Coimisiún na Scrúduithe Stáit

State Examinations Commission

Leaving Certificate 2017

Marking Scheme

Accounting

Higher Level

Note to teachers and students on the use of published marking schemes

Marking schemes published by the State Examinations Commission are not intended to be standalone documents. They are an essential resource for examiners who receive training in the correct interpretation and application of the scheme. This training involves, among other things, marking samples of student work and discussing the marks awarded, so as to clarify the correct application of the scheme. The work of examiners is subsequently monitored by Advising Examiners to ensure consistent and accurate application of the marking scheme. This process is overseen by the Chief Examiner, usually assisted by a Chief Advising Examiner. The Chief Examiner is the final authority regarding whether or not the marking scheme has been correctly applied to any piece of candidate work.

Marking schemes are working documents. While a draft marking scheme is prepared in advance of the examination, the scheme is not finalised until examiners have applied it to candidates' work and the feedback from all examiners has been collated and considered in light of the full range of responses of candidates, the overall level of difficulty of the examination and the need to maintain consistency in standards from year to year. This published document contains the finalised scheme, as it was applied to all candidates' work.

In the case of marking schemes that include model solutions or answers, it should be noted that these are not intended to be exhaustive. Variations and alternatives may also be acceptable. Examiners must consider all answers on their merits, and will have consulted with their Advising Examiners when in doubt.

Future Marking Schemes

Assumptions about future marking schemes on the basis of past schemes should be avoided. While the underlying assessment principles remain the same, the details of the marking of a particular type of question may change in the context of the contribution of that question to the overall examination in a given year. The Chief Examiner in any given year has the responsibility to determine how best to ensure the fair and accurate assessment of candidates' work and to ensure consistency in the standard of the assessment from year to year. Accordingly, aspects of the structure, detail and application of the marking scheme for a particular examination are subject to change from one year to the next without notice.

Accounting Higher Level Scheme - 2017

Question 1 – Sole Trader

(a)

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Trading, Profit and Loss Account of M. Mullen for the year ended 31/12/2016 [1]

		€		€		€	
Sales						792,000	[2]
Less: Cost of sales							
Opening stock				66,000	[2]		
Add purchases	**W 1**			515,300	[10]		
				581,300			
Less closing stock	**W 2**			(87,800)	[7]	(493,500)	
Gross profit						298,500	
Less: **Expenses**							
Administration							
Patent written off	**W 8**	14,000	[5]				
Salaries and general expenses		145,500	[2]				
Rent		10,400	[2]				
Insurance	**W 7**	19,400	[7]				
Depreciation – office equipment	**W 14**	2,800	[3]				
Depreciation – buildings	**W 15**	13,600	[2]	205,700			
Selling and Distribution							
Loss on sale of van	**W 6**	1,000	[6]				
Depreciation – delivery van	**W 4**	23,400	[5]				
Commission		16,500	[2]	40,900		(246,600)	
						51,900	
Add operating income							
Bad debt recovered						1,200	[2]
Discount including profit on sale	**W 11**					4,300	[4]
Operating profit						57,400	
Investment income	**W 9**					4,000	[4]
						61,400	
Mortgage interest	**W 10**					(10,800)	[3]
Net profit						50,600	[6]

(b) **45**

Balance Sheet of M. Mullen as at 31/12/2016

		Cost		Acc. Dep.		Net		Total	
Intangible Fixed Assets		€		€		€		€	
Patent	**W 8**							56,000	**[2]**
Tangible Fixed Assets									
Buildings		800,000	**[1]**	---		800,000			
Office equipment	**W 13 & 14**	14,000	**[2]**	8,300	**[3]**	5,700			
Delivery vans	**W 3 & 5**	158,000	**[2]**	67,400	**[3]**	90,600			
		972,000		75,700		896,300		896,300	
Financial Assets									
Investments								200,000	**[2]**
								1,152,300	
Current Assets									
Stock						87,800	**[2]**		
Debtors	**W 17**			71,000	**[2]**				
Less provision				(3,500)	**[1]**	67,500			
Investment income due	**W 9**					2,000	**[2]**		
VAT	**W 19**					4,400	**[2]**		
						161,700			
Creditors: amounts falling due within one year									
Creditors	**W 12**			83,200	**[6]**				
Bank	**W 18**			69,600	**[3]**				
PAYE, PRSI & USC				21,600	**[2]**				
Mortgage interest due	**W 10**			8,100	**[2]**	(182,500)		(20,800)	
								1,131,500	
Financed by									
Creditors: amounts falling due after one year									
6% Fixed mortgage								180,000	**[2]**
Capital and Reserves									
Capital 01/01/2016						701,900	**[1]**		
Revaluation reserve	**W 16**					218,600	**[3]**		
Net profit						50,600			
Less drawings	**W 20**					(19,600)	**[2]**	951,500	
Capital Employed								1,131,500	

