BASIC COST ACCOUNTING

(INTRODUCTION AND COSTING FOR MATERIAL)

POLYTECHNIC SERIES

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BASIC COST ACCOUNTING (INTRODUCTION AND MATERIAL CONTROLS) POLYTECHNIC SERIES

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PREFACE

Cost Accounting is part of quality management and has become one of the most important approaches to assist the management team in their key tasks including planning, evaluating, analysing, controlling, and monitoring the organization's activities for either manufacturing or services sectors. Everyone who works in an organization needs to learn about costing and strive to enhance quality and deliver improvements for their product or services offered in the market.

The first chapter of this book enable readers to develop knowledge and understand the basic cost concepts such as the cost unit, cost centre, cost object, cost elements, cost classification, product costs, period cost, and cost behaviour.

In the second chapter, readers can learn about controlling materials costs associated with the production process including the function of purchasing department, the purchasing procedure, and the store control procedure using economic order quantity, inventory control level, and inventory turnover ratio. This chapter also enable readers to apply inventory recording systems which are First in First Out, Last in First Out, and Weighted Average methods.

We hope that students or everyone who is planning to join and work in an organization in the future and everyone who has just joined an organization will benefit from this book. Happy Reading!

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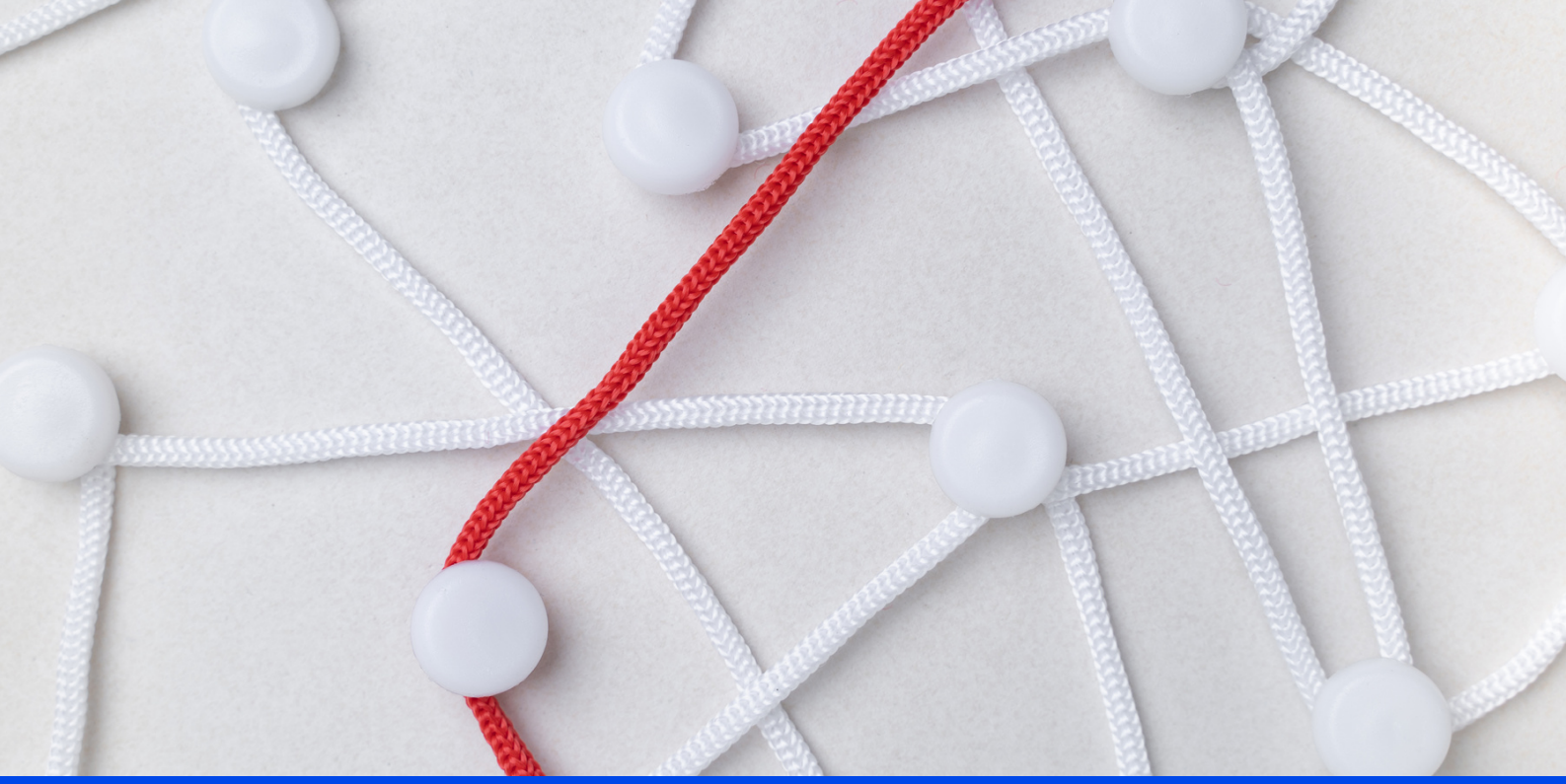
CONTENTS **PAGE**



CHAPTER ONE
INTRODUCTION

LEARNING OUTCOME :

1. **Identify the concept, principle, methods and techniques of cost.**
2. **Identify the cost accumulation and cost assignment.**
3. **Prepare statement of cost.**

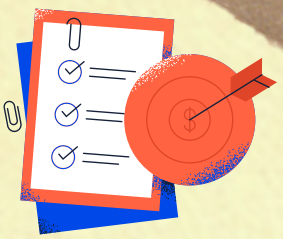
INTRODUCTION TO COST ACCOUNTING

COST ACCOUNTING

Cost Accounting is a form of managerial accounting which capture all elements of cost incurred to accomplish a purpose, to carry on an activity or operation, or to complete a unit of work or specific job.

FINANCIAL ACCOUNTING

Financial accounting is the field of accountancy concerned with the preparation of financial statements for decision makers such as stockholders, suppliers, banks, employees, government agencies, owners and other stakeholders.



THE IMPORTANCE OF COST ACCOUNTING TO THE MANAGEMENT

Planning

To identify and select the best alternatives that best suit with the organization's objective.

Controlling

Managers ensure that the plan is being followed.

Performance Evaluation

Evaluating the profitability of individual products and product lines. Determining the relative contribution of different managers and different parts of the organization. For non profit organizations, evaluates the effectiveness of managers, departments and programs.

Other Importance

- Identify and manage efficient/inefficient departments
- Identify profitable/unprofitable products or services.
- Identify areas of wastage and propose remedial actions.
- Analyze the effects of alternative courses of action.

Let's compare

Cost Accounting & Financial Accounting

Cost Accounting	Financial Accounting
Legal Requirements	
The information should be produced only if it is considered that the benefits from the use of the information	Statutory requirement for public limited companies to produced annual financial accounts.
Focus of the business	
Focus on small parts of the organization.	Describe the whole of the business.
GAAP	
Not required to adhere to GAAP. Providing information for internal purposes and useful for managers relating to decision making, planning and controlling.	FA statements must be prepared to conform with legal requirements and the GAAP. Essential to ensure the uniformity and consistency that needed for external financial statements.

Let's compare

Cost Accounting & Financial Accounting

Cost Accounting	Financial Accounting
Time Dimensions	
Concerned with future information as well as past information.	Reports what has happened (historical).
Reports Frequency	
Reports on various activities may be prepared at daily, weekly or monthly.	A detailed sets of financial accounts is published annually.
Users	
Internal to the organisation. Example; managers, employees, and decision makers.	internal and External user Example; owner, manager, creditors, Tax regulators, suppliers.
Reliability of Information	
provide a complete analysis of a company's detailed costs.	Transactions recorded in the accounting system verified with the objective evidence.

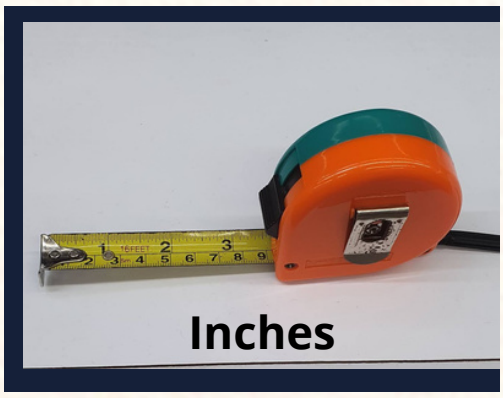
BASIC COST CONCEPTS

1. Cost Unit

Refers to the unit of quantity of product, service, or time (or combination of these) in relation to which costs may be ascertained or expressed.

A simple unit represents a single standard measurement like per kilogram, per piece and per metre.

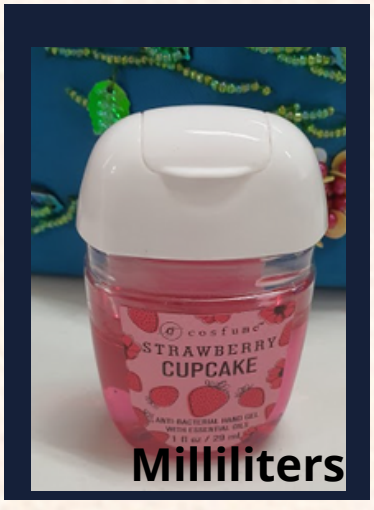
A complex unit uses a combination of two simple units like per kilowatt-hour, per tonne-kilometre and per patient-days.


Inches

liters


kilometer

Milliliters

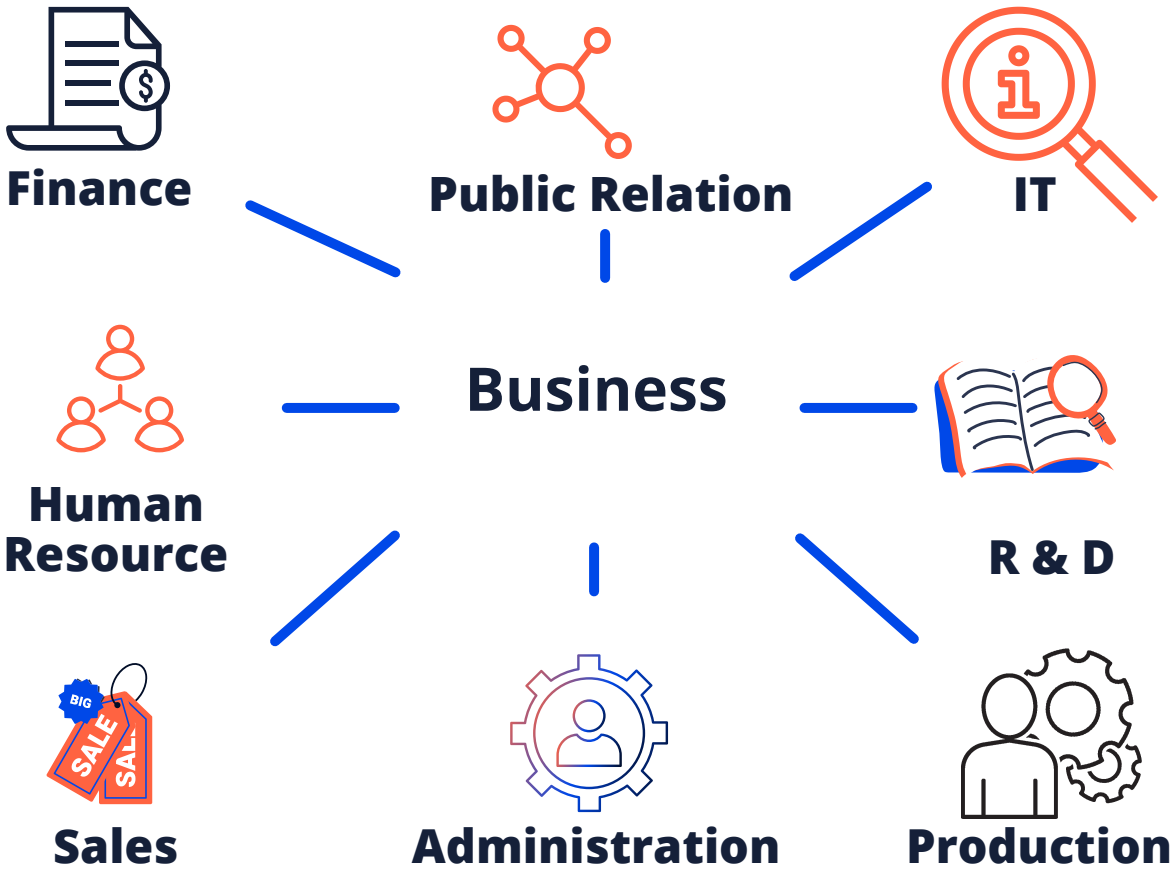


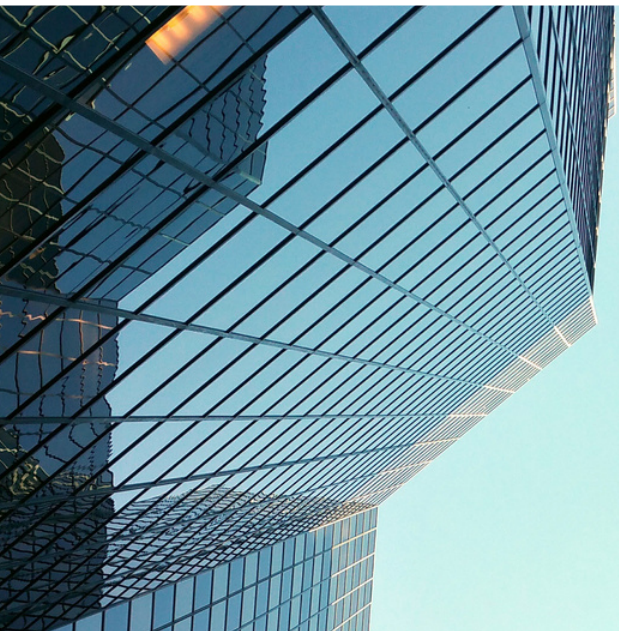
Milliliters


Pieces.

2. Cost Centre

CIMA defines Cost Centre as “a production or service, function, activity or item of equipment whose costs may be attributed to cost units.



