

UNIVERSITY OF BOLTON
SCHOOL OF BUSINESS AND CREATIVE
TECHNOLOGIES
ACCOUNTANCY PATHWAY
SEMESTER 1 EXAMINATIONS 2009/2010
MANAGEMENT ACCOUNTING CONTROL
SYSTEMS
MODULE NO: ACC3004

Date: Tuesday 19th January 2010

Time: 14:00 – 17:00

INSTRUCTIONS TO CANDIDATES:

There are SIX questions on this paper.

Answer FOUR questions –
ANY TWO from Section A, and
ANY TWO from Section B.

All questions carry equal marks.

Silent calculators may be used.

No books or materials may be referred to in the examination.

Graph paper will be provided.

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Section A – Answer ANY TWO questions

Question 1

The Directors of Babcock's PLC feel that Standard Costing and Variance Analysis have little to offer in the control of activities and functions within their organisation.

The company have been trading for many years and produce a range of standard Products and the prices of many of the raw materials are apt to change suddenly and comparison of actual prices with pre-determined and often unrealistic standard prices is of little use.

For some products the company can utilise one of several equally suitable raw materials, with the company often using the one which in the companies opinion will lead to the lowest cost of production. The company are however frequently caught out by price changes and the material actually used often proves, after the event, to have been more expensive than the alternatives which were originally rejected.

An example of this occurred during the last accounting period of two products produced by the Company, namely Pumps and Drills.

To produce a Pump, the Company can either use 5kg of Y or 5kg of Z. The Company planned to use Y as it appeared it would be the cheaper of the two and the plans were based on a cost of £3 per kg for Y. Due to market uncertainties, the actual prices changed and if the company had purchased efficiently, the cost would have been as follows:-

Material Y £4.50 per kg

Material Z £4.00 per kg

Production of Pumps was 2,000 units and usage of Y amounted to 10,800 kg at a total cost of £51,840.

A Drill uses only one material (X), but again the price of this can change rapidly. It was thought the X would cost £30 per tonne, but in fact the company only paid £25 per tonne, and if the company had purchased correctly, the costs would have come down to £23 per tonne. It usually takes 1.5 tonnes of X to produce one Drill, but the companies production of 500 Drills used only 700 tonnes of X.

The Companies production director has argued that the traditional approach to variance analysis is of little use for materials , although there are continued benefits of using it for labour and variable overhead variances.

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Question 1 continued

Required:

Analyse the material variances for Pumps and Drills using :-

- a) Traditional Variance Analysis
- b) An approach which distinguishes between planning and operational variances.

(12 Marks)

- c) Critically evaluate the approach to variance analysis which distinguishes between planning and operational variances.

(4 Marks)

- d) Analyse how this approach is useful for companies in general, and for Babcocks in particular.

(6 Marks)

- e) Critically review any major difficulties in the application of planning and operational variances

(3 Marks)

TOTAL 25 MARKS

**Section A continued over
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Section A continued

Question 2

The management team of T Ltd, a small venture capital company. Is planning its investment activities for the next five years. It has been approached by four start-up companies from the same industry sector which have presented their business plans for consideration. The forecast cash flows and resulting net present values (NPV) for each start-up company are as follows:-

Company	Capital	Operational Cash Flows					NPV
	Year 0 £000'S	Year 1 £000's	Year 2 £000'S	Year 3 £000'S	Year 4 £000'S	Year 5 £000'S	
A	(500)	(75)	(40)	50	400	650	60
B	(250)	(30)	(20)	(5)	250	247	0
C	(475)	(100)	(30)	(20)	400	750	77
D	(800)	(150)	(50)	50	900	786	80

The directors of T Ltd use a 12% cost of capital for appraising this type of investment. You can also assume that all investments are divisible and they are NOT mutually exclusive.

Taxation and Inflation can be ignored.

Required:

a) Advise T Ltd which of the investments, if any, it should invest in.

