University of Groningen

Faculty of Science and Engineering

Exam

Management Accounting IEM (WPIE 18004)

April 3, 2019, 18.30-21.30

VERSION 1

- This examination comprises 40 questions on 10 pages, for a total of 60 points.
- You have 180 minutes to complete the examination.
- You are not allowed to leave the room during the first 30 minutes.
- You are not allowed to use a formula sheet or any other document, except for a dictionary.
- Please provide answers on the answer sheet only; answers which are not provided on the answer sheet will not be considered.
- First, fill in the requested information (name, student number etc.) on the answer sheet.
- On the answer sheet, mark your student number in the space provided.
- Please mark the version number on the answer sheet. Answer sheets without version number will not be marked.
- Return the complete exam and the answer sheet with your name and student number. Please do not forget to signoff when you hand in the answer sheet. Answer sheets of students who do not signoff will not be marked.
- Please read the instructions for use on the answer sheet carefully.
- Your calculator should meet the Faculty requirements: No graphical calculators and its memory has to be empty.
- If you suspect an error with a certain question, do not call the invigilator, as **questions about content will not be answered**. Instead, answer the question as best as possible. Then after the exam send your objection by email to the course coordinator.

Good luck!

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the following is a product cost for a construction company?
A) Rent of the company's main office
B) Cost of transporting raw materials to the job site
C) Wages paid to the company's payroll clerk
D) All of these.

2) The benefits of a just-in-time system would include all of the following **except**:
A) increased warehousing costs.
B) improved customer satisfaction.
C) decrease in the number of suppliers.
D) reduced inventory holding costs.

3) Select the correct statement regarding fixed costs.
A) Fixed cost per unit is not fixed.
B) There is a contradiction between the term "fixed cost per unit" and the behavior pattern implied by the term.
C) Total fixed cost remains constant when volume changes.
D) All of these are correct statements.

4) The excess of revenue over variable costs is referred to as:
A) contribution margin B) gross profit
C) manufacturing margin D) gross margin

5) Rock Creek Bottling Company pays its production manager a salary of $6,000 per month. Salespersons are paid strictly on commission, at $1.50 for each case of product sold.

For Rock Creek Bottling Company, the production manager's salary is an example of:
A) a fixed cost. B) a variable cost.
C) a mixed cost. D) None of these

6) The following income statements are provided for two companies operating in the same industry:

	Felix Company	Jinx Company
Revenue	$ 200,000	$ 200,000
Variable costs	(25,000)	(70,000)
Contribution margin	175,000	130,000
Fixed costs	(70,000)	(25,000)
Net income	$ 105,000	$ 105,000

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Assuming sales increase by $1,000, select the correct statement from the following:
A) Only Felix will experience an increase in profit.
B) Felix's net income will be more than Jinx's.
C) Felix's net income will increase by $250.
D) Jinx's net income will increase by 6%.

7) Billings Company has developed the following budgeted income statement:

Sales Revenue (2,300 units × $14 sales price)	$ 32,200
Total Variable Expenses (2,300 × $6 per unit)	(13,800)
Contribution Margin	18,400
Fixed Expenses	(10,000)
Net Income	$ 8,400

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The Company is experimenting with new engineering techniques and believes it can reduce variable cost to $4.50 per unit and significantly improve the product. The innovations would double fixed costs but the company expects to be able to increase sales to 3,500 units. If this strategy is pursued the company's budgeted net income will:
A) decrease by $4,250. B) increase by $13,250.
C) increase by $4,850. D) decrease by $4,150.

8) The margin of safety ratio can be defined as the:
A) Excess of budgeted sales over variable costs divided by budgeted sales.
B) Excess of budgeted sales over fixed costs divided by budgeted sales.
C) Excess of budgeted sales over break-even sales divided by budgeted sales.
D) Excess of budgeted sales over break-even sales divided by break-even sales.

9) At the beginning of the year, Barcroft Co. estimated that its total annual fixed overhead costs would amount to $25,000. Further, Barcroft estimated that its volume of production would be 2,000 units of product. Based on these estimates, Barcroft computed a predetermined overhead rate that was used to allocate overhead costs to the products made during the year. As predicted, actual fixed overhead costs did amount to $25,000. However, actual volume of production amounted to 2,200 units of product. Based on this information alone:
A) Products were overcosted during the year.
B) Products were undercosted during the year.
C) Products were costed accurately during the year.
D) The answer cannot be determined from the information provided.

