTTEN

Table 3.4: Format 3 Vehicle Hold Report Format

- **2. Delayed Deliveries**: Delay deliveries reasons are due to vehicle seized at checkpost, vehicle breakdown, no entry imposed in some areas, material received in part/short, missing/improper documents. In any of above mentioned reason the deliveries get affected and thus a concern delivery branch has to communicate this to the customer as well as to their internal team, these reports may seek help to sort out the issues or can just be an informative message to update about the situation. The format is similar to the above shown and may vary from company to company.
- **3. Missed Deliveries**: Missed deliveries are due to unavailability of delivery vehicle, arrival of the consignment without proper documents, bigger lot size of the consignment, requirement of special arrangement for loading the consignment (like crane or other equipments), extra load than usual or normal load in comparison to other days, less man power. Whatever the reason is a missed delivery report has to be prepared mentioning that particular reason specifically for each waybill/docket and need to be share with customer and internal team on daily basis, this report also should be remarked with closer date for these missed deliveries and must be updated

on daily basis for remaining consignments. The report format is as mentioned above and may also vary from organization to organization.

PREPARATION OF CONSOLIDATED REPORT

after completion of the entire day process a consolidated report is generated and shared with the supervisor and other management team as a day activity report which includes various data on entire day work process and it may differ from company to company depending on their requirement and need.

Once the report is sent the activity of the day comes to an end and again the office area is prepared for the next day action. This same activity is repeated on daily basis to every courier company with slight variation depending on the volume and quantum of business for that region or area.

Activities

Activity 1: Note down details regarding the documentation prepared for each inbound and outbound consignment

Material required: Pen/pencil, paper

Step by step procedure:

Divide class in four groups.

- Distribute required materials to the class
- Assign inbound documentation to two groups and outbound documentation to the other two groups.
- Ask them to prepare a list of documents required for inbound and outbound as per assigned task.
- After preparation of the list, ask them to brief detail information caried by each particular documents, like name address, contact no. etc.
- Every group has to provide the list of documents name and its requirement in either inbound or outbound.
- Involve other students by asking questions to the group and rest of the class.
- Check the list for correctness and guide as per need

Activity 2: Update all the given details in the computer system, using school computer lab.

Material required: Sample waybill copies filled with consignment details, computer lab, Pen/pencil, paper

Step by step procedure:

Divide class in four groups.

- Provide each groups with required material like filled waybill copy, pen paper and a computer in the school lab.
- Ask each member of a group to enter or update the waybill data into computer and save it by their name or roll no.
- Get the printouts of system filled data and attach it with the sample waybills given before assigning the task.
- Interchange attached sheet of printout along with filled waybill copies between the groups and ask them evaluate and discuss their views one by one in front of the whole class.
- Ask other students to make a note of their corrections/suggestions and raise question if any.
- Involve other students by asking questions to the group and rest of the class.

Activity 3: Prepare reports on any documentation issues faced by trucks enrooted, delayed deliveries, missed deliveries etc. In a given situation

Material required: Printed report format, Pen/pencil, paper, computer lab if required

Step by step procedure:

Divide class in four groups.

- Distribute required materials to the class
- Give each group a different situation and assign a different report preparation from the above mentioned list of reports
- Within the group ask them to separate it into two sub groups, where one will cater the role of a customer and the other will play the role of management including the document assistant who has to prepare the report.
- Give them different situation explained in above exercise and ask them to prepare reports and share it with the customer sub group formed within.
- Indulge them to ask question from the shared reports and the management sub group has to explain the report and provide reason to convince the customers
- Involve other students by asking questions to the group and rest of the class.

Check Your Progress

A. FILL IN THE BLANKS

- 1. Documentation should be _____.
- 2. TIN no. and the CST no. of the consignor and consignee are _____.
- 3. Do create current dated documents rather than _____ back date or post-dated.
- 4. The data are entered and stored in computer for _____ uses within the organization

B. TRUE FALSE

- 1. The type and number of documentations varies depending on the shipment destination.
- 2. Different state or national official has same set of inbound and outbound regulations.
- 3. Missed deliveries report are shared with customer when the deliveries are delayed.
- 4. Each state as well as countries has different document requirements for inbound and outbound shipments.

C. SHORT ANSWER QUESTIONS

- 1. Write a short note on document preparation for Inbound and outbound consignment.
- 2. What is the importance of updating data into computer system?
- 3. Explain the various reports prepared in a courier company?
- 4. List the name of the documents required for outbound of consignment from an individual.

D.CHECK YOUR PERFORMANCE

Read waybill in the class given by teacher.

Session 4: Organise Workplace

Many Logistic company's require large computer systems that can store their variety of documents and data. The computer executive/clerk must have a good knowledge of operating computer system. At the end of the days work, the clerk should pay attention to save the documents, safely log off and switch off the computer. The details of such process is discussed below:

1. **Save Data:** Clerk can save data with 'Save' and 'Save As' commands to store their work. This can be done by clicking on office button on top left side of the screen fig. 1. Click on office button a menu will open up and click 'save' command.





Picture 3.8: Office button and save command

(Source: https://www.digitalunite.com/guides/microsoft-word/how-save-document)

The 'Save As' command is just below the 'Save' – it is used to save an existing file with another name. This is helpful if there are any changes made to the existing document but also want to keep the original document in its original name.

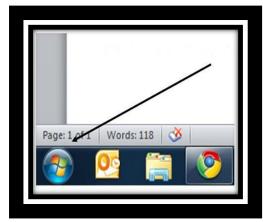
2. **Safely Log Off:** Logging off means shutting down your user account only Fig. 2. The computer will remain powered and will revert back to the login screen whenever you logs in. Log off a computer system means the user/operator who was working on the system leaves the computer running for someone else to use. This is a better option than to restart the computer.



Picture 3.9: Log Off command

(Source: http://slideplayer.com/slide/6154911/)

3. **Switch off the computer:** Switching off/ Shut down computer means windows will close all running programs and completely shuts off the computer machine. It serves as the best solution when clerk is leaving the office at the end of the day. Firstly click on the window button which is on the extreme left side at the bottom, the menu will get open and just click on shut down button.





Picture 3.10: Switch off/ Shut down the computer

(Source: https://www.digitalunite.com/guides/using-a-computer/ how-turn-off-computer)

DISPOSE OF DOCUMENTS

Records plays important role in logistics company, as various documents from order book to delivery report are to be kept in safe custody upto a specified time prescribed under various law from time to time. Only few records are preserved permanently as they are base for the company's bye laws and can be amended from time to time. Most of the records are destroyed as they are not of so much value to the organization. If any type of records are not required but still have significance for the company is transferred to the records centre. The record centre are responsible to keep the documents upto the appropriate time as per bye laws of the company. The record centre is authorized to retention of important documents or to dispose of the not so important document.

Records which are scheduled for destruction within specified time are decided by the respective head of the department, which authorises for destruction of unnecessary records. After specific period the records office propose to destroy the scheduled records and send the copies to various departments and if got green signal from all the respective departments the dispose of document date is decided.

Arrangements should be made by the record centre to destroy the records and the disposal form must got signed by the authorized executive. The records are than destroyed and the list should be deleted from the document list from the computer data.

CLEANLINESS OF WORK AREA

Most people working in logistic sector spend more time at workplace than in their own house, hence it is important that the workplace is in clean environment. Cleanliness helps in increasing the productivity and increases the morale of the employees. Effective cleanliness can eliminate some workplace hazards and will provide a safe environment to work freely and healthy. Clean environment helps in keeping work area neat and orderly, removing waste materials and other fire hazards from work areas. Let us understand the purpose of clean workplace:

- Lack of cleanliness can cause accidents
- Being hit by falling objects
- Slipping on wet or dirty surface
- Striking against poorly stacked items
- Material misplaced
- Health issues

• Dirty outlook

BENEFITS OF CLEAN WORK AREA

There are various benefits of cleanliness in work area. Some of the important benefits are as follows:

- Ease of flow of work
- Decrease in fire hazards
- Improves efficiency
- Efficient use of space
- Better hygienic condition
- Improved health
- Improved morale
- Better control of tools
- Reduced property damage
- Improved productivity

ADVANTAGES OF CLEAN WORK AREA

- 1. **Health Benefits**: Clean working environment improves employees health. This reduces the amount of time employees are sick or not feeling well and improves productivity and effeciency. The surfaces of an work area can be easily contaminated and needs regular and thorough cleaning, it is a major cause for sickness and hence necessary cleanliness acitivities is essential.
 - Dirty work area can create number of health issues like stress, depression, fatigue, stomach issues and sleeping disorder. Another health issue is allegies due to dust, this can lead to dry eyes, throat problem and allergic reactions, which can also cause asthama attack. Hence cleaning activity is most important part for employee wellbeing.
- 2. **Staying Focused:** Working in a clean environment helps to stay focused on your work. A messy work area will waste more time and energy for looking things needed in time. The disorganized workplace will always distract and put stress on the employees. Clean and organized work area will help to focus on work and get work done more quickly. Most of the companies instruct their employees to keep work area cleaner, neat, organized and systematic which increases efficiency and productivity and create a positive feeling and focus on work.

- 3. **Boosting Morale:** Dirty and disorganized work area often creates low morale of employees and hence decrease in productivity and efficiency. To prevent this negativity, employees should take initiatives to keep the work place clean and systematic, this will provide a sense of good feeling between employees. Feelings are contagious, which will enable coworkers to start experienceing the same good feeling and boost the morale of all employees. This will encourage all the employees to clean their work areas as well.
- All companies that is looking for long term success and an easy way to achieve an advantage in the competitive business world should encourage cleanliness of work area for achieving optimum efficiency and productivity.

Activities

Activity 1: Use of Computer commands to 'Save', 'Log off', and 'Shut down'.

Material Required: 1.Note Book 2. Pen/Pencil 3. Chart papers 4. Computer printouts 5. Checklist

(The teacher will take students to Computer lab of the school to show practically the use of Computer commands to 'Save', 'Log off', and 'Shut down'.. The teacher will also prepare a checklist – what to observe and tell the students)

Step by step procedure:

- 1. Take Students to computer lab
- 2. Discuss with them:
 - Meaning and usage of Save command
 - Difference between 'Save' and 'Save As'
 - What is the importance of Log off
 - Meaning of shut down
 - What is the difference between log off and shut down
- 3. Note down every point in your note book
- 4. Confirm the points which you have written with the teacher
- 5. Discuss all the notes with your classmates and show the teacher
- 6. Arrange a discussion on the topic in the class present your notes and feelings
- 7. Discuss with classmate and teacher and submit a report

Activity 2: Dispose of documents and Cleanliness of work area

Material Required: 1.Note Book 2. Pen/Pencil 3. Chart papers 4. Computer printouts 5. Checklist

(The teacher will take Computer printouts of procedure to dispose off the unwanted documents. The teacher will also prepare a checklist – what to observe and tell the students)

Step by step procedure:

- 1. Make groups of students
- 2. Four groups will play the procedure to dispose off the unwanted documents.
- 3. Another group of students will demonstrate on important benefits and advantages of cleanliness of work area
- 4. Take computer printouts of various documents needed
- 5. Note down every point in your note book
- 6. Confirm the points which you have written with the executives and the teacher
- 7. Discuss all the notes with your classmates and show the teacher
- 8. Arrange a discussion on the topic in the class present your notes and feelings
- 9. Discuss with classmate and teacher and submit a report.

Check Your Progress

	9110011 1 0 01 1 1 1 0 0 1 0 0 0 0 0 0 0	
Α.	FILL IN THE BLANKS	
	1. Dirty and disorganized work area often creates low employees and hence decrease in productivity and efficiency.	of
	2. Working in a clean environment helps to stay on work.	your
	3. Only few records are preserved as they are the company's bye laws and can be amended from time to time.	base for
	4. Clean working environment improves employees	·
	5. Cleanliness helps in increasing the and increasing the morale of the employees.	ases the
В.	MULTIPLE CHOICE QUESTIONS	
	1. There are various benefits of cleanliness in work area except.	

- a. Ease of flow of work
- b. Decrease in fire hazards
- c. Improves efficiency
- d. Inefficient use of space
- 2. Which of these is not the purpose of clean workplace
 - a. Striking against poorly stacked items
 - b. Material well placed
 - c. Health issues
 - d. Dirty outlook
- 3. The _____ command is just below the 'Save' it is used to save an existing file with another name.
 - a. Save
 - b. Log off
 - c. Save As
 - d. Shut down
- 4. Shut down computer means windows will close all running programs and completely shuts off the computer machine.
 - a. Save
 - b. Log off
 - c. Save As
 - d. Shut down

C. TRUE OR FALSE

- 1. Feelings are contagious, which will enable co-workers to start experienceing the same good feeling and boost the morale of all employees.
- 2. A messy work area will waste more time and energy for looking things needed in time.
- 3. The disorganized workplace will always distract and put stress on the employees.
- **4.** Clean work area can create number of health issues like stress, depression, fatigue, stomach issues and sleeping disorder.
- 5. Shut down means shutting down your user account only.

