



Coimisiún na Scrúduithe Stáit
State Examinations Commission

LEAVING CERTIFICATE 2011

MARKING SCHEME

ACCOUNTING

HIGHER LEVEL

LEAVING CERTIFICATE ACCOUNTING - 2011

Higher Level Marking Scheme

INTRODUCTION

The solutions and marking scheme for Accounting Higher Level are attached.

Marks allocated to each line/figure are highlighted and shown in brackets like this alongside.

[6]

These marks are then totalled for each section/page and shown in a square like this

40

Accounting solutions are mainly computational and most figures are made up of more than one component. If a figure is not as per the solution, the examiners analyse the make-up of the candidate's figure and allocate some marks for each correct element included. To facilitate this, where relevant, the make-up of the figures is shown in workings attached to the solution.

In some Accounting questions there can be a number of alternative approaches and formats that can be validly used by candidates (e.g. A Bank Reconciliation Statement can start with either the bank statement figure or the adjusted bank account balance). The solutions provided here are based on the approaches adopted by the vast majority of teachers/candidates and alternatives are not included. In cases where a valid alternative solution is required, it is provided for the examiners, so that full marks can be gained for correct accounting treatment.

Sometimes the solution to a part of a question may depend on the answer computed in another part of that question. Where a calculation in section (a) is incorrect, allowance is made for this in subsequent sections.

Question 1

75

(a)

Manufacturing Account of Fisher Ltd for the year ended 31/12/2010

		€		€
Opening stock of raw materials		49,500	[1]	
Purchases of raw materials	W1	455,500	[2]	
Carriage on raw materials		<u>6,050</u>	[1]	
		511,050		
Less Closing stock of raw materials	W2	<u>68,000</u>	[3]	
Cost of raw materials consumed				443,050
Direct costs				
Direct factory wages		201,450	[2]	
Hire of special equipment		<u>12,000</u>	[2]	213,450
Prime cost				656,500
Factory Overheads				
General factory overheads		50,400	[2]	
Patent written off	W3	12,500	[2]	
Depreciation – Plant and Machinery	W4	45,600	[3]	
Depreciation – Factory Buildings	W5	<u>11,000</u>	[2]	
				<u>119,500</u>
Factory cost				776,000
Work in progress 1/1/2010				20,500 [2]
Less Work in progress 31/12/2010				<u>(25,500) [2]</u>
				771,000
Less Profit on sale of machine	W6			(2,800) [4]
Less sale of scrap material				<u>(6,000) [2]</u>
Cost of Manufacture				<u>762,200</u>

Trading and Profit and Loss account for the year ended 31/12/2010

		€		€
Sales	W7			1,089,250 [7]
Opening stock of finished goods		80,000	[2]	
Goods transferred at cost of manufacture		<u>762,200</u>	[2]	
		842,200		
Closing stock of finished goods	W8	<u>(88,400)</u>	[6]	(753,800)
Gross profit				335,450
Less Expenses				
Administration				
Administration expenses		20,500	[2]	
Selling and Distribution				
Selling expenses	W9	108,175	[6]	
Bad Debt written off		450	[2]	
Provision for bad debts	W10	<u>2,370</u>	[4]	
		110,995		131,495
				203,955
Discount net	W 11			<u>2,300</u> [2]
Operating profit				206,255
Less Debenture interest	W 12			<u>(6,525)</u> [3]
Net Profit before taxation				199,730
Less Taxation				<u>(24,000)</u> [2]
Profit after Tax				175,730
Less Dividends paid				<u>(30,000)</u> [1]
Retained Profit				145,730
Profit and Loss Balance 1/1/2010				<u>36,400</u> [2]
Profit and Loss Balance 31/12/2010				<u>182,130</u> [3]

(b)

