OCR
RECOGNISING ACHIEVEMENT

GCE

Accounting

Advanced GCE

Unit **F014:** Management Accounting

Mark Scheme for June 2011

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of pupils of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, OCR Nationals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support which keep pace with the changing needs of today's society.

This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

Any enquiries about publications should be addressed to:

OCR Publications
PO Box 5050
Annesley
NOTTINGHAM
NG15 0DL

Telephone: 0870 770 6622
Facsimile: 01223 552610
E-mail: publications@ocr.org.uk

Question Number	Expected Answer	Mark	Additional Guidance
1 (a) (i)	Sales 4,200,000 Variable costs 2,400,000 Contribution 1,800,000 Fixed costs 840,000 Profit 960,000 **(1)**	**[1]**	Marks for profit and contribution are for correct values, regardless of method.
(ii)	$\frac{1,800,000}{30,000}$ = 60 **(1)**	**[1]**	
(iii)	$\frac{840,000}{140 - 80} = \frac{840,000}{60}$ = 14,000 **(1)** units Sales value 14,000 x 140 = 1,960,000 **(1)**	**[2]**	

Question Number	Expected Answer	Mark	Additional Guidance
(b) (i)	Selling price 150 Variable costs 88 Contribution per unit 62**(1)** Quantity x 32,700 2,027,400 Fixed costs 990,000**(1)** Profit 1,037,400**(1)**		Marks are for values shown. If correct profit but contribution per unit not shown, then (2).
(ii)	Selling price 140 Variable costs 80 Contribution per unit 60**(1)** Quantity x 31,500 1,890,000 Fixed costs 900,000**(1)** Profit 990,000**(1)**		
(iii)	Selling price 126 Variable costs 78.25 Contribution per unit 47.75**(1)** Quantity x 37,500**(1)** 1,790,625 Fixed costs 840,000 Profit 950,625**(1)**		If 1,790,625 shown, allow quantity mark.

Question Number	Expected Answer	Mark	Additional Guidance
(iv)	Selling price 140 Variable costs 79.20 Contribution per unit 60.80**(1)** Quantity x 30,000 1,824,000 Fixed costs 860,000**(1)** Profit 964,000**(1)**	[12]	
(c)	60Q**(1)** – 840,000**(1)** = 990,000 Q = 30,500**(1)**	[3]	30,500 (3), regardless of method.
(d)	Quality **(1)** – will the supplier be able to supply components to the required quality **(1)**. Faulty goods **(1)** will lead to production delays **(1)**. Price stability **(1)** – once the order has been placed, will the price be stable **(1)** for a period **(1)**. Need to ensure contract detail **(1)** covers price stability. Reliability **(1)** – will goods be delivered **(1)** on time **(1)** and in the event of urgent requirements **(1)** will the supplier prioritise our work **(1)**. Industrial relations **(1)** – redundancies may lead to bad publicity **(1)** other employees may strike **(1)**, may lead to orders not completed, loss of customers **(1)**. Financial implications **(1)** – profit increase **(1)**, contribution increase **(1)**, fixed cost increase **(1)**. **(2 x 3 marks)** **(1 for point plus up to 2 for development)**	[6]	

Question Number	Expected Answer	Mark	Additional Guidance
(e)	Make or buy Dropping a product Acceptance of special order Minimum selling price Limiting factor **(2 x 1 mark)**	**[2]**	Allow tender bidding (1). Break-even (1).
	Total marks	**[27]**	

Question Number	Expected Answer	Mark	Additional Guidance
2 (a)	Slitting $\frac{9,600}{3,000}$ 3.20 DLH**(1)** Coiling $\frac{17,220}{4,200}$ 4.10 DLH**(1)** Assembly $\frac{6,300}{2,100}$ 3.00 DLH**(1)**	**[3]**	Allow percentage.
(b)	Cost Statement Enquiry 1912 Direct material 9,680**(1)** Direct labour Slitting 2,700 Coiling 5,700 Assembly 4,000 12,400**(1)** Prime cost 22,080 Factory overheads Slitting 960 Coiling 2,460 Assembly 1,500 4,920**(1)** Cost of production 27,000 Administration expenses 4,050**(1 of)** Total costs 31,050**(1)**	**[5]**	If sub totals not shown, allow marks if correct individual components.