D.SHORT ANSWER QUESTIONS

- 1. What is the meaning of save data command and how it can be done.
- 2. What is the difference between Save and save as command
- 3. What do you mean by log off
- 4. What do you mean by shut down
- 5. Differentiate between log off and shut down
- **6.** Expalin the significance of clean work area
- 7. Explain the procedure to dispose off documents
- 8. Discuss in detail the advantages of clean work area
- 9. What are the benefits of clean workplace
- 10. State the purpose of clean work place

E. CHECK YOUR PERFORMANCE

- 1. Login to computer
- 2. Enter the credentials given in the computer
- 3. Save the data
- 4. Give a print command
- 5. Log out from the system

MODULE 4

HEALTH SAFETY AND SECURITY

Module Overview

Human safety mainly focuses on the safety of health, hygiene and environment of all the people including the customers, employees and management. Everyone in the workplace, including the employer, supervisor, workers, employees and customers have a responsibility to promote hygiene and safety.

The unorganized activity is not registered by any statute or legal provisions. On the other hand, organized business establishments maintain hygiene and safety by practicing housekeeping and guarding against any miss-happenings due to the negligence of personnel working at the workplace, anti-social elements, and even natural calamities.

The threats to the basic safety at a warehouse may be in the form of any harm to the human beings, This can cause even loss of human life. It may also be in the form of product loss through improper housekeeping or shoplifting. Basic safety practices help in reducing the chances of loss or damage at the workplace

Occupational health and safety (OHS) are an area concerned with protecting the safety, health and welfare of people engaged in work or employment. Health and safety of people are important aspects for an organisation's smooth and effective functioning. Good health and safe performance ensures an accident-free industrial environment.

The goal of occupational safety and health procedures and programmes is to establish and foster a safe and healthy work environment for all workers. The occupational health is often given less attention than occupational safety as the former is considered more as a personal issue.

This Module will help to develop an understanding of the various types of hazards and risks that may occur at the workplace and the relevant occupational health and safety responsibilities for warehouse operations. This Module will also help to understand how to identify and manage risks and hazards and work safely.

Learning Outcomes

After completing this module, you will be able to:

 Monitor the Safety Regulations and Procedures in case of fire hazards and bio hazards;

- Identify the personal protective equipment (PPE);
- Follow the organization procedure with respect to security, material handling and accidents;
- Recognize and report unsafe conditions and conduct visual inspection;

Module Structure

Session 1: Introduction to Safety Procedures

Session 2: Personal Protective Equipment's

Session 3: Security Measures and Material Handling

Session 4: Unsafe Conditions and Visual Inspection

Session 1: Introduction to Safety Procedures

Everyone in the workplace has a responsibility to protect each other around at workplace from injury. In all the organizations employers need to ensure health, safety and security procedures of its employees, contractors and visitors in all its operating sites, which includes sales and distribution hubs, warehouse and office during work- and work-related travel by keeping clean and safe environment.

TYPES OF HAZARDS

A **hazard** is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work. There could be many sources of occupational hazards. Let us now try to classify the hazards. Hazards can be classified into the following broad categories, based on their origin:

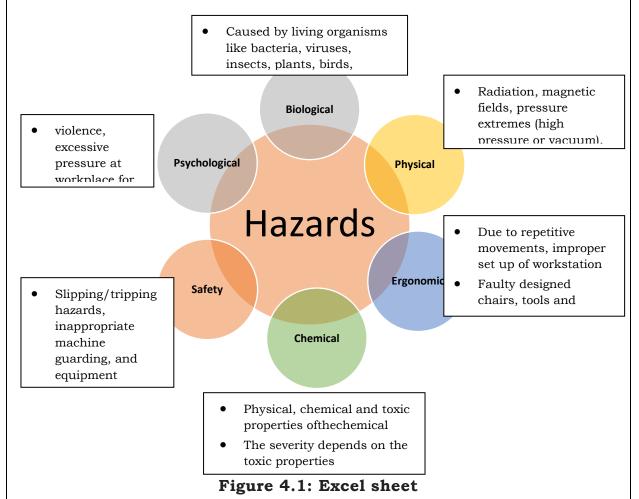
- 1. Biological
- 2. Physical
- 3. Psychological
- 4. Safety
- 5. Chemical
- 6. Ergonomic

Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. Risks usually arise because of financial problems, organization, employee, workplace, product changes, security and storage of data and records and other problems.

In order to identify the risk; the process begins by collecting the information about the events that could pose a risk. The employer should identify how the workers might be harmed, i.e. what type of injury or ill health might occur at the workplace.

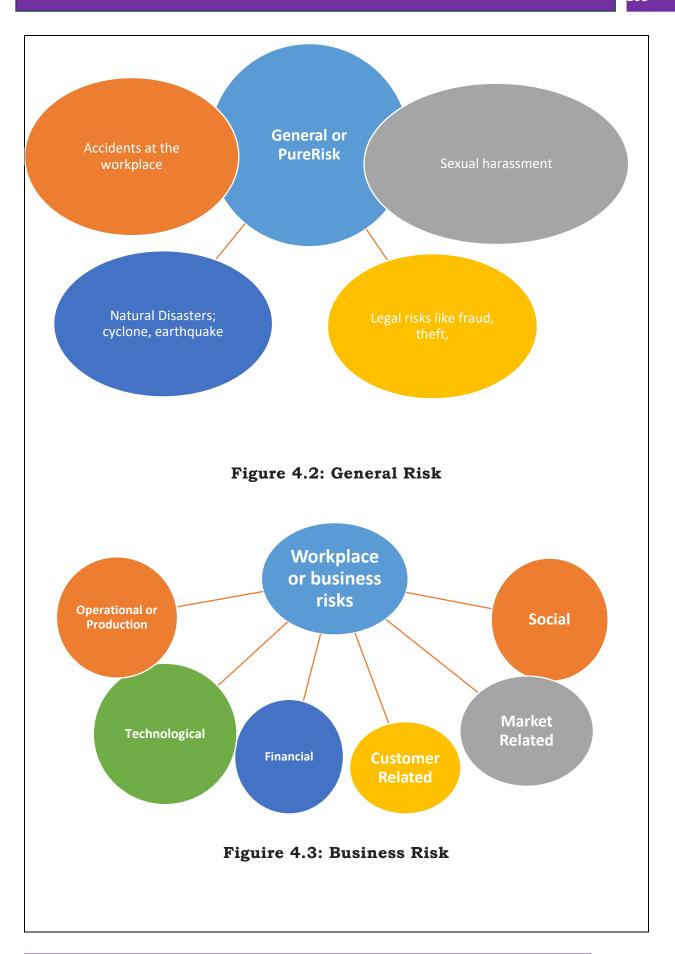
Risks can be categorized into (i) workplace or business risks: These are the risks directly related to the business; and (ii) General or pure risks: These are the risks of life in general.

All six types of hazards with their brief description is depicted in the figure 4.1 below:



General risks involve- sexual harassments, legal risk like fraud & theft, natural disaster such as cyclone & earthquake and accidents at workplace.

Workplace or Business risk involves-Operational or production, technological, financial, customer related, market related and social



TYPES OF EMERGENCIES IN THE WAREHOUSE

There can be number of unforeseen situations that may be potential threats for the workplace and the workers. These are called as emergencies for a work place. Emergencies may disrupt or shut down Business operations. It may cause physical or environmental damage. Emergencies may be natural or manmade (refer to picture 4.1). They include events, such as:



Fire Road accidents

Fall climbing accident









Electrocution, lost workmate Fuel spillage Injury from machinery and equipment

Picture 4.1: Excel sheet

Some other emergencies which includes:

- Gas leaks
- Explosions
- Snake bite or poisoning
- Electrocution, injuries
- Equipment failure
- Emergency as a result of environmental conditions (e.g., heat, cold, wet, snow, wind, lightning, bushfires, floods, high seas, cyclones)
- Emergencies requiring evacuation
- Hazardous substances and chemical spills
- Internal emergencies, such as loss of power or water supply and structural collapse
- Serious injury events or medical emergencies

- Bomb threats
- Civil disorder or criminal acts such as robberies and shootings
- Hostage situations or terrorism.

Proper planning should be done to face any emergency situation. It is called as the contingency plan. A plan to face any unforeseen event should always be made by the management and proper backup should be arranged to ensure uninterrupted working of the system.

For example, even though fire is a rare event in a warehouse, proper plan has to be designed to face such as situation.

- o Fire extinguishers have to be installed at places,
- o fire exits have to planned, fire alarms have to be installed and
- evacuation drills have to conducted to make the employees ready to face such challenge.

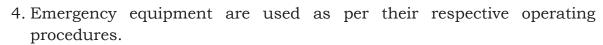
HANDLE EMERGENCIES AT WORKPLACE

Emergencies can occur due to a variety of circumstances such as chemicals

leaking, waste materials igniting, someone being injured or power failures affecting equipment. Emergency response procedures cover the steps that should be taken in the event of an emergency on-site. This ensures the following:

- 1. Emergency response procedures for the specific emergency are followed.
- 2. First aid is given without putting own life in danger.
- 3. Alarms are activated.

response



Concerned agencies like fire brigade, ambulance and police are informed.

Remember, some emergencies are controlled by external emergency authorities such as the fire brigade, police, ambulance etc. If external authorities are required, they should be immediately called and then they will assume control of the emergency situation.



picture 4.2: Emergency

In case of fire emergency one should not get panic but be calm and follow six steps:

Step 1:



1. Install and Test Smoke Detectors Regularly

Install a smoke alarm on every level of the home and outside sleeping areas. Smoke alarms should be tested every month, and batteries changed annually.

Step 2:

2. Develop a Fire Escape Plan

Designate a safe, accessible meeting spot outside, away from your home. A fire escap plan should be devised and practiced at lea twice a year.



Step 3:



Step 4:



4. Assemble an Emergency Supply Kit

Make an emergency supply kit and include things like a flashlight, batteries, a whistle, blankets and water. An extra supply kit should be kept in a car in case you are unable to immediately return inside.

Step 5:



5. Gather Emergency Contact Information

Maintain a list of emergency contact numbers in cell phones and keep it in the supply kit.

Step 6:

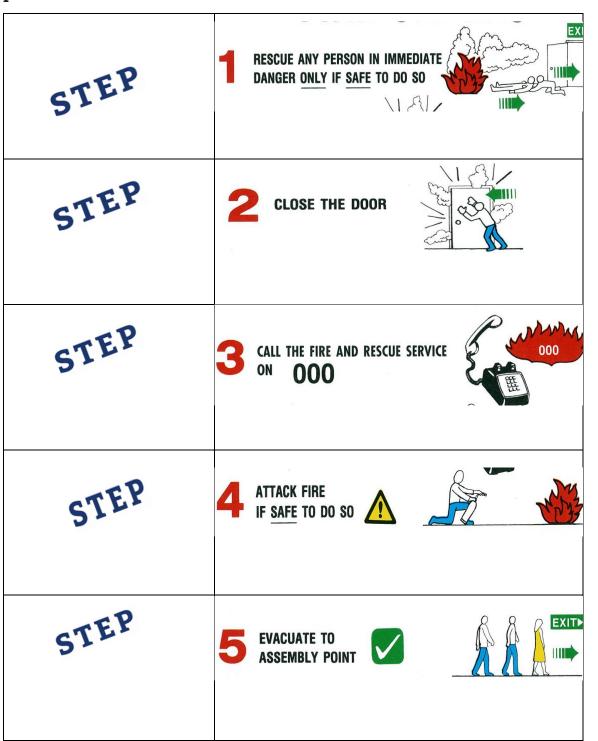
6. Store Important Documents in a Safe Place



Find a safe place to store important documents like birth certificates and financial information. You should even consider making copies of these documents and storing them in a secure, off-site location.

Just as people need to know what to do if something goes wrong, the workplace itself needs to be ready in the event of an emergency. Some items of safety equipment are specific to the work activities of an organisation, whilst others are mandatory or a requirement of the law. Fire extinguishers and first aid kits are two examples of the types of emergency equipment found in the workplace and are required by law. Eye wash stations and emergency showers are two examples of the types of emergency equipment that would be required as per the organisation's activities.

If some emergeny happened at warehouse camly follow the order of process:











Emergency procedure for spill/leaks of Hazardous Materials

Rescue		Assist person in immediate danger if safe to do so
Alarm	**	Raise the alarm, Notify the Supervisor and contact emergency services
Contain		Restrict the danger area to avoid risk of harming others then attend to the emergency
vacuate		Evacuate the staff and associate to a safe assembly area

PRACTICE AT WORKPLACE TO REDUCE RISK

- Perform regular housekeeping to prevent the accumulation of hazardous or toxic materials.
- Develop and implement standard operating procedures.
- Train and educate employees about the operating procedures
- Keep equipment well maintained.
- Pay attention to safety signs and safety rules.
- Use safe lifting techniques.
- Handle hazardous chemicals safely.
- Never touch electrical equipment with wet hands.
- To ensure a safe lift, bend at the knee and power the lift with your legs.
- Prepare and train for emergency response for incidents such as spills, fire or employee injury.
- Warn co-workers of the risks when you see them doing something unsafe.
- Attend all safety meetings and training sessions.

