Universiteit Twente
de ondernemende universiteit

antwoorden
management accounting & control (186056)

Let op: de uitwerkingen van het tentamen mogen niet gecopieerd worden. Dat maakt het mogelijk om de opgaves te gebruiken voor bijvoorbeeld *practice sessions*.

nb: 'niet copieren' betekent dus ook 'niet overschrijven'

assignment 1 (25)

question a (3)

the plans for the coming period, expressed in numbers (often money).
1. delegation of authority, 2. helps and forces planning, 3. standards for results control, 4. motivational tool

question b (4)

(1) action: submitting promotion plans, campaign budgets
(2) results control: how much have you sold
(3) results control: actual versus budgeted costs (also ok: action control for assembly line workers)
(4) social control: good people, with creativity and knowledge. no results available for control

question c (3)

budgeted profit: 1500 * 3.5 = 5250

revenues 1300 * 22	28,600
inventory 150 * 17.5	2,625
	31,225
plastic costs	2,227.2
labor costs	13,804
fixed costs	12,060
	28,091.2
actual profit	3,133.8

budget result 2,116.20 unf

question d (10)

palstc: actual cost per kg 4.8, budgeted usage 435

eff: 5 * (435 – 464)	–145
price: 464 * (5 – 4.8)	92.8
	–52.2

labor: actual cost per hour 17, budgeted usage 725

eff: 16 * (725 – 812)	–1,392
price: 812 * (16 – 17)	–812
	–2,204
fixed costs: 12,000 – 12,060	–60
man vol result: –50 * 8	–400
sales volume variance: –200 * 3.50	–700
sales margin variance: +1 * 1300	1,300
	600

total variance: 2,116.20 unf

proc: low price for leather seems ok, prod: more materials, possible of lower quality, more labor, at higher price so not very good, marketing ok: lower sales, but higher price

question e (5)

total sales margin variance: –200 * (22–17.5) = 900 unf
market share budgeted 5%, actual 1,300 / 40,000 = 3.25%
market share variance: Δ share * actual market * margin = 1.75% * 40,000 * 4.50 = 3,150 unf
market size variance: Δ market * budgeted share * margin = 10,000 * 5% * 4.50 = 2,250 fav.
declining sales in growing market: bad job.

assignment 2 (25)

question a (3)

profit centre: control over costs and revenues

question b (6)

relevant costs of producing ts: 15,000 + 3,000 + 8,000 = 26,000. revenues 32,000. yes.
minimum tp 3, maximum 32 – (15 + 8) = 9.

question c (6)

selling 1,000 to prof farmers generates 27,000 in contribution. transferring it internally leads to a contribution of 32,000 – 3,000 – 8,000 – 15,000 = 6,000. the capacity should be used to produce for prof farmers. however, home life will demand supplies from agribulk because the transfer increases its profit. the correct transfer price is the market price.

question d (5)

negotiation takes care of both situations. yes, since the production of tomato safe clearly is not viable in situation c, it should not be undertaken.

question e (5)

50% progress: budgeted cost 50% * 99,000 = 49,500. variance 31,000 unf. eff: 110 * (450 – 700) = 27,500, price, 700 * (110 – 115) = 3,500
80% progress: 80% * 99,000 = 79,200, variance 1,300 unf. eff: 110 * (720 – 700) = 2,200 fav
more milestones, better planning, better monitoring

assignment 3 (30)

question a (3)

	sup	drug	ind	totals
sales	700000	540000	450000	1690000
cogs	560000	378000	270000	1208000
gross	140000	162000	180000	482000
all	84447	65145	54288	203880
net	55553	96855	125712	278120
margin	7.9	17.9	27.9	16.5

question b (7)

cost allocation rates
admin: 40,000 / (140+360+ 1500) = 20
picking: total 20*140 + 12*360 + 6*1500 = 2800+4320+9000 = 16120, 64,480/16,120 = 4
deliveries: 99,400 / (120+300+1000) = 70

admin	2800	7200	30000
picking	11200	17280	36000
distr	8400	21000	70000
ind	22400	45480	136000
net	117600	116520	44000
	16.8	21.6	9.8

independents are now much less profitable: high picking costs, very high distribution costs, require much more activities

question c (2)

large amount of indirect costs (the c.o.g.s. are not really important, since they are only transferred), heterogenous activities

question d (7)

abc model: new sales 92% * 450,000 = 414,000
cogs (still) 270,000
admin 750*20 = 15,000
picking 36,000
distr 500*70 = 35,000
profit: 58,000
actual: relevant savings 35,000 (50% of delivery costs), relevant costs 8%* 450 = 36,000. no good.
abc: you should strive for improvement, fewer activities enable fewer costs
relevant: this is the short term effect, you don't know if you can obtain the savings in the organization.

question e (3)

directly observable, easily understandable for employees, earlier, always possible

question f (8)

financial: roi, sales, margins etc
customer: retention rate, customer satisfaction, sales per customer
internal: customer complaints, % deliveries on time, % deliveries with errors
learning & growth: educational level, years of experience, training days
note: we need measures (so quantities)

assignment 4 (20)

(a) **(17)**
analysis of type a waste cash flows:

extra cash inflows 2,000*(12.50–2)	21,000 **(3)**
direct costs 2,000*2.50	5,000
extra fixed costs	10,000
payment to employees	500
net cash flow per year	5,500 **(2)**

note that the apportioned rental costs of the car park of 2,500 are not relevant since they do not change. **(3)**

net present value: $5{,}500/1.08+...+5{,}500/(1.08^4) - 20{,}000 = 18{,}216 - 20{,}000 = -1{,}783$. **(npv-formule 3)** Since this is a negative npv, the project should not be undertaken.

analysis of type b waste cash flows:

cash inflows 4000*11	+44,000
savings on contractor costs 4000*14	+56,000
savings on employee	+9,000
direct costs 4000*13,50	54,000
fixed costs	20,000
net cash flow per year	35,000 **(4)**

the initial investment is 120,000 – 18,000 (resale of containers **(2)**) = 102,000
the present value with a discount factor of 15% of the cash flows is $35{,}000/1.15+...+35{,}000/(1.15^6) = 132{,}457$, so the net present value is 30,457. On this basis, it should be accepted.

(b) the cash inflows of type b are very uncertain: there is only a limited number of customersThe company should make very sure that it will be able to find customers for the product. Minor points are about the employee costs (whether it is possible to terminate the employee's contract, or find other work for him), and doubts about using brand-new technology with the risk that it doesn't work out as expected. **(3)**