Question 1 – Workings

1.	Purchases	536,500 – 30,000 + 12,800 – 4,000	515,300
2.	Closing stock	76,500 – 1,500 + 12,800	87,800
3.	Delivery vans at cost	150,000 – 40,000 + 48,000	158,000
4.	Depreciation – van	5,625 + 17,775 [22,500 + 900] (1,500 + 16,500 + 5,400)	23,400
5.	Acc. dep. delivery vans	65,000 – 21,000 + 23,400	67,400
6.	Loss on sale of van	40,000 – 21,000 – 18,000	1,000
7.	Insurance	17,700 + 2,000 – 300	19,400
8.	Patent	(68,000 + 2,000) ÷ 5	14,000
9.	Investment income Investment income due	200,000 × 3% × 2/3 year 4,000 – 2,000	4,000 2,000
10.	Mortgage interest Mortgage interest due	180,000 × 6% 10,800 – 2,700	10,800 8,100
11.	Discount received	3,200 + 1,100	4,300
12	Creditors	78,000 – 7,600 + 12,800	83,200
13.	Office equipment at cost	25,000 – 11,000	14,000
14.	Depreciation – office equipment Acc. dep. office equipment	14,000 × 20% 10,000 – 4,500 + 2,800	2,800 8,300
15.	Depreciation – buildings	680,000 × 2%	13,600
16.	Revaluation reserve	120,000 + 85,000 + 13,600	218,600
17.	Debtors	70,500 + 500	71,000
18.	Bank	70,300 – 700	69,600
19.	VAT	6,400 – 2000	4,400
20.	Drawings	15,600 + 4,000	19,600

Question 2 – Cash Flow Statement

(a)

52

Reconciliation of operating profit to net cash flow from operating activities

	€	
Operating profit	157,000	**[2]**
Deprecation charge for the year	64,000	**[3]**
Loss on sale of fixed assets	15,000	**[2]**
Increase in stock	(7,000)	**[3]**
Increase in debtors	(13,000)	**[3]**
Decrease in creditors	(30,000)	**[3]**
Net cash inflow from operating activities	186,000	**[2]**

Cash Flow Statement of Grant plc for the year ended 31/12/2016

		€		€	
Operating Activities		€		€	
Net cash inflow from operating activities				186,000	
Return on Investment and Servicing of Finance					
Interest paid		(12,600)	**[2]**		
Interest received		2,100	**[2]**	(10,500)	
Taxation					
Corporation tax paid				(53,000)	**[2]**
Capital Expenditure and Financial Investment	**[1]**				
Sale of investments		205,000	**[2]**		
Sale of buildings		73,000	**[2]**		
Purchase of machinery		(80,000)	**[2]**		
Purchase of buildings		(200,000)	**[2]**	(2,000)	
Equity Dividends Paid	**[1]**				
Equity dividends Paid				(32,000)	**[1]**
Net cash inflow before liquid resources and financing				88,500	**[2]**
Management of Liquid Resources	**[1]**				
Purchase of government securities				(40,000)	**[1]**
Financing	**[1]**				
Repayment of debentures		(170,000)	**[1]**		
Receipts from issue of ordinary shares		120,000	**[1]**		
Receipts from share premium		7,000	**[1]**	(43,000)	
Increase in cash				**5,500**	**[4]**

Reconciliation of net cash to movement in net debt	€	
Increase in cash	5,500	**[1]**
Cash used to purchase liquid resources	40,000	**[1]**
Cash used to repay debentures	170,000	**[1]**
Change in net debt	215,500	
Net debt 01/01/2016	(360,000)	**[1]**
Net debt 31/12/2016	(144,500)	**[1]**

(b) **8**

(i) **Solvency** is the ability of the company to pay all its debts as they fall due for payment (long term). A firm is solvent if total assets are greater than total external liabilities.

(ii) A **Financial Reporting Standard** is a rule that must be applied to all financial statements in order to give a true and fair view of the company's financial position. It sets out best practice in accounting that allows accounts to be compared from year to year and from company to company.