HIERARCHY OF CONTROLS

The effectiveness of hazard control measures varies with the method used. Hazard control measures should be considered in the following order:



•Use of Personal Protective Equipment (PPE) includes equipment or clothing designed to provide protection. This is the least effective option as it does not change the hazard. Common Personal Protective Equipment are safety shoes, goggles, apron amd gloves etc. provide training to use them.

Figure 4.4: Hierarchy of controls of Hazzards DISCHARGE WORKPLACE HEALTH AND SAFETY RESPONSIBILITIES

The employer try to integrate it with all work process at the workplace and provide guidelines which define the health, safety and security measures as well as required action and responsibility for execution with the vision of injury free organisation. Below are the responsibilities of coworker which will help to work safely and contribute to making your workplace safer.



Responsibilities of worke

- •Follow the health and safety requirements as per iob
- Ask for training before you begin work
- •Immediately report any injury to a first aid attendant or supervisor
- •Take the initiative and correct any unsafe conditions immediately
- Make suggestions to improve health and safety



Employer's Responsibilities

Provide a safe and healthy workplace Ensure about employees training, and keep

records of that

- Provide a comprehensive occupational health and safety program, including a written health and safety policy and procedure
- •Initiate an immediate investigation into incidents
- Provide adequate first aid facilities and services
- Provide personal protective equipment (PPE) where required



Responsibilities of Supervisor

- Instruct workers for saf work procedures
- Ensure that only authorized, adequately trained workers operate tools and equipment or hazardous chemicals.
- Ensure that equipment and materials are properly handled, stored, and maintained.
- •Enforce health and safety requirements
- Train and check that your work is being done safely
- •Inspect the workplace for hazards

Figure 4.5: Hierarchy of controls of Hazzards

REFUSING UNSAFE WORK

If you think a task is likely to endanger you or your co-workers, don't be afraid to speak up. Follow these guidelines to refuse work that you believe is unsafe:

• Explain to your immediate supervisor why you're not comfortable.

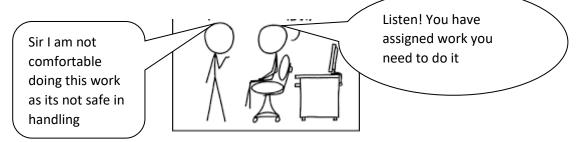


Figure 4.6: Refusing unsafe work(a)

- If your immediate supervisor is unavailable or doesn't give you a good answer, go to his or her supervisor.
- If you are still not satisfied, talk to your worker health and safety representative or a member of the joint committee.

• If you still not comfortable just refuse to work in unsafe condition

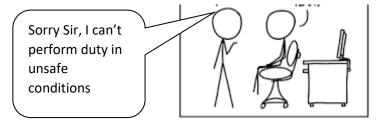


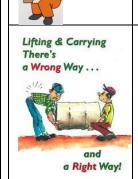
Figure 4.7: Refusing unsafe work(b)

Safe Handling Techniques



For safe handling of the object in the warehouse kindly follow the procedure discussed bellow in pictorial form:

Plan before lifting- manual or automatic load handling
Keep Feet and shoulder width apart
Move close
bend your knees and keep your back straight
Firm your grip



After getting good grasp on the object then bring it close to your body

Lift using your leg rather than your back; your legs are more strong then your bac

WAREHOUSE SAFETY PROCEDURES

Safety is an important aspect of any warehouse operation. Any disregard to the warehouse operation means direct risk of loss to goods, equipment and lives of people at work. Safety measures results in higher employee satisfaction as well as increased productivity. Warehouse safety can lead to following benefits:

- Minimize damage and loss of stored goods
- Minimize chances of injury and absenteeism among employees
- Proper functioning and maintenance of equipment's

There are lot of ways in which safety can be ensured in a warehouse operation. Some of the ways to ensure safety are discussed as under:

1. Usage of proper safety equipment's

Safety equipment's include tools such as fire extinguisher, fire alarm, security alarms and also Personal Protective Equipment's (PPEs) such as helmets, gloves, goggles and jackets. Forklifts or hydraulic dollies may be used to lift items that are too heavy. There should be a proper evacuation and safety plan followed in a warehouse and employees must be well aware about these. Also, there should be mock drills to make the employees acquainted with the evacuation process. (Refer to picture 1 a & b).

2. Avoidance of potential safety hazards

Hazards are any conditions which may cause loss or damage to the warehouse property. Various hazards such as accidents, trip and slip can be avoided by using appropriate measures, such as: (refer to picture 2)

- Putting caution sign boards like wet floor, danger zone, do not enter, do not touch etc.
- Keeping the aisle clear for free and un-obstructed movement of forklifts and also the porters
- Providing proper training regarding the operational procedures
- Keeping safe distance between machines, equipment's and people in warehouse to ensure safe and clear movements.
- Making the employees wear helmets with lights or florescent jackets to improve visibility within the dense storage areas.

3. Labelling and Marking the danger zones

Any kind of dangerous/harmful euqipments and materials shuold be stored separately and with sufficient caution in the warehouse. The electric supply grids should be accessed only by qualified induviduals and due cautions should be mentioned on the electric box. Similarly, hazardous substances such as acids, dyes etc. should be stored in a safe place and proper labels should be placed on them cautioning about the potential hazards attached to them. Making sign boards like "Access only to staff" should be placed wherever felt necessary.(refer to picture 3)



Picture 4.3: Danger Zone Marking

4. Training the staff regarding safe handling techniques

Inappropriate handling techniques (refer to picture 4 a) may lead to personal loss to the employees. Proper training regarding the body postures for lifting heavy weights should be provided to the employees to avoid any kind of health problem (refer to picture 4b). Forklift or pull/push carts should be used to lift heavy weights (refer to picture 4c). These should be operated only after sufficient training.

5. Promote Awareness in your Warehouse

• Staff members should be provided training about potential hazards, safety mechanisms and safety equipments used in the warehouse.

Trained staff is a key to safe working environment. Thus, supervisor has to be communicative to make the staff- binners and porters aware about the safety issues.

Activities

Activity 1: Understand the workplace safety

Materials Required: Notebook, Pen, Preprepared5-6 questions

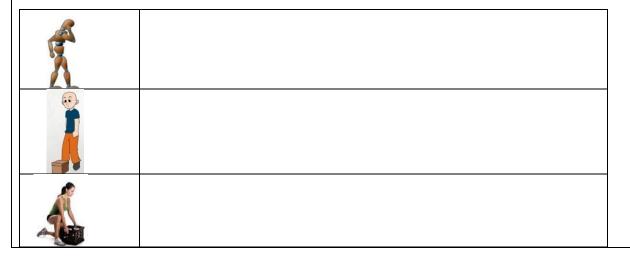
Step by Step Procedure:

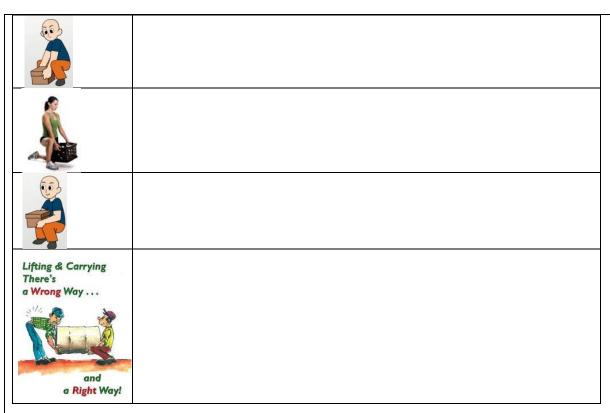
- 1. Visit to a warehouse
- 2. Name of the person and his occupation who performs respective job
- 3. Ask him/her Question you prepared previously
- 4. Ask him "Are you happy with the provisions made for taking care of your physical and safety requirements at the workplace?"
- 5. Note down the answers in the notebook
- 6. Then prepare your report based on the answers and suggest that what should these people should do to solve their problems?
- 7. Give your suggestions occupation-wise.

Activity 2: Fill the given worksheet

Materials Required: worksheet provided by teacher, pen

- 1. Take a sheet
- 2. Fill the blank space in front of picture of safe handling

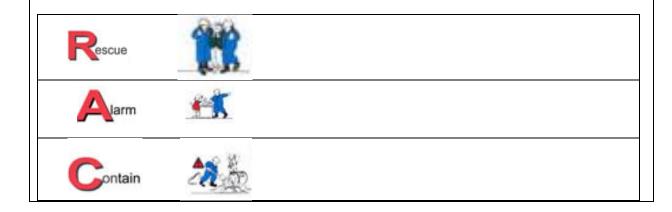




Activity 3. Fill the given worksheet

Materials Required: worksheet provided by teacher, pen

- 1. Take a sheet
- **2.** Fill the blank space in front of picture of handling emergencies in cae of leakage or spillage

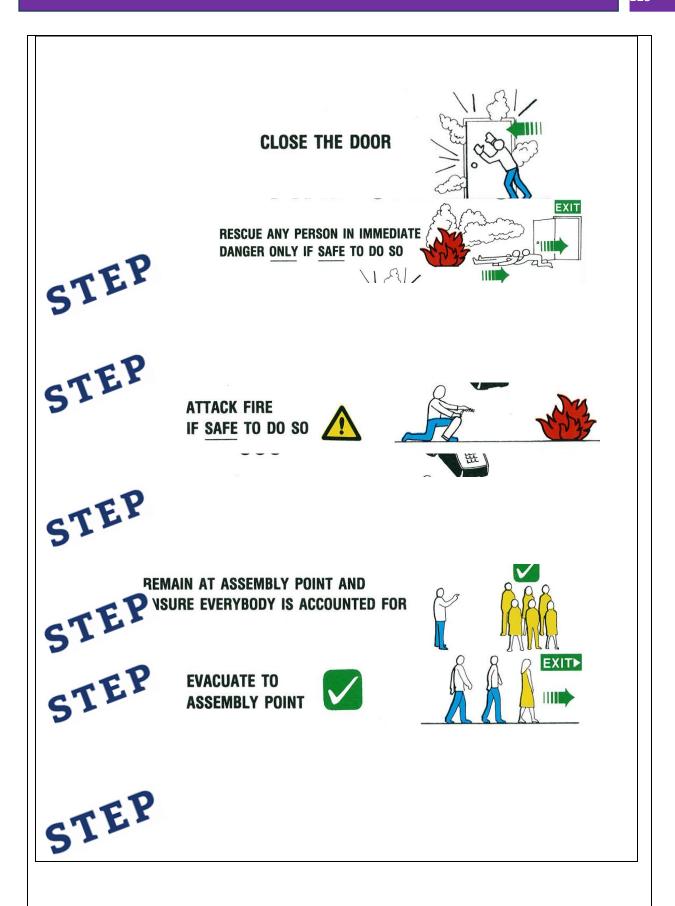






Activity 4: Arrange the steps in the proper order in a given sheet

- 1. Take a sheet
- 2. Arrange the sequence of the pictures given in the worksheet in the order to rescue for fire emergency



Assignment

- 1. Observe and identify two sources of hazards in warehouse and suggest preventive measures that should be taken up to mitigate the risks from the same.
- 2. Given below is a list of common problems that occur due to faulty tools/equipment, wrong postures or long hours of work. Talk to the people in different occupations in warehouse and find out the common cause for such problems; write down in the format given bellow

Occupation

Common	Reason			
problem	Faulty tools/ equipment	Wrong posture	Long hours of work	
Back ache				
Headache				
Neck pain				
Stress				
Irritation				
Depression				

Check Your Progress

A.	. Fill in the blanks		
1.	The services offered by the and are called the health care.		
2.	Work stations must be adjustable to be able to accommodate the wide variety of and of warehouse workers.		
3.	3. Mechanical lifting devices should be used to lift that are too heavy.		
4.	Fire extinguishers must be regularly to ensure that they are in good working order.		

C. Short Answer Questions

- 1. Write down the types of accident and emergency in the warehouse?
- 2. What is the meaning of the Health Care?