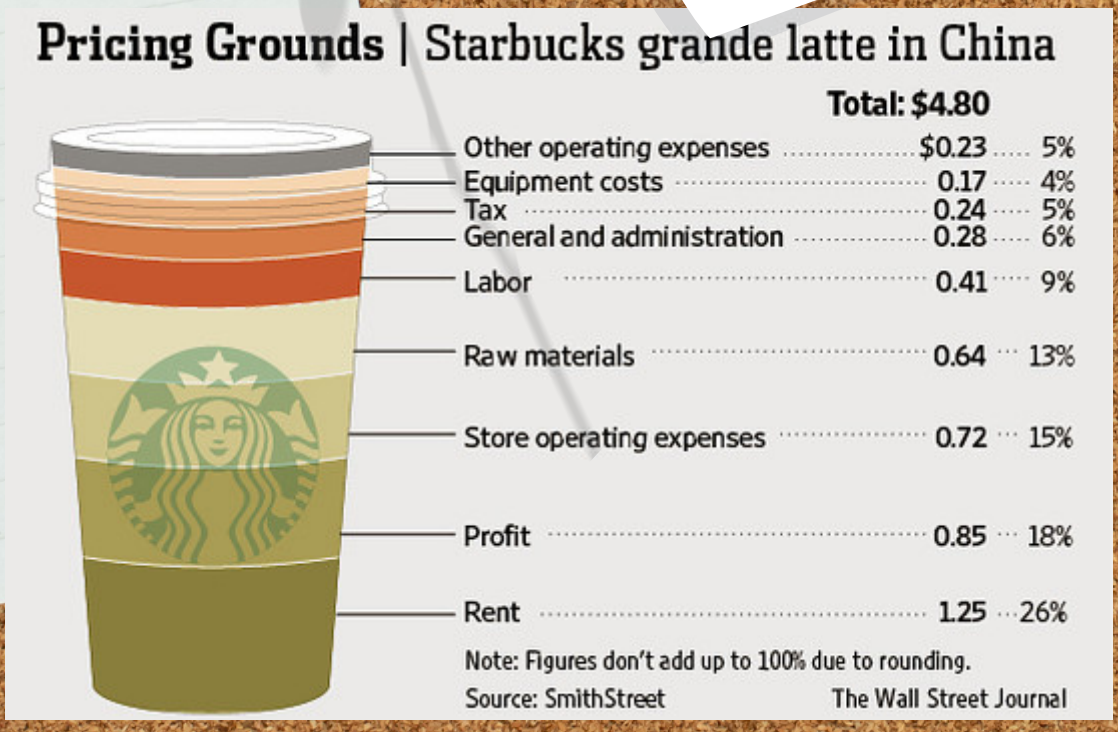


A cost centre is a department or function within an organization that does not directly add to profit but still costs the organization money to operate. Cost centres only contribute to a company's profitability indirectly.

3. Cost Object

Cost Object is the method of measuring the cost of a product, segment, customer, or another object separately so as to determine the exact cost along with the determination of the selling price.

A Cost Object is anything for which a cost is to be calculated or that makes you incur a cost. It could be anything for which a company plans to calculate costs separately. A cost object could be a part of the process to come up with the pricing of a product or service.



4. Conversion Cost

Conversion costs are the costs that are incurred by manufacturing companies when converting raw materials into finished goods.

Direct Labour **Direct Materials**

Finished Goods

It is the direct labor plus any manufacturing overheads needed to convert raw materials into a finished product. In other words, conversion costs are associated with converting materials to an actual product.

5. Opportunity Cost

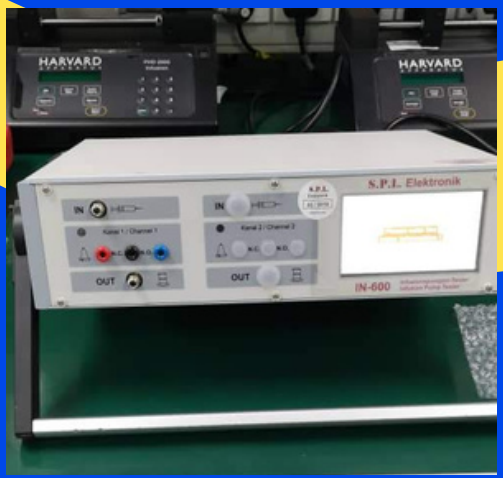
Opportunity cost is the loss of potential profit or gains when one alternative is chosen. The concept is useful simply as a reminder to examine all reasonable alternatives before making a decision.

The cost that measures the opportunity that is lost or sacrificed.

Example:

Alternative 1: Buy a new machine for RM50,000.
Alternative 2: Training personnel RM30,000.

If alternative 1 is chosen, the opportunity cost is alternative 2.



Alternative 1

or

Alternative 2

6. Incremental Cost

Incremental Cost refers to the additional cost incurred in undertaking certain actions such as expanding the production level or adding a new product to the product line.

An incremental cost or differential cost is a business planning analysis that looks at the additional cost to the company if a particular action is taken. In other words, if a company decides to take action on a new project, what extra expenses will the new project create?

Example:
Adding a new accessories for the current product line will increased certain cost such as material cost.

REPAIR

MAINTENANCE

ACCESSORIES

7. Replacement Cost

Replacement cost is the amount of money required to replace an existing asset with an equally valued or similar asset at the current market price. In other words, it is the cost of purchasing a substitute asset for the current asset being used by a company.

Example:
The Present Value of Machinery XYZ is RM15,000.

Replacement cost for the machinery XYZ is RM25,000.

REPLACEMENT COST:

Cost of replacing with an item that performs the same function or having the similar characteristics.

8. Sunk Cost

Profile

All sunk costs are fixed costs but not all fixed costs are sunk costs.

Example

- Purchase cost of machinery.
- Purchase cost of equipment.
- Salaries
- Repairing machine
- Depreciation
- Rent.

A sunk cost refers to money that has already been spent and cannot be recovered. These costs are excluded from consideration of making future decisions, as they cannot be recovered and not relevant to future decisions. It will remain the same regardless of the outcome of a decision. It is also known as retrospective cost.

9. COST ACCUMULATION

Cost accumulation is the process of collecting all costs information using the cost accounting system. It is a process of collection of all relevant data regarding the various costs incurred at various stages of production.

Cost Accumulation calculates all manufacturing costs in a sequential pattern. It considers all costs in the production process, starting from raw materials to the finished goods.

10. COST ASSIGNMENT

Cost assignment is about assigning costs to cost objects. It is the allocation of costs to the activities or objects that triggered the incurrence of the costs.

Direct Labour- chef

BORANG D (KAEDAH 13)

PERAKUAN PENDAFTARAN
AKTA PENDAFTARAN PERNIAGAAN 1956

Dengan ini diperakui bahawa perniagaan yang dijalankan dengan nama

NO. PENDAFTARAN: [redacted]

telah didaftarkan dari hari ini sehingga 1 SEPTEMBER 2022 di bawah Akta Pendaftaran Perniagaan 1956, beralamat di [redacted]

Bil. Cawangan: TIADA

Bertarikh di SISTEM EZBIZ pada 2 SEPTEMBER 2021.

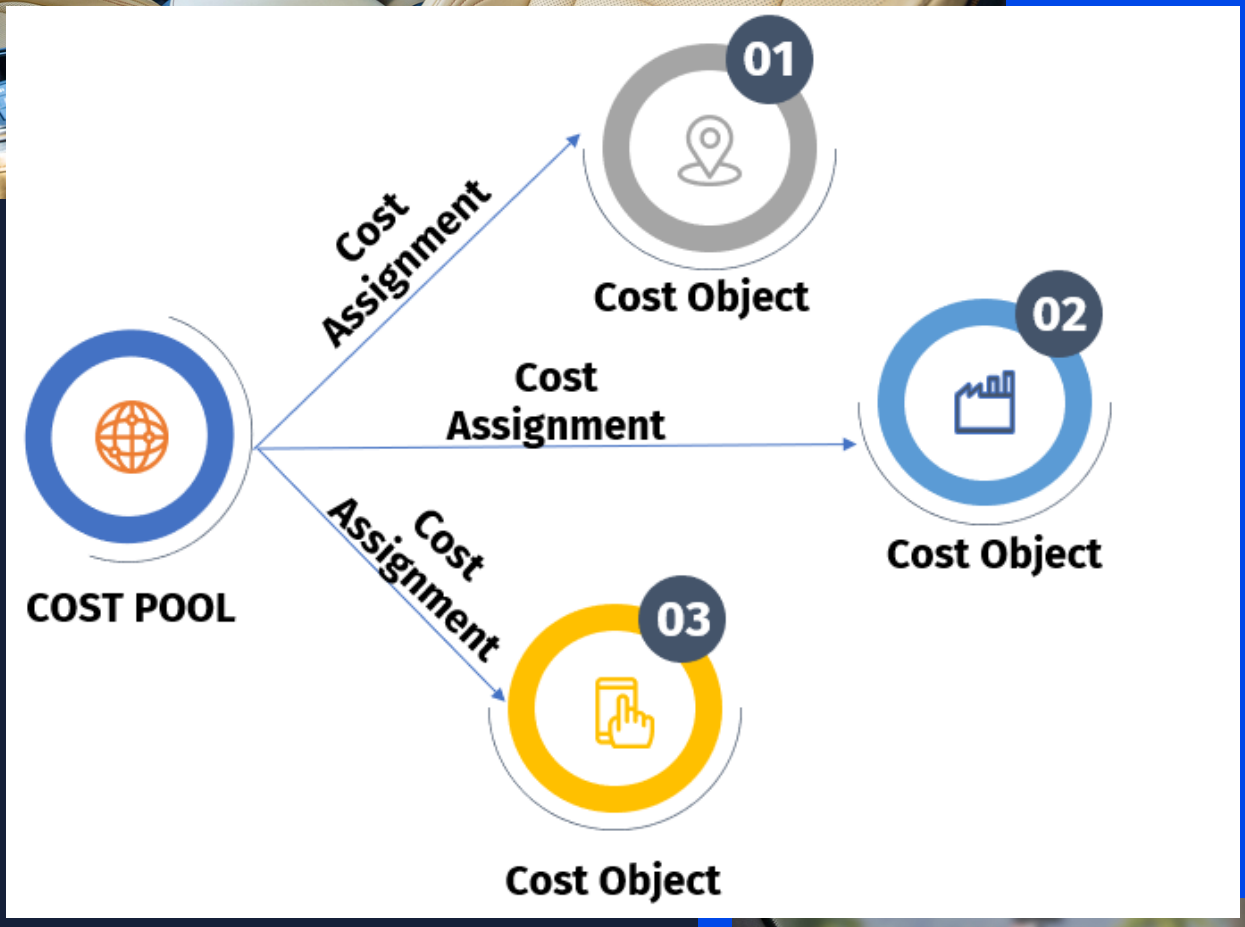
NOR AZIMAH BINTI ABDUL AZIZ
Pendaftar Perniagaan
Suruhanjaya Malaysia

Example : Bakery

Direct Material - raw materials for baking.

Direct Expenses- business registration fees or licensing fees.

COST ACCUMULATION VS COST ASSIGMENT



Cost allocation is a sub-process of cost assignment, which is the overall process of finding total cost of a cost object.

11. PRODUCT COST

Product cost are related to the goods purchased or produced for resale.
If the products are sold, the product cost will be included in the cost of goods sold and recorded as expenses in current period.

If the products are unsold, the product costs will be included in the closing stock and recorded as assets in the balance sheet.

12. PERIOD COST

Period costs are the costs that your business incurs that are not directly related to production levels. These expenses have no relation to the inventory or production process but are incurred regularly, regardless of the level of production.

Period cost is related to the operation of a business. They are treated as a fixed costs and charged as expenses when they are incurred.
They should not be included in the stock valuation.

Period Cost

Selling expenses:

- Marketing Expenses
- Sales personnel salaries
- Commission expenses

Administration expenses:

- Office personnel salary
- Office supplies
- Depreciation for Office Equipment.

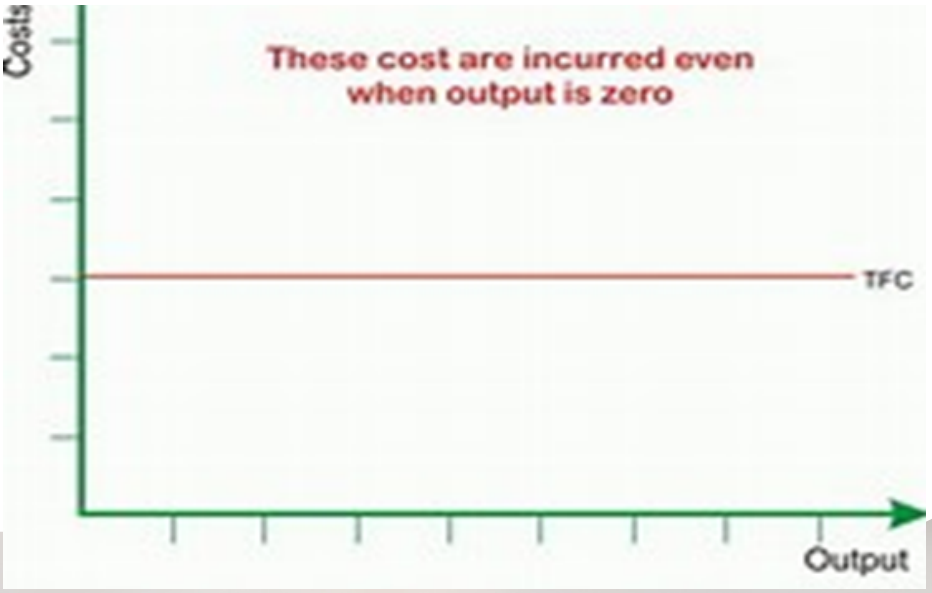
13. Cost Behaviour

Costs can be classified into variable, fixed, semi-variable, or step-costs according to how they behave with respect of changes in activity levels.

- Fixed Cost
- Variable Cost
- Semi Variable Cost

Fixed Cost

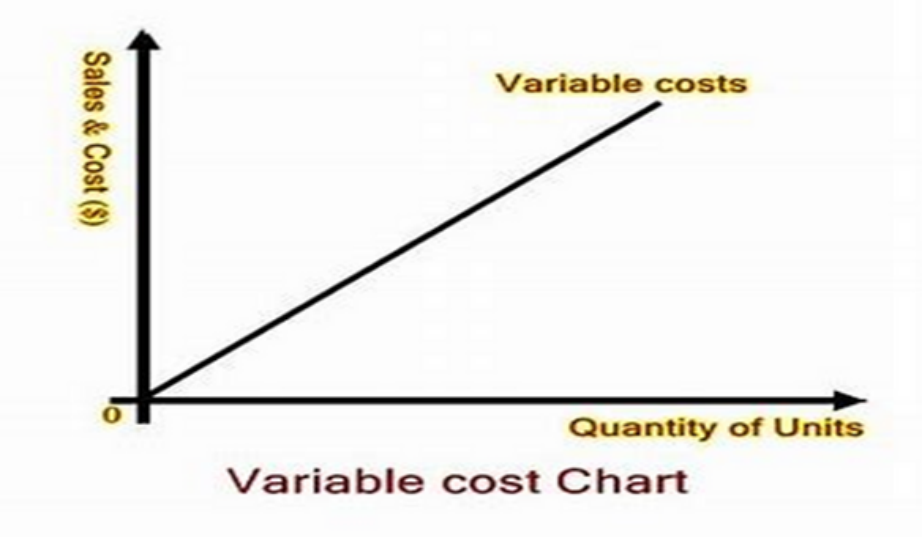
Total fixed cost remains constant over a relevant range of activity level but unit fixed cost falls with an increase in activity volume.



Example: rent, insurance, interest on loan.

Variable Cost

It increases or decreases in direct proportion to levels of activity, but the unit variable cost remains constant.