Question Number	Expected Answer	Mark	Additional Guidance
(c)	$31{,}050 \times \frac{100}{90} = 34{,}500$ **(2)(1 of)**	**[2]**	(1 of) for correct multiplier or divide by 0.9.
(d) (i)	Labour intensive **(1)**. Overheads are related to time **(1)** and this is time based **(1)**. If different grades **(1)** of labour, then departmental **(1)** labour hour rate appropriate. **(3 x 1 mark)**	**[3]**	
(ii)	Machine hour rate **(1)** – if machining main factor **(1)**, this method preferred **(1)**, if different types of machinery **(1)**, departmental **(1)** rates may be calculated. Unit cost **(1)** – simple to calculate **(1)**, cheap **(1)** to apply, only suitable if similar **(1)** units made, could apply in mass production **(1)** industry. % prime cost **(1)** – quick and convenient **(1)**, unlikely to be accurate **(1)** unless similar **(1)** material, labour, equipment **(1)**. % direct labour cost **(1)** – if similar units **(1)** and uniformly paid labour **(1)** then may give reasonable results, no distinction **(1)** between quick/slow workers **(1)** % direct material cost **(1)** – if similar material **(1)**, times proportionate **(1)** and similar equipment **(1)** then may give reasonable results, usually no relationship **(1)** between material and overheads. Activity based costing **(1)** – accuracy **(1)**, change in production **(1)**, cost to set up **(1)**, no benefit to one product companies **(1)**. **(3 x 3 marks)** **(1 for method plus up to 2 for development)**	**[9]**	
	Total marks	**[22]**	

<table>
<tr><th>Question Number</th><th>Expected Answer</th><th>Mark</th><th>Additional Guidance</th></tr>
<tr>
<td>3 (a) (i)</td>
<td>
Claman plc
<table>
<tr><th>Year</th><th>Inflow</th><th>Outflow</th><th>Net cash flow</th></tr>
<tr><td>1</td><td>90,000 x 20 = 1,800,000</td><td>2,000,000</td><td></td></tr>
<tr><td></td><td>60,000 x 22 = 1,320,000</td><td>-300,000</td><td></td></tr>
<tr><td></td><td>3,120,000(1)</td><td>1,700,000</td><td>1,420,000</td></tr>
<tr><td>2</td><td>90,000 x 20 = 1,800,000</td><td>2,100,000</td><td></td></tr>
<tr><td></td><td>60,000 x 23 = 1,380,000</td><td>-300,000</td><td></td></tr>
<tr><td></td><td>3,180,000(1)</td><td>1,800,000</td><td>1,380,000</td></tr>
<tr><td>3</td><td>90,000 x 22 = 1,980,000</td><td>2,100,000</td><td></td></tr>
<tr><td></td><td>60,000 x 24 = 1,440,000</td><td>-300,000</td><td></td></tr>
<tr><td></td><td>3,420,000(1)</td><td>1,800,000</td><td>1,620,000</td></tr>
</table>
Duncan plc
<table>
<tr><th>Year</th><th>Inflow</th><th>Outflow</th><th>Net cash flow</th></tr>
<tr><td>1</td><td>200,000 x 25=5,000,000</td><td>4,200,000</td><td></td></tr>
<tr><td></td><td>50,000 x 26 = 1,300,000</td><td>-250,000</td><td></td></tr>
<tr><td></td><td>6,300,000</td><td>3,950,000 (1)</td><td>2,350,000</td></tr>
<tr><td>2</td><td>250,000 x 28=7,000,000</td><td>3,950,000 (1)</td><td>3,050,000</td></tr>
<tr><td>3</td><td>250,000 x 28=7,000,000</td><td>4,500,000</td><td></td></tr>
<tr><td></td><td></td><td>-250,000</td><td></td></tr>
<tr><td></td><td></td><td>4,250,000 (1)</td><td>2,750,000</td></tr>
</table>
</td>
<td>[6]</td>
<td>Allow mark against correct net cash flow.

If sub totals not shown, allow marks if correct individual components.</td>
</tr>
</table>

Question Number	Expected Answer	Mark	Additional Guidance
(ii)	Claman plc 2.12 years**(2)** Duncan plc 1.8 years**(2)** Accept months and days	**[4]**	
(iii)	<u>Claman plc</u> <u>Year</u> <u>NCF</u> <u>DF</u> <u>PV</u> 1 1,420,000 0.89 1.263,800**(1)** 2 1,380,000 0.80 1,104,000**(1)** 3 1,620,000 0.71 <u>1,150,200</u>**(1)** 3,518,000 Capital cost <u>3,000,000</u>**(1)** Net present value <u>518,000</u>**(1 of)** <u>Duncan plc</u> <u>Year</u> <u>NCF</u> <u>DF</u> <u>PV</u> 1 2,350,000 0.89 2,091,500**(1)** 2 3,050,000 0.80 2,440,000**(1)** 3 2,750,000 0.71 <u>1,952,500</u>**(1)** 6,484,000 Capital cost <u>4,800,000</u>**(1)** Net present value <u>1,684,000</u>**(1 of)**	**[10]**	Capital cost may be at start, of marks if correct model.