(iii) **Implications of reduced gearing**.

1. Low interest repayments increase the amount of profits available for investment elsewhere in the business.
2. Shareholders are more likely to get a dividend when gearing is low.
3. The business has greater financial stability as it is less affected by rises in interest rates.
4. The business should find it easier to raise additional loan finance.

Workings

Cost of disposed building	635,000 + 200,000 – 720,000	=	115,000
Dep. to date on disposed building	60,000 + 42,000 – 75,000	=	27,000
Cash received from disposed building	115,000 – 27,000 – 15,000	=	73,000
Depreciation	42,000 + 22,000	=	64,000
Taxation paid	44,000 + 45,000 – 36,000	=	53,000
Interest paid	12,000 + 3,400 – 2,800	=	12,600
Interest received	2,000 + 400 – 300	=	2,100

Question 3 – Revaluation of Fixed Assets

(a)

52

Land and Buildings Account

		€				€	
01/01/2012	Balance b/d	960,000	[1]				
01/01/2012	Revaluation Reserve	180,000	[1]	31/12/2012	Balance c/d	1,140,000	
		1,140,000				1,140,000	
01/01/2013	Balance b/d	1,140,000		01/01/2013	Disposal	315,000	[1]
				31/12/2013	Balance c/d	825,000	
		1,140,000				1,140,000	
01/01/2014	Balance b/d	825,000	[1]				
	Bank	360,000	[1]				
	Bank	90,000	[1]				
	Wages	30,000	[1]	31/12/2014	Balance c/d	1,305,000	
		1,305,000				1,305,000	
01/01/2015	Balance b/d	1,305,000					
	Revaluation Reserve	130,500	[2]	31/12/2015	Balance c/d	1,435,500	
		1,435,500				1,435,500	
01/01/2016	Balance b/d	1,435,500		01/01/2016	Disposal	907,500	[1]
	Revaluation Reserve	42,000	[3]	31/12/2016	Balance c/d	570,000	
		1,477,500				1,477,500	
01/01/2017	Balance b/d	570,000					

Provision for Depreciation on Buildings Account

		€				€	
01/01/2012	Revaluation Reserve	144,000	[1]	01/01/2012	Balance b/d	144,000	[2]
31/01/2012	Balance c/d	16,500		31/12/2012	Profit and loss	16,500	[1]
		160,500				160,500	
				01/01/2013	Balance b/d	16,500	
31/12/2013	Balance c/d	33,000		31/12/2013	Profit and loss	16,500	[1]
		33,000				33,000	
				01/01/2014	Balance b/d	33,000	
31/12/2014	Balance c/d	59,100		31/12/2014	Profit and loss	26,100	[1]
		59,100				59,100	
01/01/2015	Revaluation Reserve	59,100	[1]	01/01/2015	Balance b/d	59,100	
31/12/2015	Balance c/d	28,710		31/12/2015	Profit and loss	28,710	[1]
		87,810				87,810	
01/01/2016	Disposal	18,150	[2]	01/01/2016	Balance b/d	28,710	
01/01/2016	Revaluation Reserve	10,560	[3]	31/12/2016	Profit and loss	11,400	[1]
31/12/2016	Balance c/d	11,400					
		40,110				40,110	
				01/01/2017	Balance b/d	11,400	

Disposal of Land Account

		€				€	
01/01/2013	Buildings	315,000	[1]	01/01/2013	Bank	420,000	[1]
31/12/2013	Profit and loss (profit)	105,000	[1]				
		420,000				420,000	

Disposal of Buildings Account

		€				€	
01/01/2016	Buildings	907,500	[1]	01/01/2016	Depreciation	18,150	[1]
31/12/2016	Profit and loss (profit)	48,150	[1]	01/01/2016	Bank	937,500	[1]
		955,650				955,650	

Revaluation Reserve Account

		€				€	
01/01/2013	Revenue Reserve	75,000	[1]	01/01/2012	Land & Buildings	180,000	[1]
01/01/2016	Revenue Reserve	381,000	[2]	01/01/2012	Provision for dep.	144,000	[1]
31/12/2016	Balance c/d	110,160	[3]	01/01/2015	Land & Buildings	130,500	[1]
				01/01/2015	Provision for dep.	59,100	[1]
				01/01/2016	Land & Buildings	42,000	[1]
				01/01/2016	Provision for dep.	10,560	[1]
		566,160				566,160	
				01/01/2017	Balance b/d	110,160	

