ASSESSMENT and QUALIFICATIONS ALLIANCE

General Certificate of Education

Accounting 6121

ACC7 Further Aspects of Accounting for Management and Decision-making

Mark Scheme

2006 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

June 2006 **ACC7**

MARK SCHEME

INSTRUCTIONS TO EXAMINERS

You should remember that your marking standards should reflect the levels of performance of Advanced Level candidates, mainly 18 years old, writing under examination conditions.

Positive Marking

You should be positive in your marking, giving credit for what is there rather than being too conscious of what is not. Do not deduct marks for irrelevant or incorrect answers as candidates penalise themselves in terms of the time they have spent.

Mark Range

You should use the whole mark range available in the mark scheme. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **must** be given. A perfect answer is not required. Conversely, if the candidate's answer does not deserve credit, then no marks should be given.

Alternative Answers / Layout

The answers given in the mark scheme are not exhaustive and other answers may be valid. If this occurs, examiners should refer to their Team Leader for guidance. Similarly, candidates may set out their accounts in either a vertical or horizontal format. Both methods are acceptable.

Own Figure Rule

In cases where candidates are required to make calculations, arithmetic errors can be made so that the final or intermediate stages are incorrect. To avoid a candidate being penalised repeatedly for an initial error, candidates can be awarded marks where they have used the correct method with their own (incorrect) figures. Examiners are asked to annotate a script with **OF** where marks have been allocated on this basis. **OF** always makes the assumption that there are no extraneous items. Similarly, **OF** marks can be awarded where candidates make correct conclusions or inferences from their incorrect calculations.

Quality of Written Communication

Once the whole script has been marked the work of the candidate should be assessed for the Quality of Written Communication, using the criteria at the end of the mark scheme. The mark should be shown separately on the candidate's script.

Synoptic Assessment

Synoptic assessment is located in the last question. Candidates will be required to integrate their knowledge, understanding and skills learned in different parts of the A Level course.

1 **Total for this question: 20 marks**

Jayne Bonde plc manufactures one product, the GB007.

The budgeted variable production costs per unit were:

	£
Direct materials (5.5 metres at £8 per metre)	44
Direct labour (4 hours and 20 minutes at £6 per hour)	26
	70

Budgeted production for the month of May was 10 000 units.

The actual costs for May were:

	£
Materials (60 000 metres)	585 000
Labour (60 000 hours)	360 000

The actual costs for May were based on an actual production level of 12 000 units.

REQUIRED

(a) Calculate:

(i) the material price and usage variances;

Material price
60 000 (8 – 9.75) = £105 000 (1) ADV (1)
Material usage
8 (66 000 – 60 000) = £48 000 (1) FAV (1)

4 marks

(ii) the labour rate and efficiency variances.

Labour rate
60 000 (6 – 6) = £0 (1)
Labour efficiency
6 (52 000 – 60 000) = £48 000 (1) ADV (1)

3 marks

(b) Prepare a statement reconciling the budgeted variable production costs with the actual variable production costs.

	£	
Total budgeted cost (70 (1) x 12 000 (1))	**840 000**	**(1)**
Material price	**105 000**	**(1) OF**
Material usage	**48 000**	**(1) OF**
Labour efficiency	**48 000**	**(1) OF**
Actual cost	**945 000**	**(1) OF**

7 marks

(c) Explain the interrelationships between the labour and material variances.

As the material was more expensive (1), it may be of better quality (1), so there was less material used (1); but the labour force used more hours (1) to make the production, perhaps spending longer on being more careful with the use of the material (1); or as their pay was unchanged (1), there may be a lack of skills (1).

max 6 marks

If only one aspect is focused on and no link, then max 3 marks, eg:

Paid more for the materials (1), perhaps for better quality (1), therefore used less (1).

max 3 marks

Paid labour rate as expected (1), but labour force was less efficient (1), perhaps due to a lack of skills (1).

All OF comments, based on calculations from (a).

max 3 marks

2 **Total for this question: 25 marks**

The budgeted profit for Jayne Bonde plc is expected to be £60 000 per month, using the marginal costing method of cost accounting.

Em, the financial accountant, would like to change to the absorption method of cost accounting in June. She believes that this method will enable the company to record a higher level of profit.

The fixed production costs are £90 000 per month, which will be absorbed on the basis of the normal production of 12 000 units.

The fixed non-production costs are £50 000 per month.

The budgeted variable production costs remain unchanged at £70 per unit.

The selling price is expected to be £90 per unit.

REQUIRED

(a) (i) Calculate the absorption rate per unit.