10) Which of the following statements is **incorrect**?
A) A company may need to allocate overhead costs to products to make pricing decisions for the products.
B) A predetermined overhead rate may be used to allocate overhead costs when volume varies during the year.
C) A predetermined overhead rate is calculated by dividing costs by volume, using a measure of volume such as direct labor hours or direct materials cost.
D) A predetermined overhead rate is calculated using actual cost and volume data.

11) The insurance cost for a large factory would be considered a:
A) unit-level cost. B) facility-level cost.
C) batch-level cost. D) product-level cost.

12) Keene Company allocates overhead on the basis of direct labor hours. It allocates overhead costs of $8,000 to two different jobs as follows:
Job 1: (10 hours) = $4,000; Job 2: (10 hours) = $4,000
The production process for Job 2 was then automated. Now Job 2 requires only two hours of direct labor but four hours of mechanical processing. As a result, total overhead increased to $12,000. How much overhead cost will be assigned to Job 1 after automation?
A) $6,000 B) $4,000 C) $10,000 D) $2,000

13) Scholastic Tours is trying to decide which one of two tours it will introduce. The costs and revenues associated with each alternative are listed below:

	Eastern Tour	Western Tour
Projected revenue	$ 14,000	$ 18,000
Variable costs	2,000	10,000
Fixed costs	6,000	6,000
Profit	$ 6,000	$ 2,000

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What are the incremental (differential) costs of the Western Tour?
A) $6,000 B) $4,000
C) $8,000 D) None of the above.

14) Easton Company makes and sells scooters. Easton incurred the following costs in its most recent fiscal year:

Cost Items Appearing on the Income Statement	
Materials cost ($10 per unit)	Depreciation on manufacturing equipment
Company president's salary	Salaries of administrative personnel
Labor cost ($4 per unit)	Research and development costs
Advertising costs (150,000 per year)	Real estate taxes on factory
Shipping and handling ($0.15 per unit)	Inspection costs

Easton can currently purchase the scooters it makes from another company. If the company purchases the scooters, Easton would still continue to use its own logo, sales staff, and advertising programs. Which of the following costs would be classified as a facility-level cost?
A) Materials cost B) Company president's salary
C) Shipping and handling D) Inspection costs

15) Oakton Furniture provided the following information relevant to its sales for December Year 1 and the first quarter of Year 2:

	Dec. Year 1 (Actual)	Jan. Year 2 (Budgeted)	Feb. Year 2 (Budgeted)	Mar. Year 2 (Budgeted)
Credit sales	$ 120,000	$ 280,000	$ 310,000	$ 220,000
Cash sales	$ 20,000	$ 50,000	$ 60,000	$ 24,000

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Based on the company's collection history, 42% of credit sales are collected in month of sale and the remainder is collected in the following month. Total budgeted cash receipts in February are expected to be:
A) $162,400. B) $352,600. C) $228,000. D) $60,000.

16) Shia Company makes a product that is expected to require 2 hours of labor per unit of product. The standard cost of labor is $5.20. Shia actually used 2.1 hours of labor per unit of product. The actual cost of labor was $5.30 per hour. Shia made 1,000 units of product during the period. Based on this information alone, the wage rate variance is:
A) $210 favorable. B) $200 unfavorable.
C) $210 unfavorable. D) $200 favorable.

17) Ormand Organic Grocery has invested in a yogurt stand for its store. The investment cost the company $100,000. Variable materials, preparation, and marketing costs are expected to be $0.60 per unit and fixed costs are estimated at $6,000 a year. If actual sales were 20,000 servings, what would the ROI be using the sales price of $1.80?
A) 22.0% B) 24.0% C) 18.0% D) 30.0%

18) During her first year with the company, Ann mistakenly accumulated some of the company's period costs in ending inventory. Which of the following indicates how this error affects the company's financial statements assuming number of units produced exceeded number of units sold during the period?
A) Gross margin is unaffected.
B) Inventory is understated.
C) Cash flows from operations are understated.
D) Net income is overstated.