Revenue Reserve Account

		€				€	
				01/01/2013	Revaluation Reserve	75,000	[1]
				01/01/2016	Revaluation Reserve	381,000	[1]
						456,000	

Balance Sheet (extract) as at 31/12/2016

Fixed Assets	€		€		€	
Land and Buildings	570,000	[1]	11,400	[1]	558,600	
Financed by						
Revaluation Reserve					110,160	[1]
Revenue Reserve					456,000	[1]

(b) **8**

(i) **Importance of revaluation**:

1. The accounts will show fixed assets at their true market value and thereby show a true and fair view of the financial position of the company.
2. It provides useful information to users of the accounts (lenders, takeover bidders etc.).
3. It enables ratios to be calculated more accurately (e.g. ROCE).
4. Depreciation will not be understated and therefore profits will not be overstated.

(ii) **Factors that influence the price of property on the market**:

1. The use of the land – zoning, commercial or private.
2. New investments and projects nearby – for example a new Luas line.
3. Overall state of the property market – boom, recession.
4. Tax rates/breaks etc. to encouragement development.
5. The overall levels of supply and demand and the availability of credit from financial institutions.

Question 4 – Departmental Final Accounts

(a) **50**

Departmental Trading and Profit and Loss Account for the year ended 31/12/2016

	€ Total		€ Ladieswear		€ Menswear		€ Total		€ Ladieswear		€ Menswear	
Sales							500,000	[1]	300,000	[1]	200,000	[1]
Less Cost of goods sold												
Stock 01/01/2016	41,000	[1]	25,000	[1]	16,000	[1]						
Purchases	350,000	[1]	210,000	[1]	140,000	[1]						
Returns out	(3,000)	[1]	---		(3,000)	[1]						
Carriage in	4,000	[1]	4,000	[1]	---							
Import duty	1,000	[1]	---		1,000	[1]						
	393,000		239,000		154,000							
Less stock 31/12/2016	(45,000)	[1]	(28,000)	[1]	(17,000)	[1]	(348,000)		(211,000)		(137,000)	
Gross profit							152,000		89,000		63,000	
Less expenses												
Salaries and general expenses	75,600	[1]	45,360	[1]	30,240	[1]						
Advertising	4,000	[3]	2,400	[1]	1,600	[1]						
Insurance	7,000	[3]	5,600	[1]	1,400	[1]						
Light and heat	10,300	[1]	8,240	[1]	2,060	[1]						
Cleaning	9,100	[1]	7,280	[1]	1,820	[1]						
Dep. – delivery vans	8,000	[1]	4,800	[1]	3,200	[1]						
Dep. – buildings	8,800	[1]	7,040	[1]	1,760	[1]	(122,800)		(80,720)		(42,080)	
Operating profit							29,200		8,280		20,920	
Less mortgage interest							(6,000)	[1]	(4,800)	[1]	(1,200)	[1]
Net profit for year							23,200	[4]	3,480		19,720	

(b) **Recommendations to the Manager**: **[10]**

1. Downsize the Ladieswear Department and expand the Menswear Department as the €4.35 profit earned per square metre in the Ladies section is far less than the €98.60 profit per square metre earned in the Menswear section.

2. Rent out the Ladieswear Department as the €35 per square metre (€28,000) earned from rent would be far greater than the profit made per square metre of €4.35 (€3,480).

3. Close the business and rent out all the floor space as the rental income of €35,000 (€35 per square metre) is greater than the combined profit from the two Departments of €23,200 (€23.2 per square metre).

Workings

1.	Insurance paid	8,400	
	Less prepaid	(1,400)	7,000
2.	Advertising paid	6,000	
	Less prepaid	(2,000)	4,000

Question 5 – Interpretation of Accounts

50

(a)

(i) **Closing Stock**

$$\frac{\text{Cost of sales}}{\text{Average stock}} = 10$$

Average stock × 10 = 565,000

$$\text{Average stock} = \frac{565,000}{10}$$

Average stock = 56,500

Closing stock = (56,500 × 2) **less** 73,000 = **€40,000** **[12]**

(ii) **Dividend Yield**

$$\frac{\text{Dividend per share} \times 100}{\text{Market price}} = \frac{9.44c \times 100}{135c} = \mathbf{6.99\%}$$ **[12]**

(iii) **Earnings per Ordinary Share**

$$\frac{\text{Net profit after preference dividend}}{\text{Number of ordinary shares}} = \frac{114,000 - 7,500}{450,000} = \mathbf{23.67c}$$ **[10]**