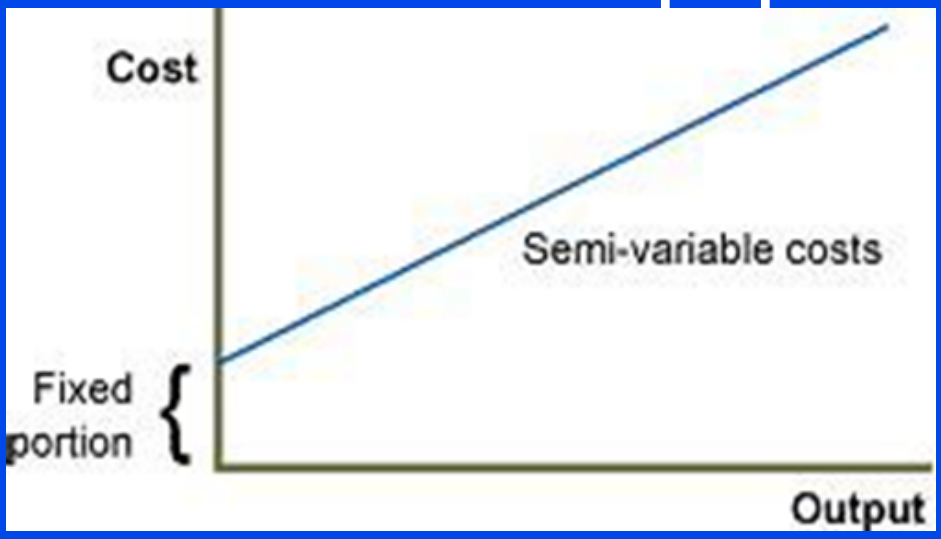


Variable cost Chart

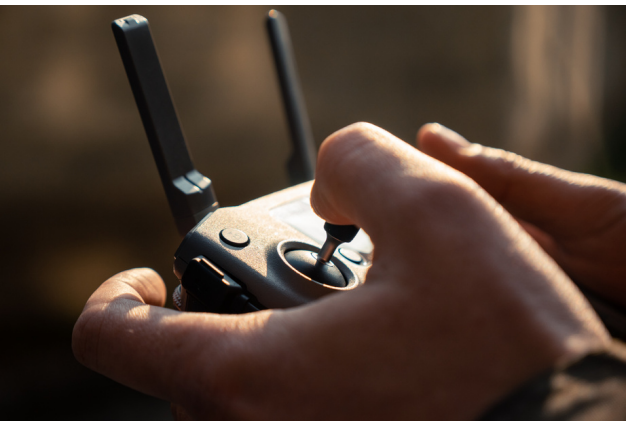
Example: direct materials and direct labour

Semi Variable Cost

It consist of both fixed and variable cost. It increases or decreases with activity level but not in direct proportion.



Example: Telephone, water and electricity,



Controllable costs

For planning and control purposes, costs can be classified as controllable or non-controllable.

CONTROLLABLE COSTS

Controllable costs are costs that are within the control of managers. Examples include production wastage, production efficiency and product reworks. With proper planning and control, production managers are able to reduce cost.

NON-CONTROLLABLE COSTS

Whilst non-controllable costs are those costs beyond the manager's control. Example : factory insurance premium and factory rent. These cost are treated as fixed because they are not targets for cost reduction and unavoidable.

STATEMENT OF COST

1. A cost statement or cost sheet is a statement that shows the various components of total cost for a product or services and shows previous data for comparison.

2. The cost statement is also used to set the ideal selling price of a product based on the cost sheet.

3. Components of cost are constituted mainly of prime cost, factory cost or manufacturing overhead, administration overhead and selling and distribution overhead.

4. Prime cost:
This comprises direct material, direct wages, and direct expenses.

5. Factory cost:
This is made up of prime cost plus factory overhead, which includes indirect wages, indirect material and indirect expenses.
Factory cost is also known as works cost, production cost, or manufacturing cost.

FORMAT
STATEMENT OF COST

NAME OF COMPANY

THE STATEMENT OF COST FOR THE YEAR ENDED _____

	RM	RM	RM
Raw Material :			
Opening Stock		XXX	
(+) Purchase	XX		
(+) Carriage Inward	XX		
(-) Return Outward	(XX)		
		XX	
(-) Closing Stock		(X)	
Cost of Materials Consumed			XXX
Direct Wages			XX
Direct Expenses:			
Rental of specific machine		XX	
Royalty		XX	
			XX
PRIME COST			**XXX**
(+)Manufacturing Overhead:			
Depreciation of machinery/plant etc		XX	
Insurance of factory		XX	
Salary of factory engineer		XX	
Power supply		XX	
General expenses of factory		XX	
Indirect raw material/wages		XX	
Rent and Rates of the factory		XX	
			XXXX
(+) Opening Stock of Work In Progress			XX
(-) Closing Stock of Work In Progress			(X)
PRODUCTION / MANUFACTURING COST			**XXX**
(+) Opening stock Finished Goods			XX
(-) Closing stock of Finished Goods			(XX)
COSTS OF GOODS SOLD			**XXX**
(+) Administrative Overhead			
Depreciation of office equipment/furniture/fittings etc		XX	
Salary of Office clerk/manager		XX	
Stationery		XX	
Office Insurance		XX	
Office Rent and Rates		XX	
Bank Charge		XX	
Interest on loan		XX	
Office general expenses		XX	
			XXX
(+) Selling and Distribution Overhead			
Advertising		XX	
Promotion		XX	
Salesman Commission		XX	
Salary of van/lorry driver		XX	
Depreciation for lorry/van		XX	
Other expenses for lorry /van		XX	
			XX
TOTAL COST			**XXX**
(+) Profit/(-) Loss			XXX

Exercise

HOMEWORK & STUDY

Tick the question that you have successfully done.

- Question 1 ☐
- Question 2 ☐
- Question 3 ☐
- Question 4 ☐
- Question 5 ☐
- Question 6 ☐

EXERCISE

QUESTION 1

GREEN Manufacturing Company submits the following information on 31 December 2020:

	RM
Sales for the year	275,000
Inventories at the beginning of the year:	
Finished goods	7,000
Work in progress	4,000
Purchase of the materials	110,000
Materials inventory:	
Beginning	3,000
Closing	4,000
Direct Labour	65,000
Factory Overhead was 60% of the direct labour cost	
Inventories at the end of the year:	
Work in progress	6,000
Finished goods	8,000
Other expenses for the years:	
Selling expenses 10% of sales	
Administration expenses 5% of sales	

Based from the above information, prepare a statement of cost.

QUESTION 2

The information below extracted from the books of RI Manufacturing Co. for the year ended 31 December 2020.

	RM
Sales	200,000
Opening stocks : Finished goods	5,000
: Work in progress	2,000
Purchased of materials	100,000
Materials stocks as at : 31 December 2019	4,000
: 31 December 2020	3,000
Direct labour	50,000
Closing stocks : Finished goods	8,000
: Work in progress	5,000
Other expenses :	
Sales expenses was 10% from sales value	
Administration expenses was 5% from sales value	
Manufacturing overhead was 60% from direct labour cost	

Prepare Statement of Cost for the year ended 31 December 2020 for RI Manufacturing Co.

QUESTION 3

The information below extracted from the books of MAYA Manufacturing Co. for the year ended 31 December 2020.

	RM
Direct Material	300,000
Direct Labour	150,000
Depreciation of factory building	20,000
Depreciation of office building	15,000
Depreciation of staffs' car	10,000
Machinery maintenance expenses	1,000
Insurance of staffs' car	1,500
Insurance for office building	1,200
Insurance for factory	1,200
Salary : Office manager	25,000
: Engineer	25,000
Electricity (including for administration office RM3,000)	10,000
Advertisement	5,000
Promotion	6,000
Manufacturing general expenses	150,000
Office general expenses	50,000

Prepare Statement of Cost for the year ended 31 December 2020 for MAYA Manufacturing Co.

QUESTION 4

The following are the information extracted from MQH Manufacturing books for the year ended 31 December 2020.

	RM
Opening Stock : Raw materials	2,300
Finished goods	4,860
Work in progress	2,500
Purchased of raw materials	68,700
Direct wages	40,200
Indirect wages	8,900
Power and electric	4,600
Insurance : Factory	1,556
: Office	1,244
Rent : Factory	6,667
: Office	5,333
Machinery expenses	1,400
Manufacturing general expenses	980
Depreciation: Plant and machinery	3,600
: Office equipment	1,200
Sales and distribution expenses	6,800
Inport duty on raw materials	1,000
Royalties	3,000

Additional information:

a)	Closing stock	:	Finished goods	RM4,450
			Raw materials	2,880
			Work in progress	3,000
b)	Power and electricity expenses are to be portioned to office and factory at the ratio of 2 : 3.			
c)	Accrual expenses	:	Sales and distribution expenses	RM200
			Direct wages	150

You are required to prepare Statement of Cost for MQH Manufacturing for the year ended 31 December 2020.

QUESTION 5

Anna Delights involved in bakery business. The following are the financial information of the company for the year ended 31 December 2020.

Units sold (Sales price per unit RM9)	40,000
	RM
Purchase :	
Powder	70,000
Sugar	20,000
Baking powder	1,000
Labour :	
Baker's salary	24,000
Factory cleaner's wages	6,000
Van driver's salary	12,000 per driver
Specific machine rental for dough mixing	34,000
Royalty	6,000
Depreciation:	
Machinery	32,000
Van (used for distribution of bread)	8,000
Rental for building	8,000
Insurance of building	6,000
Utilities	6,480

INVENTORY	1/1/2020	31/12/2020
Powder	3,000	1,000
Sugar	1,600	1,800
Baking powder	300	500
Work in progress	26,000	29,000

Additional information :

a) Rental for building, insurance of building and utilities have to be portioned to production department for ¾ and the balance is for administration department.

b) Royalty was paid for the recipe of bread and based on quantity of unit produced.

You are required to prepare Statement of Cost for the year ended 31 December 2020 and show the PRIME COST, OVERHEAD COST, TOTAL COST and PROFIT or LOSS for Anna Delights.

QUESTION 6

Soft & Safe is a company produced baby care products. The following extracted from the company's book as at 31 December 2020.

	RM
Purchase of Raw Materials	13,000
Direct Wages	10,000
Factory's salaries	6,000
Royalty	12,500
Carriage inward for raw materials	6,000
Factory rental	1,000
Electricity and power	2,500
Stock at 1/1/2020:	
Raw materials	2,000
Finished goods (4,000 units)	1,100
Work in process	3,300
Stock at 31/12/2020:	
Raw materials	2,300
Finished goods (6,250 units)	1,000
Work in process	7,250

Promotion expenses was RM0.30 each for unit sold which is 25,000 units had been produced during the year. Royalty was paid based on unit produced.

You are to required to:

a) prepare Cost Statement for the year ended 31 December 2020
b) calculate the profit of selling price was 500% on the purchase of raw materials.

Scan the QR code for the answers guide!

CHAPTER TWO
COSTING FOR MATERIALS

LEARNING OUTCOME :

1. **Describe the materials control.**
2. **Explain purchasing department's function, purchasing procedure, storing control and raw material issuing procedure.**
3. **Determine stores control procedures for material using Economic Order Quantities, Inventory Control Levels and inventory turnover ratio.**
4. **Record inventory using perpetual and periodic inventory system.**

DIRECT MATERIALS

Cost of raw materials or parts that go **directly** into producing products

PRIME COST

Direct Materials are grouped under Prime Cost.

FACTORY WEB TOUR

https://www.youtube.com/watch?v=BbcKZ1lRDuA

QUESTION:

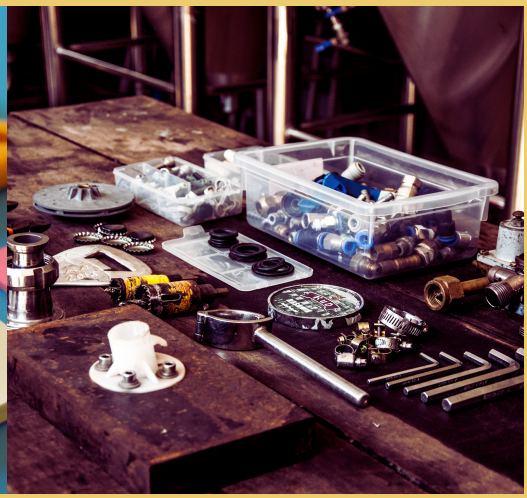
1. **Identify direct materials used in the Porsche 911" manufacturing process.**
2. **Identify indirect materials used in the Porsche 911" manufacturing process.**

INDIRECT MATERIALS

Materials that are used in the production process but not directly traceable to the product.
Example: glue, oil, tape and cleaning supplies are classified as indirect material.

MANUFACTURING OVERHEAD COST

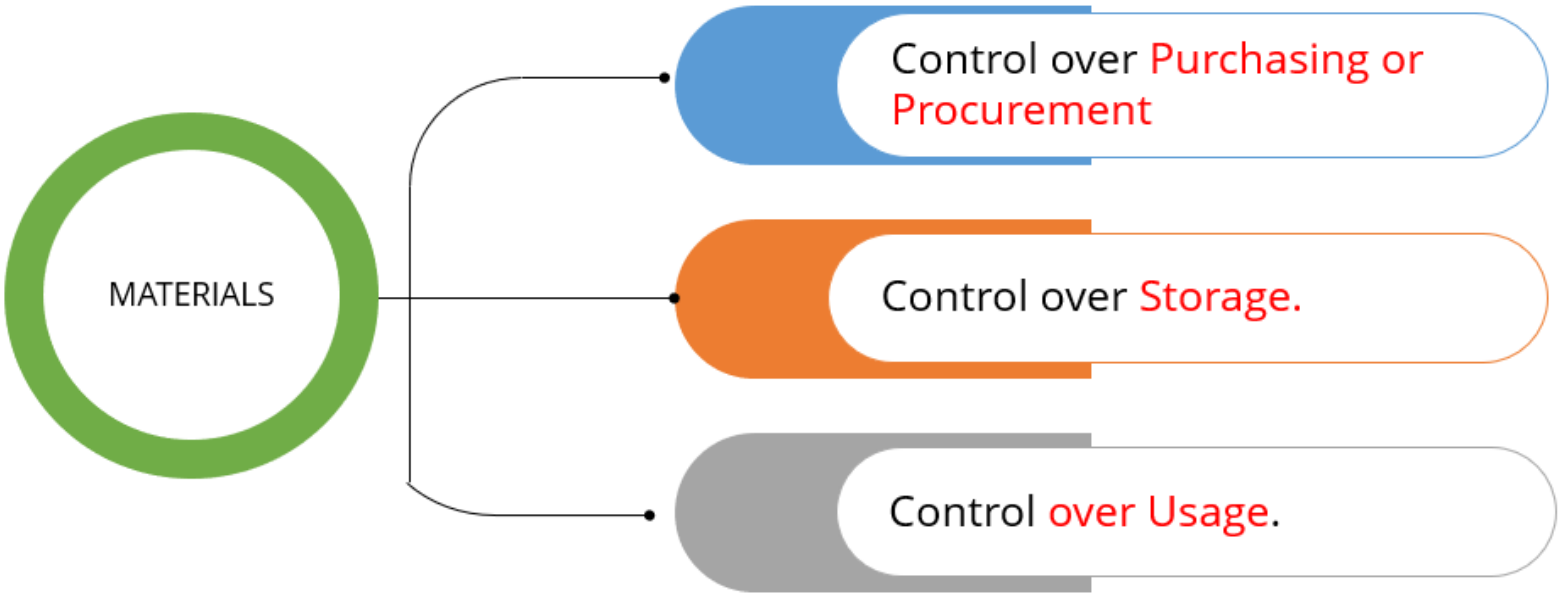
Indirect Materials are grouped under **Manufacturing Overhead Cost.**



MATERIALS CONTROL

Investment in materials normally is very high. As such, proper control has to be maintain. Control of materials are spread over three major areas.