19) Java Joe operates a chain of coffee shops. The company pays rent of $20,000 per year for each shop. Supplies (napkins, bags and condiments) are purchased as needed. The manager of each shop is paid a salary of $3,000 per month, and all other employees are paid on an hourly basis. Relative to the number of customers for a shop, the cost of supplies is which kind of cost?
A) Relevant cost B) Mixed cost C) Variable cost D) Fixed cost

20) Which of the following statements regarding Company A is **incorrect**?
A) If Company A has fixed costs of $720,000, a selling price of $50 per unit, and contribution margin of $30 per unit, its variable expenses must be $20 per unit.
B) If Company A has fixed costs of $720,000, a selling price of $50 per unit, and contribution margin of $30 per unit, its break-even point in units is 36,000 units.
C) If Company A has fixed costs of $720,000, a selling price of $50 per unit, and contribution margin of $30 per unit, once it has covered its fixed costs, net income will increase by $30 for each additional unit sold.
D) Both if Company A has fixed costs of $720,000, a selling price of $50 per unit, and contribution margin of $30 per unit, its break-even point in units is 36,000 units and if Company A has fixed costs of $720,000, a selling price of $50 per unit, and contribution margin of $30 per unit, its variable expenses must be $20 per unit are incorrect.

21) Michael & Co. expects overhead costs of $60,000 per month and direct production costs of $24 per unit. The estimated production activity for the current accounting period is as follows:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Units produced	11,500	9,000	8,250	11,250

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The predetermined overhead rate based on units produced is (rounded to the nearest cent) is:
A) $42.00 per unit. B) $2.67 per unit.
C) $18.00 per unit. D) $1.50 per unit.

22) Which of the following is an example of a prevention cost?
A) Product design B) Downtime
C) Inventory inspection D) Repair and rework

23) Breezy Company is disposing of equipment that was originally purchased for $600,000 and has $240,000 of accumulated depreciation to date. The same equipment would cost $800,000 to replace. What is the total amount of sunk cost in this decision?
A) $840,000 B) $240,000 C) $800,000 D) $360,000

24) Stephenson Company is trying to decide which one of two contracts it will accept. The costs and revenues associated with each are listed below:

	Contract X	Contract Z
Contract Revenue	$ 200,000	$ 260,000
Materials	10,000	10,000
Labor	88,000	120,000
Depreciation on Equipment	8,000	10,000
Cost Incurred for Consulting Advice	1,500	1,500
Allocated Portion of Overhead	5,000	3,000

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The equipment was purchased last year and has no resale value. Which of these amounts is relevant for the selection of one contract over another?
A) Cost of consulting advice and allocated overhead
B) Contract revenue and labor costs

C) Contract revenue, labor costs and depreciation on equipment
D) Materials, consulting advice and allocated overhead

25) Which of the following is **not** an advantage of using a standard cost system?
A) Promotes the efficient use of management talent to control costs
B) The easiest cost system to develop and maintain
C) Can boost morale and motivate employees
D) Provides immediate feedback that permits rapid response to problems

26) Marcy is plant manager for Diversified Industries. She and the managers of four other plants report to the vice president in charge of manufacturing operations. Three department managers report to Marcy. Select the **incorrect** statement regarding the preparation of responsibility reports.
A) Marcy's responsibility report should include a detailed account of the individual items for which she is personally responsible.
B) Marcy's administrative costs should be included on the reports of her three department managers.
C) Marcy's responsibility report should contain only summary information about the operations of the three departments in her chain of command.
D) The vice president's responsibility report would contain information for Marcy's plant rolled together with that of the other four plants.

27) Which of the following costs would be classified as a direct cost for a company that produces motorcycles?
A) Rent of manufacturing facility that produces motorcycles.
B) Wages of motorcycle assembly workers.
C) Seats used in the motorcycles.
D) Both seats used in the motorcycles and wages of motorcycle assembly workers are correct.

