

Cost Accounting 2

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First: Analysis of marketing costs according to the areas of distribution and sale:

Marketing costs are analyzed by areas of distribution and sales to:

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A. Direct costs: They represent the cost components that can be easily linked directly to the sales area or distribution area, such as transportation costs within the area, packaging, and storage, and selling and distribution costs within the area.

B. Indirect costs: They represent the cost components that are difficult to relate directly to the sales area or the distribution area, such as the storage costs at the main center, the cost of advertising at the firm level

To measure marketing costs according to the areas of distribution and sales to determine the share of the unit sold from this cost, this is done according to the following steps:

1
Analyzing marketing costs into direct costs and indirect costs according to the relationship to the area.

2
Allocation of indirect marketing costs on a fair and appropriate basis for the nature of the cost component.

3
Determine the share of the unit sold in the area from the marketing cost, using an appropriate allocation rate.



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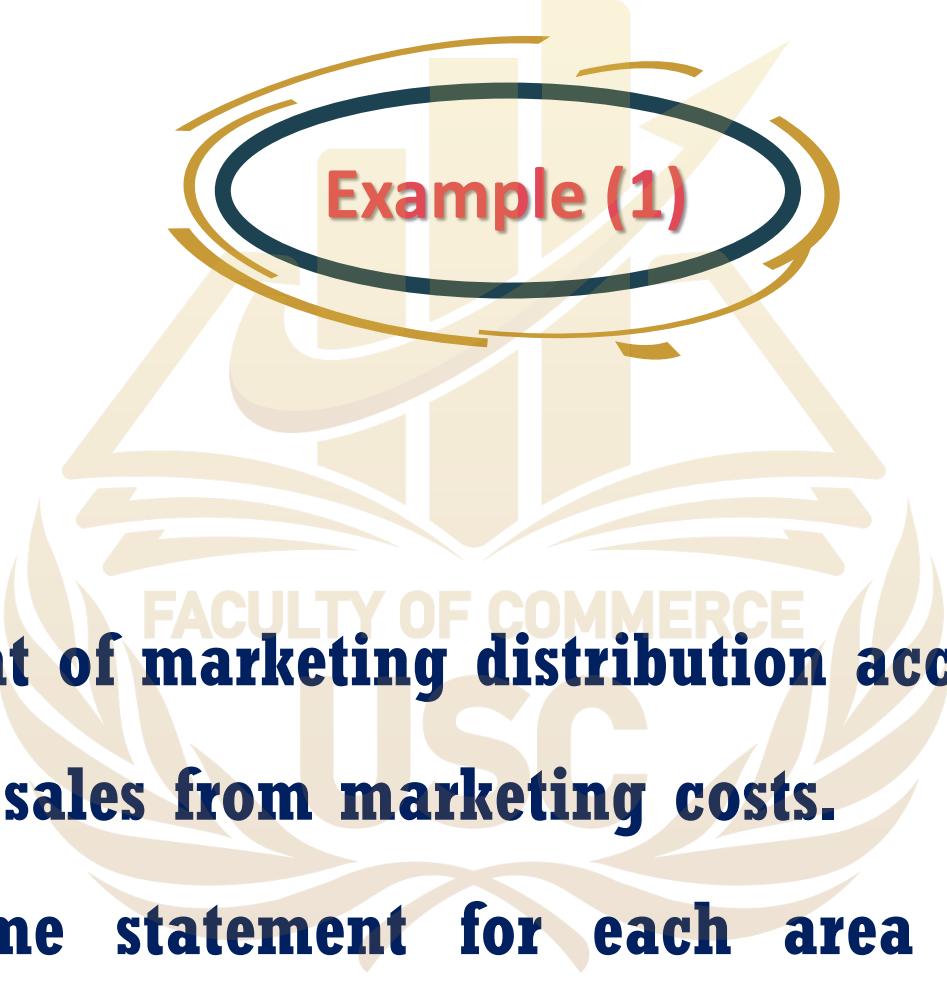
Analyzing and measuring marketing costs

Example (1)

Sherif and Shady Company for Foods Trading, headquartered in Cairo, markets its sales in the Egyptian and external market, and the company has divided the sales areas in the Egyptian market into three areas: Cairo, Lower Egypt, Upper Egypt, and one external area, the Arab Gulf area.