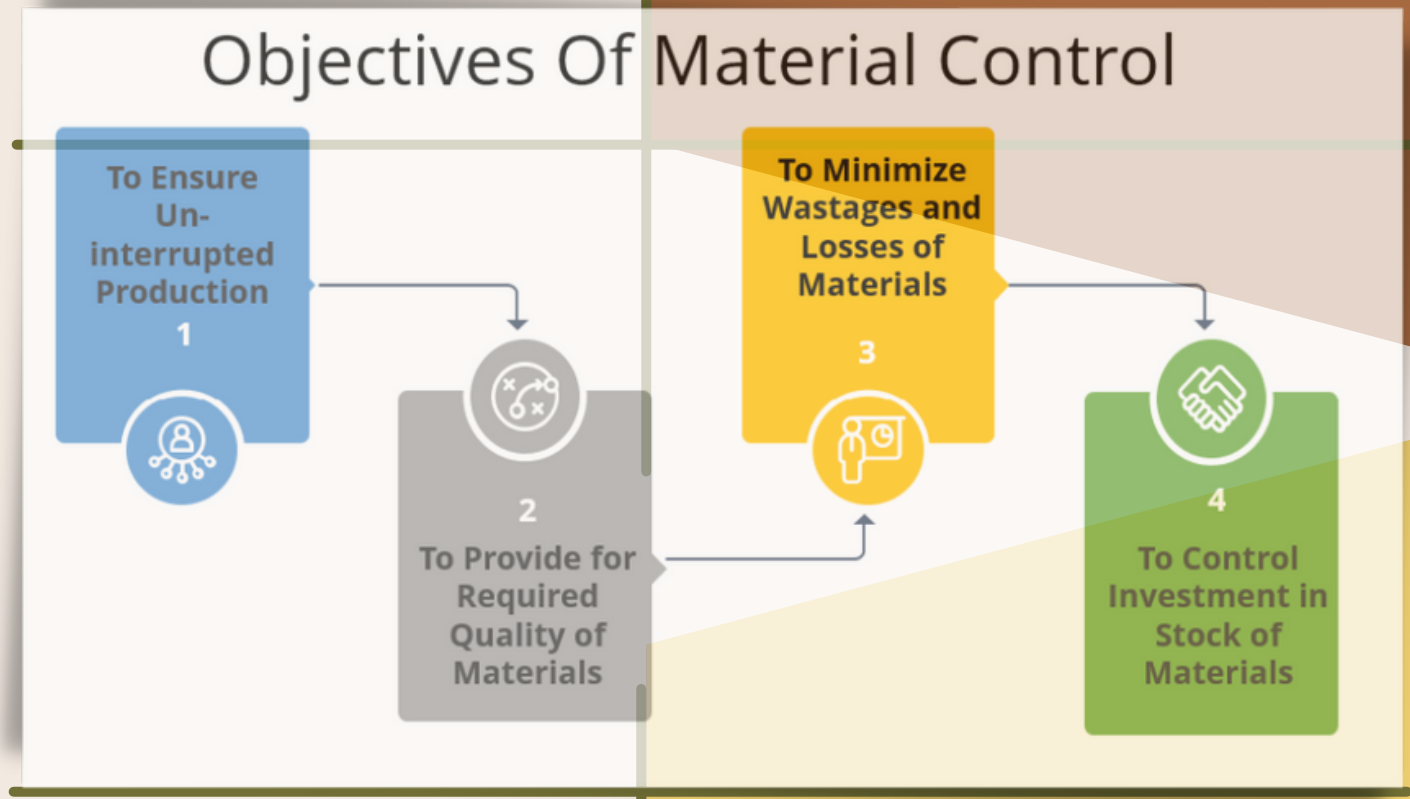
Material Control Involves



MATERIALS CONTROL

A system or procedure that ensures that various functions or department within an organization coordinate their activities to achieve efficient materials planning, purchases and usage.

MATERIALS CONTROL OBJECTIVES



"Material control is a systematic control over purchasing, storing and consumption of materials, so as to maintain a regular and timely supply of materials, at the same time, avoiding overstocking."

"Materials control is the systematic control over the materials at all its stages—procurement, storage and usage—so as to help in maintaining regular and uninterrupted flow of the materials in the production."

EFFECTIVE MATERIAL CONTROL

Effective Material Control System

Purchasing Method
Uses Effective purchasing Methods.

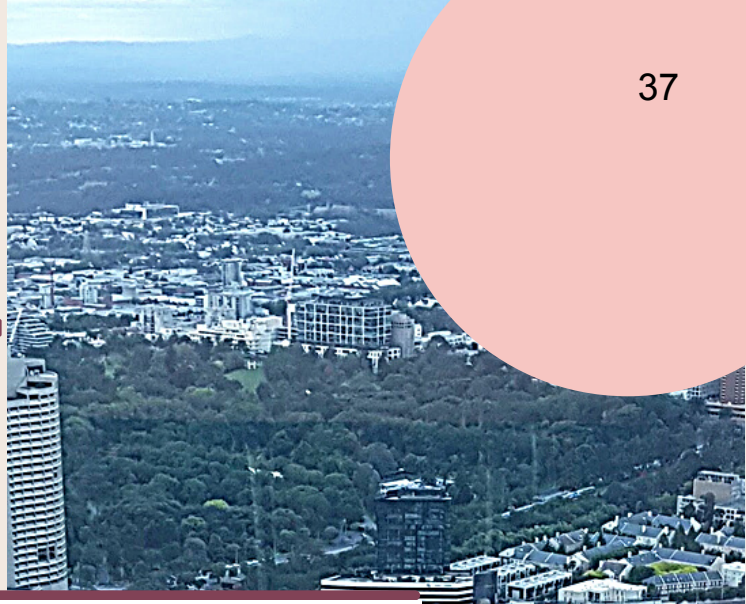
Form & Records
Uses proper forms and records.

Storage
Provide adequate storage facilities and operates efficient stock control system.

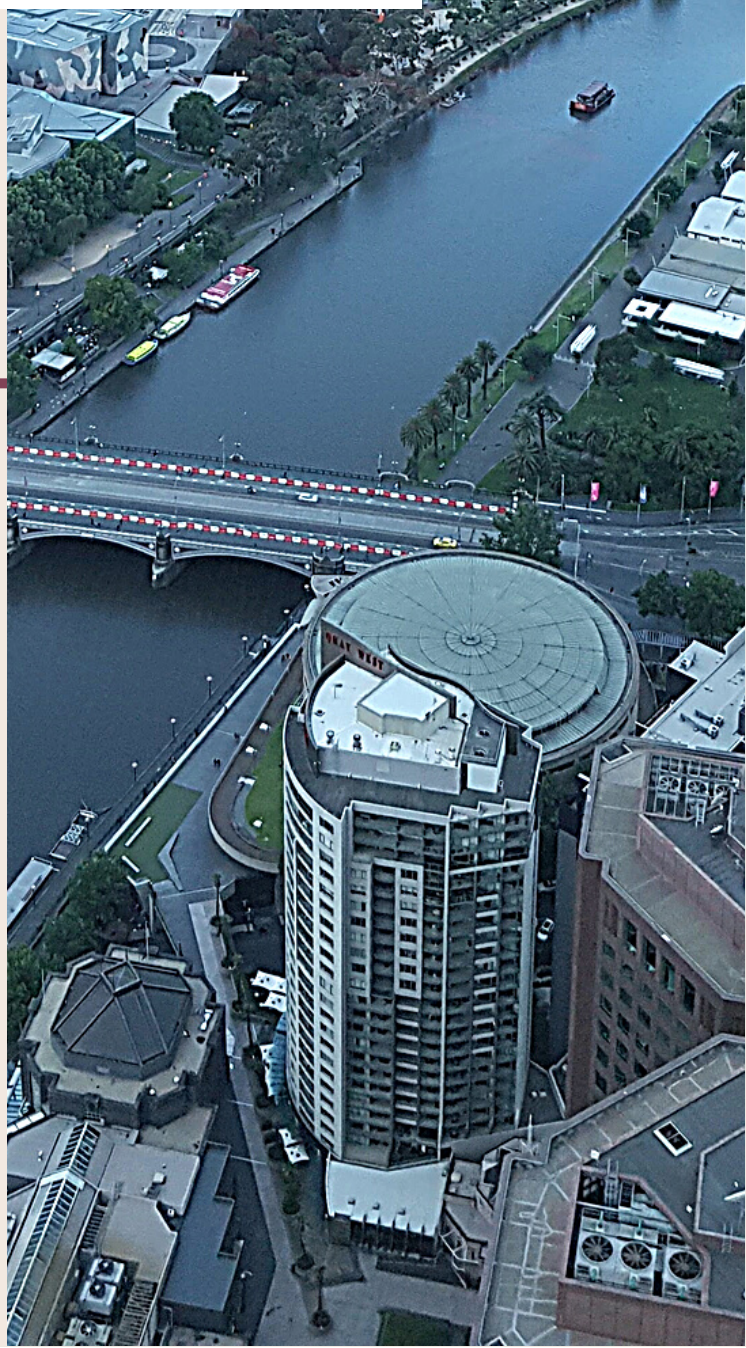
Planning & Scheduling
Maintains proper planning and scheduling of materials requirements.

Material Cost
Maintain materials cost within budget.

PURCHASING DEPARTMENT FUNCTION



Flow of Materials from Purchasing Department to Store Department and usage in Production Department.



Purchasing Department is responsible for the procurement process. This department ensure that goods must be procured at the right time, in the right quantity, in the right quality, at the right specification and the right price. If the purchasing process falls down, business will not be able to manufacture products and meet the customer demand.

PURCHASING DEPARTMENT FUNCTION

Strategic Vs. Operational Role

Strategic purchasing is responsible for planning all the high-level tasks and decisions related with procurement.
Operational purchasing, also known as tactical purchasing, takes care of the administrative aspects of purchasing.

PUCHASING DEPARTMENT FUNCTION

Material Request
Identifying requirements for goods, materials and services.

Supplier Selection & Relationship
Identifying reliable suppliers.

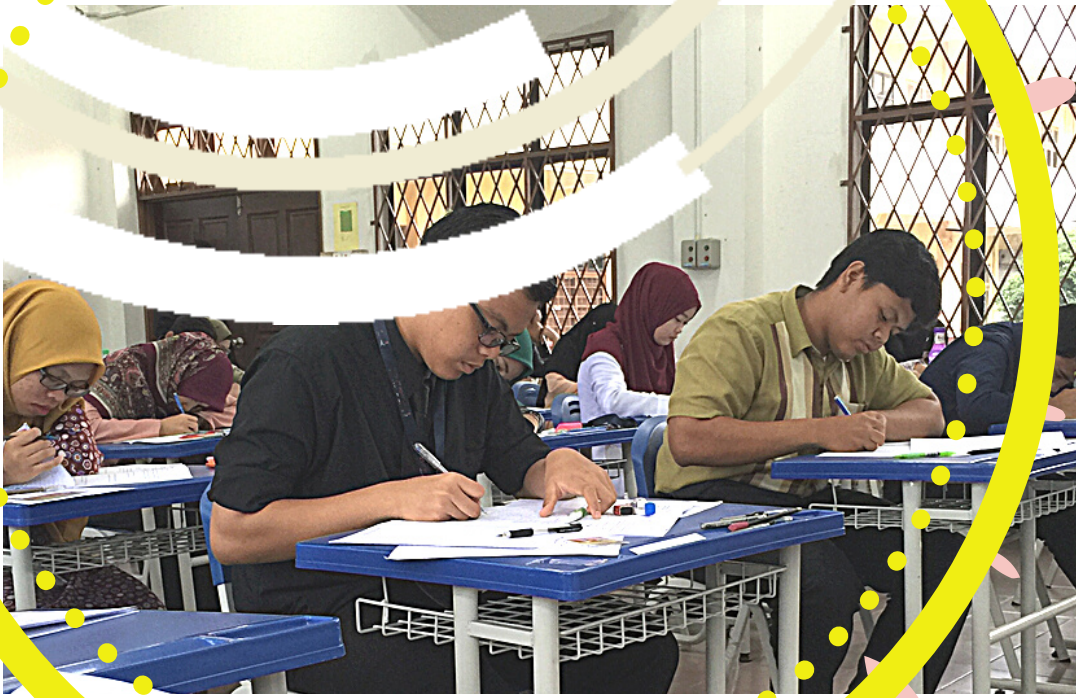
EOQ
Establishing economic order quantities and coordinating delivery and storage.

Cost
Managing materials cost within budgets.