28) The European Electronics Company has 3 divisions. The following budgeted data are available for its German division:
* the sales are 2,500 units at a selling price of € 80 per unit
* variable expenses are € 35 per unit
* fixed expenses are € 87,500
If the unit contribution margin is increased by 10%, the total fixed expenses decreased by 5%, and all other data remain as in the budget, net operating income will be:
A) € 15,625
B) € 18,125
C) € 31,875
D) € 40,625

29) Select the correct statement regarding break-even point analysis.
A) A decrease in the variable cost per unit causes the break-even point in units to increase.
B) An increase in fixed costs causes the break-even point to increase.
C) The break-even point in sales dollars equals total fixed costs divided by contribution margin per unit.
D) An increase in contribution margin per unit causes the break-even point in units to increase.

30) Some costs that possibly could be traced directly to cost objects are nonetheless classified as indirect costs because:
A) Such practice results in a more accurate accumulated cost for the object.
B) Generally accepted accounting principles require some costs to be treated as indirect.
C) Such costs cannot be traced to objects in a cost-effective manner.
D) All of the answers are correct.

31) Through which process can the use of management accounting adversely affect ethical behaviour of the organisation?
A) Tax evasion.
B) Profit maximisation.
C) Cost minimisation.
D) None of the above.

32) Coercive management controls are:
A) Controls that enable people to achieve targets.
B) Controls that penalize people if they do not reach targets.
C) Both of the aforementioned answers.
D) None of the above.

33) State University's College of Business is divided into three departments, accounting, marketing, and management. Relevant information for each department is provided below:

Cost Driver	Accounting		Marketing		Management	
Number of students	700		400		200	
Number of classes per semester	32		18		14	
Number of faculty	10		12		5	
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The Dean of the College of Business is trying to assign funds from the operating budget to the three departments. Assuming that the chair of each department is trying to attain the highest funding possible for his/her department, which of the following most accurately describes the allocation base that each chair will favor?

A) The chair of the Accounting department and the chair of the Management department will want to use the number of faculty.
B) The chair of the Management department will want to use the number of classes while the chair of the Marketing department will prefer the number of faculty.
C) The chair of the Marketing department will want to use number of students, while the chair of the Accounting department will want to use number of classes per semester.
D) The chair of the Accounting department will want to use number of students while the chair of the Management department will want to use number of faculty.

34) Chastain Company recently implemented an activity-based-costing system. As a result of the ABC allocations, the cost of one of the company's products was determined to be above its current selling price. Due to competition, the company is unable to raise the price of this product. Which of the following options is most reasonable, assuming Chastain employs a target pricing strategy?

A) Raise prices under the assumption that the company's competitors will follow suit.
B) Return to the old allocation method which produces a lower amount of estimated cost.
C) Use less expensive materials to make the product.
D) Target advertising to high income customers.

35) Ethan paid $3 for a bottle of ThirstAid. Later while on a hiking trip, she was offered $8 for the ThirstAid. Select the **correct** statement from the following:

A) The $3 original purchase price is irrelevant to his decision to sell the ThirstAid.
B) The $8 offer is not relevant if Ethan refuses to sell the ThirstAid.
C) If Ethan drinks the ThirstAid, no opportunity cost is associated with his decision.
D) All of the above.

36) Scholastic Tours is trying to decide which one of two tours it will introduce. The costs and revenues associated with each alternative are listed below:

	Eastern Tour				Western Tour		
Projected revenue	$	14,000			$	18,000	
Variable costs		2,000				10,000	
Fixed costs		6,000				6,000	
Profit	$	6,000			$	2,000	
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What are the incremental (differential) costs of the Western Tour?

A) $8,000 B) $6,000
C) $4,000 D) None of the above.

37) Company Playground produces four products. Per unit data concerning these products are:

		A	B	C	D
selling price		€ 70	€ 81	€ 90	€ 100
variable expenses:					
	direct materials	€ 15	€ 18	€ 24	€ 24
	other variable expenses	€ 24	€ 24	€ 24	€ 36
	total variable expenses	€ 39	€ 42	€ 48	€ 60

Each product consumes the same raw material, at a cost of € 3 per kilo.
The demand for the company's products is very strong; with far more orders each month than the company is able to execute given the raw materials available for production. To maximize profit, for which product should the company accept orders first?