Absorption rate

$$\frac{\pounds 90\,000 \ \textbf{(1)}}{12\,000 \ \textbf{(1)}} = \pounds 7.50 \ \textbf{(1)}$$

3 marks

(ii) Calculate the budgeted total production cost per unit, using the absorption rate calculated in (a) (i).

Total budgeted production cost

£70 (1) + £7.50 (1) OF = £77.50 (1) OF

3 marks

(2)

For the month of June, opening stock is 500 units, production is expected to be 12 000 units, but only 10 000 units are expected to be sold.

REQUIRED

(b) Calculate the budgeted profit for the month of June. Use the absorption costing method.

Jayne Bonde plc
Budgeted Profit for June (1)

		£	£
	Sales 10 000 (1) x 90 (1)		**900 000**
	Less cost of sales		
	Stock	**38 750 (2)**	
	Purchases	**930 000 (2)**	
		968 750	
	Stock	**(193 750) (2)**	**775 000**
(1) both	**Gross profit**		**125 000 (1) OF**
	Non-production costs		**(50 000) (1)**
	Net profit		**75 000 (1) OF**

13 marks

(c) Assess how the change in profit, resulting from the adoption of the absorption method, could affect the shareholders.

Profit will be higher using the absorption method (1) of cost accounting in periods of increasing stock levels (1) (over the short term (1)) (£15 000 (1) increase in profit).
Higher stock values will lead to higher profits (1) – shareholders would perceive this as an indication of business success (1), suggesting higher dividends being available for ordinary shareholders (1).
However, over the long term (1), profit is the same regardless of method (1).
In the short term, market price of shares may rise (1), increasing the demand for shares (1) and possible capital gain (1).

max 6 marks

3 **Total for this question: 10 marks**

Em, the financial accountant, is proposing to replace all existing machinery at a cost of £2 400 000. The new machinery will produce 14 000 units per month, and total costs are expected to be £1 130 000 per month.

The selling price remains at £90 per unit.

All cash flows are expected to occur evenly throughout the month. It is presumed that all production will be sold each month.

Ignore depreciation.

REQUIRED

(a) Calculate the payback period of the new machinery.

Net inflow each month

sales 14 000 x 90	=	**1 260 000**	**(1)**
production costs	=	**(1 130 000)**	
net monthly inflow		**130 000**	**(1) OF**

payback – yearly inflow = **130 000 x 12 = 1 560 000 (1) OF**

therefore 1 year + $\left(\dfrac{\mathbf{840\ 000}}{\mathbf{1\ 560\ 000}} \mathbf{\times 365}\right)$ **(1)**

equals 1 year (1) and 196.54 days (1)

***or* alternative approach** $\dfrac{\mathbf{2\ 400\ 000\ (1)}}{\mathbf{1\ 560\ 000\ (3)}}$ **x 365 = 561.54 days**

= **561.54 – 365**

= **1 year (1) and 196.54 days (1)**

(answer can be given in weeks and months as well)

6 marks

(b) Explain **two** limitations of using payback as a method of capital investment appraisal.

Any two limitations of payback from the following:

- **ignores the timing of receipts and payments, presumes that they are received at regular intervals throughout the year (0-2)**
- **ignores inflation (0-2)**
- **ignores the time value of money, unlike net present value method (0-2)**
- **ignores weighting of receipts (net inflows); for example, one machine may create regular net inflows, whereas another has a much higher net inflow towards the end of its use (0-2)**
- **ignores the length of the life of the asset and only considers the net inflows for a stated period of time (0-2)**

4 marks

4 **Total for this question: 45 marks**

Em, the financial accountant, decides **not** to introduce the absorption cost method and **not** to purchase the new machinery.

Qwe, the production manager, was only able to achieve the increased level of production of 12 000 units in June by increasing the number of hours worked by the workforce. The workforce is asking for a pay rise of 20% per hour. If this is not given, the workers have stated that they will refuse to work the extra hours, and production will remain at 10 000 units in July.

The selling price is still £90 per unit. The budgeted variable production costs per unit before any pay rise are:

	£
Direct materials (5.5 metres at £8 per metre)	44
Direct labour (4 hours and 20 minutes at £6 per hour)	26
	70

REQUIRED

(a) Calculate the new budgeted contribution per unit, with the increased labour rate per hour.

SP-VC
90 (1) – (44 (1) + (4 ⅓ x £7.20 (2)))
= 90 – 75.20
= £14.80 (1) OF

5 marks

(b) Calculate the new total monthly direct labour costs if production is 12 000 units.

12 000 (1) x 31.20 (1) OF = £374 400 (1)

3 marks

(c) Describe **two** actions that could be undertaken which would fund the proposed increase in direct labour costs.