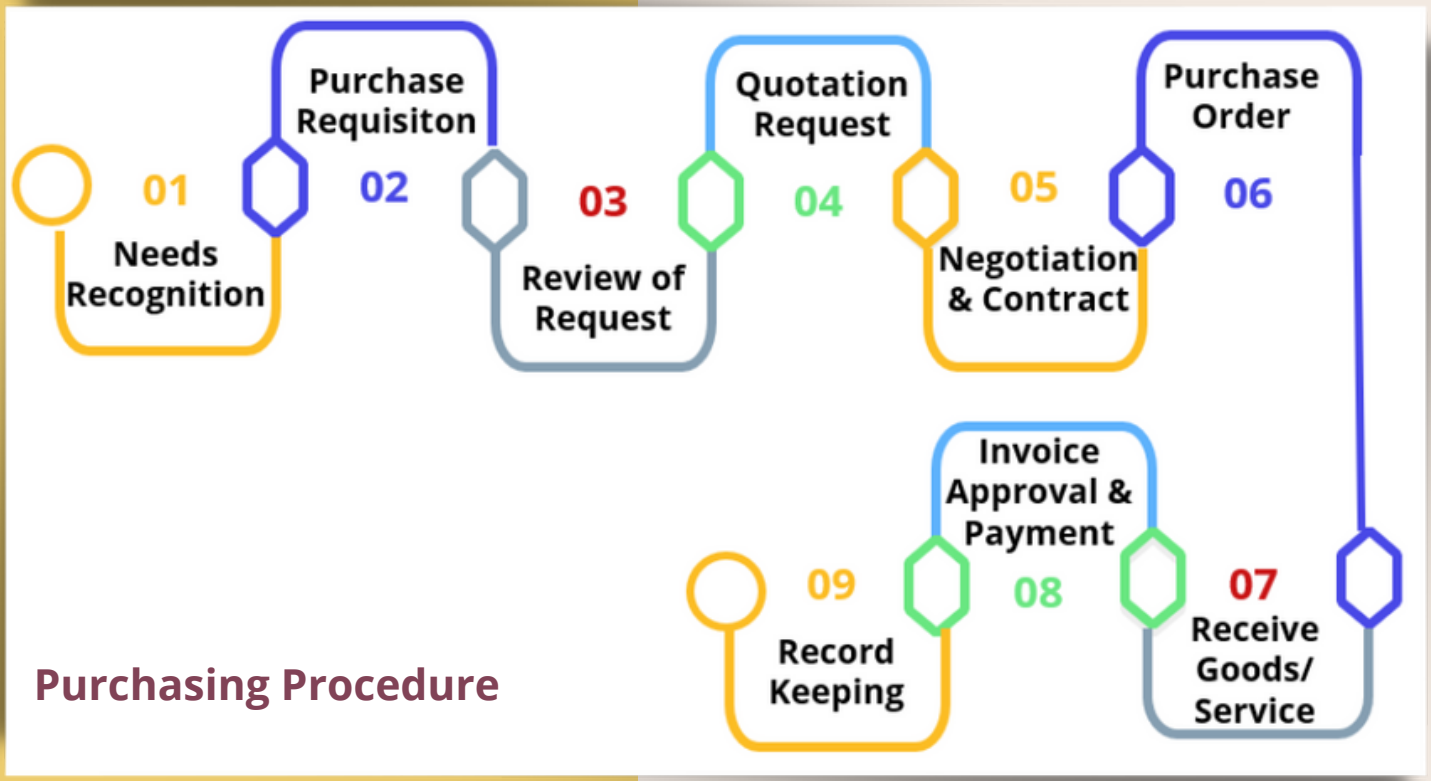
Quality
Product testing and quality control.

ACTIVITY 1

Identify the differences between strategic and operational purchasing function.



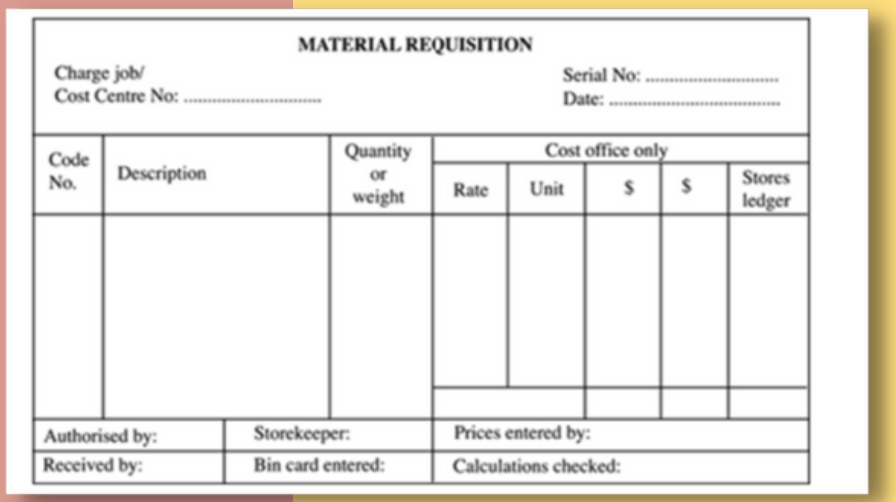
PURCHASING PROCEDURE



Purchasing Procedure

Purchasing is the first phase of materials management. Procurement is a function responsible for getting the materials, supplies and equipment of right quality, in the right quantities from the right source, at the right prices and at the right time.

PURCHASING DOCUMENTS



MATERIAL REQUISITION

Charge job/
Cost Centre No: .....

Serial No: .....
Date: .....

Code No.	Description	Quantity or weight	Cost office only				
			Rate	Unit	$	$	Stores ledger

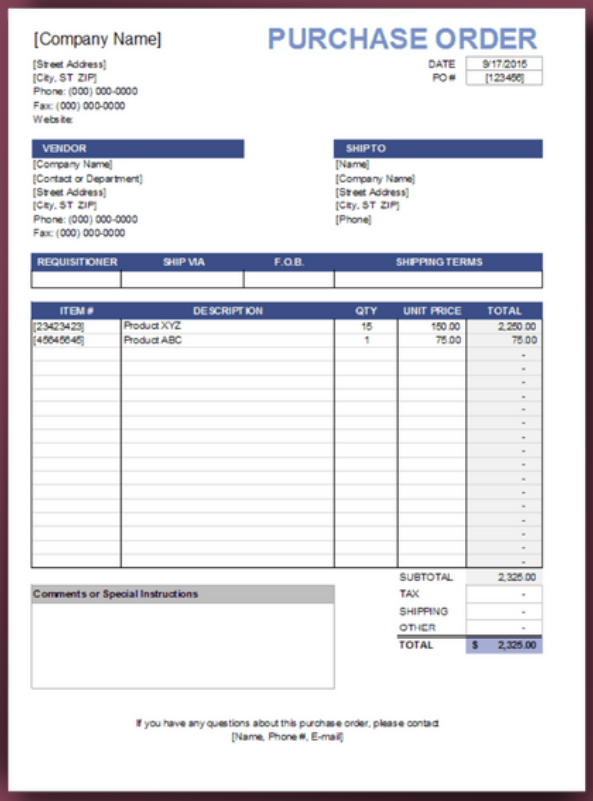
Authorised by:	Storekeeper:	Prices entered by:
Received by:	Bin card entered:	Calculations checked:

Materials Requisition Notes

Materials Requisition Notes (MRN) are document issued by production departments to authorize the storekeeper to release the goods which have been requisitioned and to update the stores records. This document are prepared in duplicate copy. One copy is sent to the store keeper and the another is retained by production department.

Purchase Department will review the MRN then ask for Quotation from supplier.

PURCHASING DOCUMENTS



[Company Name]

PURCHASE ORDER

[Street Address]
[City, ST ZIP]
Phone: (000) 000-0000
Fax: (000) 000-0000
Website:

DATE 9/17/2015
PO # [123456]

VENDOR	SHIP TO
[Company Name]	[Name]
[Contact or Department]	[Company Name]
[Street Address]	[Street Address]
[City, ST ZIP]	[City, ST ZIP]
Phone: (000) 000-0000	[Phone]
Fax: (000) 000-0000	

REQUISITIONER	SHIP VIA	F.O.B.	SHIPPING TERMS

ITEM #	DESCRIPTION	QTY	UNIT PRICE	TOTAL
[23423423]	Product XYZ	15	150.00	2,250.00
[45645645]	Product ABC	1	75.00	75.00
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-

SUBTOTAL	2,325.00
TAX	-
SHIPPING	-
OTHER	-
TOTAL	$ 2,325.00

Comments or Special Instructions

If you have any questions about this purchase order, please contact
[Name, Phone #, E-mail]

Purchase Order

Based on Quotation received, Purchasing Department will select a supplier and create an order on a Purchase Order form. A purchase order details the specification items to purchases, price per unit, delivery date and terms of payment.• This form is sent to the supplier and copies are also sent to the Accounts Department and the Store Department.

PURCHASING DOCUMENTS

GOODS RECEIVED NOTE

To: .....
.....
Carrier: .....
Date of delivery: .....

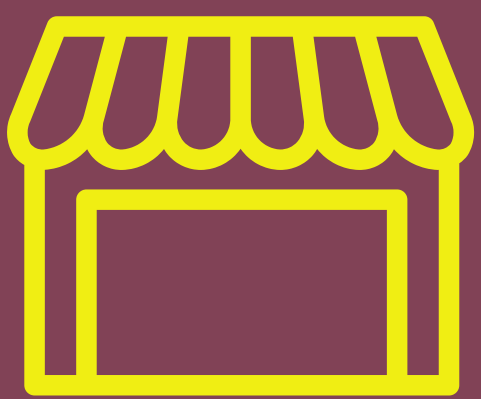
Serial No: .....
Date issued: .....
Purchase Order No: .....

Description	Code	Quantity	Packages	Gross Weight

INSPECTION REPORT			Received by: .....
Quantity passed	Quantity rejected	Remarks	Required by: .....
			Accepted: .....
Inspector	Date		Date: .....

Goods Received Note

On receipt of the goods, the store department will check the goods against the relevant purchase order, and check the delivery note which accompanies the goods. Full details of the goods are then entered into a Goods Received Note (GRN).



STORING CONTROL

Storage space

To ensure availability of storage space, setting inventory control levels and maintain proper inventory records.

Delivery schedule

To enssure delivery time and lead time follow schedule.

Storage Cost

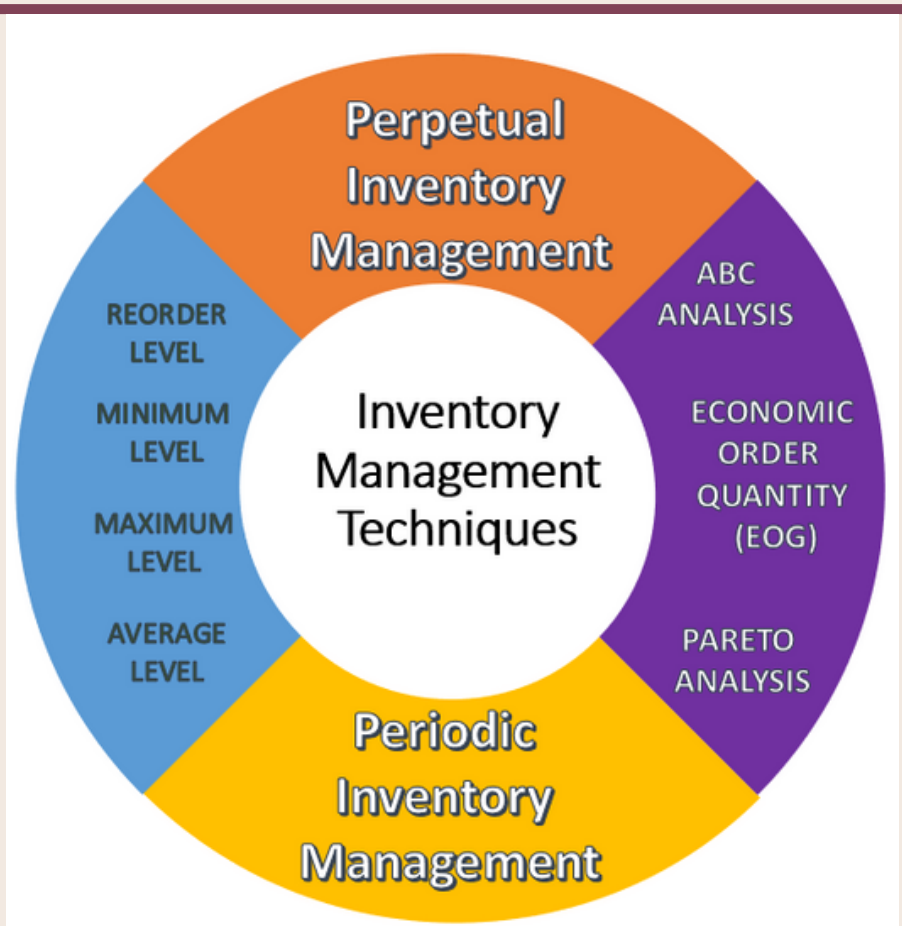
To minimize storage cost, materials handling cost and risk of loss due to damage, obslescence, deterioration and evaporation of goods.

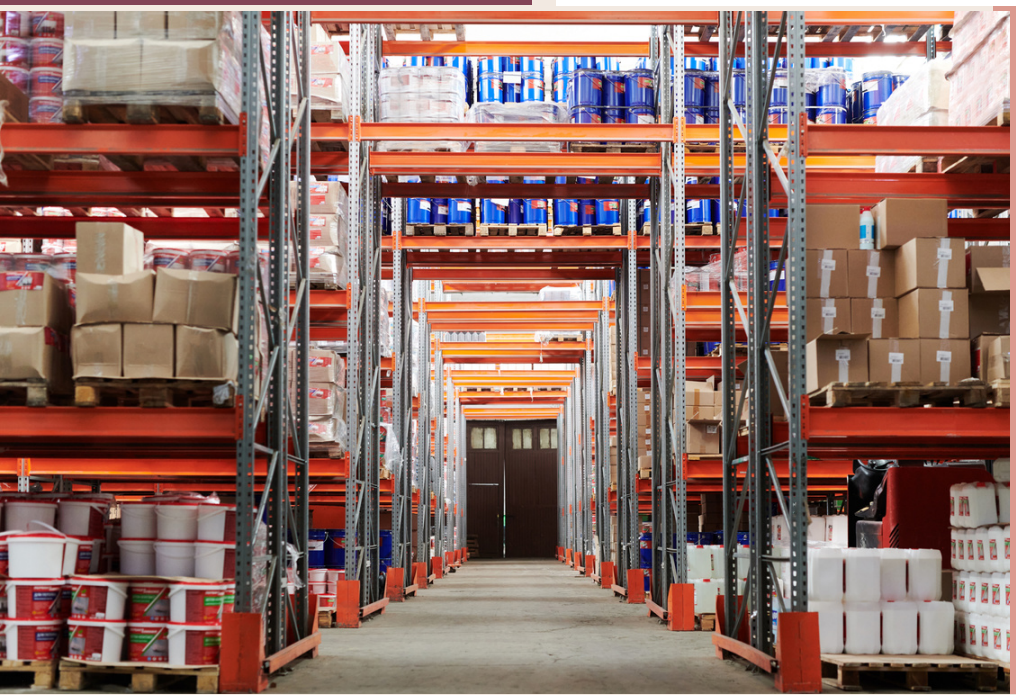
Order Quantity

To properly determine stock level using mechanism of re-order level, minimum/maximum/average stock level, and reorder quantity using Economic Order Quantity

INVENTORY MANAGEMENT

When your inventory is properly organized, the rest of your supply-chain management will fall into place.





RAW MATERIALS ISSUING PROCEDURE

- Free from physical damage and contamination.
- Right specification of each item as per Materials Requisition Note
- Right quantity as per Materials Requisition Note
- Raw materials not meeting requirements shall not be issue.
- Perform sampling and testing if necessary before issue.

Issuing materials from store must be accompanied by Materials Requisition Note to ensure that the right materials and the correct batch is issued to the right production department at the right time.

RAW MATERIALS ISSUING PROCEDURE

Control of receiving, storage, issue and return of raw material are very important. Many mis-formulation incidents occured with the wrong issue of materials from the store.

FIFO

The oldest inventory items are sold first.