A) product A
B) product B
C) product C
D) product D

38) Kentucky Company has a margin of safety percentage of 25%. The variable expenses are 60% of sales. Sales in the break-even point are € 720,000.
Given this information, the net operating income is

A) € 72,000
B) € 96,000
C) € 144,000
D) € 384,000

39) To make a target profit of € 1,000,000 at a level of fixed expenses of € 3,500,000 a company has to produce and sell 12,500,000 products.
Which of the following statements must be true:

A) The unit contribution margin is € 0.36.
B) The contribution margin is € 2,500,000 in total.
C) The variable costs are € 0.40 per unit at a product selling price of € 0.75.
D) The target cost is € 4,500,000.

40) Sea Shorts manufactures and sells swimming shorts. Last year, the shorts sold for € 10,00 each, and the variable expense was € 3,00 per unit. The company needed to sell 30,000 shorts to break even. The net operating income last year was € 18,900.
At a selling price of € 9,00 per unit, sales for this year are expected to exceed last year's by 500 units. If this occurs, the sales volume in euro's this year will be:

A) € 294,300
B) € 298,800
C) € 327,000
D) € 332,000

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1) B
Explanation: Only the transportation costs are product cost. The rest is not directly attributable to individual construction products.
2) A
Explanation: Just-in-time systems have lower inventory levels and therefore, they do not increase warehousing costs.
3) D
Explanation: The total amount of a fixed cost does not change when volume changes. In contrast, fixed cost per unit is *not* fixed. It changes as the volume changes. The fixed cost per unit decreases when volume increases and the fixed cost per unit increases when volume decreases.
4) A
Explanation: See appropriate chapter in the book.
5) A
Explanation: The total amount of a fixed cost does not change when volume changes.
6) B
Explanation: Magnitude of operating leverage = Contribution margin ÷ Net income
Felix: Magnitude of operating leverage = $175,000 ÷ $105,000 = 1.6667
Jinx: Magnitude of operating leverage = $130,000 ÷ $105,000 = 1.2381
Impact of an increase in sales of $1,000 or 0.5% (= $1,000 ÷ $105,000):
Increase in net income = Sales × Percentage increase × Magnitude of degree of operating leverage
Felix: Increase in net income =$105,000 × (0.5% × 1.6667) = $875
Jinx: Increase in net income = $105,000 × (0.5% × 1.2381) = $650
7) C
Explanation: Sales − Variable costs − Fixed costs = Profit
($14 per unit × 3,500 units) − ($4.50 per unit × 3,500 units) − ($10,000 × 2) = $13,250
New profit − Old profit = Change in profit
$13,250 − $8,400 = $4,850
8) C
Explanation: See relevant chapter.
9) A
Explanation: Allocation rate = Total cost to be allocated ÷ Cost driver (allocation base)
Allocation rate = $25,000 ÷ 2,000 units = $12.50 per unit
Allocation per cost object = Allocation rate × Weight of the cost driver for that cost object
Allocation of fixed overhead cost to units produced = $12.50 per unit × 2,200 units = $27,500
The amount of fixed overhead costs allocated to the 2,200 actually produced of $27,500 exceeds the actual fixed overhead costs of $25,000. As a result, products were overcosted during the year.
10) D
Explanation: A predetermined overhead rate is calculated using budgeted cost and volume data.
11) B
Explanation: Facility-level activities benefit the production process as a whole and are not related to any specific product, batch, or unit of production. For example, insuring the manufacturing facility against fire losses does not benefit any particular product or product line.
12) C
Explanation: Allocation rate = $12,000 ÷ (10 DLHs + 2 DLHs) = $1,000 per DLH
Allocation to Job #1 = $1,000 per DLH × 10 DLHs = $10,000

13) C
Explanation: Differential costs of Western Tour = $10,000 – $2,000 = $8,000.
14) B
Explanation: Facility-level costs are incurred to support the entire company. They are not related to any specific product, batch, or unit of product. Because these costs maintain the facility as a whole, they are frequently called facility-sustaining costs. Facility-level costs include building rent or depreciation, personnel administration and training, property and real estate taxes, insurance, maintenance, administrative salaries, general selling costs, landscaping, utilities, and security.
15) B
Explanation: Budgeted cash receipts for February = (January credit sales × Percent collected in month following month of sale) + (February credit sales × Percent collected in month of sale) + February cash sales