Balance Sheet as at 31/12/2010

	Cost €	Acc. Dep €	Net €	Total €
Intangible Fixed Assets				
Patents				87,500 [3]
Tangible Fixed Assets				
Factory Buildings	650,000 [2]	-	650,000	
Plant and Machinery W13, 14	<u>216,000</u> [2]	<u>152,800</u> [3]	<u>63,200</u>	
	<u>866,000</u>	<u>152,800</u>	<u>713,200</u>	713,200
				800,700
Current Assets				
Stock Raw materials		68,000 [2]		
Work in progress		25,500 [2]		
Finished goods		<u>88,400</u> [2]	181,900	
Debtors W 15		47,400 [5]		
Less provision		<u>(2,370)</u> [2]	45,030	
VAT			<u>4,200</u> [2]	
			231,130	
Creditors: Amounts falling due within one year				
Creditors W 16		60,700 [4]		
Bank		8,600 [2]		
Debenture interest due		5,400 [3]		
Tax due		<u>24,000</u> [2]	(98,700)	
Net Current Assets				<u>132,430</u>
				<u>933,130</u>
Financed by				
Creditors: amounts falling due after more than one year				
9% Debentures				80,000 [2]
Capital and Reserves		Authorised	Issued	
Ordinary shares @ €1 each		400,000 [1]	250,000 [1]	
4% Preference shares @ €1 each		<u>300,000</u> [1]	<u>200,000</u> [1]	
		<u>700,000</u>	450,000	
Revaluation Reserve W 17			221,000 [3]	
Profit and Loss Balance			<u>182,130</u>	853,130
Capital Employed				<u>933,130</u>

Question 1 - Workings

1.	Purchases	$440,500 + 15,000$	455,500
2	Closing Stock - Raw materials	$53,000 + 15,000$	68,000
3.	Patents	$100,000 \div 8$	12,500
4	Dep plant and machinery	$43,200 + 2,400$ $24,000 + 21,600$	45,600
5	Dep Factory buildings	$2\% (\text{€}50,000)$	11,000
	Provision for Dep - Factory buildings	$110,000 + 11,000 - 121,000$	-
6	Profit on sale of machine	$24,000 - 22,800 - 4,000$	2,800 cr
7	Sales	$1,100,000 - 6,750 - 4,000$	1,089,250
8	Closing stock –Finished goods	$85,000 - 2,000 + 5,400$	88,400
9	Selling expenses	$108,000 + 175 (300 - 125)$	108,175
10	Provision for bad debts	$5\% (\text{€}47,400)$	2,370
11	Discount net	$2000 + 300$	2,300
12	Debenture Interest	$[4,500 + 2,025]$ $[1,000 + 125 + 5,400]$	6,525
13	Prov for Dep – P & M	$130,000 + 45,600 - 22,800$	152,800
14.	Plant and machinery	$240,000 - 24,000$	216,000
15	Debtors	$54,600 - 450 - 6,750$	47,400
16	Creditors	$45,700 + 15,000$	60,700
17	Revaluation Reserve	$100,000 + 121,000$	221,000

Penalties

1 mark per entry within “Factory Overheads” if total overheads are deducted from prime cost

1 mark for omission of heading Selling Expenses

Question 2

22

(a)

Adjusted Debtors Control Account

		€			€
Balance b/d		32,500	[1]	Balance b/d	600
Discount disallowed	(i)	120	[4]	Interest	20
Bad Debt recoverable	(vi)	60	[4]	Sales returns	30
Balance c/d		600	[1]	Sales overstated	90
		<u>33,280</u>		Balance c/d	<u>32,540</u>
Balance b/d		32,540			<u>33,280</u>
				Balance b/d	600

(b)

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Schedule of Debtors Accounts Balances

		€	€
Balance as per list of debtors			27,639
Add Discount disallowed	(i)	76	[5]
Interest on account	(ii)	160	[5]
Debtors – cash and credit sales error	(iii)	2,620	[4]
Sales	(v)	1,450	[4]
Bad debt recoverable	(vi)	<u>60</u>	[4]
			<u>4,366</u>
			32,005
Deduct Sales returns	(iv)		<u>(65)</u>
Net Balance as per adjusted Control Account			<u>31,940</u>

(c)

8

Books of first entry

- (i) Sales
Sales Returns
General Journal
Cash Book – Receipts and Payments

(ii)

They act as a check on the accuracy of the ledgers by comparing the balance of the control account with the total as per the schedule.

They locate errors quickly and narrow searching for errors to confined areas

They are useful when a firm needs to find credit sales or credit purchases from incomplete records.

They allow amounts owed by Debtors and amounts owed to Creditors to be ascertained quickly by simply balancing the control accounts.