(iv) **Return on Equity Funds**

$$\frac{\text{Net profit after tax and dividends}}{\text{Equity funds}} = \frac{114,000 - 7,500 \times 100}{450,000 + 79,000} = \mathbf{20.13\%}$$ **[8]**

(v) **Interest Cover**

$$\frac{\text{Operating Profit}}{\text{Interest}} = \frac{130,000}{16,000} = \mathbf{8.13\ times}$$ **[8]**

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(b) Bank Loan Application

Profitability [7]

The company is profitable. The return on capital employed has improved from 12% in 2015 to 14.79% in 2016. This is well above the return from risk free investments of 2% and the company's present cost of borrowing of 8%. It is also well above the 6% interest being charged on the loan.

Liquidity [6]

The company is liquid. The acid test ratio has improved from 0.8:1 in 2015 to 1.11:1 in 2016. It has €1.11 in liquid assets to cover each €1 owed in the short term. There should be no difficulty paying short term debts as they fall due. If the loan is granted the company should be able to pay the interest of €18,000.

Gearing **[6]**
The company is lowly geared. The gearing position has improved from 45% in 2015 to 39.82% in 2016 (or if using the debt/equity ratio it has disimproved from 45% to 66.16%). If the €300,000 loan is granted, the gearing will worsen to 55.13% (122.87%). This means the business will become highly geared. The business will be financed, on a long-term basis, more by debt than by equity. The interest cover has improved from 6 times in 2015 to 8.1 times in 2016.

Security **[6]**
The total value of fixed assets at cost is €830,000/€580,000/€680,000. The lender should question the depreciation policy of the company, to ascertain the real value of the fixed assets. The investments cost €100,000 but now have a market value of €120,000. There is already €200,000 of the fixed assets committed to securing the existing debenture. The value of tangible fixed assets is €580,000 leaving €380,000 as security against the new loan. The security for the new loan is adequate.

Dividend Policy **[5]**
The dividend cover has improved from 2.25 times in 2015 to 2.51 times in 2016. This indicates that sufficient profits are being retained while shareholders are receiving a reasonable dividend. This high retention of profits will ensure that the new loan is more easily repaid.

Sector **[5]**
JB plc is a health food manufacturer. This is currently a growth industry. People are more health conscious and are more careful about what they eat. Many people take a variety of supplements as part of their diet. Future prospects are good as our population starts to age. There are a few notes of caution. Health foods tend to be 'faddy' by nature. What is fashionable now can go out of fashion very quickly. There is also a view that taking enough exercise and avoiding processed food is the best way to good health.

Purpose of the loan **[3]**
The loan is required for the modernisation of the manufacturing facility. This is specific and is for a productive purpose which will help to reduce the unit cost of production and make the company more competitive. The extra production will generate more income to repay and service the loan.

Conclusion – Yes the bank manager should grant the loan. **[2]**

10

(c) **As an employee I would be interested in the financial information for the following reasons**:

To assess job security.
To see if shareholder dividends are increasing which could be used as a negotiation strategy.
To see if the company can continue to pay existing wage rates or can it afford a pay rise.
To see if the company plans to expand and thereby assess the prospects for promotion.
To assess pension security.

Identify two other users of financial information:

Lending institutions, trade creditors, shareholders, the revenue, competitors, directors.

Question 6 – Service Firm

(a) **18**

Statement of Reserves on 01/01/2016

		€		€	
Assets					
Buildings and grounds	[600,000 – 36,000]	564,000	[2]		
Equipment	[80,000 – 48,000]	32,000	[2]		
Furniture	[40,000 – 24,000]	16,000	[2]		
3% Investments		90,000	[1]		
Stock in shop		5,000	[1]		
Stock of oil		1,800	[1]		
Contract cleaning prepaid		200	[1]		
Investment income due		300	[1]		
Cash at bank		59,500	[1]	768,800	
Less Liabilities					
Creditors for supplies		2,000	[1]		
Member fees paid in advance		3,000	[1]		
Loan		60,000	[1]		
Loan interest due		2,400	[1]		
Issued capital		350,000	[1]	(417,400)	
Reserves 01/01/2016				**351,400**	[1]