LIFO

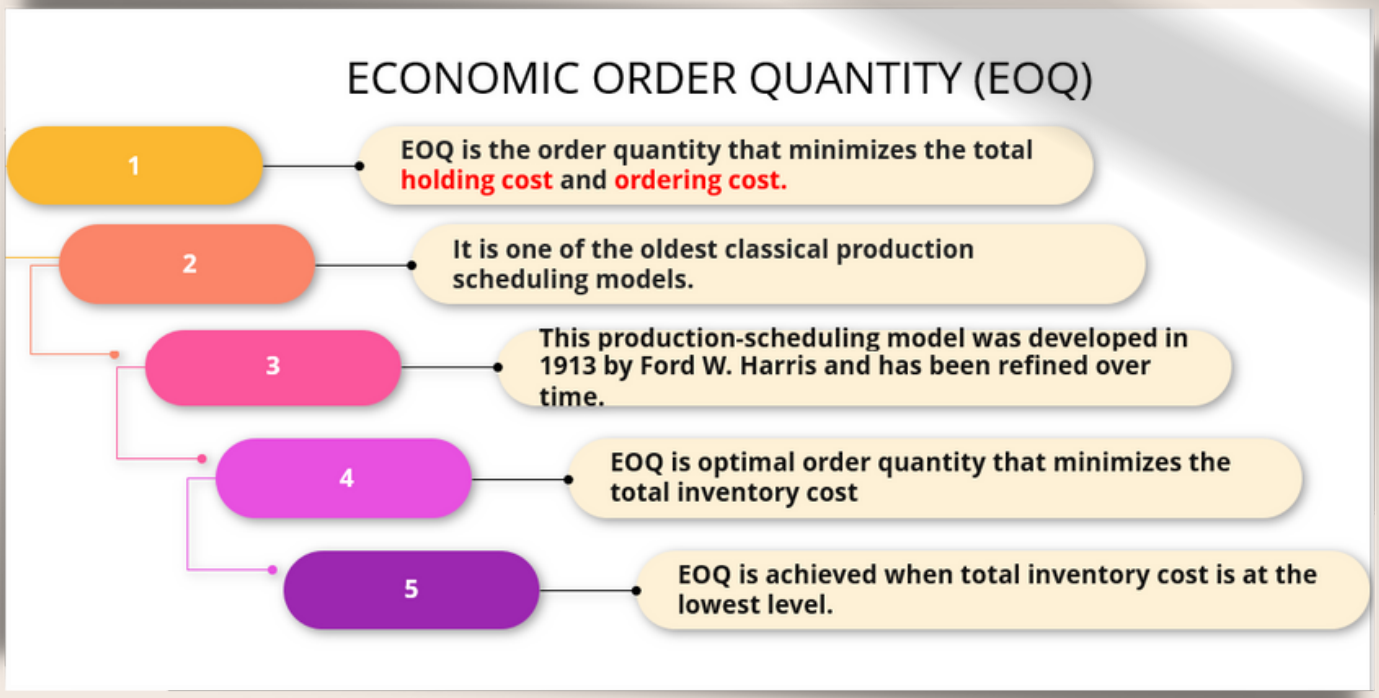
The most recently purchased or manufactured items are sold first.

WACO

This method values inventory at the weighted average cost of all purchases

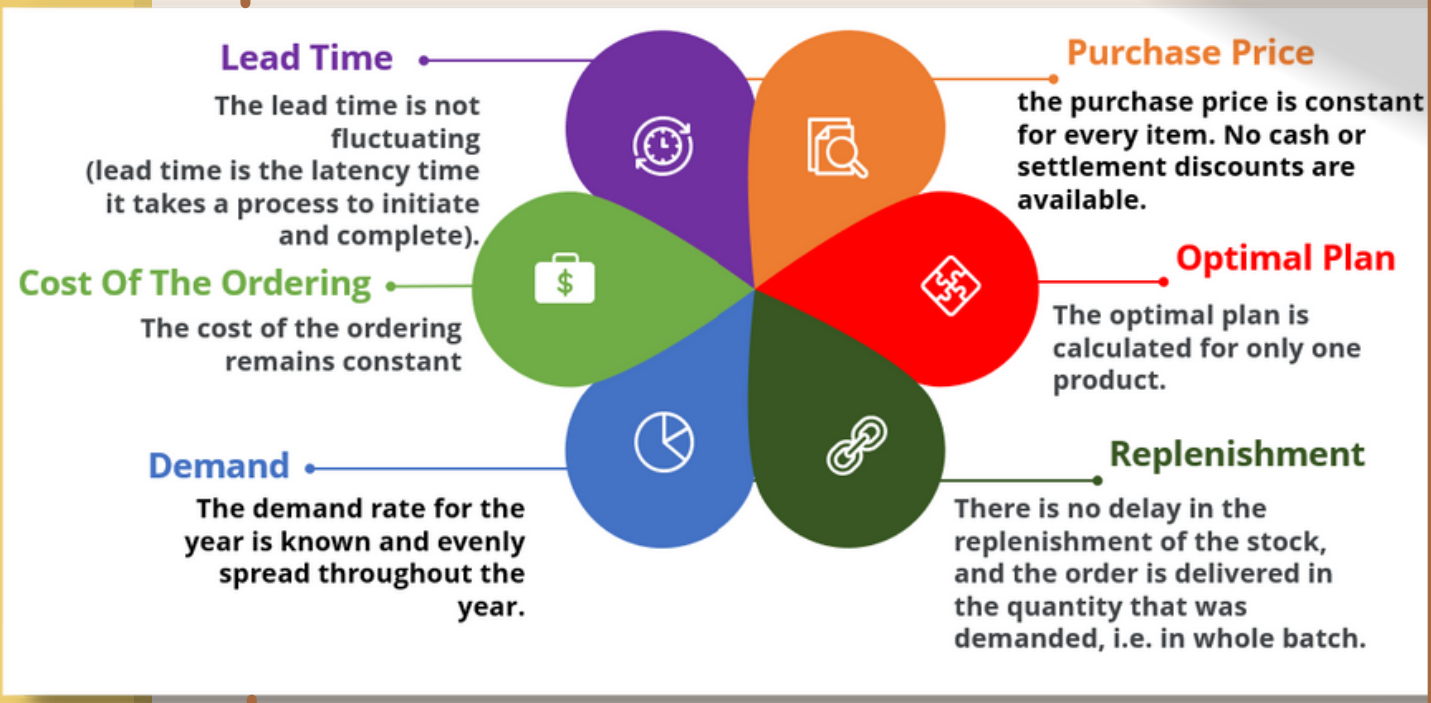
Issuance of raw materials to the production department follow proper procedure for example First In First Out (FIFO) or Last In First Out (LIFO) or Weighted Average.

ECONOMIC ORDER QUANTITY



Economic Order Quantity (EOQ), is a production-scheduling model, which was first developed by an American production engineer Ford Whitman Harris in 1913. The purpose of EOQ is to determine the perfect order quantity for inventory purchases, which will minimize inventory handling and ordering costs.

ECONOMIC ORDER QUANTITY



Economic Order Quantity Assumptions

The Economic Order Quantity model holds certain assumptions on inventory practices and norms.

EOQ APPROACH METHOD

TABULATION	GRAPHICAL	EQUATION
Using table to locate EOQ.	Using graph to locate EOQ point.	Using formula to ascertain EOQ.

The EOQ formula is best applied in situations where demand, ordering, and holding costs remain constant over time.

Ordering Cost

Cost incurred in ordering inventory from suppliers including the cost of purchase such as delivery costs and order processing costs.

Ordering Costs

Decrease with an increase quantity ordered.

Holding Cost

Also known as carrying cost or storage cost is the total cost of holding inventory such as warehousing cost and obsolescence cost.

All these costs are expressed in % of the cost per unit

Holding Cost

Increase linearly with an increase of quantity orders.

Holding Cost or Carrying cost of inventory consists of:

(i) the costs of physical storage.

Example:

cost of space, insurance,

handling and upkeep expenses, and

cost of obsolescence.

(ii) interest on capital invested.

opportunity cost of the capital blocked up.

Example 1: EOQ Approach using Tabulation

EOQ APPROACH

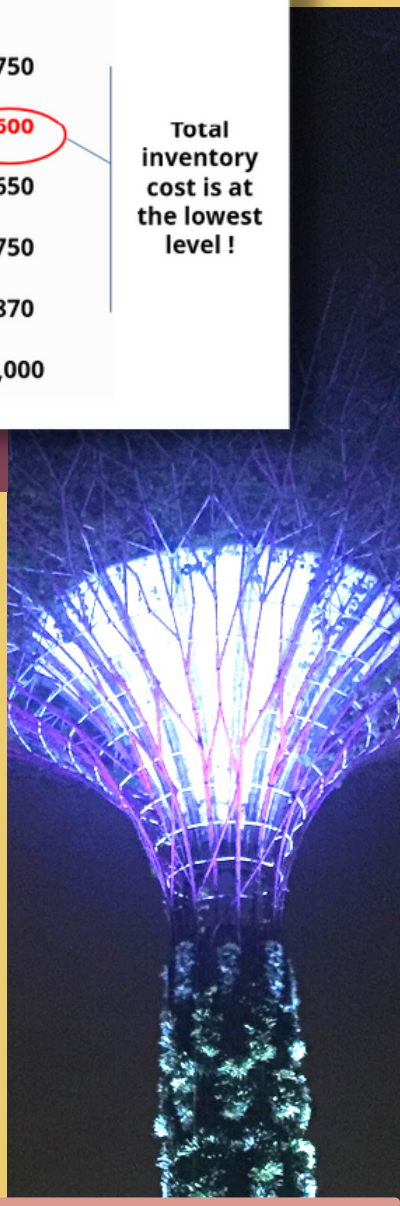
TABULATION

Using table to locate EOQ

EOQ

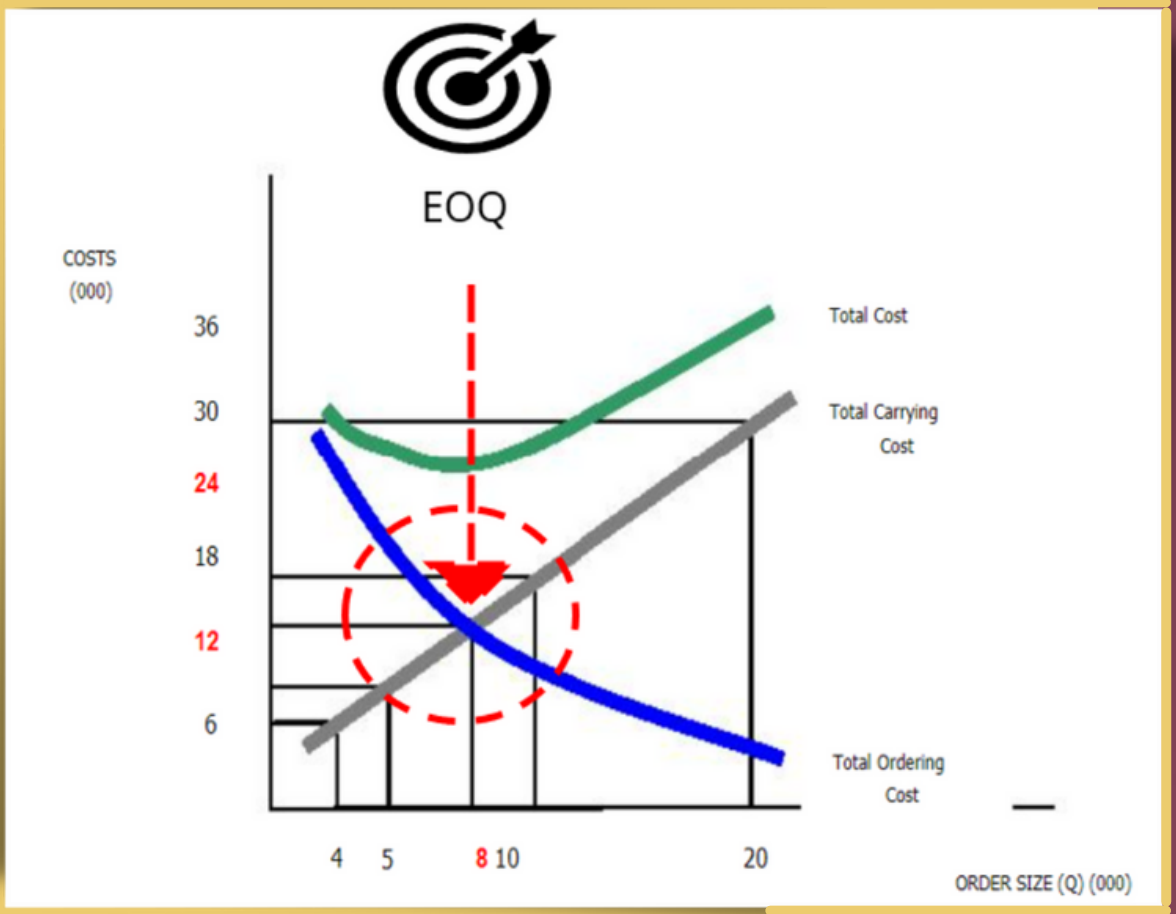
Orders (MIL)	Order Cost (RM MIL)	Holding Costs (RM MIL)	Total Costs (RM MIL)
1	600	150	750
2	300	300	600
3	200	450	650
4	150	600	750
5	120	750	870
6	100	900	1,000

Total inventory cost is at the lowest level !



- **Order Quantity is the number of units added to inventory each time an order is placed.**
- **Total Inventory Costs is the sum of ordering cost and holding cost.**
- **EOQ is occurred when total inventory cost is at the lowest level and Order Cost = Holding Cost.**

Example 2: EOQ Approach using Graph



Graphical Method

TOTAL COST

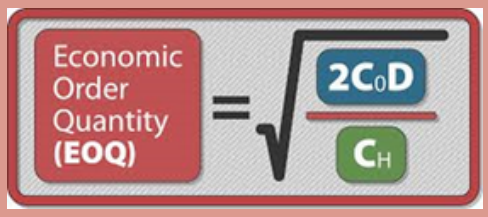
Total Inventory Costs is the sum of ordering cost and holding cost.

ECONOMIC ORDER QUANTITY

We can conclude from the graph that the total inventory cost will be minimum when Ordering Costs = Holding Costs.

From the graph in Example 2, when Total Cost at minimum point, Total Carrying Cost is equal to Total Ordering Cost. At this point, the order size is 8,000 (x axis) and the cost is RM12,000 (y axis). We call this point as Economic Order Quantity (EOQ).

Example 3: EOQ Approach using Formula



Formula EOQ

Question:

Pujaan Hati Kanda Sdn Bhd faces an annual demand of 2,000 units. Ordering costs is RM25 per unit of quantity ordered. The carrying cost is 10% and the average holding cost per unit RM 50. What is the economic order quantity?

Components of the EOQ Formula:

D: Annual Quantity Demanded
C_0: Ordering cost
C_H: Holding Cost
i: Carrying Cost (Interest Rate)

EQUATION

Using formula to ascertain EOQ.

The EOQ formula is best applied in situations where demand, ordering, and holding costs remain constant over time.

Answer:

Variable	Value
Demand (D)	2000 unit
Ordering Cost per unit (C_0)	RM25
Holding Cost per unit (C_H)	10% X 50 =RM5

$$EOQ = \frac{\sqrt{(2x25x2000)}}{5}$$

$$= 141 \text{ unit}$$

ACTIVITY 2

QUESTION 1

A retailer expects to sell about 2400 units of a product per year. The storage space taken up in his premises by one unit of this product costed at RM20. The cost associated with ordering is RM35 per order. Insurance cost of one unit is RM10 and interest rate is 10%

You are required to calculate economic order quantity using formula.

