

Problem 5:

[NU. BBA (Prof)- 2006]

The following particulars are obtained from the records of a manufacturing company:

Cost per unit of a product:

	<u>Taka</u>
Direct materials	1.50
Direct labor	1.80
Variable factory overhead	0.40
Fixed factory overhead	0.40

(Based on 1,00,000 units for normal production)

Sale price per unit Tk. 5

Selling and Administrative expenses:

Fixed Tk. 22,000

Variable 10 % of sales

Production and sales units:

	<u>Year - 1</u>	<u>Year - 2</u>
Production	1, 10,000	95,000
Closing inventory	14,000	9,000

Required: Prepare cost statements for both the years under

- (a) Absorption costing; and
- (b) Variable costing.

Solution:

Workings:

1. Manufacturing cost per unit under absorption costing:

	Taka
Direct materials	1.50
Direct labor	1.80
Variable factory overhead	0.40
Fixed factory overhead	0.40
	<u>4.10</u>

2. Manufacturing cost per unit under variable costing:

	Taka
Direct materials	1.50
Direct labor	1.80
Variable factory overhead	0.40
	<u>3.70</u>

Handwritten notes:
 sales-
 Year - 1: 1,10,000
 Year - 2: 95,000
 Closing inventory: 14,000 (Year 1), 9,000 (Year 2)
 Total Sales: 2,00,000
 Total Production: 2,00,000
 Total Closing Inventory: 23,000
 Total Opening Inventory: 0
 Total Sales - Total Production + Total Opening Inventory - Total Closing Inventory = 0
 (2,00,000 - 2,00,000 + 0 - 23,000) = -23,000
 (Note: The handwritten calculation seems to be a check for unit consistency, but the numbers don't perfectly align with the table above. The table shows production of 1,10,000 and 95,000, and closing inventory of 14,000 and 9,000. Total production is 2,05,000. Total closing inventory is 23,000. Total opening inventory is 0. Total sales is 2,00,000. The difference is 5,000 units.)

3. Under applied/absorbed fixed factory overhead for Year - 2:

$$= (\text{Normal production} - \text{Actual production}) \times \text{Fixed factory overhead per unit}$$

$$= (1,00,000 \text{ units} - 95,000 \text{ units}) \times 0.40$$

$$= 5,000 \times 0.40 = \text{Tk. } 2,000$$

4. Over applied/absorbed fixed factory overhead for Year - 1:

$$= (\text{Actual production} - \text{Normal production}) \times \text{Fixed factory overhead per unit}$$

$$= (1,10,000 \text{ units} - 1,00,000 \text{ units}) \times 0.40$$

$$= 10,000 \times 0.40 = \text{Tk. } 4,000$$

Required: (a)

Income statement**Under the absorption costing method**

Particulars	Year - 1		Year - 2
	Taka	Taka	Taka
Sales (96,000 × 5), (1,00,000 × 5)		4,80,000	
Less: Cost of goods sold:			
Opening inventory (14,000 × 4.10)	0	0	57,400
⊕ Total manufacturing costs	4,51,000		3,89,500
(1,10,000 × 4.10), (95,000 × 4.10)	4,51,000		4,46,900
Less: Closing inventory	(57,400)		(36,900)
(14,000 × 4.10), (9,000 × 4.10)	3,93,600		4,10,000
⊖ Over / Under applied fixed factory OH	(4,000)		2,000
		(3,89,600)	
Gross profit		90,400	
Less: Selling and Administrative expenses:			
Fixed	22,000		22,000
Variable (10% of sales)	48,000	(70,000)	50,000
Net Operating Income		20,400	