(b) **10**

Shop Profit and Loss Account for the year ended 31/12/2016

		€		€	
Shop Receipts				85,000	[1]
Less cost of goods sold	[5,000 + 38,600 – 1,800]			(41,800)	[5]
				43,200	
Less expenses					
Light and heat		300	[1]		
Insurance		850	[1]		
Telephone		400	[1]		
Salary (24,000 × 60%)		14,400	[1]	(15,950)	
Profit from shop				27,250	

(c) **32**

Profit and Loss Account for the year ended 31/12/2016

	€		€	
Income				
Profit from shop	27,250			
Investment interest	2,700	[1]		
Profit on disposal of furniture	2,000	[1]		
Member fees	271,500	[5]	303,450	
Less Expenditure				
Wages and salaries	73,100	[2]		
Insurance (7,200 – 850)	6,350	[2]		
Light and heat	6,700	[5]		
Telephone (1,700 – 400)	1,300	[2]		
Purchases – supplies	44,800	[3]		
Loan interest	600	[1]		
Laundry	8,900	[1]		
Contract cleaning	7,900	[3]		
Bank charges	110	[1]		
Depreciation – Buildings	14,250	[1]		
– Equipment	16,000	[1]		
– Furniture	6,400	[1]	(186,410)	
Net profit			117,040	[1]
Add reserves 01/01/2016			351,400	[1]
Profit and loss balance 31/12/2016			468,440	

(d) **30**

Balance Sheet as at 31/12/2016

	Cost		Depreciation		Net	
Fixed Assets	€		€		€	
Buildings	750,000	[2]	50,250	[2]	699,750	
Equipment	80,000	[1]	64,000	[2]	16,000	
Furniture	32,000	[2]	18,400	[3]	13,600	
	862,000		132,650		729,350	
3% Investments					90,000	[2]
					819,350	
Current Assets						
Closing stock – shop	1,800	[1]				
Closing stock – oil	400	[1]				
Bank	2,240	[3]				
Contract cleaning prepaid	600	[1]				
Member fees due	3,650	[3]	8,690			
Less Creditors: amounts due within 1 year						
Wages due	1,800	[2]				
Creditors for supplies	3,600	[1]				
Member fees prepaid	4,200	[1]	(9,600)		(910)	
					818,440	
Financed by						
Share Capital and Reserves	**Authorised**		**Issued**			
Ordinary shares	500,000	[1]	350,000	[1]		
Profit and loss balance			468,440	[1]	818,440	

(e) Fitpro Ltd can afford the new gym equipment. It can finance the cost of €225,000 by selling the investments and receive €90,000 cash and issuing extra ordinary shares and collect €135,000 in cash (or €150,000 from shares and €75,000 from investments).

It has just repaid a loan including interest of €63,000 and spent a net €152,000 on fixed assets both of which are of a non- recurring nature. The company made a profit this year of €117,040 and has cash in the bank of €2,240. The company has no need to borrow to fund the project which will eliminate interest payments and result in higher future profits.

Workings

1.	Cost of goods sold	5,000 + 38,600 – 1,800	=	41,800	
2.	Member fees	270,000 + 3,000 + 2,700 – 4,200	=	271,500	
3.	Light and heat	5,600 – 300 + 1,800 – 400	=	6,700	
4.	Purchases – supplies	43,200 – 2,000 + 3,600	=	44,800	
5.	Contract Cleaning	8,300 + 200 – 600	=	7,900	
6.	Wages	68,600 + 4,500	=	73,100	
7.	Bank	3,300 – 950 – 110	=	2,240	
8.	Furniture disposal	20,000 – 12,000 – 10,000	=	2,000	**Profit**