The following is the marketing activity data for the month of October 2021:

data	Home office	Cairo	Lower Egypt	Upper Egypt	Arab Gulf
Sales value	-	100000	80000	90000	150000
Sales commission	-	%2	%3	%4	%5
Salaries of salesmen	-	10000	4000	3000	18000
Transportation expenses	11200	2000	3000	4000	6000
Packaging	-	2500	2500	1500	4000
Advertising	18900	-	-	-	-
Storage costs	9000	1500	1000	1500	3000
Selling management expenses	14700	1000	500	500	4000
The distance from the main center of the areas	-	20 Kg	100 Kg	500 Kg	2000 Kg
Weigh the dispatched quantities	-	50 ton	25 ton	25 ton	20 ton
Cost of purchasing units sold	-	50000	50000	60000	40000
Insurance expenses	10000	-	-	-	-



Example (1)

Required:

1. Preparing a statement of marketing distribution according to areas.
2. Finding the share of sales from marketing costs.
3. Preparing the income statement for each area if you know that the administrative costs amount to 21,000 pounds, and the financing amount to 2,520 pounds.

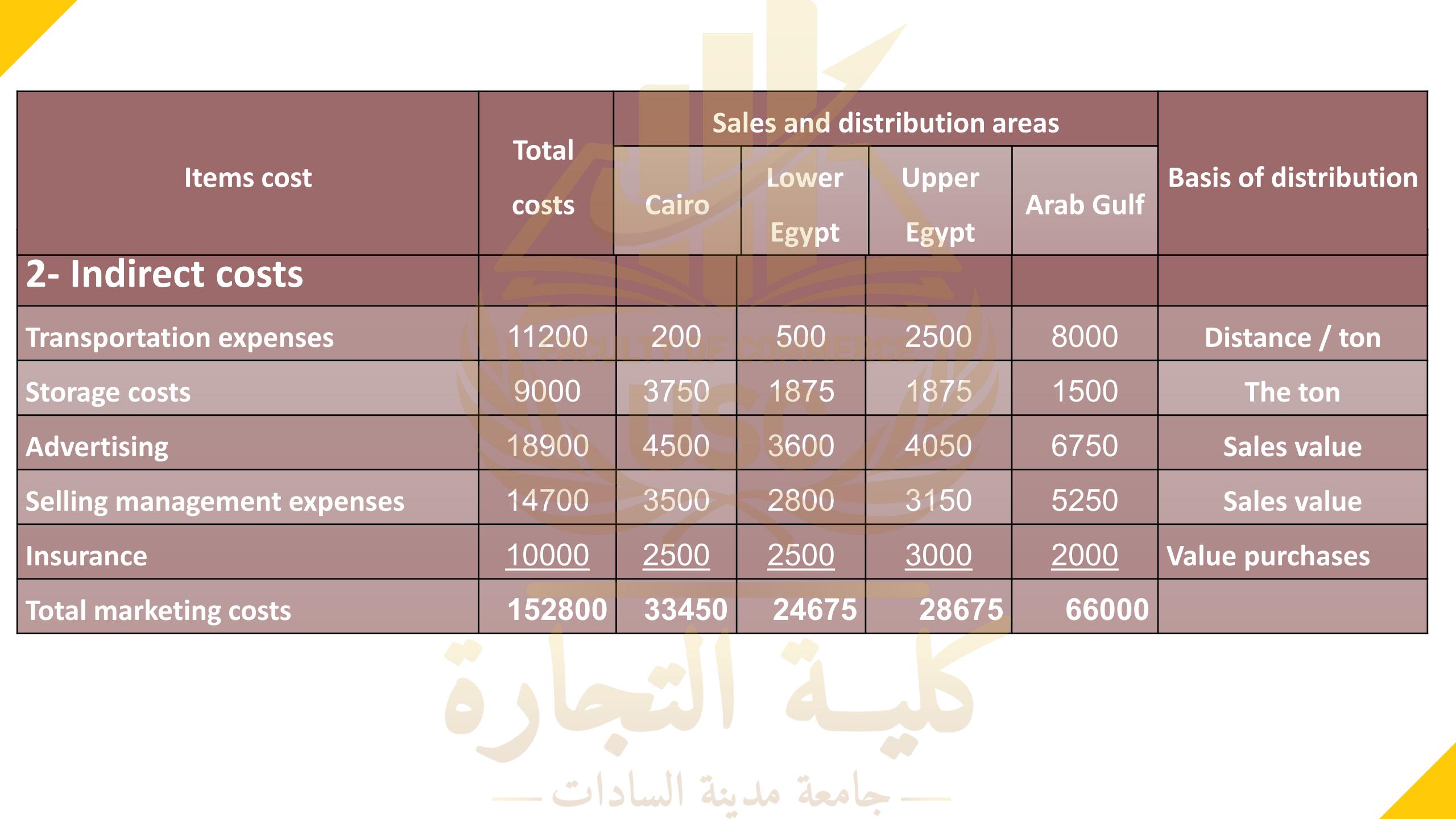
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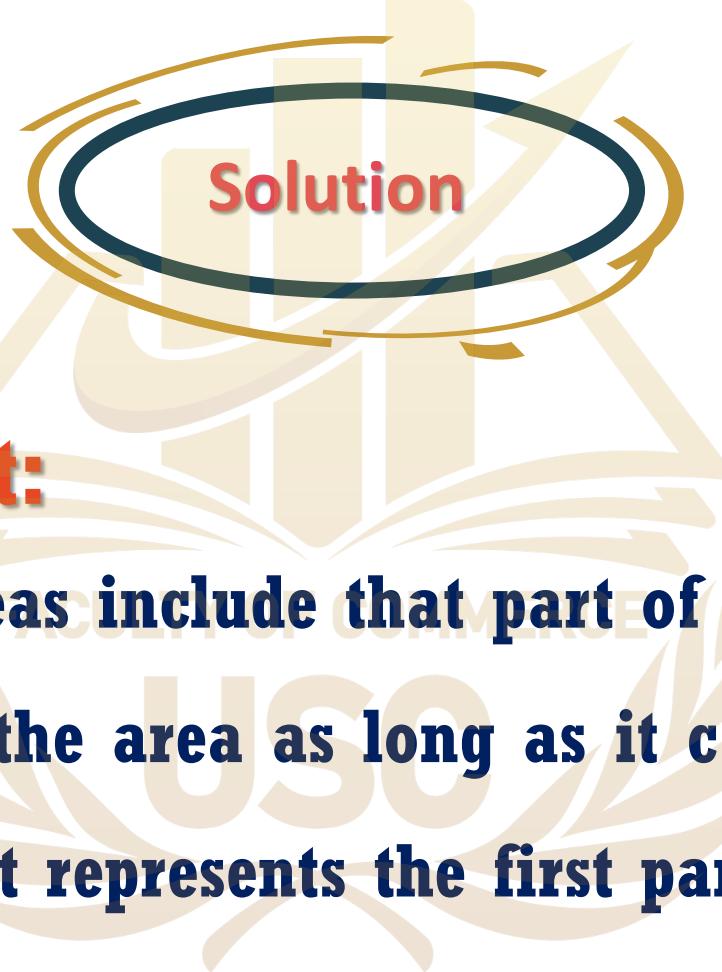