Budgeted cash receipts for February = [($280,000 × (100% – 42%)] + [$310,000 × 42%] + $60,000 = $162,400 + $130,200 + $60,000 = $352,600
16) C
Explanation: Price variance = (Actual price – Standard price) × Actual quantity
Price variance = ($5.30 per hour – $5.20 per hour) × (1,000 units x 2.1 hours per unit)
Price variance = $0.10 per hour × 2,100 hours = $210
Since the actual price was greater than the standard price, the variance is unfavorable.
17) C
Explanation: ROI = Operating income ÷ Operating assets

ROI = [Sales – Variable costs – Fixed costs] ÷ Operating assets

ROI = [($1.80 per serving – $0.60 per serving) × 20,000 servings)] – $6,000] ÷ $100,000

ROI = [($1.20 per serving × 20,000 servings)– $6,000] ÷ $100,000

ROI = ($24,000– $6,000) ÷ $100,000 = $18,000 ÷ $100,000 = 18%
18) D
Explanation: Classifying administrative salaries as a product cost (rather than a period cost) means that these costs are first accumulated in the Inventory account and then expensed when the goods are sold. Given that inventory increased during the period, some of the administrative salaries have passed through the Inventory account into the Cost of Goods Sold account with the rest remaining in the Inventory account. As a result, net income would be overstated because the understated expense would exceed the overstatement of cost of goods sold.
19) C
Explanation: When the volume increases, the total cost of supplies increases; when volume decreases, the total decreases; as such, the cost of supplies is a variable cost.
20) B
Explanation: Break-even point in units = Fixed costs ÷ Contribution margin per unit
Break-even point in units = $720,000 ÷ $30 per unit = 24,000 units (rather than 36,000 units)
Selling price per unit − Variable cost per unit = Contribution margin per unit
$50 per unit − Variable costs per unit = $30 per unit (which is the increase in profit for each additional unit sold)
Variable costs per unit = $50 per unit − $30 per unit = $20 per unit
21) C

Explanation: Allocation rate = Total cost to be allocated ÷ Cost driver (allocation base)
Allocation rate = ($60,000 × 12 months) ÷ (11,500 units + 9,000 units + 8,250 units + 11,250 units) = $18.00 per unit

22) A

Explanation: Companies incur prevention costs, such as product design, to avoid nonconforming products. They incur appraisal costs to identify nonconforming products produced in spite of prevention cost expenditures.

23) D

Explanation: Since sunk costs have been incurred in past transactions, they cannot be changed and are not relevant for making current decisions. The book value of the equipment of $360,000 = ($600,000 − $240,000) is not relevant.

24) B

Explanation: Since the contract revenue differs among the alternatives, it is a differential revenue. Since the labor cost differs among the alternatives, it is a differential cost. The following are not relevant to this decision for the reasons stated. The materials and cost incurred for consulting advice do not differ among the alternatives. The book value of the asset and associated depreciation is based on a sunk cost that cannot be avoided because it has already been incurred and therefore is not relevant to current decisions. There is no indication that the allocated portion of the overhead can be avoided.

25) B

Explanation: The primary advantage of a standard cost system is efficient use of management talent to control costs. Secondary benefits include the following. Standard cost systems quickly alert management to trouble spots. If established and maintained properly, standard cost systems can boost morale and motivate employees. A standard cost system forces managers to plan, resulting in more effective operations with less waste.

26) B

Explanation: The controllability concept is crucial to an effective responsibility accounting system. Managers should be evaluated based only on revenues or costs they control. Since the three department managers have no control over the administrative costs, these costs should not be included in their individual reports.

27) D

Explanation:

28) D

Explanation:

German Division			
	total		per unit
sales	200,000		80.00
var.exp.	87,500		35.00
cm	112,500		45.00
fix.exp.	87,500		
net op.inc.	25,000		
sales in units	2,500		units
new:			
sales			
var.exp.			
cm	123,750		49.50
fix.exp.	83,125		
net op.inc.	40,625		
sales in units	2,500		units

29) B

Explanation: When the fixed cost increases, one needs more total contribution margin to cover this cost. This means that a higher revenue needs to be made or, similarly, more units of product needs to be sold. I.e. the break-even point increases.