Question 7 – Tabular Statement **100**

	01/01/2016	Jan	Feb	Mar	April	June	July	August	Sept	Oct	Nov	Dec	Total
Land and buildings	630,000	170,000 [2]	180,000 [2]										980,000 [1]
Depreciation – L & B	(25,000)	25,000 [2]										(17,100) [2]	(17,100)
Vehicles	50,000												50,000
Depreciation – veh.	(27,000)											(8,000) [2]	(35,000)
Equipment	15,000		50,000 [2]								(5,400) [2]		59,600
Depreciation – equip	(3,000)										2,200 [2]		(800)
Stock	73,000				12,000 [2]			(250) [2]		500 [2]			85,250
Debtors	90,000		12,000 [2]					600 [2] 369 [3]		(700) [3]			102,269
Bad debts provision	(3,600)			(2,520) [2]									(6,120) [1]
Goodwill			18,000 [2]										18,000
Total Assets	**799,400**	**195,000**	**260,000**	**(2,520)**	**12,000**	**---**	**---**	**719**	**---**	**(200)**	**(3,200)**	**(25,100)**	**1,236,099**
Share capital	560,000		200,000 [2]						40,000 [2]				800,000
Share premium	30,000		40,000 [2]						10,000 [2]				80,000 [1]
Revaluation reserve		195,000 [3]											195,000
Profit and loss	109,000			(2,520) [2]			100 [2]	1,500 [2] 50 [2]		(62) [1]	800 [2]	(17,100) [1] (8,000) [1] 6,300 [1] (1,600) [1]	88,468 [2]
Creditors	54,000		20,000 [2]		14,760 [3]		(1,800) [2]				(4,000) [2]		82,960
Bank	32,000					(7,200) [2] 4,800 [2]	1,700 [2]	(900) [2]	(50,000) [3]				(19,600) [1]
VAT	8,400				(2,760) [1]			69 [1]		(138) [1]			5,571
Expenses due	6,000					(4,800) [2]						1,600 [2]	2,800
Rent receivable						7,200 [2]						(6,300) [2]	900 [1]
Total Liabilities	**799,400**	**195,000**	**260,000**	**(2,520)**	**12,000**	**---**	**----**	**719**	**---**	**(200)**	**(3,200)**	**(25,100)**	**1,236,099**

Question 8 – Marginal Costing

80

(a) High Low Method

	Output (Units)	Production Overheads
High	90,000	330,000
Low	30,000	150,000
Difference	60,000	180,000

Variable cost per unit $= \frac{180,000}{60,000} =$ **€3 per unit** [4]

Total cost of 90,000 units	=	330,000		
Less variable cost (90,000 × €3)	=	270,000		
Fixed cost	=	60,000	**€60,000**	[4]

(b)

Marginal Costing Statement	**€**	**€**	**€ Per unit**
Sales (60,000 units)		1,320,000	22.00
Less variable costs			
Direct materials	270,000		
Direct wages	207,000		
Factory overhead (60,000 × €3)	180,000		
Sales commission (5% of sales)	66,000	(723,000)	12.05
Contribution		597,000	9.95
Less fixed costs			
Administration expenses	101,250		
Selling expenses (excl. commission)	16,500		
Factory overhead	60,000	(177,750)	
Net profit		419,250	

Break-even point $\frac{\text{fixed cost}}{\text{CPU}}$ $\frac{177,750 \text{ [4]}}{9.95 \text{ [5]}}$ = **17,865 units** [4]

Margin of safety budgeted sales **less** break-even point

60,000 [2] **less** 17,865 [1] = **42,135 units** [2]

(c) Number of units that must be sold at €25 to provide a profit of 10% of the sales revenue

Variable cost per unit (excl. sales commission)	=	10.95
At €25 per unit the 5% commission	=	1.25
New variable cost per unit	=	12.20

Let number of units	=	N
Sales revenue	=	25N
Profit	=	2.5N

Sales	**=**	**Variable Costs**	**+**	**Fixed Costs**	**+**	**Profit**	
25N **[2]**	=	12.2N **[4]**	+	177,750 **[2]**	+	2.5N **[4]**	
10.3N	=	177,750					
N	=	17,257.28				**[2]**	**17,258 units**

(d) The selling price to be charged in 2017

Let **S** be the selling price

Sales	**–**	**Variable costs**	**=**	**Fixed costs**	**+**	**Profit**	
60,000S **[1]**	–	60,000 [10.95 + 0.05S] **[5]**	=	199,080 **[3]**	+	419,250 **[3]**	
60,000S	–	[657,000 + 3,000S]	=	618,330			
60,000S	–	3,000S	=	618,330	+	657,000	
57,000S			=	1,275,330			
Selling price			=	€22.3742		**[2]**	**€22.37**

(e) **Report on the effect on profit of a number of options**:

To: **The manager of Clarke Ltd** **[1]**

From:

Date:

Option 1

Selling price – 10%	=	19.80			
Fixed costs + 30,000	=	207,750			
Sales volume + 20%	=	72,000	units		
New variable cost per unit (10.95 + 0.99)	=	11.94			
Sales (72,000 × 19.80)				1,425,600	**[3]**
Less variable costs (72,000 × 11.94)				(859,680)	**[3]**
Contribution				565,920	
Less fixed costs				(207,750)	**[2]**
Net profit				**358,170**	**[1]**

