#Balanced Scorecard.
↓
Do from book entire theory on the day of exam before reading @ 11:00pm.

#Illustration 1 — Pg 9.4.
2 — " 9.8 (easy)

#Problem 1. — Pg 9.80.
2. — Pg 9.13.
5. — Pg 9.17.
8 — " 9.22.

Chapter 9.

Profitability Analysis.

I: Reconciliation statement for profit/operating profit :-

O/p of last year)	← Budgeted profit	= ₹	₹
(a)	(+) Growth component	= ₹ (SPV)	(Revenue & cost effect)
(b)	Price recovery component	= ₹ (Profit Volume variance)	(Revenue & cost effect of)
[Only cost effects.]	→ (c) Productivity component	= ₹ (Cost variance)	
	Actual profit (O/p income in CY).	= ₹	₹

(a) "Growth" component :- measures the change in the quantity of output sold.

(i) Revenue effect of growth :- Happens solely due to Δ in no. of units sold.

direct → market size/ industry → For product.

indirect → market share → For company

Formula :-

→ [Actual units of output sold in CY − Actual units of output sold in last year] × SP of last year.

(ii) Cost effect of growth :- It measures the effect of VC & FC separately.

Formula :-

→ VC effect = [units of input required to produce CY output in last year (Budgeted) − Actual units of input used to produce CY's output] × input price in last year.

→ FC effect = [actual units of capacity in last year if adequate to produce CY's prod^n in last year (Budgeted) − actual units of capacity in last year] × rate in last year.

b) Price recovery component :- measures Δ in revenue and cost solely due to Δ in prices.

(i) Revenue effect :-

Formula :-

[SP in CY − SP in last year] × Actual units of output sold in CY.

(b) Cost effect :-

Formula :-

[Input price in CY − Input price in LY] × units of input required to produce CY's output in LY. (Budgeted)

(c) Productivity component :- measures Δ in operating income due to Δ in product mix and/or yield of inputs as compared w/m last year.

(i) Variable cost component :- Formula.

[Actual units of output used to produce CY's output − units of input required to produce CY's output in last year (Budgeted)] × input price in CY

(ii) Fixed cost component :- Formula.

[Actual units of capacity in CY − Actual units of capacity in last year, if adequate to produce CY's production in LY (Budgeted)] × Rate in CY.

Profitability Analysis - Segment Wise :

As a part of performance evaluation, a firm can segment its operations in many different ways.

The basis of segmentation can be product, price, geographical boundaries, demographics, customers or production processes.

In management accounting the purpose of segment wise profitability is to assist management to make better decisions, hence, it is customizable.

Costs in segment analysis can be classified into direct costs and indirect costs. All expenses which are directly related with the existence of a segment are called direct costs. Direct costs can be variable or fixed in nature.

2. Approaches :-

(i). Full cost Approach : Segment profit = Segmental Revenue - DC - Allocated and Apportioned costs

and.

Organizational profit = Σ Segmental profits.

(ii) Contribution approach : Segmental contribution = Segmental revenue - DC.

and.

Organizational profit = Σ Segmental contribution - Total Ind. (Indirect cost)

PROFITABILITY ANALYSIS — CUSTOMER LEVEL:

In many organisations, price just as important to our customers, as it is to our products. different customers or groups of customers, differ in their profitability. This is a relatively new technique that has become possible because it means cost pools of activities. customers use some activities intensively and different groups of customers have different "activity profiles".

Example: Banks / Hotels - service organisations. In particular need to cost customers. Main activities to them:

(a) withdrawal
(b) deposit
(c) statement enquiry.
(d) mortgage o/p.

PROFITABILITY ANALYSIS – PRODUCT WISE.

It is very important to know the relative profitability of an individual product so that management can concentrate on the profitable products and weed out the loss making products from the products portfolio.

Direct Product Profitability is one among the various analytical methods which analyse the profitability for each product or segment of products separately.

Direct product Profitability (DPP). – It is used to measure the profitability of an individual product and assist management to know the true profitability to make appropriate decisions.

DPP uses variety of measures like space used for transportation and storing of goods.

DPP is generally used for retail trade to determine profitability from an individual product.

CIMA describes DPP "used primarily within the retail sector. DPP involves the attribution of both, the purchase price and other indirect costs to each product line.

Thus a DPP as opposed to a GP can be identified for each product.

The cost attribution process utilises a variety of measures to reflect the resource consumption of individual products"

Benefits of DPP :-

(•) Better cost Analysis.

(•) Better pricing decisions.

(•) Better management of stores and warehouse space.

(•) The rationalisation of product ranges.

DPP statement :-

Indirect costs, for DPP may be analysed into basic cost categories as follows :

(i) OH costs – not directly linked to a particular product

(ii) volume related cost – the cost is incurred in relation to the space occupied by products. This includes storage & transport costs.

(iii) Product Batch cost – this cost is often a time based cost. If product items (that is a no. of identical products which are handled together as a batch) are stored on shelves a labour time cost is incurred.

(iv) Inventory financing costs – this is the cost of tying up money in stock and is the cost of the product by interest rate/day or week.

Direct Product Profit.

Sales.	xx.
Less: costs	(xx)
GM.	xx
± Adjustments	xx.
Adjusted GM.	xx.
Less: Direct product costs (warehouse, transportation, store etc.).	(xx)
Direct product profit	xx

→ labour, fuel and vehicle maintenance costs.

includes.

Labour, space and insurance costs. → may be better spread on value or on risk index.

Risk is greater with refrigerator or perishable goods.

Refrigeration costs must only be related to those products that need to be stored in the refrigerator.

(Page 9.7 & 9.8)