- 3. List out the Health Care Activities in warehouse?
- 4. What should your employees know about health activities?
- 5. Write down the hierarchy of controls
- 6. What are the potential hazards for workers in warehouse
- 7. What is the impact of the following activities for Workplace Health and Safety?
 - Ergonomics
 - Lifting, Carrying and Standing
 - Fire prevention
 - Floor Slips, Trips and falls
 - Machine Guarding
 - Electricity
- 8. Explain the responsibilities following stakeholders for workplace health and safety:
 - Worker
 - Employer
 - Supervisor

D. Multiple Choice Questions

- 1. Which of the following would you check to see if a material is considered 'hazardous'?
 - a. The product label
 - b. Purchasing record
 - c. Material safety data sheet
 - d. Hazardous material inventory
- 2. A _______is any source of potential damage, harm or adverse health effects on something or someone under certain conditions at work.
 - a. Risk
 - b. Injury
 - c. Hazard
 - d. Elimination

- 3. ______is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard.
 - a. Risk
 - b. Injury
 - c. Hazard
 - d. Sabstitution
- 4. OSHA stands for
 - a. Organizational Safety and Health Activity
 - b. Occupational Safety and Health Administration
 - c. Occupational Safety and Hygiene Administration
 - d. None of the Above
- 5. "Placing a hood on the gas stove helps in eliminating the gases while cooking. A fan draws the air from the hood into the ducts and removes the air from the workspace into an open space." Is an example of
 - a. Risk
 - b. Elimination
 - c. Safety
 - d. Substitution
- 6. use electric motors rather than diesel ones to eliminate diesel exhaust emissions.
 - a. Process Control
 - b. Engineering Control
 - c. Administration Control
 - d. Substitution

E. Match the Columns

Column A	Column B
General Risk	Violence
Business Risk	Legal
Physical	Slipping
Ergonomic	Caused by living organisms

Chemical	Radiation
Safety	Operational
Biological	Improper set up of workstation
Psychological	Toxic properties of the chemical

F. CHECK YOUR PERFORMANCE

- 1. Demonstrate the safe handling of the material/parcel.
- 2. Demonstrate the emergency handling in situation of fire and spillage.
- 1. List out the common problem/ hazards/ risk in the workplace.

Session 2: Personal Protective Equipment

Personal Protective Equipment (PPE) is defined as any clothing, equipment or substance designed to be worn by a person to protect the person from the injury or illness. Referring to the section on risk management, PPE is the last control measure to be used. This is because PPE does not change the hazard itself; it puts a barrier between you and the hazard.

PPE includes equipment such as safety footwear, hard hats, high visibility waistcoats, goggles, life jackets, respirators and safety harnesses.

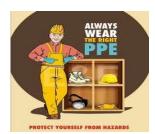
Waterproof, weatherproof, or insulated clothing is subject to the Regulations only if its use is necessary to protect employees against adverse climatic conditions that could otherwise affect their health and safety. Protective equipments helps in overcoming hazards like physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.

The personal protective equipment's are been used as per the specifications or requirements. For example, if one is working in a high intensity light area, should wear protective glasses. If one is handling food, then he must wear an apron and polythene cap and gloves for maintaining hygiene.

What are the benefits of using PPEs?

- Save from any potential risks of accident or collision.
- Saves from any biological hazard such as allergies, asthma, cut/wound, infection etc.
- Provides a safe working environment in the warehouse.

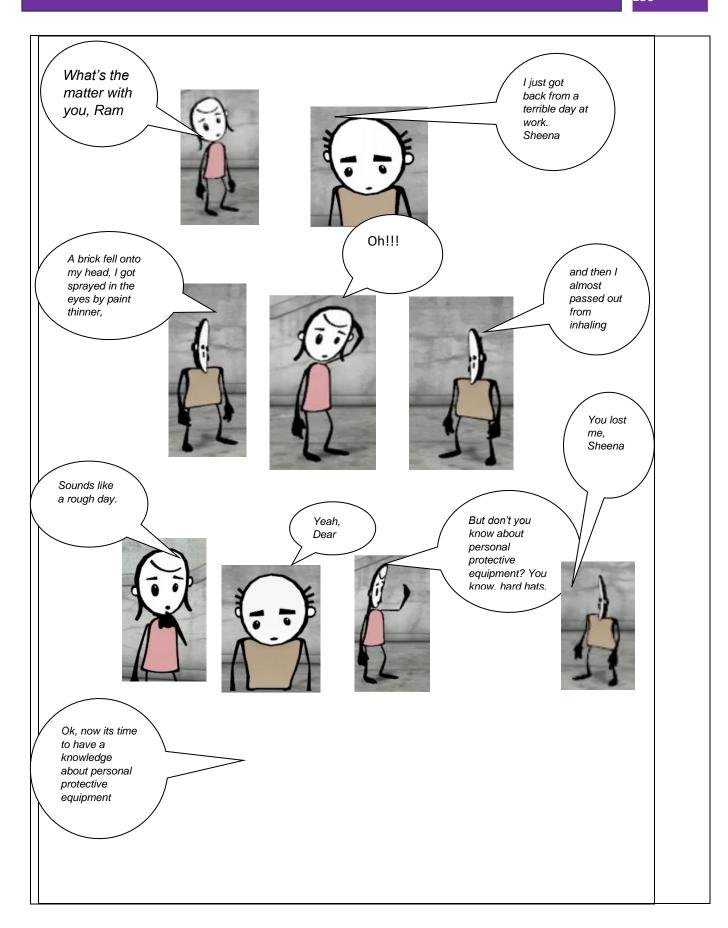
• Helps in fulfilling the work norms.

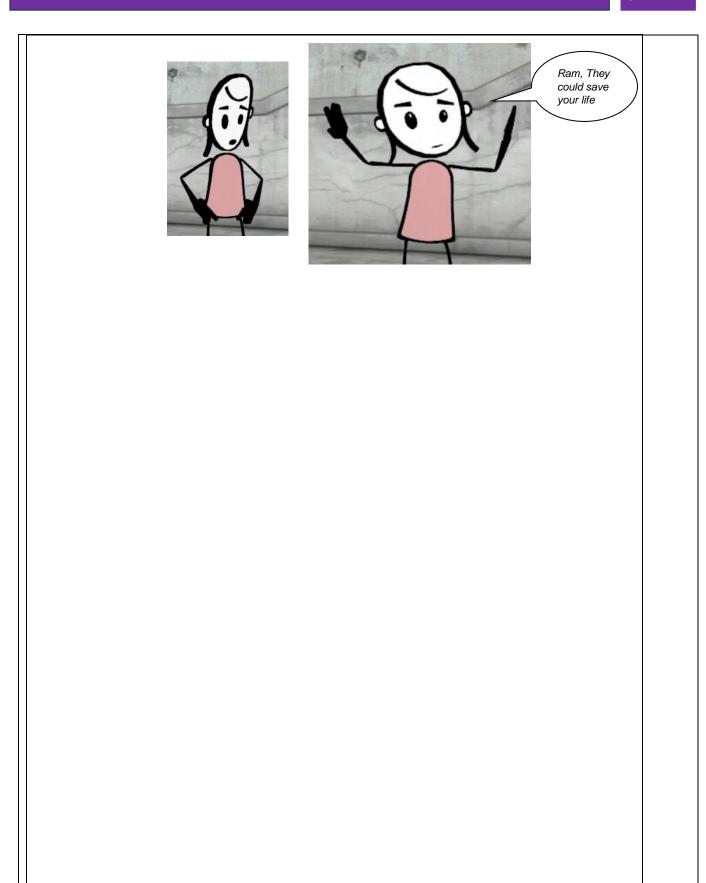


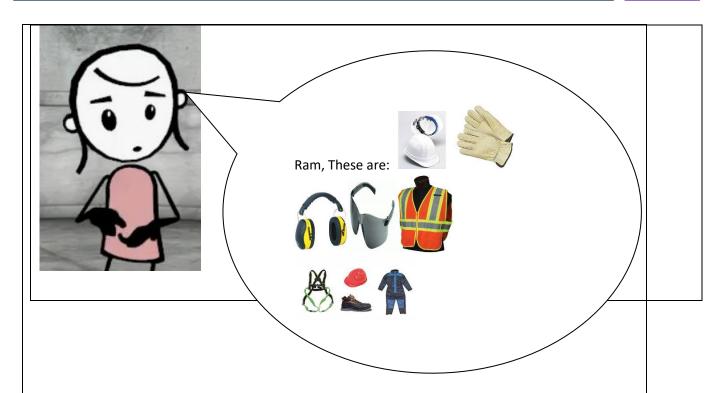


REQUIRED BEYOND THIS POINT









Types of Personal Protective Equipment's

1. Hearing protection

Hearing protection must be worn by anyone who is likely to be exposed to noise. Exposure to high noise levels can cause hearing loss impairment. It can create physical and psychological stress. There is no cure for noise-induced hearing damage. Specifically designed protection is required, depending on the type of noise encountered and the auditory condition of the employee. There are three main types of hearing protection:

- Earmuffs/defenders, which completely cover the ear
- Earplugs, which are inserted into the ear canal
- Semi-inserts (also called canal-caps), which cover the entrance to the ear canal.

2. Head protection

The employer shall ensure that affected employee wears a protective helmet when working in areas where there is a potential for injury to the head. There are three widely used types of head protection:

- Industrial safety helmets (hard hats), which are designed to protect against materials falling from height and swinging objects
- Industrial scalp protectors (bump caps), which are designed to protect from knocking against stationary objects
- Caps/hair nets, which protect against entanglement

Tasks where head protection may be required include:

- Construction
- Building repair
- Work in excavations and tunnels
- Work with bolt driving tools
- Driving motorcycles and all-terrain vehicles, etc.

3. Protection

The employer shall ensure that each affected employee uses appropriate eye or face protection when exposed to eye or face hazards. There are several types of eye protection:

- Safety spectacles: these are similar to regular glasses but have a tougher lens. They can include side shields for additional protection.
- Eye shields: a frame-less one piece moulded lens, often worn over normal prescription glasses
- Safety goggles: these are made with flexible plastic frames and an elastic headband
- Face shields: heavier and bulkier than other type of eye protector, face shields protect the face, but do not fully enclose the eyes so do not protect against dusts, mists or gases.

Tasks where eye protection may be required include:

- Handling hazardous substances where there is a risk of splashing
- Work with power driven tools where materials are likely to be propelled
- Welding operations
- Work with lasers
- Using any gas or vapour under pressure.

4. Foot protection

The supervisor shall ensure that each affected employee uses protective footwear when working in areas where there is danger of foot injuries due to falling or rolling objects, or objects piercing the sole, and where such employee's feet are exposed to electrical hazards. There are a number of types of safety footwear:

- Safety boots or shoes. Normally have steel toe-caps but can have other safety features (e.g. steel mid-soles, slip resistant soles, insulation against heat and cold)
- Wellington boots, which can be supplied with steel toe-caps
- Anti-static and conductive footwear. These protect against the build-up of static electricity.

Tasks where foot protection may be required include:

- Sites where construction, demolition and building repair are in process,
- manual handling where there is a risk of heavy objects falling on the feet,
- work in extremely hot or cold environments,
- work with chemicals and forestry.
- Where there is a risk of slipping that cannot be avoided or controlled by other measures,

attention must be given to the slip resistance of soles and replacement before the tread pattern is overly worn.

5. Hand and arm protection

Employers shall require employees to use appropriate hand protection when employees' hands are exposed to hazards. Hand and arm protection comes in a variety of forms, including:

- Gloves and gauntlets (leather, nitrile, latex, plastic coated, chain mail, etc.)
- Wrist cuffs and armlets, e.g. used in glass cutting and handling
- Barrier cream may sometimes be used, where gloves cannot practicably be used.

Tasks where hand and arm protection may be required include:

- work with skin absorption of harmful substances, severe cuts or lacerations
- work with severe abrasions, punctures, chemical burns, thermal burns, and
- harmful temperature extremes
- work with manual handling of abrasive, sharp or pointed objects,

• work with vibrating equipment's such as pneumatic drills and chainsaws, construction and outdoor work

6. Body protection

Types of body protection include:

- overalls, aprons and coveralls (protection against hazardous substances)
- clothing for cold, heat and bad weather
- clothing to protect against machinery, e.g. chainsaws
- high visibility clothing (e.g. jackets, vests)
- harnesses
- back supports
- life jackets

Tasks where body protection may be required include:

- work with hazardous substances
- work next to the highway or other areas with moving transport or vehicles (e.g. construction sites)
- outdoor work
- forestry and grounds maintenance work

7. Respiratory protection

In control of occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures. When effective engineering controls are not feasible, appropriate respirators shall be used. There are two main types of respiratory protective equipment:

- respirators that filter contaminated air or clean it as it is breathed in
- respirators that supply clean air from an independent source.

8. Electrical rotation

Equipment used for protection when employees are working in contact with electricity include insulating blankets, matting, covers, line hose, gloves, and sleeves made of rubber in addition to protective helmets designed to reduce electrical shock.

How to use PPEs

Each supervisor shall identify those employees whose work requires the wearing of personal protective equipment and should maintain a file of employees whose work requires personal protective equipment, to include but not limited to: industrial safety glasses, steel capped shoes, head protection, hearing protection, respirators, electrical protection equipment, and safety gloves that meets current safety standards.