- increase the selling price (1) but also do not exceed market expectations (1)
- find a cheaper supplier of materials (1) as long as quality is maintained (1)
- find cheaper materials (1) with lower quality (1)

4 marks

(4)

Qwe, the production manager, believes that contribution should not be reduced. He proposes that new machinery is leased at a monthly cost of £5000. This machinery will increase production to 12 000 units per month. Each worker will be able to operate two machines at the same time. Qwe is hopeful that, over time, he will actually be able to reduce the size of the workforce with the introduction of the new machinery.

REQUIRED

(d) Write a report to the directors of Jayne Bonde plc, discussing whether the company should lease the new machinery.

To : The directors of Jayne Bonde plc
From : Student name
Date : Date of exam
Subject : Analysis of potential machine lease **(2 marks for report format)**

Production increased to satisfy demand, no increase in production costs so contribution remains the same (0-3).

Health and safety issues as workers' responsibility doubled (0-3).

Extra 2000 units sold @ 20	**=**	**40 000**	**(1)**
Less lease cost		**<u>(5 000)</u>**	**(1)**
Extra revenue per month		**<u>35 000</u>**	**(1) OF**

May be extra costs associated with new machine, eg retraining costs (0-3).

If workforce is reduced, possible redundancy costs and effects on morale (0-3).

Possible future trade union activity (0-3).

1 mark for decision.

max 14 marks

> On 1 July, it is expected that the company will have a bank balance of £2000. Em, the financial accountant, believes that the financing for the cost of the lease of £5000 per month can be achieved through careful budgeting. She therefore agrees to the lease. It is expected that 95% of the 12 000 units produced per month will be sold. All transactions are on a cash basis.
>
> Assume that the machine is leased at a cost of £5000 per month, selling price remains at £90 per unit, the variable production cost per unit includes the pay rise and fixed costs will be £140 000 per month, which **excludes** the cost of the lease.

REQUIRED

(e) Prepare a cash budget for **each** of the months of July and August.

Jayne Bonde plc
Cash budget for July and August (1)

	July		August	
	£		£	
Opening balance	**2 000**	**(1)**	**(19 400)**	**(1)** OF
Revenue (11 400 (1) x 90 (1))	**1 026 000**		**1 026 000**	**(2) row**
	1 028 000		**1 006 600**	
Variable production costs (W_1)	**(902 400)**		**(902 400)**	**(1) row**
Fixed production costs	**(140 000)**		**(140 000)**	**(1) row**
Lease	**(5 000)**		**(5 000)**	**(1) row**
Closing balance	**(19 400)**		**(40 800)**	**(1)** OF

W_1 12 000 (1) x £75.20 (1) OF **= £902 400**

11 marks

(f) Explain **two** advantages of budgeting.

Any 2 of the following;
Planning - the use of resources, including cash, can be planned for future periods to maximise efficiency.
Control - the use of all resources can be controlled over a period to ensure that they are not over- or under-used.
Co-ordination - different departments can co-ordinate their activities to achieve overall company objective.
Communication - to enable a unified activity, the departments must communicate with each other and pass information.
Aids decision making - the budgets produced can provide vital information for managers.
Evaluation of performance - each department or manager can be evaluated on their achievement or non-achievement of their budgets.

(1) per advantage
(0-2) development
6 marks

QUALITY OF WRITTEN COMMUNICATION

After the candidate's script has been marked, the work should be assessed for the Quality of Written Communication, using the following criteria.

Marks

0	Accounts and financial statements are unclear and poorly presented. There is little or no attempt to show workings or calculations. Descriptions and explanations lack clarity and structure. There is very limited use of specialist vocabulary. Answers may be legible but only with difficulty. Errors in spelling, punctuation and grammar are such that meaning is unclear.
1-2	There is some attempt to present accounts and financial statements in an appropriate format. Workings are missing or are not clearly linked to the answers. Descriptions and explanations are understandable but they lack a logical structure. There is some use of specialist vocabulary but this is not always applied appropriately. In most cases answers are legible, but errors in spelling, punctuation and grammar are such that meaning may be unclear.
3-4	Accounts and financial statements are generally well presented but there are a few errors. Workings are shown and there is some attempt to link them to the relevant account(s). Descriptions and explanations are usually clearly expressed but there are some weaknesses in the logical structure. There is a good range of specialist vocabulary which is used with facility. Answers are legible. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed.
5	Accounts and financial statements are well organised and clearly presented. Workings are clearly shown and easy to follow. Descriptions and explanations are clearly expressed. Arguments are logically structured. There is wide use of specialist vocabulary which is used relevantly and precisely. Answers are clearly written and legible. Spelling is accurate and the standard conventions of punctuation and grammar are followed so that meaning is clear.