Question 3

34

(a)

Profit and Loss Account of Marx plc for the year ended 31/12/2010

Turnover		1,880,000	[2]
Cost of Sales	W 1	(1,152,000)	[4]
Gross Profit		728,000	
Distribution Costs	W 2	(298,200)	[4]
Administrative Expenses	W 3	(329,800)	[6]
		100,000	
Other operating income	W 4	80,000	[3]
Operating Profit		180,000	
Investment Income	W 5	6,000	[2]
Profit on sale of land		55,000	[2]
		241,000	
Interest payable		(24,000)	[2]
Profit on ordinary activities before tax		217,000	
Taxation		(80,000)	[2]
		137,000	
Dividends paid		(23,000)	[2]
		114,000	
Profit brought forward at 1/1/2010		40,000	[2]
Profit carried forward at 31/12/2010		154,000	[3]

**Penalties are applied where entries are in incorrect sequence.*

Workings

1. Cost of Sales	$72,000 + 1,150,000 - 80,000 + 10,000$	=	1,152,000
2. Distribution costs	$250,000 + 4,200 + 44,000$	=	298,200
3. Administrative Expenses	$240,000 + 60,000 + 10,000 + 10,000 + 9,800$	=	329,800
4. Other Operating Income	$60,000 + 10,000 + 10,000$	=	80,000
5. Investment Income	$5,000 + 1,000$	=	6,000

Note Depreciation - Buildings 2% (700,000) = 14,000

30% (14,000)	=	4,200
70% (14,000)	=	9,800

Notes to the Accounts

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1. Accounting policy notes. [4]

Tangible Fixed Assets

Buildings were re-valued at the end of 2010 and have been included in the accounts at their re-valued amount. Vehicles are shown at cost.

Depreciation is calculated in order to write off the value or cost of tangible fixed assets over their estimated useful economic life as follows:

Buildings	2% per annum straight line
Vehicles	20% of cost

Stocks - Stocks are valued on a first in first out basis at the lower of cost or net realisable value.

2 **Operating Profit [2]**

The operating profit is arrived at after charging:

Depreciation on tangible fixed assets	58,000
Patent amortised	10,000
Directors remuneration	60,000
Auditors fees	10,000

3 **Financial Fixed Assets [2]**

	01/01/2010	31/12/2010
Quoted investments	300,000	300,000
Unquoted Investments	<u>80,000</u>	<u>80,000</u>
	<u>380,000</u>	<u>380,000</u>

The market value of the quoted investments on 31/12/2010 was €160,000.

The director's valuation of the unquoted investments on 31/12/2010 was €50,000

4 **Dividends [2]**

Ordinary dividends	
Paid 2.89c per share	13,000
Preference dividends	
Paid 5.0c per share	10,000

5 **Tangible Fixed Assets [4]**

	Land & Buildings	Vehicles cost	Total
	€	€	€
01/01/2010	820,000	220,000	1,040,000
Disposal	(120,000)		(120,000)
Revaluation surplus	<u>150,000</u>		<u>150,000</u>
Value at 31/12/2010	<u>850,000</u>	<u>220,000</u>	<u>1,070,000</u>
Depreciation 01/01/2010	91,000	8,000	99,000
Depreciation charge for the year	<u>14,000</u>	<u>44,000</u>	<u>58,000</u>
	105,000	52,000	157,000
Transfer on revaluation	<u>(105,000)</u>		<u>(105,000)</u>
Depreciation 31/12/2010	Nil	<u>52,000</u>	<u>52,000</u>
Net book value 01/01/2010	729,000	212,000	941,000
Net book value 31/12/2010	<u>850,000</u>	<u>168,000</u>	<u>1,018,000</u>

(b)

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(i) When a Contingent Liability is probable, the estimated amount should be provided for in the accounts and a note should show the nature of the loss. [4]

(ii) **Unqualified and Qualified Auditor's Report [8]**

An unqualified auditor's report is often referred to as a clean report. A report is unqualified when the auditor in his/her opinion **is satisfied** that the following apply:

- the financial statements **give a true and fair view** of the state of affairs of the company at the end of the year and of its profit and loss account for the year.
- the financial statements are prepared in accordance with the Companies Acts.
- all the information necessary for the audit was available
- the information given by the directors is consistent with the financial statements
- the net assets are more than 50% of the called up capital

A qualified auditor's report is when an auditor in his/her opinion is **not satisfied** or is unable to conclude that all or any of the above apply:

The report will state the elements of the accounts or of the director's report that are unsatisfactory.