Option 2

Fixed costs + 40,000	=	217,750		
New variable cost per unit (12.05 – 2.00)	=	10.05		
Sales (60,000 × €22)			1,320,000	**[3]**
Less variable costs (60,000 × €10.05)			(603,000)	**[3]**
Contribution			717,000	
Less fixed costs			(217,750)	**[2]**
Net profit			**499,250**	**[1]**

Choose Option 2
Option 2 would generate a profit of €141,080 greater than option 1 **[1]**

(f) **[6]**

Sensitivity Analysis is also known as 'what if' analysis. It is a technique used by management accountants to show the effect on profit brought about by changes in the following:

1. Selling price
2. Sales volume
3. Variable costs
4. Fixed costs

The examples in part (e) are examples of sensitivity analysis.

Question 9 – Budgeting

80

(a)

Production budget	**Basic**		**Deluxe**	
Budgeted sales in units	1,800	[2]	1,500	[2]
Add closing stock	45	[2]	54	[2]
	1,845		1,554	
Less opening stock	(50)	[2]	(60)	[2]
Budgeted production (units)	1,795		1,494	

(b)

Materials Purchases Budget		**Material A (Kgs)**			**Material B (Kgs)**	
Basic	(1,795 x 5kgs)	8,975	[2]	(1,795 × 3kgs)	5,385	[2]
Deluxe	(1,494 × 7kgs)	10,458	[2]	(1,494 × 6kgs)	8,964	[2]
		19,433			14,349	
Add closing stock		2,700	[2]		1,800	[2]
		22,133			16,149	
Less opening stock		(3,000)	[2]		(2,000)	[2]
Budgeted purchases if R.M. in kgs		19,133			14,149	
Purchase price		€5	[1]		€6	[1]
Purchases in €		€95,665			€84,894	

(c)

Production Cost/Manufacturing Budget	**€**	**€**	
Opening stock of raw materials			
A (3,000 × €4.50)	13,500		
B (2,000 × €5.50)	11,000	24,500	[4]
Add purchases of raw materials (95,665 + 84,894)		180,559	[2]
		205,059	
Less closing stock of raw materials			
A (2,700 × €5)	13,500		
B (1,800 × €6)	10,800	(24,300)	[4]
		180,759	
Labour cost			
Basic (1,795 × 4 × 15)	107,700		
Deluxe (1,494 × 5 × 15)	112,050	219,750	[4]
Variable overhead			
Basic (1,795 × 4 × 8)	57,440		
Deluxe (1,494 × 5 × 8)	59,760	117,200	[4]
Fixed overhead		322,300	[2]
Cost of Manufacture		**840,009**	[3]

(d)

Budgeted Closing Stock per unit		**Basic**			**Deluxe**	
Material A	(5kg × €5)	25	[1]	(7kg × €5)	35	[1]
Material B	(3kg × €6)	18	[1]	(6kg × €6)	36	[1]
Direct labour	(4hrs × €15)	60	[1]	(5hrs × €15)	75	[1]
Variable overheads	(4hrs × €8)	32	[1]	(5hrs × €8)	40	[1]
Fixed overheads	(4hrs × €22)	88	[1]	(5hrs × €22)	110	[1]
Cost per unit		223			296	

Fixed overheads per direct labour hour

$$\frac{322{,}300}{(1{,}795 \times 4\text{hrs}) + (1{,}494 \times 5\text{hrs})}$$

$$\frac{322{,}300}{14{,}650} = \textbf{€22} \quad [2]$$

Budgeted Trading Account			**€**		**€**	
Sales (1,800 × €260) + (1,500 × €340) [468,000 + 510,000]					978,000	[2]
Opening stock of finished goods						
Basic	(50 × €220)	11,000				
Deluxe	(60 × €290)	17,400	28,400	[2]		
Cost of manufacture			840,009	[1]		
			868,409			
Less closing stock of finished goods						
Basic	(45 × €223)	10,035				
Deluxe	(54 × €296)	15,984	(26,019)	[2]	(842,390)	
Gross profit					135,610	[2]

[6]

(e) **The importance of budgeting**:

1. Budgeting is part of the planning process. It is a financial road map for a business.
2. Budgeting helps define areas of responsibility for staff and motivates staff to achieve targets, improves communication and builds teamwork.
3. The resources of the organisation are used as efficiently as possible and it can adapt quickly to changing circumstances.
4. Budgeted figures can be compared with actual performance. Adverse variances can be investigated and action taken to ensure it does not happen again.

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