1. Preparing a statement of distribution of marketing costs by areas:

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Items cost	Total costs	Sales and distribution areas				Basis of distribution
		Cairo	Lower Egypt	Upper Egypt	Arab Gulf	
1- Direct costs						
Sales commission	15,500	2,000	2,400	3,600	7,500	direct
Salaries of salesmen	35,000	10,000	4,000	3,000	18,000	direct
Packaging	10,500	2,500	2,500	1,500	4,000	direct
Transportation expenses	15,000	2,000	3,000	4,000	6,000	direct
Storage costs	7,000	1,500	1,000	1,500	3,000	direct
Selling management expenses	<u>6,000</u>	<u>1,000</u>	<u>500</u>	<u>500</u>	<u>4,000</u>	direct
Total direct costs	89,000	19,000	13,400	14,100	42,500	





Notes on the statement:

- 1. The direct costs of the areas include that part of the cost component or the entire component cost of the area as long as it can be linked and assigned directly to this area, and it represents the first part of the table.**



Solution

Notes on the statement:

2- Indirect costs were distributed on the following basis:

- ❖ Transportation expenses based on the distance, weighted in tons from the headquarters, according to the following ratios:

Cairo,	Lower Egypt,	Upper Egypt,	Arab Gulf
20×50	100×25	500×25	2000×20
1000 :	2500 :	12500 :	40000

Solution

❖ Transportation expenses

$$\text{Cairo} = (1000 / (1000+2500+12500+40000)) \times 11200 = 200$$

$$\text{Lower Egypt} = (2500 / (1000+2500+12500+40000)) \times 11200 = 500$$

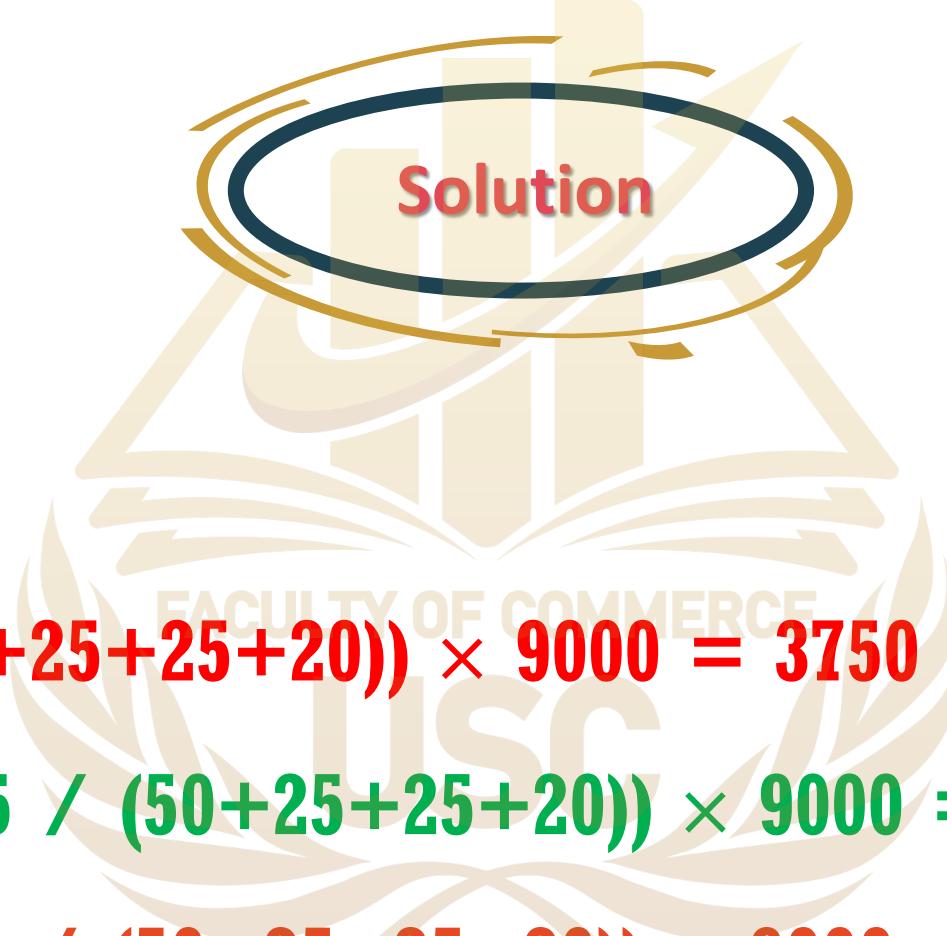
$$\text{Upper Egypt} = (12500 / (1000+2500+12500+40000)) \times 11200 = 2500$$

