

Activity-Based Costing

VS

Traditional Method



ACTIVITY BASED COSTING

{ 1 question in detail }

ABC Co. Ltd. produces three products A,B and Z for which the standard cost and quantities per unit are as follows:

	PRODUCTS		
	A	B	Z
Output (units)	10,000	20,000	30,000
Direct material per unit(Rs)	50	40	32
Direct labour per unit(Rs)	30	40	48
Labour hours per unit	3	4	5
Machine hours per unit	4	4	7
No. of purchase requisitions	600	900	1000
No. of machine set ups	120	130	150

Production overhead split by department:

X – Rs.12,00,000

Y – Rs. 15,00,000

Dept X is labour intensive and Dept Y is machine intensive

Total labour hours in Dept X = 2,00,000

Total machine hours in Dept. Y = 5,00,000

Overhead
Absorption Rate

$$= \frac{1200000}{200000}$$

$$= ₹6 \text{ per labour hour}$$

$$= \frac{1500000}{500000}$$

$$= ₹3 \text{ per machine hour}$$

In traditional costing

Statement of cost { per unit }

	A	B	Z
Direct material	50	40	32
Direct labour	30	40	48
Overheads (X)	18 (3x6)	24 (4x6)	30 (5x6)
(Y)	12 (4x3)	12 (4x3)	21 (7x3)

Product cost

110

116

131

(most costly as per traditional costing)



Production overhead split by activity:
 Receiving and inspection = Rs.14,00,000
 Production scheduling/set up = Rs.13,00,000

No. of batch received/inspected - 2500
 No. of batches for scheduling/set up - 400

Cost driver Rate \Rightarrow
 $\left\{ \frac{\text{overheads}}{\text{cost driver}} \right\}$

Receiving & Inspection
14,00,000
 2500

Set up
13,00,000
 400

$\boxed{\text{₹ 560 per batch}}$

$\boxed{\text{₹ 3250 per set up.}}$

$\boxed{\text{ABC}}$

Statement of cost

	A	B	Z
Direct Mat	50	40	32
Direct Labour	30	40	48
Overheads			
Receiving	33.60	25.20	18.67
Set up.	39	21.13	16.25
Total	152.60	126.33	114.92

Most costly as per ABC.

Working notes on next slide

Overheads

Receiving and inspection

(A)	(600	x	(560)	/	10,000	=	33.60
(B)	(900	x	(560)	/	20,000	=	25.20
(Z)	(1000	x	(560)	/	30,000	=	18.67

No. of purchase requisition Cost driver Rate Output units

Note: Similarly calculations can be done for set up activity.