Question 4

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(a)

Balance Sheet as at 31 December 2010		€	€
Intangible Assets			
Goodwill			31,500 [3]
Fixed Assets			
Buildings	(400,000 + 280,000)	680,000 [4]	
Equipment		<u>8,800 [3]</u>	688,800
Financial Assets			
Investments			<u>14,436 [5]</u>
			734,736
Current Assets			
Stock at 31 December 2010	16,700 [2]		
Trade Debtors	31,200 [2]		
Bank	125,260 [5]		
Rates prepaid	<u>2,100 [3]</u>	175,260	
Less Creditors: amounts falling due within 1 year			
Creditors	27,300 [2]		
Interest due	1,200 [3]		
Electricity due	<u>620 [2]</u>	(29,120)	
Net Current assets			<u>146,140</u>
			<u>880,876</u>
Financed by			
Creditors: amounts falling due after more than 1 year			
Loan			360,000 [2]
Capital - Balance at 1/1/2010		480,000 [2]	
Add Capital introduced		3,800 [3]	
Less Drawings		<u>(21,224) [7]</u>	462,576
			822,576
Add Net Profit			<u>58,300 [4]</u>
Capital Employed			<u>880,876</u>

(b)

O'Hagan should keep a detailed cash book and general ledger supported by appropriate subsidiary day books. This would enable O'Hagan to prepare an accurate trading and profit and loss account and therefore would avoid reliance on estimates.

Workings

Light and heat - amount paid	8,100
Add electricity due 31/12/2010	620
Less drawings	<u>(1,744)</u>
Rates - amount paid	8,400
Add rates prepaid 1/1/2010	1,800
Less rates prepaid 31/12/2010	<u>(2,100)</u>
Interest - amount paid	2,400
Add interest due	1,200
Less drawings	<u>(720)</u>

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Drawings

Drawings of stock	8,320
Cash/bank	6,240
College fees – family member	2,000
Equipment	2,200
Light and heat	1,744
Interest	<u>720</u>
	<u>21,224</u>

Bank Account

Balance/Lodgment	480,000	Business	420,000
Loan	360,000	Drawings	6,240
Capital introduced	3,800	Wages	86,000
Cash lodgments	120,000	Equipment	11,000
		Purchases	280,000
		Investments	14,400
		Light & heat	8,100
		Interest	2,400
		Rates	8,400
		College Fees	2,000
		Balance	<u>125,260</u>
	<u>963,800</u>		<u>963,800</u>

Question 5

50

(a)

(i) Opening Stock

$$\begin{aligned} \frac{\text{Cost of Sales}}{\text{Average stock}} &= 10 && \frac{875,000}{10 \times \text{Average Stock}} \\ \text{Average Stock} &= 87,500 \\ \text{Opening Stock} &= (87,500 \times 2) \text{ less } 80,400 && \mathbf{€94,600} \quad [10] \end{aligned}$$

(ii) Gearing

$$\begin{aligned} \frac{\text{Debt Capital}}{\text{Capital employed}} \times 100 &= \frac{240,000 + 100,000}{932,800} \times 100 && = \mathbf{36.45\%} \quad [9] \\ &&& \mathbf{0.364 \text{ to } 1} \\ &&& \mathbf{0.574 \text{ to } 1} \end{aligned}$$

(iii) Earnings per share

$$\begin{aligned} \frac{\text{Net profit after preference dividend}}{\text{Number of ordinary shares}} &= \frac{40,800}{550,000} && = \mathbf{7.42c} \quad [10] \end{aligned}$$

(iv) Dividend Yield

$$\begin{aligned} \frac{\text{Dividend per share}}{\text{Market Price}} \times 100 &= \frac{4.55}{90} \times 100 && = \mathbf{5.05\%} \quad [12] \end{aligned}$$

(v) Period to recoup share price

$$\begin{aligned} \frac{\text{Market price}}{\text{Dividend per Share}} &= \frac{90}{4.55c} && = \mathbf{19.78 \text{ years}} \quad [9] \end{aligned}$$

(b)

Bank Loan Application

40

Return on Capital Employed [7]

The company is profitable but less profitable in 2010 than in 2009. The ROCE has disimproved from 8.1% to 7.0%. This is less than the 8% interest to be charged on the loan. Why borrow/ loan at 8% if the return is only 7%.

Liquidity [7]

The acid test ratio of 0.43 to 1 is very poor. It has worsened from 0.7 to 1 since 2009. Sully plc has a serious liquidity problem. It has only 43c of liquid assets available for each €1 owed. The Liquidity problem will worsen if loan is granted. The company will/may not be able to pay extra interest

Gearing [6]

The company is lowly geared but gearing has become less favourable after rising from 32% to 36.45%. The gearing will get worse with a further loan of €400,000. The gearing with the loan will be 56%. The Interest Cover has disimproved from 5 times in 2009 to 3.3 times in 2010. This cover will get much worse if a loan of €400,000 is granted

Security [6]

The Fixed Assets are valued at cost at €42,800 but one should question the depreciation policy to ascertain the real value of the tangible assets. One should also question the value of intangible assets. The Investments have a market value of €90,000 but cost €150,800.