- 1. Employer must train employees before issuing PPE in at least these things:
 - i. When PPE is necessary?
 - ii. What kind of PPE is necessary?
 - iii. How to properly put on, put off, adjust, and wear PPE?
 - iv. Limitations of the PPE
 - v. Proper care, maintenance, useful life and disposal of the PPE
- 2. Workers must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work requiring the use of PPE
- 3. Written certification (may be given), to verify that each employee has received and understood the required training, contains:
 - Name of each employee trained
 - Date(s) of training

Subject of the certification

Activities

Activity 1: Use of personal protective equipment's

Materials Required: Notebook, Pen, Preprepared 5-6 questions

Step by Step Procedure:

- 1. Visit to a warehouse
- 2. Name of the person and his occupation who performs respective job
- 3. Ask him/her Question you prepared previously
- 4. Note down the answers in the notebook
- 5. Then prepare your report based on the answers on personal protective equipment used in warehouse with its purposes

Activity 2: Recognition of personal protective equipment's

Materials Required: worksheet provided by teacher, pen

Step by Step Procedure:

- 1. Take a sheet
- 2. Fill the PPE name with their use in front of picture of safe handling

S. No.	Pictures	Names
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Activity 3: Identify personal protective equipment's

Materials Required: drawing sheet, pencil, eraser, colours

- 1. Take a sheet
- 2. Prepare a chart for the care of personal protective equipment's

3. Submit to the teacher for display in class

Check Your Progress

Α.	LIIT	. IN	THE	BL.	ANKS

1.	If one is working in a high intensity light area, should wear
2.	Personal protective save from any potential risks of accident or collision.
3.	that filter contaminated air or clean it as it is breathed in.
4.	Industrial safety,which are designed to protect against materials falling from height and swinging objects.
5.	required when one has work next to the highway or other areas with moving transport or vehicles.
6.	PPE includes equipment such as safety footwear, hard hats, high visibility, goggles, life, respirators and safety harnesses.

B. TRUE OR FALSE

- 1. Employee should use body protection when working in areas where there is danger of foot injuries due to falling or rolling objects. [True/False]
- 2. PPE includes equipment such as safety footwear, hard hats, high visibility waistcoats, goggles, etc.[True/False]
- 3. Anti-static and conductive footwear protects against the build-up of slip and fall [True/False]
- 4. Workers must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work. [True/False]
- 5. Wrist cuffs and armlets, e.g. used in glass cutting and handling. [True/False]
- 6. The personal protective equipment's are been used as per the specifications or requirements. [True/False]

C. SHORT ANSWER QUESTIONS

1. What PPE stands for?

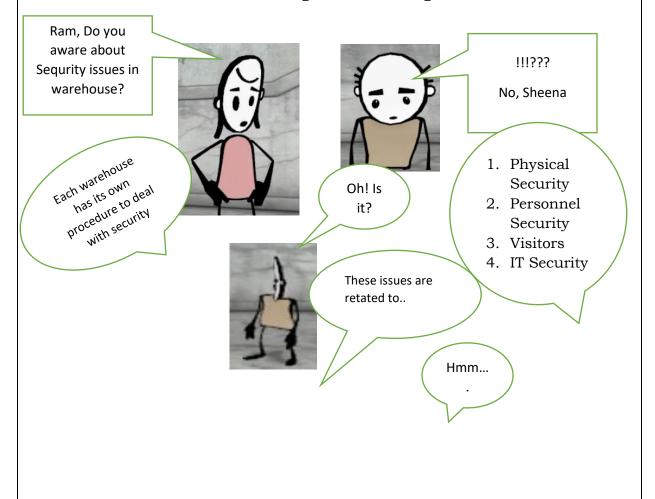
- 2. What is the meaning PPE?
- 3. Write down the types Personal Protective Equipment
- 4. Write a note on PPE and heir uses.
- 5. What should employees know about PPE?
- 6. What are the potential hazards for which workers should know he use of PPE in warehouse

D. CHECK YOUR PERFORMANCE

1. Prepare a chart for the care of personal protective equipment.

Session 3: Operations of Office Equipment

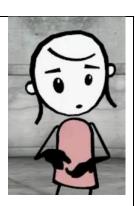
Security can be defined as a protection from harm, which is very important in warehouse. As there is no standard templet to follow a security procedure because it depends on the organization, the products organization is dealing with, work in hand, the people working for the organization and many other variables on which it varies from organization to organization.











A proper security in warehouse means a there will be a set proceduresforstaorage of containers at safe place to prevent unauthorized access and/or manipulation then effective communication will be placed to communicate seal numbers to consignee and a set procedures for reporting and neutralizing unauthorized entry of visitors to the store areas and other secured areas. In other words an environment saved from harm, injuries and theft. There are various equipments used in a warehouse for ensuring security such as security cameras, gates, fencing, monitoring, locking of the doors, alarming etc.

1. Physical Security:

Physical security depends on many things such as the type of floors, walls, roof and especially windows are important. Physical security includes building and room security as well as physical security devices such as locks and physical restraints. Warehouses should incorporate security facilities which must have physical barriers and deterrents that guard against unauthorized access.

Physical security can be ensured through following mediums:

Using alarms Systems and/or Video Surveillance Cameras

Outside intrusion resistant building Structure

Critical Facility Protection Systems which has fire suppression, alarm systems, hazardous gas, detection systems and air scrubbers

Perimeter fencing

Manned and/or monitored gates and gate houses

Adequate lighting at entrances and exits, cargo handling and storage areas, fence lines and parking areas

2. Personnel Security:

Control issuance of Locking Devices and Keys

Personal security is aimed to protect people from physical violence. Everyone has a right to have a safe life while working in the organization and now a days it's a prime duty of an organization to provide such environment. Although it's a synergistic approach of employee and employer which occurs after adequate efforts.

To facilitate personal safety an organization should provide training on threat awareness to recognize and foster awareness of the threat posed by terrorists at each point in the warehouse and supply chain. Employees must be made aware of the procedures the company has in place to address a situation and how to report it. Additional training should be provided to employees in the shipping and receiving areas, as well as those receiving and opening mail. Additionally, specific training should be offered to assist employees in maintainingcargo integrity, recognizing internal conspiracies, and protecting access controls. Theseprograms should offer incentives for active employee participation.

Personal security can be ensured through following process:

An employee identification system must be in place for positive identification and access control purposes

Employees should only be given access to those secure areas needed for the performance of their duties

Proper process of issuance and removal of employee, visitor and vendor identification badges

Changing of access devices (e.g. keys, key cards, etc.) must be documented

Employment history and references must be verified prior to employment

Conduct employment screening, background checks, and thorough interviewing prior to hire

Proper Procedure for removing identification, facility, and system access for terminated employees

Warehouse provides periodic internal training programs covering warehouse activities including the importance of maintaining cargo integrity

3. Visitors

For the purpose of the organisation visitors pass procedure is been used which help to protect from unauthorised entry of person and vehicle in site the organization.

Visitors security can be ensured through following process:

- Due surveillance has to be kept on any unauthorized visitor entering the warehouse
- Proper vendor ID and/or photo identification mustbe presented for documentationpurposes upon arrival by all
- Personal vehicles should have separate parking areas and should not be parked near the receiving /shipping bay
- Arriving packages and mail must be periodically screened before being disseminated
- Identify, challenge and address unauthorized/unidentifiedpersons.

4.

5. IT Security

Depending upon the nature of the information security should be applied to secure sensitive information. Information security policies ensure that access to information assets in an organisation is safeguarded and being compliant with data protection requirements.

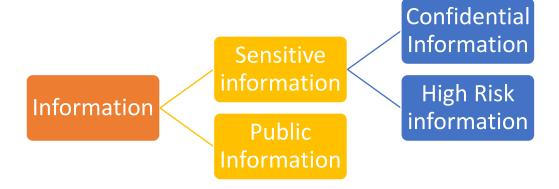


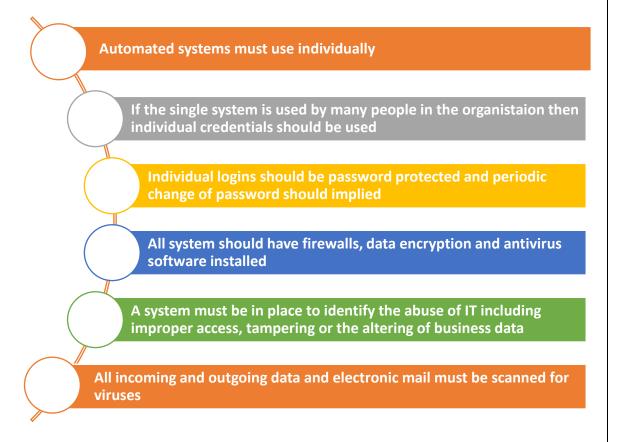
Figure 4.8: Types of IT Security

Confidential information:which need some level of protection either by law, contract, or custom, such as information related to budget, financial data, strategic plans, critical self analysis and matters subject to confidentiality agreements.

High Risk information: which are protected by state and federal law such as information related to personnel and payroll records and employee health records

The information security policies should cover two dimensions, the first is technical security measures such as firewalls, data encryption and antivirus software etc. The second is administrative security which include user account management, change management and physical and logical access control.

IT security can be ensured through following process:



Standard Operating Procedure of Warehouse for Implementing Security

Warehouse is responsible for the security of the stored goods as well as the well being of its people and processes. Thus, warehouses soul have a well developed security system. Security in warehouse is collaborative effort of each person of each level working in the organization. Employees are trained to operate safely inside the warehouse and the supervisors are responsible for inspecting the implementation of safety procedures by the employees. Maintaining safety is the result of continuous effort and supervision. Any

mishap related to the security should be immediately reported to the supervisor to avoid any major incident and also to implement protective and corrective measures.

Oh!!!

Every warehouse has standard operating procedure

1

2

3

5

6





•All building exterior doors are to be kept locked at all times except where specific procedures have been established to leave a door unlocked.

•All CCTVs are are working well in the premises except where specific procedures have been established to leave place. Cameras should be placed to view entrance points as well as interiareas

•Any person who is suspicious or cannot provide identification, and must be reported to management

•No one shall provide or allow access to any building or room to anyone who is not known to t

•If you witness a building problem, such as a faulty lock or door, or something potentially dangerous, you must report to manager

•Users must control physical access to their office and thus their computer

•All rooms shall be kept locked unless a staff member is in the room or within sight of the room a position to monitor access to the room). However, employees are advised to lock all rooms time no one is there to monitor access

•All windows shall be kept locked unless an employee is in the room or in a position to monito access to the room. It is very important to close and lock windows in rooms on lower floors





Audits of the security procedures shall be performed annually and upon the occurrence of any event in which a review of current procedures is appropriate. Such audit shall be performed by an authorized employee of the organization or by an outside individual or firm at the discretion of management

MATERIAL HANDLING

Material handling is the movement, protection, storage and control of materials and products throughout manufacturing, warehousing, distribution, consumption and disposal. Material handling includes wide range of manual, semi-automated and automated equipment and process that helps supply chain works smoothly.

IMPORTANCE OF MATERIAL HANDLING

Material handling helps to improve process of supply chain in various ways, these are as follows:



Material Handling Procedure:

Below are the steps for material handling:

- 1. PLANNING AND PREPARATORY WORKS
 - a) Receiving the following reference documents for planning
 - Overall Shipping Schedule,
 - Over Dimension Cargo List and drawings thereof,
 - Storage Area General Drawing
 - ➤ MATERIAL Handling Procedure
 - a) Receiving the Detail Packing Lists
 - b) Planning for required manpower and construction equipment for unloading

- c) Planning of unloading place and designation of storing areas
- d) Filling the Package No., Item No., etc. in the Cargo Receiving Report accordance with the received Detail Packing Lists

2. MATERIAL RECEIVING AND UNLOADING

- a) Receiving of Materials
 - > At the warehouse
 - > At the open storage area
 - ➤ At any given place in the site (direct delivery materials)
- b) Unloading of materials

3. UNPACKING AND INSPECTION

- a) Unpacking Inspection Schedule
- b) Non-scheduled Unpacking Inspection
- c) Preparation of Unpacking Inspection
 - Establishing the inspection procedure according to the kind of packing
 - Provision of, as necessary, the area for the Unpacking Inspection
 - making available all necessary manpower, equipment, tools, MATERIALS, etc., for unpacking and re-packing the MATERIALS
 - ➤ Designation of the place for storing of the MATERIALS after Unpacking Inspection.
- d) Unpacking Inspection
 - Unpacking Inspection shall be carried out for the following checks.
- (1) Visual appearance inspection for
 - (i) Damage to, and/or deformation of the MATERIALS
 - (ii) Rust or stains,
 - (iii) Evidence of water soaking
 - (iv) Peeling of, and/or damage to, paint, coatings or linings, and/or blistering thereof due to underlying rust.
- (2) Verification of Tag Nos., Valve Nos., ID Stamps, ID Markings. Etc.