QUESTION 2

From the following table, you are required to determine the Economic Order Quantity.

Quantity Order	Annual Ordering Cost	Annual Holding Cost	Total Cost
	RM	RM	RM
100	7500	500	8000
200	3750	1000	4750
300	2000	2000	4000
400	1800	2500	4300
500	1500	3500	5000
600	700	4000	4700
700	500	4500	5000

QUESTION 3

From the following graph, you are required to locate the Economic Order Quantity point.

ACTIVITIES ANSWERS

QUESTION 1

riable	Value
mand (D)	2400 unit
per unit	RM35
per unit	10% (Storage cost + insurance cost) 10% (20 + 10) =RM3

$$EOQ = \frac{\sqrt{(2x35x2400)}}{3}$$

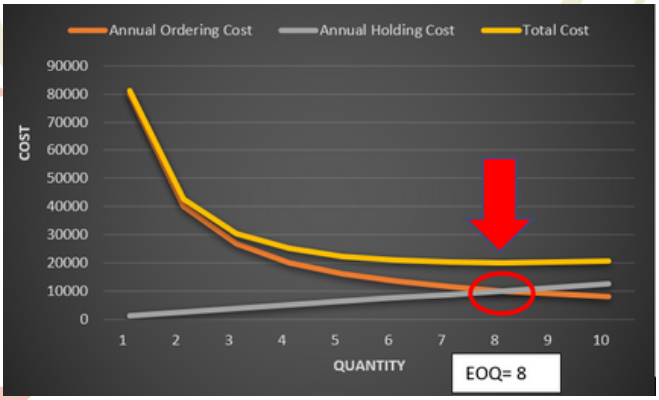
$$= 237 \text{ unit}$$

QUESTION 2

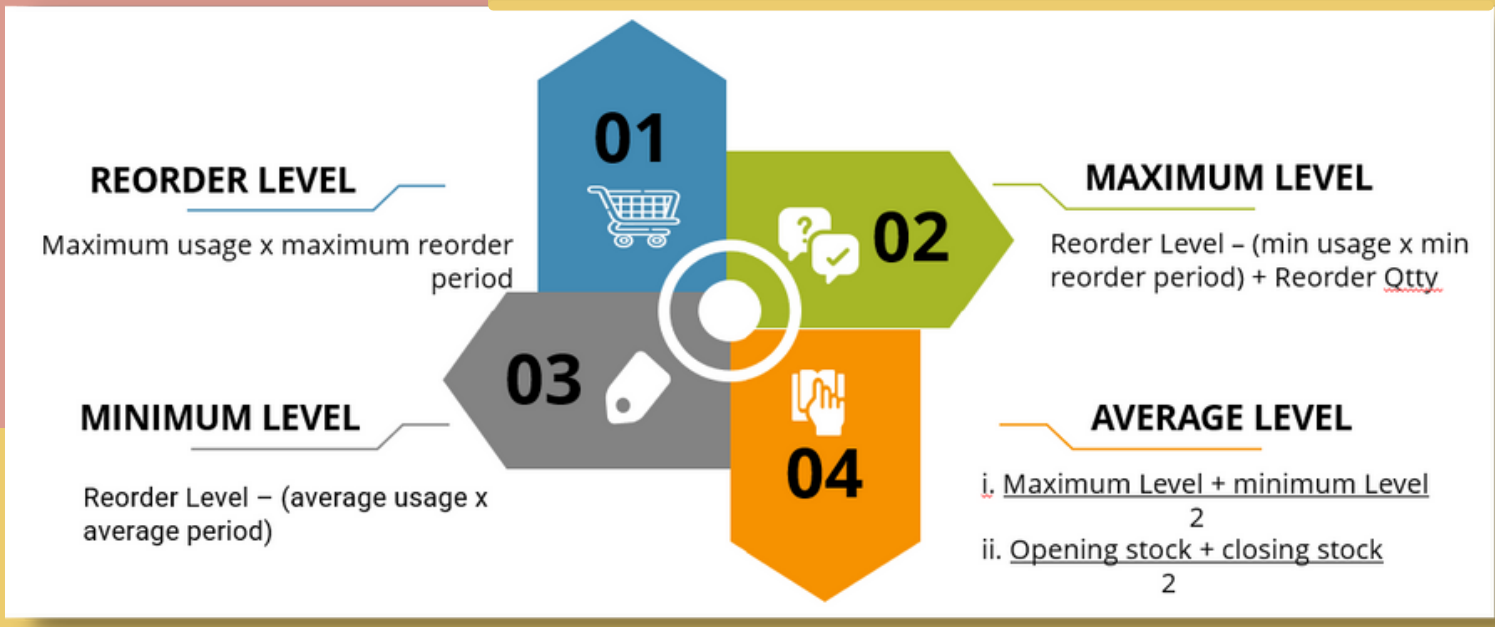
EOG →

Quantity Order	Annual Ordering Cost	Annual Holding Cost	Total Cost
	RM	RM	RM
100	7500	500	8000
200	3750	1000	4750
300	2000	2000	4000
400	1800	2500	4300
500	1500	3500	5000
600	700	4000	4700
700	500	4500	5000

QUESTION 3

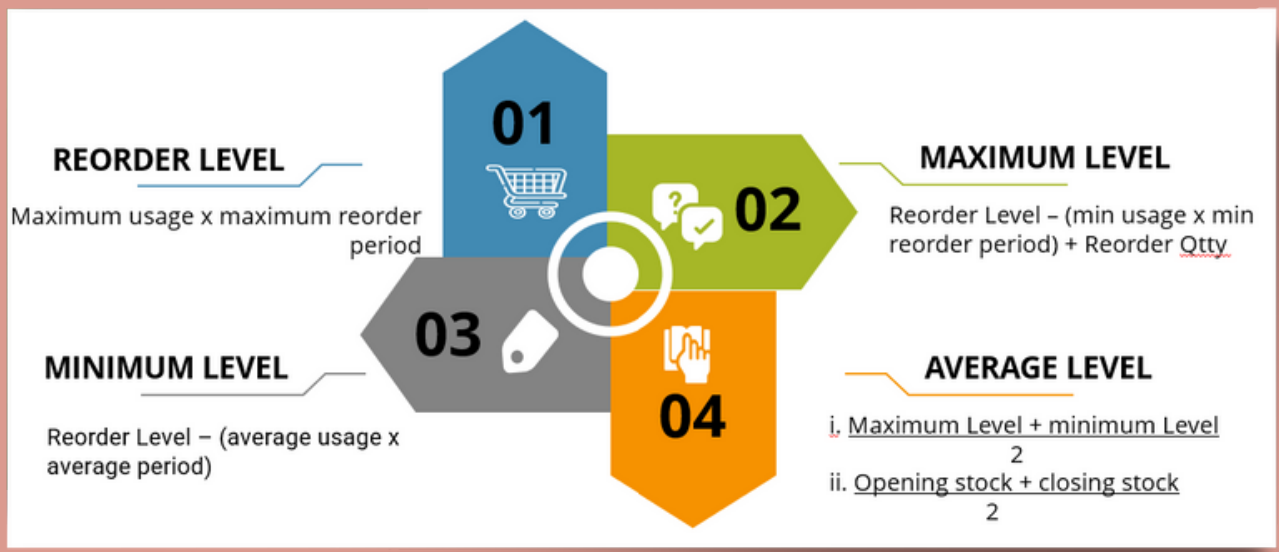


INVENTORY LEVEL CONTROL



Inventory level control is a process of managing inventory levels, whether in the warehouse or at other locations. Four (4) level used to ensure that the current inventory meets production need and minimize ordering and storage cost.

INVENTORY LEVEL CONTROL



i. Reorder Level

- Place order when inventory at this level.

ii. Maximum Level

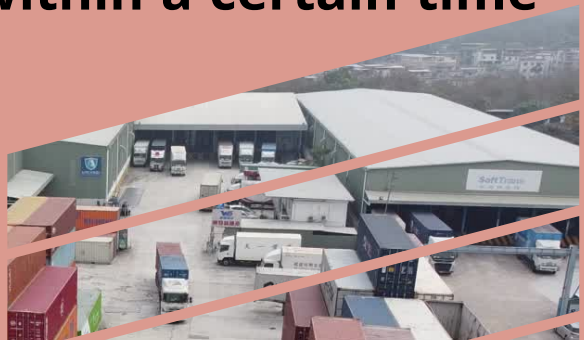
- stop order when inventory at this level (warning level).

iii. Minimum Level

- maintain this level to prevent shortage.

iv. Average Level

- mean value of inventory within a certain time period.



Example 4:

The following are inventory data of a manufacturing company in Shah Alam for the month of January 2020.

Maximum usage : 200 kg
Minimum usage : 100 kg
Reorder Period : 2 – 4 month
Reorder Quantity : 400 kg

You are required to calculate :
i.Reorder Level
ii.Maximum Level
iii.Minimum Level
iv.Average Level

Answers:

i. Reorder Level

= Maximum usage x maximum reorder period

= 200 x 4

= 800 kg

ii. Maximum Level

= Reorder Level – (min usage x min reorder period) + Reorder Qtty

= 800 – (100 x 2) + 400

= 800 - 200 + 400

=1000 kg

iii. Minimum Level

= Reorder Level – (average usage x average period)

= 800 – ((200 +100) /2) x ((2+4)/2)

= 800 – (150 x 3)

= 350 kg

iv. Average Level

$$= \frac{\text{Maximum Level + minimum Level}}{2}$$

$$= \frac{1000 + 350}{2}$$

= 675 kg

$$\text{Inventory Turn Over Ratio} = \frac{\text{Cost Of Goods Sold}}{\text{Average Inventory}}$$

INVENTORY TURNOVER RATIO

$$\text{Average Inventory} = \frac{\text{OI} + \text{CI}}{2}$$

COST OF GOODS SOLD

Cost of goods sold is the accumulated costs used to create a product or service by adding opening inventory and inventory purchases cost then deduct the closing inventory.

AVERAGE INVENTORY

Average inventory refers to the average quantity of stock available in a specified period of time.

OPENING INVENTORY (OI)

PURCHASES

CLOSING INVENTORY (CI)

quit talking
and
begin doing

EXAMPLE 5

The following are data given for a manufacturing company for the month of January 2020.

Cost of Goods Sold = RM6,000

Opening Stock = 2,000

Closing Stock = 4,000

You are required to calculate:

Inventory Turnover Ratio

Answers:

$$\text{Average Inventory} = \frac{OI + CI}{2}$$

$$= \frac{2000 + 4000)}{2}$$

$$= 3000 \text{ kg}$$

$$\text{Inventory Turnover Ratio} = \frac{COGS}{\text{Average Inventory}}$$

$$= \frac{6000}{3000}$$

$$= 2 \text{ times monthly}$$

learn more

EXAMPLE 6

Based on Statement of Cost given,
You are required to calculate:
Inventory (Finished Good) Turnover Ratio

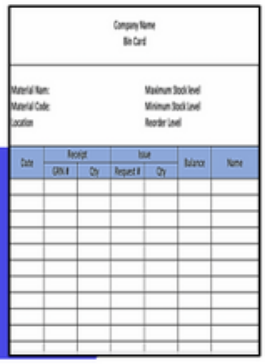
GREEN MANUFACTURING CO.			
THE STATEMENT OF COST FOR THE YEAR ENDED 31 DISEMBER 2020			
	RM	RM	RM
Raw Material :			
Opening Stock		3000	
(+) Purchase of Raw Materials		110000	
		113000	
(-) Closing Stock		4000	
Cost of Materials Consumed			109000
Direct Wages			65000
PRIME COST			**174000**
(+)Manufacturing Overhead:			
Factory Overhead (60%x 275000)			39000
MANUFACTURING COST			213000
(+) Opening Stock of Work In Progress			4000
			217000
(-) Closing Stock of Work In Progress			6000
PRODUCTION / MANUFACTURING COST			**211000**
(+) Opening stock Finished Goods			7000
			218000
(-) Closing stock of Finished Goods			8000
COSTS OF GOODS SOLD			**210000**

Answers:
Inventory Turnover Ratio = 28 times annually

PERPETUAL INVENTORY SYSTEM

BIN CARDS

Bin card show summary of inventory movement and the remaining balance. The movement includes beginning balance, stock receipt, stock issue, and the ending quantity. Keep in the store.



STORES LEDGER

Store Ledger is the subsidiary ledger of the cost ledger that tracts the movements of inventory with the value of the inventory. Keep in the costing department.

Bin Cards and Stores Ledger are components of Perpetual inventory System.

Perpetual inventory System is an inventory system that keeps continual track of inventory balances.

PERIODIC INVENTORY SYSTEM

In a periodic inventory system, a physical inventory count are perform at periodic intervals and valued at the end of an accounting period

Periodic inventory System is an inventory system where inventory records are updated at periodic intervals.

INVENTORY VALUATION

FIRST IN FIRST OUT

LAST IN FIRST OUT

WEIGHTED AVERAGE COST

Inventory valuation is a calculation of the value of the products or materials in the stores at the end of a particular period. The following are three methods for inventory valuation which is First In First Out (FIFO), Last In First Out (LIFO) and Weighted Average Cost (WAC0)

FIFO

According FIFO valuation method, items are issued or sold in the order of oldest inventory items are sold first. This method widely used because companies typically sell products in the order in which they're purchased, so it best represents the actual flow of goods in a business.

LIFO

According LIFO valuation method, the most recently purchased or manufactured items are issue or sold first. When the prices of goods increase, Cost of Goods Sold in the LIFO method is relatively higher and ending inventory balance is relatively lower.

WACO

According LIFO valuation method, the most recently purchased or manufactured items are issue or sold first. When the prices of goods increase, Cost of Goods Sold in the LIFO method is relatively higher and ending inventory balance is relatively lower.

INVENTORY VALUATION

FIRST IN FIRST OUT(FIFO)

EXAMPLE 7

Sweet Delight purchases flour for bakery production in May 2020 as the following:

May 1 100 kg at RM41 per kg
May 10 75 kg at RM42 per kg
May 25 40 kg at RM45 per kg

Inventory issued as following:
May 13 50 kg
May 23 65 kg
May 30 50 kg

You are required to record the movement and valuation of inventory using First In First Out method.