Already €240,000 is committed to securing debenture. The balance sheet value of tangible fixed assets is €42,000 leaving €402,000 after security committed to debentures. The security is not adequate.

Dividend Cover/policy [5]

The Dividend Cover is 1.6 times. This has worsened from 1.9 times in 2009. The Dividend Cover is low. Not enough of earnings are retained. This would jeopardise the repayment of the loan.

Sector [5]

Sully plc is involved in the construction industry. There is grave concern about the industry in the current climate and prospects in not encouraging in medium term

Further questions about current value of fixed assets and serious question about the ability of Sully plc to generate any/enough profits to pay back/service loan as the construction industry has declined significantly in recent times due to the slow down in economic growth.

Property developers are finding it hard to sell properties and this in turn has a knock on effect for companies in the construction industry as building has almost come to a standstill. The overall worsening state of the economy is having a very negative effect on the construction industry.

OR

Purpose for which loan is required

The loan is required for future expansion. Future expansion should be more specific. It is questionable whether Sully plc could generate extra income to service the loan.

Conclusion [4]

(c)

10

Limitations of ratio analysis

- It analyses past figures only and these figures are quickly out of date (historical). It merely gives us clues to the future.
- Ratios do not show seasonal fluctuations
- Firms use different accounting bases and therefore company comparisons are not accurate
- Financial Statements give limited pictures of a business. Other important aspects of a company are not revealed in the Financial Statements. Accounts alone cannot measure aspects which may be extremely significant such as monopoly position, economic climate, staff morale and management/staff relationships.

Question 6

30

(a)

Accumulated Fund at 1/1/2010

Assets			
Clubhouse and Grounds	250,000	[1]	
Equipment	75,000	[1]	
Bar stock	15,000	[2]	
Bar debtors	1,280	[2]	
Wages prepaid	400	[2]	
Subscriptions due	500	[2]	
Bank	1,140	[2]	
4% Government investments	50,000	[3]	
Levies due	<u>800</u>	[2]	394,120
Less Liabilities			
Bar creditors	8,400	[2]	
Life membership	24,000	[2]	
Levy Reserve	20,000	[2]	
Loan	30,000	[2]	
Loan Interest due	<u>1,584</u>	[3]	(83,984)
Accumulated Fund/Capital 1/1/2010			<u>310,136</u> [2]

(b)

Income and Expenditure Account for the Year ending 31/12/2010

		€	€
Income			
Bar profit	W 1	32,620	[6]
Interest from investments		2,000	[3]
Subscriptions	W 2	56,400	[6]
Annual sponsorship		7,500	[1]
Life membership written off	W 3	<u>6,000</u>	[2]
			104,520
Expenditure			
Catering Loss	W 4	3,100	[2]
Loss on sale of equipment		1,500	[2]
Sundry expenses	W 5	24,400	[2]
Coaching lessons		3,500	[1]
Travel expenses		10,000	[1]
Loan Interest		2,376	[2]
Depreciation Equipment		19,750	[2]
Depreciation Clubhouse and grounds		<u>5,000</u>	[2]
			(69,626)
Surplus of income			<u>34,894</u> [3]

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(c)

Balance Sheet as at 31/12/2010

	€	€	€
Fixed Assets			
Clubhouse and Courts	250,000 [1]	5,000 [1]	245,000
Equipment	<u>79,000 [2]</u>	<u>19,750 [1]</u>	<u>59,250</u>
	<u>329,000</u>	<u>24,750</u>	304,250
Investments			
4% Government Investments			<u>50,000 [1]</u>
			354,250
Current Assets			
Closing Stock	13,300 [1]		
Debtors	300 [1]		
Bank	45,180 [2]		
Investment Interest due	500 [2]		
Prize Bonds	<u>4,400 [1]</u>	63,680	
Less Creditors: amounts falling due within 1 year			
Creditors	8,600 [1]		
Subscriptions prepaid	<u>300 [1]</u>	<u>(8,900)</u>	<u>54,780</u>
Total Net Assets			<u>409,030</u>
Financed by			
Creditors: amounts falling due after more than 1 year			
Life membership			24,000 [1]
Accumulated Fund			
Balance at 1 January 2010		310,136 [1]	
Add surplus of income		<u>34,894 [1]</u>	345,030
Levy Reserve			<u>40,000 [2]</u>
Capital Employed			<u>409,030</u>

(d) (i)

Limitations of a Receipts and Payments Account. [6]

- does not show whether the club is raising enough funds to cover its running costs
- amounts due but unpaid at the end of the accounting period are not included
- only shows an increase or decrease in cash although there could be outstanding bills
- does not take into account losses such as depreciation
- does not show whether the club bar or restaurant are profitable
- does not distinguish between receipts for the current year and other years

(d) (ii) [9]

Yes I would advise the treasurer to go ahead and install the floodlights. The improved facilities would allow longer use of club courts resulting in added income from usage. This could enable the club to increase its membership and thereby increase the annual surplus of income as well as greater usage of restaurant and bar.

