

COST ACCOUNTING

Syllabus

Unit 1 :- Introduction to Cost Accounting

Introduction Meaning & definition of Cost, Costing and Cost Accounting objectives of Costing - Comparison between financial accounting and Cost Accounting Application of Cost Accounting Designing and Installing a Cost Accounting System Cost Concepts - classification of costs Cost unit Cost Center Elements of Cost Preparation of Cost Sheet Tenders and Quotations.

Unit 2 :- Material Cost Control

Meaning Types Direct material Indirect material - Material Control Purchasing Procedure Store Keeping Techniques of Inventory Control Setting of Stock Levels EOQ ABC analysis ^{VED}VED analysis Just in time Perpetual Inventory System Documents used in material accounting - Methods of pricing material Issues FIFO LIFO Weighted average price method and Simple average price method.

Unit 3 :- Labour Cost Control

Meaning Types Direct labour Indirect labour Timekeeping Time booking Idle time overtime labour turn over Methods of labour remuneration - Time rate system Piece rate system Incentive systems Halsey plan Rowan plan Taylor's differential Piece rate system and Merrick's differential Piece rate system Problems

unit - 4 :- overhead cost control

Meaning and definition classification of overheads Procedure for accounting and control of overheads Allocation of overheads apportionment of overheads Primary overhead distribution summary Secondary overhead distribution summary Repeated distribution summary method & Simultaneous Equations method Absorption of factory overheads Methods of absorption Machine hour rate Problems.

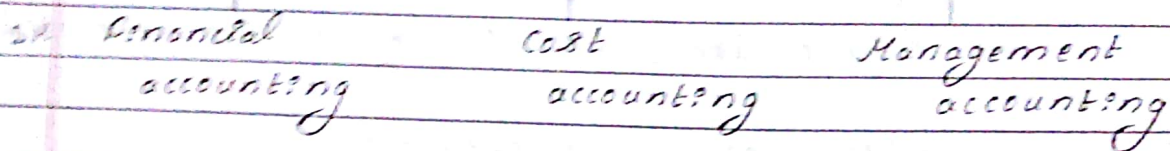
unit - 5 :- Reconciliation of cost and financial accounts

need for reconciliation Reasons for differences in Profit or loss shown by cost accounts and Profit or loss shown by financial accounts Preparation of reconciliation statement and Memorandum Reconciliation account.

Unit - 1 :- Introduction to Cost Accounting

1. Classification of accounts

Accounts



1. Financial accounting :- mainly concerned with recording business transactions in the books of accounts and prepare profit and loss account showing profit or loss & balance sheet showing financial position of a company at a point of time

2. Cost accounting :- a branch of accounting which specializes in the ascertainment of cost of products and services.

3. Management accounting :- a modern concept of accounts as a tool of management. It is concerned with all such accounting information that is useful to management.

2. Basic Cost Accounting terms

1. Costing :- It is a process that simply means cost finding by any process or technique.

2. Cost Accounting :- It is formal accounting mechanism by means of which costs are ascertained by recording them in the books of accounts.

3. Cost Control :- It involves establishing predetermined standards of cost for different

elements. Example budgeting

ii Cost audit :- It is application of auditing principles & procedures in the field of cost accounting

v Cost accountancy :- It is a wide term which includes costing, cost accounting, cost control and cost audit. Cost accountancy is a science, art & practice of a cost accountant.

Functions of cost accounting :-

i Cost ascertainment :- This is a 1^o to obj of CA. The technique of ascertaining the cost is known as costing & cost is ascertained by using any 1 of methods of costing

ii Cost Control :- Its purpose is to improve efficiency by controlling & reducing cost. It is done by using standard costing technique to make comparison cost budgetted or actual cost

iii Determination of selling cost :- The supply & tender price of a product is fixed on the basis of total cost + Margin of profit. CA provides detailed info to what extent the selling price can be reduced during depression

iv Determination of Profit :- The obj of cost accounting is to ascertain profitability of the activities carried out or planned in a systematic manner if any diff of profit is analyzed as per the estimation made. efforts are made to earn max profit at its capacity

v Providing basis for business policy :- It helps the mgt regarding intro / discontinue of product, utilization of ideal plant capacity, selection of most profitable unit etc.,

4. classification of cost

i. Direct and Indirect

ii. Fixed, variable and semi variable

iii. Controllable and uncontrollable cost

iv. Normal and abnormal cost

5. Elements of cost

Elements of cost

Direct cost

Indirect cost

Direct	Direct	Direct
Material	labour	expenses
Productive wages		
Prime Cost		

Indirect	Indirect	Indirect
Material	labour	Expense
unproductive wages		
overheads		

→ Raw material Consumed

opening stock of raw material + Purchases during the year - closing stock of raw material.