- (3) Quantity verification. Damaged MATERIALS shall be stored separately by STORE OFFICER. The STORE OFFICER shall prepare Unpacking Inspection Report and submit it to the MATERIAL CONTROLLER for recording.
 - e) Material Excess, Shortage or Damage
 - f) Insurance Claim

4. STORING

- a) General store officer should instruct
 - Correct storage of materials at the prescribed location.
 - > Storing of materials by item, class, size, etc.
 - ➤ Maintenance of up-to-date records of quantities of the materials held in the storage facilities.
 - Correct identification and marking of the various storage areas.
- b) Classifying storage as per material
- c) Storing in open storage area
- d) Storing in warehouse
- e) Care and Protection of materials
- 5. MATERIAL REQUISITION AND ISSUING
 - a) Issuing of materials
 - b) Loan and return of special tools
- 6. STOCKTAKING
- 7. RETURN OF ISSUED MATERIALS
- 8. DISPOSAL OF SURPLUS OR RESIDUALMATERIALS
- 9. DOCUMENTATION FOR MATERIAL HANDLING AND STORING
 - a) prepare list of documents
 - b) explanation for use of document
 - (i) Shipping Control Sheet
 - (ii) Detail Packing List

- (iii)Cargo Receipt Report
- (iv) Unpacking Inspection Report
- (v) Excess, Shortage or Damage Report (ESD)
- (vi) Request for Urgent Procurement (RUP)
- (vii) ESD/RUP Summary Report
- (viii) RUP Status Report
- (ix)Stock Book
- (x) Bin Card
- (xi) Material Requisition
- (xii) Piping Material Requisition
- (xiii) Loan/Return Slip for Special Tool
- (xiv) Daily Report for Storing Works
- (xv) Monthly Report for Storing Works

Warehouse Material Handling and Safety Checklist

Supervisor Name:

Date:

S. No.	Particulars	Ye	N
1.	Wear approved eye protection when working in locations where eye hazards from flying particles or hazardous substances exist		
2.	Wear appropriate personal protective equipment when exposed to chemicals which are toxic, corrosive, or irritating		
3.	Use protective gloves when handling sharp materials		
4.	Use approved ladders, platforms, and lifting devices to reach elevated storage areas, and don't climb on racks		

5.	Keep areas clear in front of fire fighting equipment, alarm boxes, electrical control panels, exits, and main aisles	
6.	Toss out broken pallets and keep boards with nails out of traffic areas	
7.	Store moving equipment (floor trucks, hand trucks, wheelbarrows, dollies) out of the way when not in use	
8.	Put packing material directly in recycling or waste containers as soon as possible	
9.	Store material in a stable position	
10.	Pay careful attention to posted stacking height limits determined by shelf manufacturers or warehouse staff. Correct weakness or signs of shelf failure	
11.	Maintain a minimum of eighteen inches clearance to all sprinkler heads	
12.	Chock round or irregular material to prevent rolling	
13.	Mark all bar stock, pipes, lumber, or other materials that project beyond racks with flags or similar warnings	
14.	Store drums (maximum of four to a pallet) in an upright position	
15.	Inspect chemical drums at least monthly - more frequently during hot weather. Provide venting, cooling, or covering as necessary	
16.	Store gas cylinders in an upright position, secured to prevent them from falling, and capped when stored, moved, or shipped	
17.	Store flammable gas bottles away from oxygen cylinders	
18.	Use lifting cradles if moving gas cylinders with overhead hoists	

19.	When moving gas cylinders lift truck or hand truck, use approved racks	
20.	Forklift operators need specific training and supervisor certification before use.	
Signat	ure:	

Activity

Activity 1: Materials Required: Notebook, Pen, Preprepared5-6 questions on material handling

Step by Step Procedure:

- 1. Visit to a warehouse
- 2. Name of the person and his occupation who performs respective job
- 3. Ask him/her Question you prepared previously
- 4. Note down the answers in the notebook
- 5. Then prepare your report based on interview and observation about material handling in warehouse also write down the step by step procedure of material handling in the warehouse.

Activity 2: Materials Required: worksheet provided by teacher, pen **Step by Step Procedure**:

- 1. Take a sheet
- 2. Understand a simulated situation explained by teachers in the class.
- 3. Based on instruction fill the checklist

	Warehouse Material Handling and Safety Checkl	ist		
Super	visor Name:			
Date:		Т	Time:	
S.No.	Particulars	Yes	es No	
1.	Wear approved eye protection when working in locations where eye hazards from flying particles or hazardous substances exist			

2.	Wear appropriate personal protective equipment when exposed to chemicals which are toxic, corrosive, or irritating	
3.	Use protective gloves when handling sharp materials	
4.	Use approved ladders, platforms, and lifting devices to reach elevated storage areas, and don't climb on racks	
5.	Keep areas clear in front of fire fighting equipment, alarm boxes, electrical control panels, exits, and main aisles	
6.	Toss out broken pallets and keep boards with nails out of traffic areas	
7.	Store moving equipment (floor trucks, hand trucks, wheelbarrows, dollies) out of the way when not in use	
8.	Put packing material directly in recycling or waste containers as soon as possible	
9.	Store material in a stable position	
10.	Pay careful attention to posted stacking height limits determined by shelf manufacturers or warehouse staff. Correct weakness or signs of shelf failure	
11.	Maintain a minimum of eighteen inches clearance to all sprinkler heads	
12.	Chock round or irregular material to prevent rolling	
13.	Mark all bar stock, pipes, lumber, or other materials that project beyond racks with flags or similar warnings	
14.	Store drums (maximum of four to a pallet) in an upright position	
15.	Inspect chemical drums at least monthly - more frequently during hot weather. Provide venting, cooling, or covering as necessary	

16.	Store gas cylinders in an upright position, secured to prevent them from falling, and capped when stored, moved, or shipped	
17.	Store flammable gas bottles away from oxygen cylinders	
18.	Use lifting cradles if moving gas cylinders with overhead hoists	
19.	When moving gas cylinders lift truck or hand truck, use approved racks	
20.	Forklift operators need specific training and supervisor certification before use.	

Place:

Signature:

Activity 3: Materials Required: drawing sheet, pencil, eraser, colours Step by Step Procedure:

- 1. Take a sheet
- 2. Prepare a chart for all four categories of security procedure in the warehouse
- 3. Submit to the teacher for display in class

Activity 4: Materials Required: 4 worksheets, pencil, eraser, colours Step by Step Procedure:

- 1. Take a sheet
- 2. Fill the steps of security procedure for all 4 types of security in the warehouse
- 3. All four sheets submit to the teacher

Check Your Progress

A.	F'III	ın	the	blank	3		

- 1. Any person who is suspicious or cannot provide_____ and must be reported to management .
- 2. If you witness a building problem, such as a faulty lock or door, or something potentially dangerous, you must report to_____
- 3. Critical Facility Protection Systems which has fire_______, alarm systems, ______ gas, detection systems and ______ scrubbers.
- 4. _____operators need specific training and supervisor certification before use.
- 5. Use protective _____ when handling sharp materials.
- 6. ______is aimed to protect people from physical voilance.

B. True Or False

- 1. Destruction of all sensitive information must be done in such manner to ensure the information is rendered completely and permanently destroyed.
- 2. Machines that are swapped internally between individuals or groups, which contained sensitive data (original or derived), must not have the hard drive wiped before being utilized by the new user.
- 3. All company equipment must be tracked through inventory control and audited within a month by the organization.
- 4. Maintain reasonable climate control in secured rooms, with temperature ranges between 20- and 50-degrees Fahrenheit.
- 5. Conduct employment screening, background checks, and thorough interviewing prior to hire.
- 6. Individual logins should be password protected and periodic change of password should imply.

C. Short Answer Questions

- 1. What do you understand with security?
- 2. What kind of security does warehouse need to maintain?
- 3. What is personal security and how it can be ensured?
- 4. What is IT security and how it can be ensured?

- 5. What is physical security and how it can be ensured?
- 6. What do you mean by material handling? Write down its importance.

D. CHECK YOUR PERFORMANCE

- 1. Prepare a chart showing categories of security procedure in warehouse.
- 2. Prepare worksheets for four types of security procedure showing their steps.

Session 4: Unsafe Conditions and Visual Inspection

unsafe act can be termed as "violation of a commonly accepted safe procedure which caused the amount of injury - producing accident." It is evident from the meaning that no personal action islabeled unsafe unless there is a reasonable, less hazardous, alternative procedure. For example, the operation of a railway crossing gate for which no guard was provided can be classified as a hazardous condition and as an unsafe act because the worker can prevent forthcoming accidents.

In many cases from the analysis of the individual accidents it is apparent that the accidents are not only due to unawareness of safe condition but it is also due to chosing of alternative procedure even after awareness of safe procedure. Therefore, two steps in any safety program which are essential to the reduction of unsafe acts, namely education and enforcement. All workmen should be carefully instructed in the safe methods of performing their duties and they should be taught to recognize hazards involved in deviations from the safe procedures.

STANDARD PROCEDURE OF WAREHOUSING

The purpose of this SOP is to provide the guidelines and procedures for the warehousing procedure and management so that worker can work in a particular sequence. Warehosing is an important function of logistics. Warehousing strategy helps in loweringdown the operational costs helps to provide competitive advantage. Sequenced activities in warehouse facilitate ease and comfort of end-to-end storage solutions under one roof.

Thus every warehouse required standard operating procedure for its operation. employees should adhearethose standard operating procedures of warehouse for hanling works there. General warehosing procedure is depicted in the flow chart below whereas employees should follow the given procedure by warehouse supervisor or manager as per different activities performed.

General warehouse procedure:flow chart shows general working of warehouse from receiving to dispatching goods. This activity involves different jobs at different level which has standard procedure depending on the type of

warehouse and work in the warehouse. Every employee need to adopt that to keep them safe from hazards and risks at the workplace.

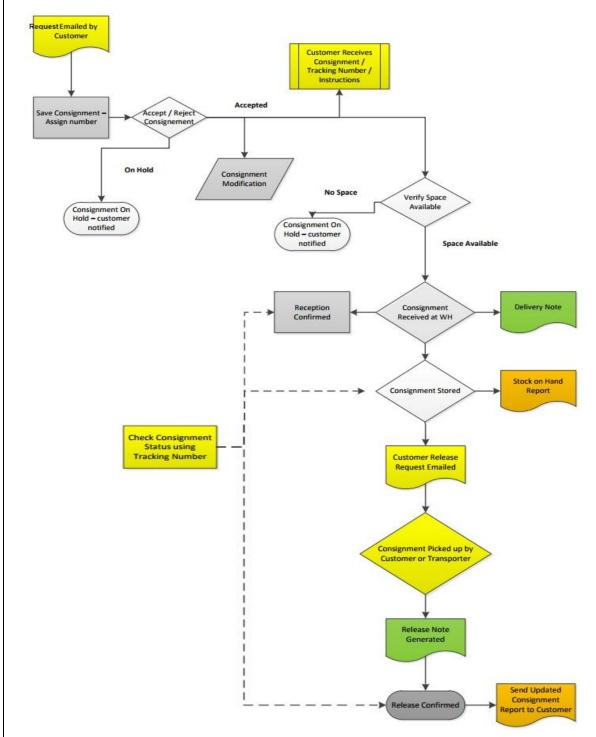


Figure 4.9: Hierarchy of controls of Hazards

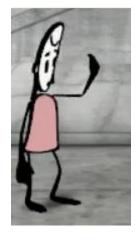
Health and Safety Policy: if the warehouse has 5 or more then 5 employees working then a warehose should have a written statement of general policy on health and safetywith the statement on the organisation itself. The

management should ensure putting the policy into practice and reviewed it on a regular basis.

Compliance of the policy:

You know Ram, for compliance of the policy a policy statement should include the followings:

Oh!! Ok... sheena



- 1. Health and Safety policy statement
- 2. Responsibilities
- 3. Health and safety risks
- 4. Consultation with employees
- 5. Safe plant & equipment &safe handling& use of substances
- 6. Information, instruction and supervision
- 7. Competency for tasks and training
- 8. Accidents and emergency procedures

4

Risk Assessments: when a warehouse have five or more staff have in place a documented risk assessment should be implied which cover not only staff but also visitors and contractors. This also should be reviewed on a regular basis.

Ram, To comply risk assessment a warehouse should

HOPAL

Ok... Sheena





- 1. Identify the hazards.
- 2. Decide who may be harmed and how
- 3. Evaluate the risks and decide on precautions
- 4. Record your findings and implement them
- 5. Review your risk assessments and update.

Accident Reporting: Employees and employers should report work related accidents, injuries, specific work related diseases and dangerous occurrences such as death or major injury including physical violence, a member of the public is killed or taken to hospital and If an employee on the premises suffers an over-seven day injury i.e. not a major injury but one which results in the person being away from work. These must be reported without delay and followed up within 10 days with a completed accident report.

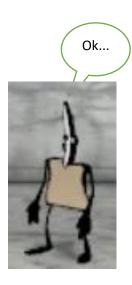
Ram, To comply accident reporting you must report

PSS CENTRAL INSTIT

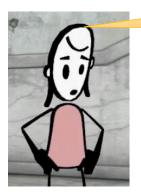
The various types of accident and injuries listed above withinthe set timescales by:

Telephone (major injuries and





Workplace Transport: employers and the self-employed assess the risks to workers and others (e.g. contractors, customers, visiting drivers) from workplace transport.