The club is in a strong financial position: It has a surplus of income over expenditure of €34,894 in the current year. At this rate of surplus enough funds would be generated in little over two years.

The club has increased its bank balance to €45,180 after paying off a loan of €30,000 during the year. [includes levy €20,000]

To fund the expenditure of €70,000 the club could use the cash balance of €45,180, the prize bonds of €4,400 and withdraw €20,420 from the investment fund.

The club should avoid using any of the funds raised through the levy as this is more than likely earmarked for other purposes and these funds may be needed for future capital expenditure.

Funds available without Reserve Fund

Investments	50,000	
Prize bonds	4,400	
Bank balance	<u>45,180</u>	
	99,580	
Less Levy	<u>(40,000)</u>	
Net available	<u>59,580</u>	

Borrow the remainder in the short term as the club is capable of paying back quickly through its regular income sources.

Question 6 - Workings

1. Bar Trading account for the year ending 31/12/2010

Sales (74,000 + 300 – 1,280)		73,020
Less Cost of Sales		
Opening stock	15,000	
Purchases (38,500 + 8,600 – 8,400)	<u>38,700</u>	
	53,700	
Closing stock	<u>(13,300)</u>	<u>(40,400)</u>
Bar profit		<u>32,620</u>

2. Subscriptions

Received	84,000	
<u>Less</u> subs due 1/1/2010	(500)	
Life membership	(6,000)	
Levy 2010	(20,000)	
Levy 2009	(800)	
Subs prepaid 31/12/2010	<u>(300)</u>	56,400

3. Life Membership

1/1/2010	24,000	
Amount received	6,000	
<u>less</u> transferred to P&L account	<u>(6,000)</u>	24,000

4. Catering Loss

Receipts	12,700	
Costs	<u>(15,800)</u>	3,100

5. Sundry Expenses

Payments	24,000	
Add wages prepaid	<u>400</u>	24,400

Question 7

	1/1/2010	January	February	April	May	June	July	August	September	October	November	December	Total
Land & Buildings	550,000	150,000 [2]	200,000 [2]										900,000 [1]
L&B depreciation	(11,000)	11,000 [2]										(23,800) [2]	(23,800)
Vehicles	38,000				10,000 [2]								48,000
Veh. depreciation	(20,000)				5,500 [2]							(25,000) [2]	(39,500)
Equipment	10,000		30,000 [2]						(1,200) [2]				38,800
Equip depreciation	(1,000)								500 [2]				(500)
Goodwill			18,000 [2]										18,000
Stock	80,000						(440) [2]	500 [2]					80,060
Debtors	80,000		8,000 [2]				180 [2]	(570) [3]					88,050
Prov. for bad debts	(4,000)			(2,160) [3]			440 [2]						(6,160) [1]
Total Assets	722,000	161,000	256,000	(2,160)	15,500	–	180	(70)	(700)	–	–	(48,800)	1,102,950
Share Capital	440,000		180,000 [2]								80,000 [2]		700,000
Share Premium	20,000		36,000 [2]								20,000 [2]		76,000 [1]
P&L	170,500			(2,160) [2]	500 [2]		900 [2]	(70) [2]	100 [2]	(31,000) [2]		3,500 [2]	
												(375) [2]	
												(25,000) [2]	
												(23,800) [2]	93,095 [2]
Creditors	65,000		40,000 [2]						(800) [2]				104,200
Bank	24,000				15,000 [2]	(4,500) [2]	(720) [2]			31,000 [2]	100,000 [2]		(33,720) [2]
						1,500 [2]							
Expenses (due)	2,500					(1,500) [2]						375 [2]	1,375
Rent receivable						4,500 [2]						(3,500) [2]	1,000 [1]
Revaluation Res.		161,000 [2]											161,000
Total Liabilities	722,000	161,000	256,000	(2,160)	15,500	–	180	(70)	(700)	–	–	(48,800)	1,102,950

