

Cost and Management Accounts

Methods	Character	Suitable for
1. Process Costing	Continuous Production	Sugar, Cement, Chemical, Fertilizer
2. Job / Contract Costing	One Job differ from other Job. (Tailor made job)	Construction of Road, Bridge, Hospital
3. Operation Costing	Service Provider	Transportation, Hospital, Hotel, Telecom, Bank, Information technology
Variation of above methods		
Batch Costing	A lot produce at once	Pharma, Jewelry
Joint Costing	To some extent Joint then separate	Crude Oil
Multiple Costing	Various method applied	Car, Radio, TV and Electronics Items

TECHNIQUES:

	Techniques can be used in any industries at any time. These techniques more than one can be applied at a time	
1. Marginal Costing	For Decision Making	Decision for Price & Volume
2. Standard Costing	For Control & Reduction Cost	Variance Analysis
3. Budgetary Control	For Control & Reduction Cost	Control of element wise cost
4. Uniform Costing	For Control & Reduction Cost	Compare with other units in the same industry
5. Inter firm Comparison	For Control & Reduction Cost	Compare with other firm
6. Target Costing	For Control & Reduction Cost	Phase wise controlling
7. Activity Base Budget	For Control & Reduction Cost	Control through value added activity
8. Activity Base Management	For Control & Reduction Cost	Control through value added use of resources

Material Costing

$$(1) EOQ = \sqrt{\frac{2AO}{C}}$$

A = Annual Demand

O = Ordering Cost

C = Carrying Cost p.a.

Carrying Cost is the cost incurred for storage of Material, Space cost, Insurance and Interest of Working Capital to hold inventory.

(2) Stock Level

a) Reorder level = Maximum consumption x Max period for Delivery

b) Minimum Level = ROL – (Normal consumption x Normal period for Delivery)

c) Maximum Level = ROL + ROQ – (Minimum consumption x Min. period for Delivery)

d) Average Level = Max. Level + Min. Level / 2

e) Safety Level = Maximum Lead time demand – Mean Lead time demand

(3) Stock Turnover Ratio = Consumption of Material / Average Stock

(4) Average Inventory Cost = (Order Size / 2) x Price per unit.

ABC Analysis – Illustrative

Category	% of Value	% of Qty	Example	Control	Valuation
A	60 to 70%	10 to 20%	Electrical Motor	Tight	Accurate
B	20 to 30%	20 to 30%	Belt	Moderate	Accurate
C	10 to 20%	60 to 70%	Bolt	Loose	Estimated