$$\text{Arab Gulf} = 40000 / (1000+2500+12500+40000) \times 11200 = 8000$$



- **Storage costs** based on the quantity that each area benefits from the head office, according to the following rates for Cairo, Lower Egypt, Upper Egypt, and the Arabian Gulf, 50: 25: 25: 20, respectively.

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Solution

❖ Storage costs

$$\text{Cairo} = (50 / (50+25+25+20)) \times 9000 = 3750$$

$$\text{Lower Egypt} = (25 / (50+25+25+20)) \times 9000 = 1875$$

$$\text{Upper Egypt} = (25 / (50+25+25+20)) \times 9000 = 1875$$

$$\text{Arab Gulf} = (20 / (50+25+25+20)) \times 9000 = 1500$$



- Advertising costs were distributed based on the sales value for each area of Cairo, Lower Egypt, Upper Egypt, and the Arabian Gulf in the following rates: 100,000: 80,000: 90,000: 150,000 respectively

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❖ Advertising costs

Cairo = $(100,000 / (100,000 + 80,000 + 90,000 + 150,000)) \times 18900 = 4500$

Lower Egypt = $(80,000 / (100,000 + 80,000 + 90,000 + 150,000)) \times 18900 = 3600$

Upper Egypt = $(90,000 / (100,000 + 80,000 + 90,000 + 150,000)) \times 18900 = 4050$

Arab Gulf = $(150,000 / (100,000 + 80,000 + 90,000 + 150,000)) \times 18900 = 6750$

- ❖ **Sales department expenses** in the head office were distributed based on the sales value for each area and in the same proportions for advertising costs.
- ❖ **Insurance expenses** were distributed based on the value of purchases on the basis that insurance is made on the stored value, which is represented in the purchases for each area, i.e. the ratio of 50,000: 50,000: 60,000: 40000, respectively, for the areas of Cairo, Lower Egypt, Upper Egypt, and the Arabian Gulf.

2- Determining the pound's share of sales from marketing costs for each area:

- ❖ The pound was used here as sales, as the diversity and multiplicity of food products do not enable us to find the unit's share of marketing costs, as in cases of limited and large-value commodity trade such as cars or other large-value commodities with limited diversity.

2- Determining the pound's share of sales from marketing costs for each area:

The allocation rate is determined on the basis that:

Allocation rate = marketing costs for the area value of sales for the area

- Allocation rate for Cairo = $33450 \div 100000 = .3345$ EGP / Sales EGP
- Allocation rate for Lower Egypt = $24675 \div 80000 = .3084$ EGP/pounds sales
- Upper Egypt allocation rate = $28675 \div 90000 = .3186$ EGP / pounds sales
- Allocation rate for the Arab Gulf = $66000 \div 150000 = .44$ EGP / Sales pounds

3- Preparing the income statement for sales and distribution areas:

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Income statement for the month of October 2020

For Sherif & Shady Brothers Trade Company

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Elements of revenue and costs (areas)	Total	Cairo	Lower Egypt	Upper Egypt		Arab Gulf
Sales value	420000	100000	80000	90000		150000
<u>deduct</u>						
purchases Value	200000	50000	50000	60000	40000	
Marketing costs	<u>152800</u>	<u>33450</u>	<u>24675</u>	<u>28675</u>	<u>66000</u>	
Sales costs	<u>352800</u>	<u>83450</u>	<u>74675</u>	<u>88675</u>	<u>106000</u>	
Gross income (profit)	67200	16550	5325	1325	44000	
<u>deduct</u>						
Administrative costs	21000	5000	4000	4500	7500	
Financial burdens	<u>2520</u>	<u>600</u>	<u>480</u>	<u>540</u>	<u>900</u>	
Total administrative and financing costs	<u>23520</u>	<u>5600</u>	<u>4480</u>	<u>5040</u>	<u>8400</u>	
Net income (profit)	43680	10950	845	3715	35600	