Question 8

	€	€	€ per unit
Sales (90,000 units)		1,170,000	13.00
Less Variable Costs			
Direct materials	390,000		
Direct wages	236,000		
Factory overhead (40%)	[1] 32,800		
Sales commission (5% of sales)	[1] 58,500	(717,300)	(7.97)
Contribution		452,700	5.03
Less Fixed Costs			
Factory overhead (60%)	49,200		
Selling expenses (excl Commission)	[1] 46,500		
Administration expenses	130,000	(225,700)	
Net Profit		<u>227,000</u>	

(a) **Break even point** $\frac{\text{Fixed Costs}}{\text{CPU}} = \frac{225,700 [1]}{5.03 [1]} = [4] 4,871 \text{ units}$

Margin of safety Budgeted Sales – Break even point
 90,000 [2] – 44,871 [1] = [2] 45,129 units

(b) **Number of Units to increase profits by 20%**

Net profit 2010	227,000
Increase in net profit 20%	45,400
Net profit for 2011	<u>272,400</u>

$\frac{\text{Fixed Costs} + \text{Target Profit}}{\text{CPU}} = [2] \frac{225,700 + 272,400 [3]}{5.03 [5]} = [2] 99,026 \text{ units}$

(c) **Profit if selling price dropped to €11 in 2011**

Sales (110,000 x €1)	1,210,000 [4]	
Less Variable costs (110,000 x €7.87)	(865,700) [4]	
Total Contribution (110,000 x €3.13)	344,300	
Less Fixed costs	<u>240,700 [4]</u>	
Profit	<u>103,600</u>	[2] €103,600

(d) **The selling price to be charged**

Let S be the selling price

Sales	–	Variable costs	=	Fixed costs	+	Profit
90,000S [1]	–	90,000[7.32 + 0.05S] [5]	=	[3] 252,784	+	227,000 [3]
90,000S	–	[658,800 + 4,500S]	=	479,784		
90,000S	–	4,500S	=	479,784	+	658,800
85,500S			=	1,138,584		
S P			=	€13.3167		[2] €13.32

(e) Let the number of units = N
 Sales Revenue = 16N
 Profit = 1.6N

$$\begin{aligned}
 \text{Sales} &= \text{Variable Costs} + \text{Fixed Costs} + \text{Profit} \\
 16N \text{ [2]} &= 8.12N \text{ [4]} + 225,700 \text{ [2]} + 1.6N \text{ [4]} \\
 6.28N &= 225,700 \\
 N &= 35,939.49 \qquad \qquad \qquad \text{[2] 35,940 units}
 \end{aligned}$$

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(f)

Limitations/assumptions: [7]

Variable costs are assumed to be completely variable at all levels of output. However variable costs may decrease due to economies of scale or may increase because of increased costs.

It is assumed that in marginal costing fixed costs remain the same although most fixed costs are step-fixed and are only fixed within a relevant range.

It is assumed that all mixed costs are easily separated into fixed or variable. The High Lo method can be used for this purpose but it is not always possible to do this.

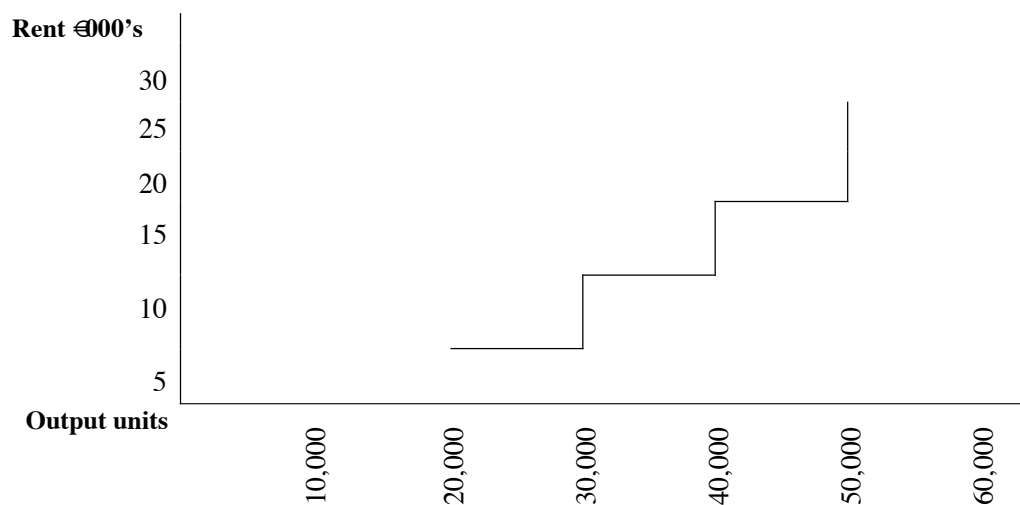
It is assumed that the selling price per unit is constant and does not allow for discounts.