→ Prime Cost

Direct material + Direct labour + Direct expenses.

payable at law.

02 Feb 2018

Cost Sheet for the year/month/week ending...

Particulars	Cost Per Unit	Total amt (₹)
opening stock of raw materials		xx
Add:- Purchases		xx
Add:- Carriage inwards		xx
Add:- Customs duty, octroi charges & other exp on purchase		xx
Ad less:- closing stock of raw materials		xx
<u>Raw material Consumed</u>		xx
Add:- Direct / Productive wages		xx
Add:- Direct / chargeable exp		xx
<u>Prime Cost</u>		xx
Works / factory overheads:- Add		
Eg:- Dep on Plant & Machinery		xx
factory rent under product-ive wages.		
less:- Sale of scrap		xx
Add:- opening stock of work in Progress		xx
less:- closing stock of work in Progress		xx
<u>Works / factory Cost</u>		xx
office & distribution exp:- Add		xx
Eg:- office salary, Directors Remuneration, legal charges, office rent & rates, Printing & stationery, telephone & Postage, trade magazine.		xx
<u>Cost of Production</u>		xx
Add:- opening stock of finished goods		xx

less:- closing stock of finished goods		
Cost of goods sold.		xx
Selling & distribution overhead:- Add		xx
Eg: Advertisement, Showroom rent, Salesmen Salary		xx
Cost of Sales		xx
Add:- Profit		xx
Sales		xx

✓ P.4 From the following particulars prepare cost sheet of ABC Ltd Co as on 31/3/2016

1. Cost of raw material consumed - 10,000/- PC
2. Cotton waste - 1000/- P0
3. Power & fuel - 1200/- P0
4. Dep on office furniture - 800/- 00
5. Dep on Plant & Machinery - 1100/- P0
6. Dep on delivery van - 650/- 50
7. Staff Salary - 16,000/- 00
8. Work's manager Salary - 4500/- P0
9. Printing & Stationery - 1400/- 00
10. Advertisement - 1600/- 50
11. Commission - 450/- 50
12. Managing director remuneration - 4000/- 00
13. Lubricating oil - 350/- P0
14. Factory rent - 900/- P0
15. Productive wages - 8000/- PC

Unit - 2 :- Material Cost Control

1. Classification of Material :-

i. Direct material - are those which are directly identified, directly allocated & charged with cost center or cost unit. It includes raw materials, semi-finished products, finished products etc.
Example :- Cotton used in textile, leather in shoe making

ii. Indirect material - are those which cannot be identified with the cost center or cost unit. It cannot be traced as a major part of the product.

Example :- thread used in shirt, nails used in furniture.

2. Material control definition :- It is providing right quantity of materials of the right quality at the right time & place, at the min cost. A systematic control over purchasing, storing, & consumption of material so as to maintain a timely supply of the material at the same time avoiding over stocking

3. Obj of Material Control :-

→ obtaining the material of right quality & quantity for continuous prodn

→ Purchase of raw material as per predetermined standards

→ fixing the level setting to avoid overstocking or understocking of raw material

→ Proper storage of materials against fire /

4. ABC analysis: This technique is also called as always better control. ABC technique denotes 'A' items of 'i' value on high priced materials & a small / less quantity of items. In this type the value of materials is 70% & quantity of materials is 10%. 'B' items refer to medium value of materials which are under normal control procedure. In this type the value of material is 25% & quantity is 30%. 'C' items refers to low value of materials which may represent huge quantity. The value of material is 5% & quantity 60%.

5. VED analysis:- It is a technique of segregating the parts in the stores according to their need & imp to the prodⁿ activities & not the value.

Vital spare parts are not expensive but they are imp & without it there is possibility of stoppage of prodⁿ or prodⁿ may not continue due to critical situation.