Notes on the income statement:

1. The administrative and financing costs were distributed on the basis of the sales value in each area, at a ratio of 100,000: 80,000: 90000: 150,000 for Cairo, Lower Egypt, Upper Egypt, and the Arabian Gulf areas, respectively.

Notes on the income statement:

2- Despite the higher rate of Allocating (Charging) marketing costs per sales pound in the **Arabian Gulf area** than in other areas, it is the area that achieved the highest profits during the month of October due to the increase in its sales value. Nevertheless, the company must study aspects of spending rationalization so that this rate decreases.

Notes on the income statement:

3. The Lower and Upper Egypt area, despite the low rate of Allocating (Charging) marketing costs per sales pound, but are the areas that one of them achieved the lowest profits in Lower Egypt and achieved losses in Upper Egypt, which requires the management to study the reasons for this, and the possibility of conducting a specialized advertising campaign for the consumers of these areas to enhance sales process.

- ❑ Second: Analysis of marketing costs according to the marketing functions:
- ❑ In the marketing activity, areas or commodities can be considered the productive function, and the rest of the jobs are among the marketing services functions, or according to the concept of cost centers, it can be said that there are:

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1-Marketing center represented in areas or commodities.

2

2-Marketing services represented in the assisting centers.

The marketing centers include:

- 1. The function (center) of the storage :** This center provides a storage service, whether at the level of the company or at the level of a area or a limited commodity, and the costs of this job are lighting, insurance, guarding, wages, salaries and all other expenses related to stores, including depreciation of buildings and tools that are incurred inside Store and others.

The marketing centers include:

2. Sales function: This center provides sales services at the level of commodities or areas. Its costs include wages, salaries, and sales administration expenses.



The marketing centers include:

3. The advertising and promotion center: This center provides advertising and promotion services through an agreement with advertising agencies and choosing means and tools for advertising and promotion, whether at the level of the company, area, or commodity, and the cost of this function includes the rental costs of advertising tools and Advertising spaces, places of advertisement, wages, salaries, and other expenses related to advertising, including publications, depreciation, and others.

The marketing centers include:

4. Packaging function: This job provides packaging services as evaluation, purchase, and selection of packaging materials, the cost of this center includes raw materials for packaging, printing, wrapping, packing, wages, and other expenses associated with this function.

The marketing centers include:

5. **The transportation and freight function:** This function provides transportation and freight services for sales, whether from main stores to the stores of distribution areas, or from sales stores to customers, and the cost of this center includes transportation expenses such as renting or depreciating cars, repairing and associated maintenance, drivers' wages, salesmen, insurance, and other expenses associated with transportation and shipping abroad.

The marketing centers include:

6. **Credit and collection function:** This function provides credit sales services to clients, specifically the credit period, its value, and collection dates, such as collection commissions, discounts, bad debts, wages, salaries, and others.

The marketing centers include:

7. Marketing Research Function: This function provides research related to different markets at the level of the company, area, and commodity, and determines the customers' needs of the product in terms of price, quality, function, etc., and the cost of this center includes wages and salaries for researchers, publications, tools, and the depreciation of the assets associated with that of furniture, offices and computers and others.

The marketing centers include:

8. **After-sales services function:** This function provides after-sales service for the goods sold in terms of warranty, maintenance, and repair, and the cost of this function includes the wages and salaries for after-sales services and the cost of free spare parts in the warranty periods, as well as other expenses related to providing this service such as Depreciation of after-sales service cars and the cost of operating these cars, including fuel, repair, and others.