To comply transport security manager should ensure:

Safe Vehicles – Well maintained (brakes, reversing warnings, lights, horns

etc.) and examined. Loads secure and not beyond capacity.

Safe Drivers – trained, authorised, instructed and supervised. Trained

banks men where reversing is carried out.

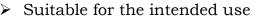
Safe Site – suitable routes, roadways and parking (firm, even surfaces, routes marked with direction signs); speed limits; one way routes; lighting

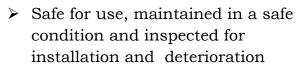


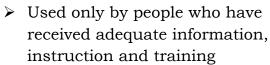
General Work Equipment: warehouse has duties towards their employees who have control over work equipment.

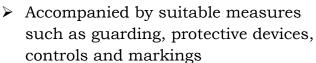


To comply general equipment security manager should









Used in accordance with specific requirements

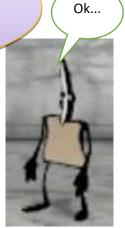


Lifting Equipment and Fork Lift Trucks: 'Lifting equipment' means not only work equipment for lifting and lowering loads but it includes lifting accessories and attachments used for anchoring, fixing or supporting the equipment. Warehouse should aim to reduce risks to people's health and safety from lifting equipment provided for use at work.

PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (NCERT), BHOPAL



To comply Lifting
Equipment and Fork Lift
Trucks security manager
should ensure:



Storage Systems: warehouse have to deal with the issues related tomanual handling or the manner in which items are stored. Storage areas should be specifically designated and clearly marked. The layout of storage and handling areas should avoid tight corners, pillars, changes of gradient and uneven surfaces.



To comply storage system security manager should

Racking Systems

- ➤ Safe working loads, heights, widths and equipment tolerances should be set by designers and manufacturers of the system.
- Racking should only be installed by competent people.
- Racking should be erected on sound, level floors, capable of withstanding the point loading at each base.
- Notices should be clearly displayed stating the maximum load

Pallets

- Pallets should be loaded to an established pattern to achieve maximum stability and safety.
- ➤ The load should be uniformly distributed over the pallet.
- ➤ Pallets should be inspected each time before use to ensure that they are safe to use.
- Withdraw damaged pallets for repair or destruction.

Manual Handling: In the warehouse more than one third injuries reported to are associated with manual handling. Thus warehouse manager or supervisor is required to:

1. Avoid the need for hazardous manual handling, so far as is reasonably practicable;



Ok...

- 2. Assess the risk of injury from any hazardous manual handling that can't be avoided; and
- 3. Reducethe risk of injury from hazardous manual handling, so far as is reasonably practicable.

To complyManual handling safety, a

If manual lifting is the only option then there are a number of things that can done to reduce risks includes:

- Making the load smaller or lighter and easier to lift,
- Breaking up large consignments into more manageable loads,
- Modifying the workstation to reduce carrying distances, twisting ovements, or the lifting of things from floor level or from above shoulder height, can be done to reduce the risk, including;
- > Improving the environment e.g. better lighting, flooring or air temperature can sometimes make manual handling easier and safer,
- > Ensuring the person doing the lifting has been trained to lift as safely as possible.

manager should

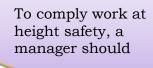


Ok



Work at Height: While working in the warehouse falls are the most common cause. Warehouse manager or supervisor must do all that is reasonably practicable to prevent anyone falling and also ensure that work at height should be carried out safely. For all tasks involving work at height, risk assessments must be completed and must consider risks from both falling staff and objects.

Ok.



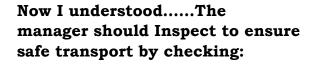


- Work at height must be adequately planned, supervised and carried out in a safe manner.
- ➤ Ensure the people working at height are trained and competent to carry out their duties.
- ➤ Make sure the equipment selected is appropriate for the job!
- ➤ Inspect your equipment regularly. Mobile Elevating Working Platforms (MEWPS) must be thoroughly examined every 6 months (Lifting Operations and Lifting Equipment Regulations 1998).
- Ensure there is a system for reporting and managing defects.
- > Plan for emergencies e.g. rescuing people
- Risk assessment for work on or accessing roof (including contractors)



Visual Inspection: It is a most effective technique to ensure effective Quality Control of equipment's, working conditions and also used in maintenance of facilities, this implies inspection of equipment and structures using vision, hearing, touch and smell.







- Driver certification
- > Pre-shift truck checks
- Vehicles regularly serviced and (where necessary) thoroughly examined
- ➤ Pedestrian safety e.g. walkways, warning signs and pedestrian crossing points
- ➤ High visibility clothing for anyone in the vicinity of moving vehicles
- Policy to inform suppliers/delivery drivers of site rules
- Safe access and egress to backs of delivery vehicles with footholds, ladders and/or grab rails
- Gangways and aisles of sufficient space to enable trucks to load/unload from racking safety
- Protective barriers on traffic routes
- > Blind bends provided with fixed mirrors

And...The manager should inspect to ensure safe working with general equipments by checking:



- > Fixed guards on moving parts of conveyor belts and stretch wrap machines
- Racking installed by competent persons and in accordance with manufacturer's instructions
- Racking suitable for the loads, not modified and displaying maximum loads/configuration signs
- ➤ Lift trucks fitted with seat belts, roll cages and audible/visible alarms
- Access equipment suitable for task, maintained in good condition e.g. Ladders, Mobile Elevating Working Platforms (MEWPS), mobile steps
- Emergency stop devices and visible markings on work equipment

The manager should inspect to ensure safety in Lifting Equipment and Fork Lift Trucksby thorough examination of:

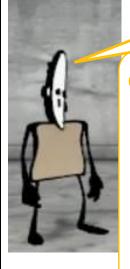


- > Fork lift trucks
- Overhead cranes and their supporting runways
- > Vehicle tail lifts and cranes fitted to vehicles
- ➤ A building cleaning cradle and its suspension equipment
- ➤ Goods and passenger lifts

AND Lifting Accessories for example:

- > Fibre or rope slings
- Chains
- ➤ Hooks and Eyebolts
- > Magnetic and vacuum devices

The manager should inspect to ensure safety in storage system by checking:

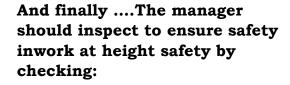


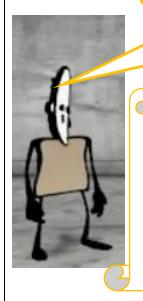
- Suitable and sufficient racking systems in good repair.
- Pallets in good repair.
- > Items stored safely and securely.
- > Appropriate equipment readily available to reach
- > High level storage.
- > Staff training in manual handling.
- Regular inspection records.
- > Installation certificate
- Signage
- ➤ Hazardous substances clearly identified, stored inappropriate containers in a safe manner.

And....The manager should inspect to ensure safety in manual handling by checking:



- ➤ A risk assessment specifically relating to manual handling issues
- ➤ A record of any training given to staff relating to handling techniques and use of equipment.
- ➤ Observed correct lifting technique demonstrated by staff, or correct use of mechanical handling aids/equipment.
- An appropriate number of mechanical lifting aids/equipment, in good working order, accompanied by adequate maintenance/service records, thorough examination certificates (see the section on LOLER)as required.





- Statutory inspection reports for MEWPS.
- ➤ Appropriate equipment for the task in good working order.
- > Staff adequately trained to fulfil their tasks.

Warehouse Health & Safety Checklist: A general checklist to ensure health and safety of employees by employer in the warehouse is given below. This is not specific for all kind of warehouse but can vary with the types of warehouse and job at the workplace.

Organi	sation	Date			
POLICY & RISK ASSESSMENTS S. No. Portionless Vac./N Comments					
S. No.	Particulars	Yes/N	Comments		
	Written, signed statement of general health &				
	safety policy				
	Arrangements in place for putting into practice				
	Reviewed on a regular basis and brought to				
	the attention of all staff				
	All relevant hazards identified				
	Identification of those who may be harmed andhow (employees, contractors, visitors etc)				
	Risks evaluated and the necessary precautionsput in place				
	Significant findings recorded and brought to)			
	the attention of all staff				
	Reviewed and updated regularly				

Organisation Da					
WORK EQUIPMENT					
S. No.	Particulars	Yes/N o	Comments		
	Only standard palletised loads wrapped				
	Machine adequately guarded – fixed guards on moving/dangerous parts, safe access via interlocked guards				
	Emergency stop button operative and easily Accessible	7			
	Mechanical parts & guarding regularly maintained Staff informed, instructed & trained in correct use, especially clearing blockages				
	Area around machine unobstructed at all times managed with suitable barriers, floor markings				
	Written Examination scheme and records for equipment subject to Pressure Systems testing				

Organisation D			
	WORKPLACE TRANSPORT		
S. No.		Yes/N o	Comments
	Drivers		
	Drivers trained, competent and authorised		
	Active supervision of driver behaviour (e.g. near misses, damaged racking)		
	Truck keys not left unattended in ignition		
	Reversing of delivery vehicles avoided unless absolutely necessary		
	Any necessary reversing overseen by trained banks men	d	
	Traffic Routes		
	Gangways/aisles of sufficient space to enable lift trucks to load/unload from racking safely		
	Systems in place to keep vehicles & pedestrians separated		
	Access to warehouse & other dangerous areas restricted to staff		
	Warning Signs located around traffic routes (e.g. FLT operating in area)	3	
	Protective barriers on entrances leading ont traffic routes	0	
	Floor/Traffic routes suitable for the vehicles using them (e.g. no excessive slopes/potholes)	S	

Vehicle routes kept free of obstructions & in good condition	
Suitable & marked pedestrian crossing points and walkways where possible	
Fixed mirrors on blind bends	
Sensible speed limits imposed & adhered to	
Staff & others working in vicinity of moving vehicles given training and high visibility clothing	
Parking of cars & vans only in marked, designated spaces away from external delivery/dispatch areas	
Suppliers/contractors informed of site rules & restrictions	
Vehicles	
Vehicles immobilised when not in use by designated driver (e.g. ignition keys removed)	
Drivers check trucks each day prior to start up	
Trucks regularly serviced and maintained	
LOLER Thorough Examination & certification for trucks and lifting accessories by competent person (6or12 monthly as LOLER requires)	
Truck features present and working (seat belts, roll cages, audible/visual alarms)	
Safe means of access/egress to rear of delivery vehicles (footholds, ladders, clean floors)	

Organisation Da		Date	ate	
	STORAGE SYSTEMS			
S. No.	Particulars	Yes/N o	Comments	
	Racking designed to be suitable for the load carriedand not modified	s		
	Signage on racking with information such a safeworking load (SWL) should be clearly displayed	s		
	Inspect racking regularly to make sure it is repaired and maintained properly and is safe, including 'expert' inspections carried out at intervals by acompetent person			
	Staff report any damage to racking immediately			
	System in place to make sure defective pallets are withdrawn from immediate use			
	Protective footwear used by all entering the Warehouse			
	Protective gloves provided for staff handling pallets			

Organisation			ate	
WORK AT HEIGHT				
S. No.	Particulars	Yes/N	Comments	
	All staff instructed never to climb racking Platform ladders for racking access kept in good condition			
	Safe use of free standing ladders for short duration work (condition, secured, footing; 4:1 slope)			
	Proprietary forklift cage/MEWPs used for high access,			
	properly secured & maintained; 6 monthly LOLER Thorough Examination			
	Competent contractors used for roof work (method statement, risk assessment, rescue plan)	:		
	Roof assumed to be fragile unless otherwise confirmed and fragile roof signs in place			
	Internal mezzanines – load bearing, edge protection, toe boards etc.			
C	Organisation	Date	ate	
	MANUAL HANDLING			
S. No.	Particulars	Yes/N o	Comments	
	Use of mechanical aids such as conveyors, sacktrucks			
	Staff manual handling training			

Manual handling tasks risk assessed according to HSE Manual Handling	
Assessment Charts (MAC Chart – INDG 383)	

Organisation		Date	ate	
HAZARDOUS SUBSTANCES				
S. No.	Particulars	Yes/N o	Comments	
	Vehicle Fumes	<u> </u>		
	Drivers not allowed to leave vehicles' engines			
	running in warehouse & other enclosed spaces.			
	Roller shutter doors & warehouse windows open, where practicable, to assist ventilation	3		
	Recharging of Truck Batter	ries	1	
	Batteries charged in designated, ventilated area			
	Safe system of work followed including use of	2		
	goggles, gloves & aprons			
	Potential sources of ignition controlled			

Activity

Activity 1: Verify with the checklist for warehouse procedure

Materials Required: Notebook, Pen, worksheet of warehouse standard procedure provided by teacher

Step by Step Procedure:

- 1. Take a sheet of standard procedure of warehouse
- 2. Fill appropriately in blanks
- 3. Submit to teachers

Activity 2: Verify with the checklist for manual handling

Materials Required: Checklist of manual handling and work at height provided by teacher, pen

Step by Step Procedure:

- 1. Take a checklist
- 2. Understand a simulated situation explained by teachers in the class
- 3. Based on instruction fill the checklist of manual handling and work at height

Activity 3: Prepare a chart

Materials Required: drawing sheet, pencil, eraser, colours

Step by Step Procedure:

- 1. Take a sheet
- 2. Prepare a chart of visual inspection at warehouse for general equipment safety, Lifting Equipment and Fork Lift Trucks, storage system and manual handling
- 3. Submit to the teacher for display in class

Check Your Progress

. Fill iı	the blanks	
1.	All workmen should be carefully	in the safe methods of ties)
2.	Warehousing is an important function of	(logistics)

3. If v	varehouse haveor staff have in place a
doo	cumented risk assessment should be implied. (five, more)
	is a most effective technique to ensure effective Quality ntrol of equipment's. (Visual Inspection)
	nployees should report work relatedand such death. (accidents, injuries)
	ery employee need to adoptworking practice to keep them The fromand at the workplace. (safe, hazards, risks)
B. True or	False
	ccept safe procedure at workplace which cannot amount of injury is alled unsafe condition.
	isual inspection of general equipment is not done by Fixed guards n moving parts of conveyor belts and stretch wrap machines.
	or manual handling manager should ensure that the person doing ne lifting has been trained to lift as safely as possible.
	he manager should Inspect to ensure safe transport by checking lind bends provided with fixed mirrors
c. a m	he manager should inspect to ensure safety in manual handling by hecking an appropriate number of mechanical lifting ids/equipment, in good working order, accompanied by adequate naintenance/service records, thorough examination certificates (see the section on LOLER) as required.
D.Short A	nswer Questions
1. What	do you understand with Standard operating procedure?
2. Write	down standard operating procedure for:
a. Comp	liance of the policy
b. Risk A	Assessments
c. Accide	ent Reporting
3. What	do you mean by visual inspection.

1. Prepare a chart showing safety equipment's of the warehouse.

D.CHECK YOUR PERFORMANCE

Answer Keys

MODULE-1: INBOUND GOODS

SESSION 1: INTRODUCTION OF INBOUND GOODS

A. Fill in the Blanks

1. Asset 2. Received 3. Warehouse 4. Expenses 5. Performance

B. Match the Columns

1. A, iii; 2. B, v; 3. C, i; 4. D, ii; 5 E, iv

SESSION 2: DISTRIBUTION AND SORTING OF INBOUND GOODS

A. Fill in the Blanks

- 1. purchase order 2. Warehouse Document Assistant 3. Delivery Optimization
- 4. Franchising method 5. delivery

B. Match the Columns

1. A, ii; 2. B, iii; 3. C, i; 4. D, v; 5 E, iv

SESSION 3: ADVANTAGES AND DISADVANTAGES OF INBOUND GOODS

A. Fill in the Blanks:

1. transportation 2. one relationship 3. efficiency 4. Milk Run 5. supply chain

B. Match the Columns

1. A, iv; 2. B, v; 3. C, ii; 4. D, i; 5 E, iii

SESSION 4: TESTING INBOUND GOODS

A. Fill in the Blanks

1. standard 2. purchase order 3. superior 4. brochure 5. Misplacement

B. Match the Columns

1. A, II; 2. B, III; 3. C, I, 4. D, V; 5 E, IV

MODULE 2: INBOUND DOCUMENTATION

SESSION 1: DOCUMENTS AND ITS TYPES

A. Fill in the Blanks

1. Manual or Electronic 2. Data 3. Performance 4. Commercial, Regulatory 5. Documentation

B. True or False

1-true, 2- false, 3-true, 4-false, 6-false

C. Multiple choice

1-d,2-d,3-c, 4-a

SESSION 2: INBOUND DOCUMENTATION AND PREPARATION

A. Fill in the Blanks

1-Receiving, 2-Received, 3-Goods Receipt Register, 4-Bin Card, 5-Inventory Card, 6-Issuance, 7-Transit Insurance.

B. State whether the following statement are True or False

1-true, 2-true, 3-false, 4-true, 5-false, 6-true, 7-true, 8-true

C. Multiple choice

1-d,2-c,3-b,4-a

SESSION 3: EVALUATE CHECKLIST

1. Fill in the Blanks

1- location, 2- honeycombing, 3- Quantity, 4- Personnel, 5-in and out checking

A. Multiple Choice Questions

1-b, 2-a, 3-a, 4-b, 5-b

B. True or False

1-True, 2- True, 3-False, 4- True, 5-true, 6-False

SESSION 4: IMPORTANCE OF INBOUND DOCUMENTATION

A. Fill in the Blanks

1- capital and operating, 2- raw materials, 3- Traceability, 4- Goods transaction, 5- Physical Inventory

B. True or False

1-False, 2 -True, 3- False, 4-True, 5-True

MODULE 3: CHALLENGES IN DOCUMENTATION

SESSION 1: DOCUMENTATION PROCEDURE AND ITS SIGNIFICANCE

A. Fill in the Blanks

1-Documents, 2-Bill of Lading, 3-Freight bill/ freight invoice, 4-Proof, 5-Consignor

B. State whether the following statements are True or False

1-True, 2-True, 3-False, 4-False, 5-False

SESSION 2: DOCUMENTATION ISSUES

A. Fill in the Blanks

1-Regional Transport Office, 2-Local , 3-Documentation, 4-Detention, 5-Under-utilization

B. True or False

1-False, 2-True, 3-True, 4-False, 5-True

SESSION 3: COMPILATION AND REPORTING TO MANAGEMENT

A. Fill in the Blanks

1-Precise, 2-Mandatory, 3-Issuing, 4-Multiple

B. True or False

1-True, 2-False, 3-True, 4-False

SESSION 4: ORGANISE WORKPLACE

A. Fill in the Blanks

1-Morale, 2-Focused, 3-Permanently, 4-Health, 5-Productivity

B. Multiple Choice Questions

1. Inefficient use of space, 2. Material well placed, 3. Save As, 4. Shut down

C. State whether the following statements are True or False

1-True, 2-True, 3-True, 4-False, 5-False

MODULE 4: HEALTH SAFETY AND SECURITY

SESSION 1: INTRODUCTION TO SAFETY PROCEDURES

A. Fill in the Blanks

1-medical, allied health professions, 2-heights, strengths, 3-loads, 4-inspected, 5-Harm, 6-Toxic, 7-Safety, 8-Personal, 9-First aid, 10- Protect, 11-Dangerous

B. True and False

1-true, 2-true, 3-false, 4-true, 5-true, 6-true

C.Multiple Choice Question

1-a,2-c,3-a,4-a,5-d,6-b

D. Match the Columns

1-B,2-F,3-E,4-G,5-H,6-C,7-D,8-A

SESSION 2: FUNCTIONS OF THE OFFICE EQUIPMENT

A. Fill in the Blanks

1-protective glasses,2- Equipment's, 3-respirators, 4-helmets, hard hats, 5-body potecion,6-waistcoats, jackets

B. True and False:

1-false, 2-true, 3-false, 4-true, 5-true, 6-true

SESSION 3: SECURITY MEASURES AND MATERIAL HANDLING

A. Fill in the Blanks

A. 1-identification, 2-manager, 3-Suppression, hazardous, air, 4-Forklift, 5-gloves, 6-Personal security

B. True or False

1-true, 2-false, 3-false, 4-false, 5-true, 6-true

SESSION 4: UNSAFE CONDITIONS AND VISUAL INSPECTION

A. Fill in the Blanks

1-instructed, duties, 2-logistics, 3-five, more, 4-Visual Inspection, 5-accidents, injuries, 6-safe, hazards, risks

B. True/False

1-False, 2-false, 3-True, 4-true, 5-true

Glossary

	1
Accident-	An incident which results in death, injury loss, or damage.
Accident Prevention	The systematic application of recognized principles to reduce incidents, accidents, or the accident potential of a system or organization.
Acute Effect –	A change that occurs in the body within a relatively short time (minutes, hours, days) following exposure to a substance.
Acute Exposure –	A single exposure to a hazardous agent.
Area Sampling -	Collection and analysis of representative samples of air in general work areas in order to determine the concentrations of any contaminants that are present.

Biological Agent –	Any living organism (for example, virus or bacteria) that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.
Chemical Agent –	A chemical substance that affects the body, a part of the body, or any of its functions. The effects may be beneficial or harmful.
Chronic Effect	A change that occurs in the body over a relatively long time (weeks, months, years) following repeated exposure or a single over exposure to a substance.
Chronic Exposure –	Repeated exposure to a hazardous agent.
Claims	state or assert that something is the case
Confined Space –	A space in which a hazardous gas, vapour, dust or fume may collect or in which oxygen may be used up because of the construction of the space, its location, contents, or the work activity carried out in it.
Consignments-	Goods/materials booked with the courier
Critical Injury-	The Occupational Health and Safety Act of Ontario defines critical injury as serious injury that:
	> is life-threatening
	> produces unconsciousness
	results in a substantial loss of blood
	involves the fracture of a leg or arm (but not a finger or toe)
	 involves the amputation of a leg, arm, hand or foot (but not a finger or toe)
	> consists of burns to a major portion of the body
	> causes the loss of sight in an eye
Danger Zone-	An area or location where the probability of injury is high (for example, in the vicinity of saw blades).
Dust –	Fine particles of a solid that can remain suspended in air. The particle size of a dust is larger than that of a fume.

Eliminate -	completely remove
Emergency Plan-	Detailed procedures for responding to an emergency, such as a fire or explosion, a chemical spill, or an uncontrolled release of energy. An emergency plan is necessary to keep order, and minimize the effects of the disaster.
Ergonomics –	An applied science that studies the interaction between people and the work environment. It focuses on matching the job to the worker.
Fire precautions-	The measures taken and the fire protection features provided in a building (e.g. design, systems, equipment and procedures) to minimise the risk to the occupants from the outbreak of fire.
Fire Prevention-	The concept of preventing outbreaks of fire, of reducing the risk of fire spreading and of avoiding danger to persons and property from fire.
First Aid-	The skilled application of accepted principles of treatment on the occurrence of an accident or in the case of sudden illness, using facilities or materials available at the time
Fragile -	Can be easily broken or damage
Fume -	Finely divided solid particles that are formed when a hot metal vapour cools and condenses.
Harm-	Injury to or death of persons, or damage.
Hazard –	The potential of any machine, equipment, process, material (including biological and chemical) or physical factor that may cause harm to people, or damage to property or the environment.
Hazardous Material –	Any substance that may produce adverse health and/or safety effects to people or the environment.
Health –	The World Health Organization has defined health as more than just the absence of disease. Rather, it is a state of complete physical, mental and social well being.

Housekeeping -	A way of controlling hazards along the path between the source and the worker. Good housekeeping means having no unnecessary items in the workplace and keeping all necessary items in their proper places.
Hygiene Practices-	A broad term for personal health habits that may reduce or prevent the exposure of a worker to chemical or biological substances. Hygiene practices include:
	> not smoking, eating or drinking in the work area
	> washing up before breaks and meals
	> removing contaminated clothing before leaving work
	Keeping street clothes separate from contaminated work clothing.
Improper -	Not in accordance with accepted standards
Ingestion –	The swallowing of a substance.
Inhalation –	The breathing in of an airborne gas, vapour, fume, mist or dust.
Injection –	To force or drive liquid or gas into the body
Liquid-	A formless fluid that takes the shape of its container, but does not necessarily fill it.
Loss-	Personal injury and/or asset damage.
Melting Point -	The temperature at which a solid changes to a liquid. For mixtures, a range of temperatures may be given.
Mistake-	A human action that produces an unintended result.
Noise-	Unwanted sound that can lead to hearing loss or stress, or interfere with the ability to hear other sounds or to communicate.
Policy-	A statement of corporate intent, which will be adopted and pursued as advantageous or expedient.
Precautions -	A measure taken in advance to prevent something dangerous

Procedure-	A step-by-step description of how to do a task, job, or activity properly.	
Radiation -	The energy transmitted by waves through space or some medium. There are two types of radiation.	
Reducing Agent –	A substance that accepts oxygen or gives up hydrogen during a chemical reaction.	
Risk –	The probability of a worker suffering an injury or health problem, or of damage occurring to property or the environment as a result of exposure to or contact with a hazard.	
Safety-	Freedom from (unacceptable) risk of harm to persons. Safety may also encompass environmental or asset damage/loss.	
Sampling -	The process of taking small representative quantities of a gas, liquid, or solid for the purpose of analysis.	
Solvent -	A substance that dissolves other substances. Many solvents are flammable.	
Substitution -	The replacement of toxic or hazardous materials, equipment or processes with those that are less harmful.	
Toxic-	Inherent potential of a substance to cause harm.	