Essential spare parts are those which are not very imp but essential & without it prodⁿ may continue for a shorter period.

Desirable spare parts are those which are needed but the cost of shortage of these parts are negligible & hence a reasonable delay does not damage the situation.

2.11.2
6

Just-in-time:- Refers to proper planning to be done for getting the materials at well in time for the prodⁿ. The purpose of JIT is to reduce stock levels to the min & keeping continuous relationship with the suppliers.

raw materials frequently in small quantities based on the requirement.

17 Feb 2018

7 Stock levels :-

→ Reorder level :- It is the point at which the store keeper should initiate purchase requisition for fresh supply of materials. This level lies between min level & Max level of raw materials.

$$\text{Reorder level} = \text{Max Consumption} \times \text{Max Reorder Period.}$$

→ Minimum stock level :- It is that level below which the stock should not normally be allowed to fall. It is also called safety stock / buffer stock. In case material falls below this level, there is a danger of stoppage of prodⁿ

$$\text{Min stock level} = \text{Reorder level} - (\text{Normal consumption} \times \text{Normal reorder period}).$$

$$= \frac{\text{Min stock level} + \text{Reorder Quantity}}{2}$$

→ Danger level : Average consumption × Earliest Possible time for delivery

Notes:-

① Normal Consumption = $\frac{\text{Min consumption} + \text{Max cons}}{2}$

② Normal reorder period = $\frac{\text{Min reorder period} + \text{Max reorder period}}{2}$

$$= 5400 + 407.92 - 1200$$

$$= 4607.92 \text{ units}$$

$$\text{Average stock level} = \frac{\text{MSL} + \text{MSL}}{2}$$

$$= \frac{2400 + 4607.92}{2}$$

$$= 3503.96 \text{ units}$$

21 Feb 2018

Method

Material Pricing Measures :- *

- 1 First in first out (FIFO)
- 2 Last in first out (LIFO)
- 3 Simple average Price method
- 4 Weighted average Price method.

→ First - in first - out (FIFO) Method :- This method assumes that material are used in the order in which they are received in stores. The issues are posted in chronological order of receipts. As a result closing stock will be valued at latest Purchase Price.

Merits of FIFO :-

1. It is easy & simple
2. It is suitable where materials are slow moving, bulky & when the cost is high.

3 It is logical method.

4 Material cost represents actual cost which should be charged to process.

Demerits:-

1. When materials are purchased frequently, complicated calⁿ will invite clerical errors.
2. It overstates Profit at the time of raising prices.
3. If Prices change frequently, comparison of one job with the other will not serve useful purpose.
4. The old material which are return to stores from prodⁿ centre's will be sent to other prodⁿ units as fresh issue.

6 Prepare a store ledger a/c from foll info

1.03.2007 → opening bal 800 units @ ₹ 2

2.03.2007 → Purchase 600 units @ ₹ 3 per unit

6.03.2007 → Issued to prodⁿ @ 600 unit

12.03.07 → Purchased 400 units @ ₹ 3 per unit

22.3.7 → Issued 300 units

26.3.7 → Purchased 500 units @ ₹ 3.5 per unit

30.02.7 → Issued 200 units

STORES LEDGER ACCOUNT

LIFO Method is based on assumption that materials which are received latest are issued first to the Prodⁿ department. Under this method the closing stock of raw material are not valued at current market price.

CLOSING STOCK = 900 - 2 X 450 = 100

Advantages :- (1) Materials are issued according to the market current price

(2) Material are issued at actual cost price.

(3) It is most suitable when prices are rising

(4) This method is matching of cost & revenue.

Disadvantages :- (1) C.S is not valued on the basis of current market price (2) When transⁿ are huge Calⁿ of issue price becomes complicated (3) Complicated Calⁿ will invite clerical errors

Average Price method :- under this method there are two types

a simple average price method

In this method materials are issued from the stores to Prodⁿ Centre at simple average price of materials in the stores. Each time the issue price is calculated based on the average of rates available for issues. When Particular lot of materials are issued & exhausted the price of such lot cannot be considered for subsequent issues

b Weighted average price method.

This method gives weightage to the quantity in addⁿ to the Price. It is calculated by dividing the total cost of raw material by the total quantity of materials in the stock & issues are priced accordingly.