(3 Marks)

b) If capital for investment now is limited to £700,000 but T Ltd can raise further capital in one year's time and thereafter at a cost of 12% per annum.

i) Advise how T Ltd should invest the £700,000.

(5 Marks)

ii) Discuss other factors which may effect the decision

(4 Marks)

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Question 2 continued

- c) T Ltd has now found out that funds will also be restricted in future years and that the constraints are absolute and cannot be removed by project generated incomes. The present values of cash that will be available for future investment are as follows:-

	Present Value £000's
Year 0	700
Year 1	80
Year 2	35

Formulate the linear programming model that will maximise net present value and explain the meaning of each variable and the purpose of each constraint you have identified (**you are not required to attempt a solution**).

(10 Marks)

- d) Briefly explain the benefits of using a linear programming format in this situation.

(3 Marks)

TOTAL 25 MARKS

**Section A continued over
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Section A continued

Question 3

Lauder Ltd is a commercial laundry service. The company uses a traditional method of overhead absorption. It has two cost centres, Laundry operations and Transport. The management is unhappy with the profitability of some of its operations. The CEO wants to discontinue the unprofitable business, but the COO feels that this will let competition increase market share. The COO is convinced that an activity based costing system (ABC), of dealing with overheads, will provide management with the information they need to make the correct decisions. The management accountant has been asked to investigate.

The estimated data for next year using the existing absorption method is as follows:

Total number of cost units to be processed	50,000 (One cost unit = 100 items)
Total transport km for collection/delivery	200,000km
Total overhead	£500,000
Overhead absorption rate:	70% Laundry operations 30% Transportation

Additional data resulting from the ABC investigation:

Main Activities	Cost Driver	Cost pool (% of total overheads)
Collection & Delivery of laundry	200,000km	20
Loading & unloading	12,500 transport runs	10
Laundry	400,000 kg dry weight	30
Drying	500,000 kg wet weight	20
Pressing	50,000 cost units	20

Data for two sample contracts	St Mary's Hospital	The Royal Hotel
Number of cost units processed	10,000	5,000
Number of transport runs	1,000	400
Transport km	6,000	8,000
Average dry weight per cost unit	4kg	3kg
Average wet weight	5.3kg	3.3kg

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Question 3 continued

Required:

- a) Using the traditional absorption costing information, calculate the overhead absorption rate (OAR) for each of the two cost centres. **(2 marks)**
- b) Calculate the OAR for each activity using the additional ABC information. **(5 marks)**
- c) Compare the overhead absorbed by both St Mary's Hospital and the Royal Hotel using both the traditional system and the ABC approach. **(8 marks)**
- d) Critically evaluate how the ABC approach to overhead absorption will assist management in decision-making. **(10 marks)**

TOTAL 25 MARKS

Section B – Answer ANY TWO questions

Question 4

- (a) Discuss the main reasons for the adoption of a transfer pricing system. **(12 marks)**
- (b) Critically evaluate the use of the following:
(i) market price based transfer prices; and
(ii) cost based transfer prices.
Outline the main types that exist under each heading. **(13 marks)**

TOTAL 25 MARKS

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Section B continued

QUESTION 5

- (a) Critically evaluate the use of the “Balanced Score Card” and give examples of its use in the business environment.

(13 marks)

- (b) Using a business of your choice as an example, identify one corporate goal for each of the 4 perspectives and give examples of one performance indicator for each performance goal. Give reasons justifying your selection of each performance indicator.

(12 marks)

TOTAL 25 MARKS

QUESTION 6

TQM aims to change the management culture in an organisation to that of a 'quality culture', focusing on improving customer care, the relationship with suppliers and team-centred management. All business functions in the organisation are involved in continuous quality improvement.

- (a) Discuss the above statement and how the traditional approach to quality differs from the TQM approach.

(10 marks)

- (b) Critically evaluate the effect that TQM will have on the role of MACS and the information needs of management.

(15 marks)

TOTAL 25 MARKS

END OF QUESTIONS