30) C

Explanation: Direct costs can be traced to cost objects in a cost-effective manner. Indirect costs cannot be traced to objects in a cost-effective manner.

31) A
As explained at the end of lecture 6, organisations can use the valuation of their intangible assets to move profits to low taxation countries. This is legal, but commentators often view these practices as unethical.
32) B
Lecture 7: Coercive controls are controls that motivate behaviour by imposing penalties. In this vein, coercive controls are negative by nature.
33) B
Explanation: Recall that the allocation rate equals the total cost to be allocated divided by the cost driver (allocation base). Here, the funds to be assigned from the operating budget represent the total cost to be allocated. Each department chair will favor the rate that provides the highest allocation of budget funds as shown below:

Cost Driver	Allocation Base		Accounting		Marketing		Management	
Number of students	700 + 400 + 200 = 1,300		700 ÷ 1,300 = 53.8%		400 ÷ 1,300 = 30.8%		200 ÷ 1,300 = 15.4%	
Number of classes per semester	32 + 18 + 14 = 64		32 ÷ 64 = 50%		18 ÷ 64 = 28.1%		14 ÷ 64 = 21.9%	
Number of faculty	10 + 12 + 5 = 27		10 ÷ 27 = 37.1%		12 ÷ 27 = 44.4%		5 ÷ 27 = 18.5%	
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34) C
Explanation: Target pricing (or target costing) starts with determining the price customers are willing to pay. The company then attempts to produce the product at a low enough cost to sell it at the price customers demand. Since the cost of one of the company's products is above its current selling price, the company should attempt to reduce one or more components of the product's cost.

35) A
Explanation: An opportunity cost is the sacrifice that is incurred in order to obtain an alternative opportunity. As such, the $8 offer is relevant to Ethan's decision to sell the ThirstAid. Since sunk costs have been incurred in past transactions, they cannot be changed and are not relevant for making current decisions. As such, the $3 original purchase price is not relevant to his decision to sell the ThirstAid.

36) A
Explanation: Differential costs of Western Tour = $10,000 – $2,000 = $8,000.

37) B
Explanation: The key factor is not how much of a constrained resource a product uses, or how much the contribution margin for each product is, but rather how much contribution margin the product generates per unit of the constrained resource. That is product B.

	A	B	C	D
number of kilo's available each month				10000
	A	B	C	D
selling price	€ 70	€ 81	€ 90	€ 100
variable expenses:				
direct materials	€ 15	€ 18	€ 24	€ 24
other variable expenses	€ 24	€ 24	€ 24	€ 36
total variable expenses	€ 39	€ 42	€ 48	€ 60
contribution margin	€ 31	€ 39	€ 42	€ 40
materials costs per kilo	€ 3	€ 3	€ 3	€ 3
kilo's	5	6	8	8
CM per kilo	€ 6	€ 7	€ 5	€ 5

38) B

Explanation:

sales	960,000	100%
bep sales	720,000	75%
Margin of safety	240,000	25%
contr. Margin	40%	
Net op.inc.	96,000	

39) A

Explanation: Units sold to attain the target profit = (fixed expenses + target profit) / unit contribution margin: 12,500,000= (€ 3,500,000+€ 1,000,000)/x; x= €0,36.

40) B

Explanation:

Sea Shorts					
	total		per unit		%
sales	327,000	f	10.00		
var.exp.	98,100	e	3.00		
cm	228,900	d	7.00	a	70%
fix.exp.	210,000	= c			
net op.inc.	18,900				
bep	30,000		units	b	
in bep: cm = fixed exp.			210,000	c = a * b	
extra units sold above bep			2,700	g	
bep			30,000		
sales in units last year			32,700	h	
or					
sales			327,000	f	
sales price per unit			10.00		
sales in units last year			32,700		
sales in units:					
sales in units last year			32,700		
extra			500		
sales in units this year			33,200		
selling price			9.00		
sales in €			298,800		