P.1 Prepare stores ledger a/c from the following info & the simple average & Weighted average method

Date	Receipts in unit	Rate	Issues in units
2 Mar 14	200	2	-
10 Mar	300	2.4	-
15 Mar	-	-	250
18 Mar	250	2.6	-
20 Mar	-	-	200

Notes:- Calⁿ of issue Price for 15th Mar

$$\frac{2 + 2.4}{2} = \frac{4.4}{2} = 2.2$$

Calⁿ of issue Price for 20th Mar

$$\frac{2.4 + 2.6}{2} = \frac{5}{2} = 2.5$$

Simple average method
STORES LEDGER ACCOUNT

14th Mar 15Unit - 3 Labour Cost Control4 Direct & Indirect Labour

→ Direct Labour: It is the cost of that labour which is directly engaged in the production work & can be conveniently identified or attributed wholly to a particular job, process or cost unit.

→ Indirect Labour: It is the wage paid to those workers who are not directly engaged in converting raw materials into finished products.

2 Labour turnover: It is the rate of change in the composition of labour force in an org.

i Separation method:

Labour turnover rate = $\frac{\text{no. of workers left during a period}}{\text{Average no. of workers during that period}} \times 100$

Average no. of workers = $\frac{\text{no. of workers at the beginning of the period} + \text{no. of workers at the end of the period}}{2}$

ii Replacement method:

Labour turnover rate = $\frac{\text{NO. OF WORKERS REPLACED DURING THE PERIOD}}{\text{Average no. of workers during that period}} \times 100$

Average no. of workers = $\frac{\text{no. of workers at the beginning of the period} + \text{no. of workers at the end of the period}}{2}$

beginning of the period + no. of workers
end of the period
 2

Flux method: This shows total change in the composition of labour force due to separation & replacement of workers.

Labour Turnover Rate = $\frac{\text{no. of workers left + workers replaced during the period}}{\text{Average no. of workers during that period}} \times 100$

Average no. of workers = same formula

- P.1 From the foll^g data given by personnel department cal^l labour turnover rate by applying
 : Separation method
 : Replacement method
 : Flux method

No. of workers on the pay role at the beginning of month 900; end of the month 1100; during the month 10 workers left, 40 persons were discharged & 150 were recruited. out of this 25 workers are recruited in the vacancies of those leaving while the rest were engaged for an expansion scheme.

Sol: Separation method:

Labour Turnover rate = $\frac{50}{1000} \times 100 = 5$

Average no. of workers = $\frac{900 + 1100}{2} = 1000$

Replacement method

$$\text{labour turnover rate} = \frac{25}{1000} \times 100 = 2.5\%$$

Flux method

$$\text{labour turnover rate} = \frac{50 + 25}{1000} \times 100 = \frac{75}{1000} \times 100 = 7.5\%$$

16.11.18 Imp
Time booking
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to show

Time booking :- Recording of workers time spend on diff jobs is known as time booking.

Wage sheet / Pay roll :- It is a statement which lists the workers showing Gross wages earned by them for a Particular Period & actual wages payable to them after making necessary deduction.

Casual workers :- Temporary workers who are not on the regular pay roll of the factory. They are appointed on a daily basis to meet add'l workload or replace absentee workers.

out workers :- This are the workers who work outside the factory premises on behalf of the undertaking. They usually work on side / at their own home.

o.v. Overtime :- It occurs when a worker works beyond normal working hours. As per the factories act any worker working more than 9 hrs per day / more than 48 hrs per week is entitled to overtime payment.

o.v. Idle time :- It represents loss of labour time. When workers are paid on time basis some

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Difference b/w the time for which they are paid & the time for which they actually work is bound to arise this difference is known as Idle time.

few causes of Idle time are :-

- ① Power failure
- ② Machine break down
- ③ Waiting for instructions
- ④ Fall in demand of the product.

