Written Exam at the Department of Economics summer 2019

Managerial Accounting

Final Exam

29 May 2019

(3-hour closed book exam)

Answers only in English.

This exam question consists of 5 pages in total

Falling ill during the exam

If you fall ill during an examination at Peter Bangs Vej, you must:

- contact an invigilator who will show you how to register and submit a blank exam paper.
- leave the examination.
- contact your GP and submit a medical report to the Faculty of Social Sciences no later than five (5) days from the date of the exam.

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You cheat at an exam, if during the exam, you:

- Make use of exam aids that are not allowed
- Communicate with or otherwise receive help from other people
- Copy other people's texts without making use of quotation marks and source referencing, so that it may appear to be your own text
- Use the ideas or thoughts of others without making use of source referencing, so it may appear to be your own idea or your thoughts
- Or if you otherwise violate the rules that apply to the exam

Exercise 1

The managing director Mr. Nysholt didn´t believe in the absorption profit or loss statement he was confronted with as shown below as the operating profit despite constant sales has doubled from year 1 to year 2:

UUR	Year 1	Year 2
Sales (20,000 units each year)	1,400,000	1,400,000
Less cost of goods sold	920,000	800,000
Gross margin	480,000	600,000
Less selling and administrative expenses	400,000	400,000
Operating profit	80,000	200,000

Above are shown the results of the first two years of operation. In the first year, the company produced and sold 20,000 units; in the second year, the company again sold 20,000 units, but it increased production in order to have an inventory of units on hand, as shown below:

	Year 1	Year 2
Production in units	20,000	25,000
Sales in units	20,000	20,000
Variable production cost per unit (EUR)	16	16
Fixed manufacturing overhead costs (total) (EUR)	600,000	600,000

The company produces a single product; fixed manufacturing overhead costs are applied to the product based on each year's production. Variable selling and administrative expenses are 2 EUR per unit sold.

Questions

1. Compute the unit product cost for each year using:
    a. Absorption costing.
    b. Variable costing.
2. Prepare a profit and loss statement for each year, using the contribution approach with variable costing.
3. Reconcile the variable costing and absorption costing profit figures for each year.

4. Explain why, under absorption costing, the profit for Year 2 was higher than the profit for Year 1.

Exercise 2

Longboard Surf operates three stores situated at different shores in Oahu. A segmented profit statement for the company for the last quarter is given below:

Longboard Surf
Profit & Loss statement for the quarter ended 30 June

In USD	Total	East store	South store	North store
Revenue	9,000,000	2,160,000	3,600,000	3,240,000
Cost of goods sold	4,971,600	1,209,600	1,980,000	1,782,000
Gross margin	4,028,400	950,400	1,620,000	1,458,000
Operating expenses:				
Selling expenses	2,451,000	694,200	945,000	811,800
Administrative expenses	1,149,000	318,000	452,700	378,300
Total expenses	3,600,000	1,012,200	1,397,700	1,190,100
Net operating profit (loss)	428,400	(61,800)	222,300	267,300

The East store has consistently shown losses over the past two years. For this reason, management seriously considers to close the store. The company has asked you to make a recommendation as to whether they store should close the store or keep it open. The following additional information is provided to you:

a. The breakdown of the selling and administrative expenses is as follows:

In USD	Total	East store	South store	North store
Selling expenses:				
Sales salaries	717,000	210,000	267,000	240,000
Direct advertising	561,000	152,000	216,000	192,000
General advertising*	135,000	32,400	54,000	48,600
Store rent	900,000	255,000	360,000	285,000
Depreciation of store fixtures	48,000	13,800	18,000	16,200
Delivery salaries	63,000	21,000	21,000	21,000
Depreciation of delivery equipment	27,000	9,000	9,000	9,000
Total selling expenses	2,451,000	694,200	945,000	811,800

*Allocated on the basis of sales.

In USD	Total	East store	South store	North store
Administrative expenses:				
Store management salaries	210,000	63,000	90,000	57,000
General office salaries*	150,000	36,000	60,000	54,000
Insurance on fixtures and inventory	75,000	22,500	27,000	25,500
Utilities	318,000	93,000	120,000	105,000
Employment taxes	171,000	49,500	65,700	55,800
General office – other*	225,000	54,000	90,000	81,000
Total administrative expenses	1,149,000	318,000	452,700	378,300

*Allocated on the basis of sales.

b. The lease (rent) on the East store building can be broken with no penalty.
c. The fixtures being used in the East store would be transferred to the other two stores if the East store were closed.
d. The general manager of the East store would be retained and transferred to another position in the company if the East store were closed. She would be filling a position that would otherwise be filled by hiring a new employee at a salary of USD 33,000 per quarter. The general manager of the East store would be retained at her normal salary of USD 36,000 per quarter. All other employees in the store would be discharged.
e. The company has one delivery crew that serves all three stores. One delivery person could be discharged if the East store were closed. This person's salary is USD 12,000 per quarter. The delivery equipment would be distributed to the other stores. The equipment does not wear out through use but does, eventually, become obsolete.
f. The company's employment taxes are 15% of salaries.
g. One-third of the insurance in the East store is on the store's fixtures.
h. The 'General office salaries' and 'General office – other' relate to the overall management of Longboard Surf. If the East store were closed, one person in the general office could be discharged because of the decrease in overall workload. This person's salary is USD 18,000 per quarter.

Questions

1. Prepare a schedule showing the change in revenues and expenses and the impact on the company's overall profit that would result if the East store were closed.
2. Explain shortly your choices in the calculation you have made.
3. Assuming that the store space can't be subleased, what recommendation would you make to the management of Longboard Surf?
4. Assume that if the East store were closed, at least one-fourth of its sales would transfer to the North store, due to strong customer loyalty. The North store has enough capacity to handle the increased sales. Assume that the increased sales in the North store would yield the same gross margin rate as present sales in that store. What effect would these factors

have on your recommendation concerning the East store? Show all computations to support your answer.

Exercise 3

GF Ltd manufactures garden furniture. One of the company's products is a small round table in metal. The company has a standard cost system in use. According to the standards that have been set for the table, the factory should work 2,850 hours each month to produce 1,900 tables. The standard costs associated with this level of production activity are:

In GBP	Total	Per table
Direct materials	63,840	33,60
Direct labour	25,650	13.50
Variable manufacturing overhead (based on direct labour-hours)	10,840	5.40
		52.50

During March, the factory worked only 2,800 direct labour-hours and produced 2,000 tables. The following actual costs were recorded during the month:

	Total	Per table
Direct materials (12,000 kilo)	68,400	34.20
Direct labour	27,300	13.65
Variable manufacturing overhead	10,500	5,25
		53.10

At standard, each table should require 5.6 kilo of material. All of the materials purchased during the month were used in production.

Questions

Calculate the following variances for March:

1 The materials price and quantity variances.

2 The labour rate and efficiency variances.

3 The variable overhead spending and efficiency variances.