The marketing centers include:

9. The electronic and television sales function: This function provides the service of selling through electronic means (Internet) and television for various areas of sale and commodities, and the cost of this job includes wages, salaries, subscription to the internet and satellites, advertisement in television, mail and telephone expenses, depreciation of devices and tools, etc.

Marketing costs are analyzed according to their function for the purpose of Allocating (Charging) them to sales according to the following steps:



The first step: A Measurement and identification of the elements of marketing costs classified into materials, wages, and expenses.

The second step: counting and define the marketing elements for the marketing services centers or each assisting function of the marketing functions.

The fourth step: The unit share of marketing costs is determined after determining the allocation rate for each area, either based on the number of units sold or on the basis of the sales value

The third step: the distribution of the costs of the marketing service centers (the assisting function) to the main marketing centers, whether they are a commodity or areas of sale and distribution

The unit share of marketing costs is determined after determining the allocation rate for each area, either based on the number of units sold or on the basis of the sales value using the following equation:

$$\text{Allocation Rate} = \text{Marketing Cost} \div \text{Number of Units Sold} = \text{EGP / Unit Sales}$$

$$\text{Or: Allocation Rate} = \text{Marketing Cost} \div \text{Sales Value} = \text{EGP / Sales EGP}$$

- Third: Analysis of Marketing Costs on the Basis of Commodities:
- The first objective of marketing cost accounting is to determine the unit sold a share of the marketing cost, and then, in addition to the analysis on the functional basis and the basis of sales and distribution areas, the cost accountant uses the analysis of marketing costs on the basis of goods.
- The accountant faces a problem, especially in a commercial firm that deals in many commodities, which requires a lot of effort, time and cost to analyze the cost on the basis of commodities

The cost accountant classify commodities into homogeneous groups, whether on the basis of:

Price or cost

1

Distribution channels

3

2

Specifications

4

Weight or volume

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- ❑ Each group of commodities treats as one commodity, and the group's share of the marketing costs is determined
- ❑ Then the marketing cost of each group is re-allocated to the units sold of the group's goods to extract the average marketing cost of units for each commodity of the group.



- That is, the commodity group, if the commodities are included in groups, then the one commodity group according to the analysis of marketing costs on the basis of the commodities is the same as the main marketing center (production center).
- The marketing services centers that are to be distributed again on these goods are represented in the assisting functions of the marketing activity.

The analysis of marketing costs on the basis of commodities is characterized by:

1-Ease of analyzing and classifying marketing costs on the basis of the relationship to the unit sold to:

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Direct costs: They are those costs that are directly related to the unit sold of the commodity or the commodity group, the salaries and commissions of the salesmen for the commodity or the commodity group, the cost of marketing research related to the commodity or the commodity group, the cost of after-sales services related to the commodity or the commodity group and other marketing costs in which the benefit and the reason for its occurrence depend on the commodity or commodity group.

Indirect costs: They are those costs that are not directly related to the unit sold of a specific commodity or commodity group previously identified, and all commodities or commodity groups in the company benefit or at least a large number of them, and then they need certain bases for their distribution, such as the general announcement of the company or Goods or different commodity groups, the cost of storage or transportation, credit expenses, collection and other costs of the assisting functions of the marketing activity that are limited to the marketing service centers.

The analysis of marketing costs on the basis of commodities is characterized by:

2- Ease of identifying and measuring the share of the sold unit of the commodity or commodity group from the marketing costs through the following steps:

The first step: collecting the cost elements of the commodity or commodity group, which represents the direct marketing cost of the commodity or commodity group.

The second step: collecting the elements of indirect costs on the company's marketing services centers.

The third step: the distribution of the cost of the marketing services centers on the commodities or commodity groups (centers of marketing activity), which corresponds to the production centers in the manufacturing firm.

The fourth step: Determine the allocation rate for each commodity or commodity group through the following equation:

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Allocation Rate

= Total Marketing Cost of the Item or Group of Goods ÷ Amount (value) of sales

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The End
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