Labour Costing

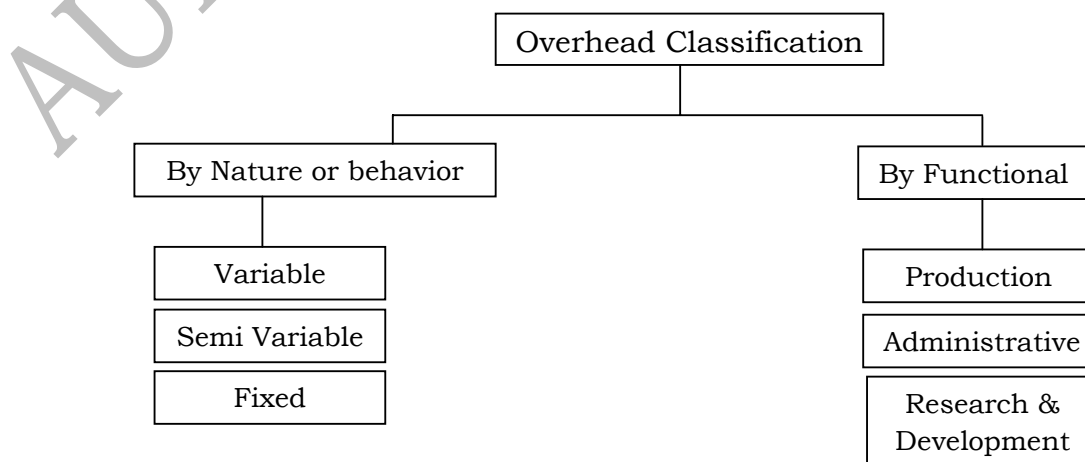
Illustration of Pay slips in Industry

Basic	Cost to the Company Concept (CTC)
VDA	includes
FDA	<u>Monthly Basis</u>
<u>Allowances</u>	Basic
Transport	Variable DA
Education	Fixed DA
House Rent Allowance	Allowances
Gross	HRA
<u>Deduction for</u>	Medical
PF	Education
Credit Society	Transport
Income tax	<u>Contribution of Company</u>
Professional Tax	Contribution of PF
Canteen	<u>Yearly Basis</u>
<u>Net Salary</u>	Total Amount / 12
	Ex-gratia or Bonus
	Super annuation
	Production or any other annual incentive
	Annual incentives _____
	Total CTC _____
	(This is not complete list of items)

Overheads

Overhead (Sum total of Indirect Material + Indirect Labor + Indirect Expenses)
(Indirect Material – Stores, consumables, Depreciation, power, Indirect Labor – Wages of Indirect employees, salary of supervisor etc.)

Indirect expenses – Admn Expenses, Traveling, Audit Fee, Computer Expenses



<u>Absorption Methods</u>	
Method	Suitable
(1) % of Direct Material	Where material to each product substantial Diff. say in pharma. Some material Rs.10/Kg. and one may be Rs. 5,000/Kg.
(2) % of Direct Labor	When Direct Labor is substantially engaged
(3) % Prime cost	When material and labor unequally important
(4) Labor hour Rate	Labor oriented (Manual work is important)
(5) Machine Hour Rate	When precision machining like Engineering is important

Finding under Absorption / Over absorption

- (1) Step I - Finding Absorption Rate = Estimated OH/Estimated Basis
- (2) Step II - Recovered/Absorption OH = Absorption Rate x Actual Activity
- (3) Step III - Under/Over Absorption Recovered OH – Actual OH = + (over) – (under).

Basis of Apportionment of overheads (some illustration)

Expenses	Suitable Basis
(1) Electricity	Electrical Points
(2) Power	Horse Power
(3) Indirect Wages	Direct Wages
(4) Depreciation	Value of Machinery
(5) Insurance	Value of Machinery
(6) Canteen Exp.	No. of employees
(7) Sundry Exp.	Direct Wages
(8) Rent, Rates & taxes	Sq. Area

Marginal Costing**(1) Important Formula**

- (1) P/V Ratio = Contribution/Sales x 100
- (2) BEP in units = Fixed Cost/Contribution per unit
BEP in Rs. = Fixed Cost/(PV Ratio)
- (3) Margin of Safety = Sales – BEP
- (4) Expected Profit when sales is given
Sales x PV Ratio = Contribution
Contribution – Fixed Cost = Profit
- (5) Expected Sales, when expected profit is given
(Fixed Cost + Expected Profit)/PV Ratio

(2) Cost Sheet under Marginal Costing

Element	Total	Per unit
	Rs.	Rs.
(A) Sales		
(B) Variable cost		
(i) Direct Material		
(ii) Direct Labor		
(iii) Variable OH		
Total Variable (B)		
(C) Contribution (A – B)		
(D) Fixed Cost		
(E) Profit (C – D)		

Activity Base Costing

Activity	Cost Drivers
Purchase	Purchase Order
Stores	Issue slips
Maintenance	Repairs order
Dispatch	Deliveries
Material Handling	No. of Movement
Machine Shop	Machine Hours
Machine costs	Machine hours of capacity
Testing costs	Testing hours
Rework costs	Units Reworked
Ordering costs	Number of orders
Engineering costs	Engineering hours / Production Runs
Inspection cost	No. of Inspections/ Inspection orders
Assembly Cost	Labour Hours
Setup Cost	No. of Set ups

Standard Costing (Variance Analysis)