Production in a period usually equals sales. Fixed costs are charged in total to a period and are not carried forward to next period.

Step Fixed Cost

Step fixed costs are costs that are fixed within a certain range of activity but change outside of that range. E.g. Rent could be fixed up to a certain level of production. However, if production increases and results in the rental of more factory space, then the rent would increase to a new level. Thus the fixed costs would increase in steps.

Graph [5]



Question 9

(a)

Production Budget

	Light	Extra Light
Budgeted Sales in units	12,000 [3]	3,500 [3]
+ Closing Stock	<u>585 [3]</u>	<u>450 [3]</u>
	12,585	3,950
- Opening Stock	<u>(650) [2]</u>	<u>(500) [2]</u>
Budgeted production (units)	<u>11,935</u>	<u>3,450</u>

(b)

Materials Purchases Budget

	Material A (Kgs.)	Material B (Kgs.)	
Required by Production			
Light (11,935 x 8kgs)	95,480 [2]	107,415 [2]	(11,935 x 9kgs)
Extra light (3,450 x 6kgs)	<u>20,700 [2]</u>	<u>24,150 [2]</u>	(3,450 x 7kgs)
	116,180	131,565	
Closing stock (90% of opening stock)	<u>5,400 [2]</u>	<u>3,600 [2]</u>	
	121,580	135,165	
Less opening stock	<u>(6,000) [2]</u>	<u>(4,000) [2]</u>	
Budgeted purchases of R.M. in kgs.	115,580	131,165	
Purchase price	<u>€ [2]</u>	<u>€5.50 [2]</u>	
Purchases in €	<u>€462,320.00</u>	<u>€721,407.50</u>	€1,183,727.50 Total

(c)

Production Cost/Manufacturing Budget

		€	€
Opening stock of raw material	Light	(6,000 x 3.5)	21,000
	Extra Light	(4,000 x 5.0)	<u>20,000</u>
			41,000.00 [4]
Purchases	Material A		462,320.00
	Material B		<u>721,407.50</u>
			1,183,727.50 [2]
			1,224,727.50
Less			
Closing stock of raw materials	Light	(5,400 x 4)	21,600
	Extra Light	(3,600 x 5.5)	<u>19,800</u>
			<u>(41,400.00) [4]</u>
			1,183,327.50
Labour cost	Light	(11,935 x 8 x 12)	1,145,760
	Extra Light	(3,450 x 9 x 12)	<u>372,600</u>
			1,518,360.00 [4]
Variable overhead	Light	(11,935 x 8 x 4.5)	429,660
	Extra Light	(3,450 x 9 x 4.5)	<u>139,725</u>
			569,385.00 [4]
Fixed overhead			<u>210,500.00 [2]</u>
Cost of Manufacture			<u>3,481,572.50 [3]</u>

(d)

Budgeted closing stock per unit		Light		Extra Light		
Material A	(8 kg x €4)	32.00	[1]	(6 kg x €4)	24.00	[1]
Material B	(9 kg x €5.50)	49.50	[1]	(7 kg x €5.50)	38.50	[1]
Direct labour	(8 hrs x €12)	96.00	[1]	(9 hrs x €12)	108.00	[1]
Variable overheads	(8 hrs x €4.50)	36.00	[1]	(9 hrs x €4.50)	40.50	[1]
Fixed overheads	(8 hrs x €1.66) W 1	<u>13.28</u>	[1]	(9 hrs x €1.66)	<u>14.94</u>	[1]
Cost per unit		<u>226.78</u>	[1]		<u>225.94</u>	[1]

W 1 Fixed overheads per direct labour hour

$$\frac{210,500}{(11,935 \times 8\text{hrs}) + (3,450 \times 9\text{hrs})}$$

$$\frac{210,500}{126,530} = \text{€1.66 [2]}$$

(e) [7]

A Master Budget is a summary of all the other budgets and provides an overview of the operations for the planned period.

A Master Budget for a manufacturing firm consists of:

- Budgeted manufacturing account
- Budgeted trading account and profit and loss account
- Budgeted balance sheet