Question Number	Expected Answer	Mark	Additional Guidance
(b)*	Payback Easy to calculate **(1)**. Uses cash flow **(1)**, not subjective **(1)**. No account is taken that earnings may accrue after **(1)** the payback period and we are not considering the full period **(1)**. No account is taken of timing **(1)**. Cash flows in the future **(1)** will not be of the same value as today **(1)**. Many companies limit investments to short payback **(1)**, this could exclude **(1)** profitable investments. Short term aspect may be useful **(1)** with rapid technological change **(1)**. Net present value Uses cash flow **(1)**, not subjective **(1)**. All **(1)** earnings are taken into account **(1)**. Timing **(1)** of cash flows **(1)** is taken into account. Need to predict **(1)** a discount factor **(1)** which might not be accurate **(1)**. Increased calculations **(1)** and could be time consuming **(1)**. **Max six marks for each method** **(10)** **Maximum ten marks** **QWC (2)**	**[12]**	
(c)	Duncan plc has highest net present value **(1)**, shortest payback **(1)**, but note highest capital cost **(1)**. Recommendation **(1)**. **(3 x 1 mark)**	**[3]**	Allow two of.
	Total marks	**[35]**	

Question Number	Expected Answer	Mark	Additional Guidance
4 (a)	Cash Budget for the three months ending 31 August 2011		Correct purchases (2).

	June	July	August
Receipts			
Sales	63,000**(1)**	60,000**(1)**	55,500**(1)**
Disposal	3,400**(1)**		
	66,400	60,000	55,500
Payments			
Purchases	26,460**(1)**	27,930**(1)**	29,400**(1)**
	11,000**(1)**	9,000**(1)**	9,500**(1)**
Purchases	37,460	36,930	38,900
Expenses	12,000	12,000	12,000
Fixed asset		9,600**(1)**	
	49,460	58,530	50,900
Net cash flow	16,940	1,470	4,600
Opening bal	3,000	19,940	21,410
Closing bal	19,940	21,410	26,010**(1)**

[12]

Question Number	Expected Answer	Mark	Additional Guidance
(b)*	Budgeted Trading and Profit and Loss Account for the three months ending 31 August 2011 Sales 177,000**(1)** Opening stock 44,000**(1)** Purchases 114,000**(1)** 158,000 Closing stock 40,000**(1)** Cost of sales 118,000 Gross Profit 59,000 Discount received 1,710**(1)** 60,710 Expenses 36,000**(1)** Depreciation 4,850**(1)** Loss on sale 600**(1)** 41,450 Net Profit 19,260		

Question Number	Expected Answer	Mark	Additional Guidance
(b)* continued	Budgeted Balance Sheet as at 31 August 2011 Fixed Assets at cost 202,000 less depreciation 56,850 145,150 **(1 of)** Current Assets Stock 40,000 **(1)** Debtors 28,500 **(1)** Bank 26,010 94,510 Current Liabilities Creditors 10,000 **(1)** Expenses 4,000 **(1)** Fixed Asset 14,400 **(1)** 28,400 Working Capital 66,110 211,260 Capital and Reserves 211,260 **(1 of)** **QWC (3)**	**[18]**	Capital and Reserves (1 of) for change to 192,000.

Question Number	Expected Answer	Mark	Additional Guidance
(c)	Participation **(1)** – budgets can be imposed **(1)** and if managers are not involved **(1)** then less likely to contribute/buy in **(1)** to the process. If involved then more likely to contribute effectively **(1)**. Motivation **(1)** – budgets can help to motivate managers and be seen as a target **(1)**. If process participative **(1)** then more likely to encourage managers **(1)**. Communication **(1)** – budgets can help communicate to managers. Keeping managers up to date **(1)** can motivate, whilst lack of communication can de-motivate **(1)**. Goal congruence **(1)** – if managers involved **(1)** in process, then likely to see goals **(1)** of the company as a group and work together **(1)**. **(2 x 3 marks)** **(1 for point plus up to 2 for development)**	**[6]**	Allow planning, benefits and actions.
	Total marks	**[36]**	

OCR (Oxford Cambridge and RSA Examinations)
1 Hills Road
Cambridge
CB1 2EU

OCR Customer Contact Centre

14 – 19 Qualifications (General)
Telephone: 01223 553998
Facsimile: 01223 552627
Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553