Methods of Wage payment

1. Time Rate System :- $\text{wages} = \text{hours worked} \times \text{Rate per hr}$
 $\text{Days worked} \times \text{Rate per day}$
2. Piece Rate System :- $\text{wages} = \text{rate per unit} \times \text{no. of units produced}$

17 Mar 18

P.1 Cal the earnings of a worker per day of 8 hrs from the following info under time rate system & Piece rate system

Rate per hr - ₹ 5 no. of units produced in a day of 8 hrs - 100 Rate per unit - ₹ 0.5

1. Time rate system : $\text{hours worked} \times \text{Rate per hr}$
 $= 8 \times 5$
 $= ₹ 40$

2. Piece rate system : $\text{rate per units} \times \text{no. of units produced}$

$$= 0.5 \times 100$$
$$= ₹ 50$$

Unit :- 5 Reconciliation of Cost And Financial Accounts

1. need for Reconciliation :-
 - i. Reconciliation reveals reasons for difference in P&L b/w Cost & Financial a/c's.
 - ii. It also helps in checking the arithmetical accuracy of the costing data. Recor_g enables to test the subs_oriability of Cost accounts.
2. Reasons for disagreement b/w Cost & P a/c Profit :-
 - i. items shown only in P&A
 - a. Purely financial charges
 - b. Purely financial income
 - c. Appropriation of Profit
 - ii. items shown only in CA
 - iii. under absorption or over absorption of OH.
 - iv. Different basis of stop valuation.
 - v. Different charges for depn.

Normal

Reconciliation format (Proofoma)

Particulars	₹	₹
P&L as per cost accounts		✓✓
Add: ① over absorption of OH's	✓✓	
② financial income not recorded in cost a/c.	✓✓	
③ items charged only in cost a/c	✓✓	
④ over-valuation of O/S in cost books	✓✓	
⑤ under valuation of C/S in cost books	✓✓	✓✓

Less: ① under-absorption of OH's	✓✓
② Purely financial charges	✓✓
③ under-valuation of C/S in Cost book	✓✓
④ over-valuation of O/S in Cost book	✓✓
P/L as per financial a/c's.	✓✓

P. 4 From the following figures prepare Reconc & determine financial Profit

net Profit as per Costing books	₹	66,760
Factory OH under recovered in Costing		9700
Admin OH recovered in excess		4250
Depn charged in financial book		3660
Depn recovered in Costing		3950
Intn received but not included in Costing		450
Income tax provided in financial books		600
Bank Intn credited in financial books		230
Stores adjustment (Credited in financial books)		420
Depn of stock charged in financial a/c's		260
Dividend appron. in P.A		1200
Loss due to theft & pilferage provided only in financial books		260

7 Apr 18

Unit-4 Overhead Cost Control

1. overheads are the aggregates of indirect material cost, indirect wages & indirect exp. overhead costs are the operating cost of a bus: enterprise which cannot be traced directly to a particular unit of output

2. classification according to func: :-

i. Prodⁿ OH - It is also known as factory OH, work's OH or Manufacturing OH. It is the aggregate of factory indirect material cost, indirect wages & indirect exp. It means indirect expenditure incurred in connection with Prodⁿ operations

ii. Admin OH - It consists of all exp: incurred in the direction, control & admin which is not related directly to prodⁿ. Selling & distribution func: eg telephone, P & G

iii. Selling OH - These are the cost to create & stimulate demand or to secure orders. In other words these are exp: incurred to promote sales. eg:- ads

iv. Distribution OH - It comprises of exp: incurred from the time the product is complete until it reaches its destination or customer eg:- carriage outward, packing cost, warehousing cost.

v. accounting & control of OH :-

→ Steps in distribution of OH :-

1. Collection of OH under separate headings
2. Allocation & apportionment to prodⁿ depart^t & service depart^t.

- 3 Reapportionment of total OH of each service departⁿ to Prodⁿ departⁿ,
- 4 Absorption of OH.

→ Allocation - It means charging the full amt of OH cost to a cost centre. Eg:- departⁿ. Salary of a time keeper^{up}. Can be easily allotted to time keeping department.

→ Apportionment - When an item of cost is common to various cost centres, it is allotted to different cost centres α ly on some equitable bases.

Allocation deals with a whole item of cost & Apportionment deals with α of items of cost.

→ Prodⁿ departⁿ :- is one that engages in the actual manufacture of the product by changing the form or nature of material or by assembling. Eg:- spinning departⁿ, weaving departⁿ.

→ Service departⁿ :- is one rendering the service that contributes in an indirect manner to the manufacture of the product but does not change the form or nature of material. Eg:- accounting departⁿ, canteen departⁿ.