

NVQ/SVQ Level 4 in Accounting Contributing to the Management of Performance and Enhancement of Value (PEV) 2003 Standards

Monday 18 June 2007 (morning)

Time allowed - 3 hours plus 15 minutes' reading time

Important:

This exam paper is in two sections. You should try to complete all tasks in both sections.

We recommend that you use the 15 minutes' reading time to study the exam paper fully and carefully so that you understand what to do for each task. However, you may begin to write your answers within the reading time, if you wish.

We strongly recommend that you use a pen rather than a pencil.

You may not use programmable calculators or dictionaries in the exam.

Do NOT open this paper until instructed to do so by the Supervisor.

This exam paper is in TWO sections.

You must show competence in BOTH sections. So, try to complete EVERY task in BOTH sections.

Section 1 contains 2 tasks and Section 2 contains 2 tasks.

You should spend about 80 minutes on Section 1 and about 100 minutes on Section 2.

Please use the answer booklet provided.

You should include all your workings and essential calculations in your answers.

Both sections are based on the information below about Foodrink Ltd.

Section 1

You should spend about 80 minutes on this section.

Data

Foodrink Ltd manufactures and distributes nutritional supplements. One of its main products is IQ, a special vitamin supplement which claims to increase the concentration levels of individuals and helps them think carefully, especially when taking an exam. The supplement makes students read questions very carefully and show all their workings.

You work as an Accounting Technician reporting to the Finance Director.

The company operates an integrated standard cost system in which:

- purchases of materials are recorded at standard cost
- direct material costs and direct labour costs are variable
- production overheads are fixed and absorbed on a unit basis.

The budgeted activity and actual results for May 2007 are as follows:

		Budget		Actual
Production (units)		9,000		9,900
Direct materials	450 kgs	£5,400	594 kgs	£6,534
Direct labour	300 hours	£4,500	325 hours	£4,225
Fixed overheads		£18,000		£19,000
Total cost		£27,900		£29,759

Task 1.1

- (a) Calculate the following for May:
- (i) standard price of materials per kilogram
 - (ii) standard usage of materials for actual production
 - (iii) standard labour rate per hour
 - (iv) standard labour hours for actual production
 - (v) budgeted overhead absorption rate per unit
 - (vi) overheads absorbed into actual production
- (b) Calculate the following variances for May:
- (i) direct material price variance
 - (ii) direct material usage variance
 - (iii) direct labour rate variance
 - (iv) direct labour efficiency variance
 - (v) fixed overhead expenditure variance
 - (vi) fixed overhead volume variance
- (c) Using the variances you have calculated in Task 1.1(b), prepare an operating statement for May which reconciles the standard cost of total actual production with the actual cost of total actual production.
- (d) Briefly explain how the treatment of fixed costs in an absorption costing system differs from that in a marginal costing system. Your answer should refer to the effect on fixed overhead variances and the stock valuation.
- (e) Explain how the fixed overhead volume variance can be analysed further. You do not need to do any calculations.

Additional data

The material which is derived from soft fruit is either imported or purchased from UK farmers. The price of the material fluctuates month by month depending on the time of year. The cost information for the 4 months ending August 2006 is given below.

	May 06	June 06	July 06	August 06
Cost per 1,000 kg of vitamin	£1,000	£900	£700	£800

The underlying cost does not change during the period May to August. The change in cost over the 4 months is due only to the seasonal variations which are given below.

	May 06	June 06	July 06	August 06
Seasonal variations	£200	£100	-£100	£0

Task 1.2

- (a) Calculate the underlying cost per 1,000 kilograms for the period May to August 2006.
- (b) Indications are that the underlying cost per 1,000 kilograms for the period May 2007 to August 2007 will be £850. Calculate the percentage increase in the underlying cost from 2006 to 2007.
- (c) Calculate the forecast cost per 1,000 kilograms for the period May 2007 to August 2007 using the underlying cost and the seasonal variations given above.

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Note:

Please turn over for Section 2.

Section 2

You should spend about 100 minutes on this section.

Data

A division of Foodrink Ltd is developing a new supplement and a colleague has prepared forecast information based upon two scenarios. The forecast profit and loss account and balance sheet for both scenarios is shown below.

- Scenario 1 is to set the price at £10 per unit with sales of 120,000 units each year.
- Scenario 2 is to set the price at £5 per unit with sales of 360,000 units each year.

Budgeted profit and loss account	Scenario 1	Scenario 2
	£000	£000
Turnover	1,200	1,800
Cost of production		
Direct (raw) materials	300	900
Direct labour	120	360
Fixed production overheads	360	360
Total cost of sales	780	1,620
Gross profit	420	180
Selling and distribution costs	74	122
Administration costs	100	100
Operating profit	246	(42)
Budgeted balance sheet	£000	£000
Fixed assets		
Machinery	1,600	1,600
Current assets		
Stocks of raw materials	50	50
Trade debtors	150	150
Current liabilities		
Trade creditors	75	75
Net current assets	125	125
Long-term borrowing	754	1,042
Net assets	971	683
Represented by:		
Share capital	725	725
Profit and loss account	246	(42)
Net assets	971	683

Task 2.1

(a) Calculate the following performance indicators for both scenarios:

- (i) gross profit margin
- (ii) operating profit margin
- (iii) direct materials as a percentage of turnover
- (iv) direct materials cost per unit
- (v) return on net assets
- (vi) stock turnover in days
- (vii) debtors' payment period in days
- (viii) gearing

(b) Draft a report for the Finance Director giving an explanation of why the following ratios have changed:

- (i) gross profit margin
- (ii) operating profit margin
- (iii) direct materials as a percentage of turnover

Additional data

You have found that your colleague has made a few mistakes with the figures for Scenario 2. The profit and loss account and balance sheet amendments for Scenario 2 are listed below.

- The raw material price per unit will fall to £1.50 per unit.
- The closing stock of raw materials will be £90,000.
- Trade debtors will be £225,000.
- Trade creditors will be £45,000.
- Short-term borrowing will be £145,000.
- Long-term borrowing will be £682,000.

(c) Recalculate the following information:

- (i) gross profit
- (ii) operating profit
- (iii) net assets

(d) Recalculate the following ratios:

- (i) gross profit margin
- (ii) operating profit margin
- (iii) return on net assets

(e) Redraft your report for the Finance Director commenting on the ratios you recalculated in (d) above and recommend whether the price of the product should be set at £10 or £5.

Note:

Please turn over for Task 2.2.

Task 2.2

The Operations Director has heard of the terms 'lifecycle costing' and 'target costing' and wonders whether the techniques can be used to aid future decisions. The company is about to start two projects. One is the design of a new cooler drinks bottle and the other is the design of a new production process for the manufacturing division. The new cooler drinks bottle will compete in an extremely competitive market.

- (a) Explain the terms:**
 - (i) lifecycle costing**
 - (ii) target costing**
- (b) Explain which technique should be used for each project.**

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NVQ/SVQ qualification codes

Technician (2003 standards) - 100/2942/4 / G794 24
Unit number (PEV) – J/101/8106