Legend:
Q - Quantity
P- Price (RM)
V - Value (RM)

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
May-01	100	41	4100				100	41	4100
May-10	75	42	3150				100	41	
							75	42	7250
May-13				50	41	2050	50	41	
							75	42	5200
May-23				50	41	2050			
				15	42	630	60	42	2520
May-25	40	45	1800				60	42	
							40	45	4320
May-30				50	42	2100	10	42	
							40	45	2220

As can be seen from above, the inventory cost under FIFO method relates to the cost of the latest purchases

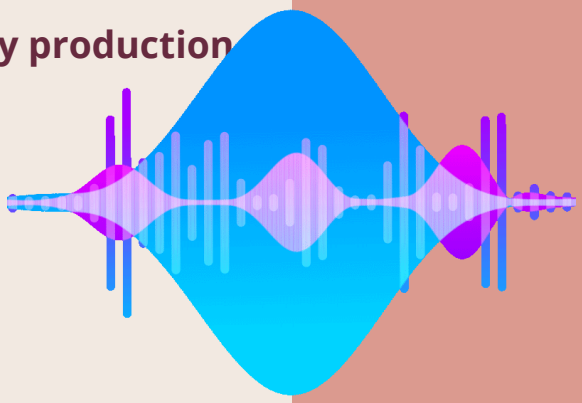
INVENTORY VALUATION

LAST IN FIRST OUT

EXAMPLE 8

Sweet Delight purchases flour for bakery production in May 2020 as the following:

May 1	100 kg at RM41 per kg
May 10	75 kg at RM42 per kg
May 25	40 kg at RM45 per kg



Inventory issued as following:

May 13	50 kg
May 23	65 kg
May 30	50 kg

You are required to record the movement and valuation of inventory using Last In First Out method.

Legend:
Q - Quantity
P- Price (RM)
V - Value (RM)

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
May-01	100	41	4100				100	41	4100
May-10	75	42	3150				100	41	
							75	42	7250
May-13				50	42	2100	100	41	
							25	42	5150
May-23				25	42	1050			
				40	41	1640	60	41	2460
May-25	40	45	1800				60	41	
							40	45	4260
May-30				40	45	1800			
				10	41	410	50	41	2050

As can be seen from above, the value of inventory using LIFO will be based on outdated prices.

INVENTORY VALUATION

WEIGHTED AVERAGE COST

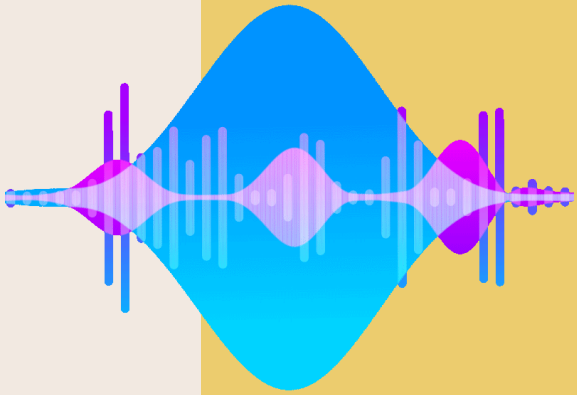
EXAMPLE 9

Sweet Delight purchases flour for bakery production in May 2020 as the following:

May 1 100 kg at RM41 per kg
May 10 75 kg at RM42 per kg
May 25 40 kg at RM45 per kg

Inventory issued as following:
May 13 50 kg
May 23 65 kg
May 30 50 kg

You are required to record the movement and valuation of inventory using Weighted Average Cost method.



Legend:
Q - Quantity
P- Price (RM)
V - Value (RM)

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
May-01	100	41	4100				100	41	4100
May-10	75	42	3150				175	41.43	7250.3
May-13				50	41.43	2071.5	125	41.43	5178.8
May-23				65	41.43	2693	60	41.43	2485.8
May-25	40	45	1800				100	42.86	4286
May-30				50	42.86	2143	50	42.86	2143

As can be seen from above, the inventory cost under Weighted Average Cost method, mean cost of purchases is used at the end of each period. Average cost of inventory changes every time a purchase is made at a different price.

EXERCISES

HOMEWORK & STUDY

Tick the question that you have successfully done.

- [ ] Question 1
- [ ] Question 2
- [ ] Question 3
- [ ] Question 4
- [ ] Question 5
- [ ] Question 6
- [ ] Question 7
- [ ] Question 8
- [ ] Question 9
- [ ] Question 10

EXERCISES

Question 1

Calculate EOQ using equation, table and graph from the following:

Demand 600 units
Ordering cost RM 12 per order
Carrying cost 20%
Price per unit RM 20.

Question 2

Glass Limited annual requirements production of 10mm glass is 100,000 units. Cost per unit of the product is RM 10 and cost for each new order is RM 100. Carrying cost is 50%.

Calculate EOQ by equation, table and by graph.

Question 3

The demand for a product is 12,500 units for three month period. Purchase price per unit is RM 15 and ordering costs is RM 20 per order placed. The annual holding cost of one unit of product is 10% of its purchase price.
What is the Economic Order Quantity (to the nearest unit)?

EXERCISES

Question 4

Total annual requirement:4800 unit
Order quantity:2,400 unit
Material Cost per unit:RM10
Cost of Ordering RM8 per order
Storage cost 20%

Calculate
i.EOQ
ii.Number of orders per year

Question 5

Maximum usage 6000kg
Minimum usage 500 kg
Reorder period 2 month – 8 months
Reorder Quantity 3500kg

Based on the information given, you are required to calculate:
i. Reorder Level
ii. Maximum Level
iii. Minimum Level
iv. Average Level

EXERCISES

Question 6

WhoDaresToWin Co. purchases materials SYZ in January 2020 as the following:

Jan 1	200kg at RM2 per kg
Jan 5	300kg at RM3 per kg
Jan 15	200kg at RM2 per kg
Jan 29	150kg at RM5 per kg

Inventory issued as following:

Jan 10	250kg
Jan 20	350kg
Jan 30	70kg

You are required to record the movement of inventory using

i.FIFO

ii.LIFO

iii.Weighted Average Cost

EXERCISES

Question 7

Cora Cora and Co. purchases materials for manufacturing product TCT in July 2020 as the following:

July 3	700kg at RM60 per kg
July 10	300kg at RM30 per kg
July 21	250kg at RM72 per kg
July 30	150kg at RM5 per kg

Inventory issued as following:

July 17	750kg
July 20	150kg
July 25	200kg
July 31	170kg

You are required to record the movement of inventory using

i. FIFO
ii. LIFO
iii. Weighted Average Cost

EXERCISES

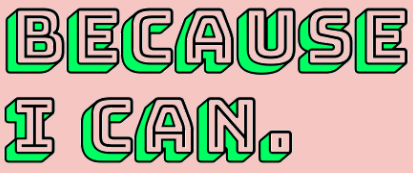
Question 8

Discuss the advantages and disadvantages of LIFO, FIFO, and the Average cost Method.
(25 marks)

Question 9

Based on the Statement of Cost given, calculate:
Inventory (Finished Good) Turnover Ratio.

SIN SIN				
Statement of Cost for the year ended 30 June 2016				
	RM	**RM**	**RM**	**RM**
Opening Inventory Raw Materials			10450	
Purchases		42100		
(-) Return Outward		700		
		41400		
Duty on purchases	2400			
Carriage inwards	4000	6400		
Purchases Cost			47800	
			58250	
(-) Closing inventory Raw Materials			11245	
Cost of Materials consumed			47005	
Direct Wages			12700	
Prime Cost			59705	
(+) Manufacturing Overhead			20000	
Manufacturing Cost			79705	
(+) Opening stock Finished Goods			20000	
(-)Closing Inventory Finished Goods			30000	
Cost of Goods Sold			69705	



EXERCISES

Question 10

Based on Statement of Cost given, calculate:
Inventory (Finished Good) Turnover Ratio.

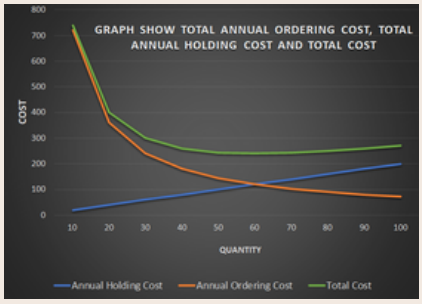
SOFI MANUFACTURING			
THE STATEMENT OF COST FOR THE YEAR ENDED 31 DISEMBER 2020			
	RM	RM	RM
Raw Material :			
Opening Stock		10000	
(+) Purchase of Raw Materials	13000		
Carriage inward	5000	18000	
		28000	
(-) Closing Stock		30000	
Cost of Materials Consumed			-2000
Direct Wages			35000
Direct Expenses			
Royalties			12500
PRIME COST			**45500**
(+)Manufacturing Overhead:			
Factory Salary		6000	
Factory Rental		1000	
Electricity and Power		2500	9500
MANUFACTURING COST			55000
(+) Opening Stock of Work In Progress			5000
			60000
(-) Closing Stock of Work In Progress			7000
PRODUCTION / MANUFACTURING COST			**53000**
(+) Opening stock Finished Goods			12000
			65000
(-) Closing stock of Finished Goods			23000
COSTS OF GOODS SOLD			**42000**

ANSWERS GUIDE

Question 1

EOQ = $\sqrt{2X12X600)}$ = 60 UNIT
(20% X 20)

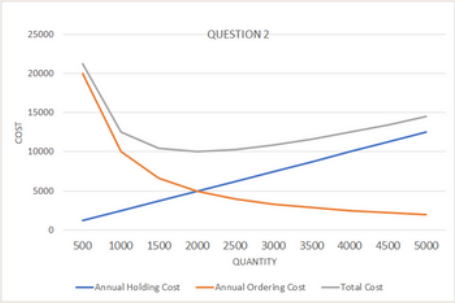
Order Quantity (Q)	Annual Holding Cost	Annual Ordering Cost	Total Cost
10	20	720	740
20	40	360	400
30	60	240	300
40	80	180	260
50	100	144	244
60	120	120	240
70	140	103	243
80	160	90	250
90	180	80	260
100	200	72	272



Question 2

EOQ = $\sqrt{2X100X100000)}$ = 2000 UNIT
(50% X 10)

Order Quantity (Q)	Annual Holding Cost	Annual Ordering Cost	Total Cost
500	1250	20000	21250
1000	2500	10000	12500
1500	3750	6667	10417
2000	5000	5000	10000
2500	6250	4000	10250
3000	7500	3333	10833
3500	8750	2857	11607
4000	10000	2500	12500
4500	11250	2222	13472
5000	12500	2000	14500



Question 3

EOQ = $\sqrt{2X20X(12500X4)}$ = 1155 UNIT
(10% X 15)

Question 4

i. EOQ = $\sqrt{2X8X4800}$ = 196 UNIT
(20% X 10)

ii. Number of orders per year = 4800/196 = 25 UNIT

Question 5

i. Reorder Level = 6000 x 8 = 48000 kg

ii. Maximum Level = 48000 – (500 x 2) + 3500 = 50500 kg

iii. Minimum Level = 48000 – ((6000 +500)/2 x (2+8)/2)
= 48000 -16250
= 31,750

iv. Average Level = (50500 + 31750) /2
= 41,125

ANSWERS GUIDE

Question 6

i. FIFO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jan-01	200	2	400				200	2	400
Jan-05	300	3	900				200	2	
							300	3	1300
Jan-10				200	2	400			
				50	3	150	250	3	750
Jan-15	200	2	400				250	3	
							200	2	1150
Jan-20				250	3	750			
				100	2	200	100	2	200
Jan-29	150	5	750				100	2	
							150	5	950
Jan-30				70	2	140	30	2	
							150	5	810

ii. LIFO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jan-01	200	2	400				200	2	400
Jan-05	300	3	900				200	2	
							300	3	1300
Jan-10				250	3	750	200	2	
							50	3	550
Jan-15	200	2	400				200	2	
							50	3	
							200	2	950
Jan-20				200	2	400	100	2	200
				50	3	150			
				100	2	200			
Jan-29	150	5	750				100	2	
							150	5	950
Jan-30				70	5	350	100	2	
							80	5	600

iii.WACO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jan-01	200	2	400				200	2	400
Jan-05	300	3	900				200	2	
							300	3	1300
Jan-10				250	3	750	200	2	
							50	3	550
Jan-15	200	2	400				200	2	
							50	3	
							200	2	950
Jan-20				200	2	400	100	2	200
				50	3	150			
				100	2	200			
Jan-29	150	5	750				100	2	
							150	5	950
Jan-30				70	5	350	100	2	
							80	5	600

ANSWERS GUIDE

Question 7 : FIFO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jul-03	700	60	42000				700	60	42000
Jul-10	300	30	9000				700	60	
							300	30	51000
Jul-17				700	60	42000			
				50	30	1500	250	30	7500
Jul-20				150	30	4500	100	30	3000
Jul-21	250	72	18000				100	30	
							250	72	21000
Jul-25				100	30	3000			
				100	72	7200	150	72	10800
Jul-30	150	5	750				150	72	
							150	5	11550
Jul-31				150	72	10800			
				20	5	100	130	5	650

Question 7 : LIFO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jul-03	700	60	42000				700	60	42000
Jul-10	300	30	9000				700	60	
							300	30	51000
Jul-17				300	30	9000			
				450	60	27000	250	60	15000
Jul-20				150	60	9000	100	60	6000
Jul-21	250	72	18000				100	60	
							250	72	24000
Jul-25				200	72	14400	100	60	
							50	72	9600
Jul-30	150	5	750				100	60	
							50	72	
							150	5	10350
Jul-31				150	5	750	100	60	
				20	72	1440	30	72	8160

Question 7 : WACO

DATE	RECEIPTS			ISSUES			BALANCE		
	Q	P	V	Q	P	V	Q	P	V
Jul-03	700	60	42000				700	60	42000
Jul-10	300	30	9000				700	60	
							300	30	51000
Jul-17				700	60	42000			
				50	30	1500	250	30	7500
Jul-20				150	30	4500	100	30	3000
Jul-21	250	72	18000				100	30	
							250	72	21000
Jul-25				100	30	3000			
				100	72	7200	150	72	10800
Jul-30	150	5	750				150	72	
							150	5	11550
Jul-31				150	72	10800			
				20	5	100	130	5	650

ANSWERS GUIDE

Question 8

Method	Advantages	Disadvantages
FIFO	1. Easy to apply 2. Income manipulation not possible. 3. Inventory in balance sheet approximates current market value.	1. Mismatch between current cost and current revenue. 2. Heavier tax burden if used in periods of inflation.
LIFO	1. Better measure of profitability as recent cost match recent revenue. 2. Decreased net income means less tax.	1. Difficult to maintain as it can result in older inventory never being sold. 2. Number of international accounting standards do not allow LIFO
WACO	1. Simple to use. 2. Difficult to manipulate net income. 3. Very useful method in cases where it is impossible to differentiate goods from another.	1. Ending inventory cost does not approximate current market value of similar goods. 2. Lead to mispricing of item that are not identical in nature

Question 9

Average Inventory Inventory (Finished goods)

$$= \frac{\text{Opening stock + closing stock}}{2}$$

$$= \frac{(20{,}000 + 30{,}000)}{2}$$

= 25,000 kg

Turnover Ratio = COGS /Average Inventory

= 69,705/ 25,000

= 3 times

Question 10

Average Inventory Inventory (Finished goods) $= \frac{\text{Opening stock + closing stock}}{2}$

$$= \frac{(12{,}000 + 23{,}000)}{2}$$

= 17,500 kg

Turnover Ratio = COGS /Average Inventory

= 42000/ 17,500

= 2.4 times

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