

Pearson Edexcel
International Advanced Level**Accounting (Modular Syllabus)****Unit 2: Corporate and Management Accounting**

Monday 8 June 2015 – Morning

Source booklet

Paper Reference

WAC02/01**Do not return the insert with the question paper.***Turn over* ►**P44822A**

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**PEARSON**

SECTION A

SOURCE MATERIAL FOR USE WITH QUESTION 1

- 1 The Statements of Financial Position of Maltese Construction plc at 31 March 2014 and 31 March 2015 were as follows:

	31 March 2014	31 March 2015
ASSETS	£	£
Non-current Assets		
Property, plant and equipment at cost	5 428 000	5 728 000
Provision for depreciation	(1 650 000)	(1 979 000)
Property, plant and equipment carry over	3 778 000	3 749 000
Shares held in other companies	1 085 000	1 260 000
	4 863 000	5 009 000
Current Assets		
Inventories	744 000	656 000
Trade and Other receivables	621 000	537 000
Cash and cash equivalents	326 000	435 000
	1 691 000	1 628 000
Total Assets	<u>6 554 000</u>	<u>6 637 000</u>
EQUITY AND LIABILITIES		
Equity & Reserves		
Share capital – Ordinary shares of £1	3 500 000	3 000 000
3% Redeemable preference shares of £1	320 000	320 000
Share Premium	700 000	650 000
Retained earnings	453 000	757 000
	4 973 000	4 727 000
Non-current Liabilities		
6% Bank Loan	-----	1 500 000
		1 500 000
Current Liabilities		
5.5% Debenture 2014	1 000 000	-----
Trade and Other payables	373 000	342 000
Current Tax payable	208 000	68 000
	1 581 000	410 000
Total Equity and Liabilities	<u>6 554 000</u>	<u>6 637 000</u>

Additional information:

- (i) Plant bought for £900 000, with depreciation to date of £360 000 was sold for £420 000 on 4 April 2014.
- (ii) Property was bought for £1 200 000 on 11 May 2014.
- (iii) On 16 May 2014 ordinary shareholders received a final dividend for year ended 31 March 2014 of 2 pence (£0.02) per share.
- (iv) A redemption of 500 000 £1 Ordinary shares at a premium of 10 pence (£0.10) per share was made on 31 August 2014.
- (v) On 1 October 2014, the following took place:
 - 5.5% debenture of £1 000 000 was redeemed
 - 6% bank loan of £1 500 000 was received
- (vi) Ordinary shareholders received an interim dividend of 1 pence (£0.01) per share on 20 October 2014.
- (vii) A purchase of shares in other companies took place on 12 December 2014.
- (viii) Preference shareholders received their dividends in full during the year.
- (ix) Profit after interest but before tax for the year ended 31 March 2015 was £481600.

Required:

- (a) Prepare a Statement of Cash Flow for the year ended 31 March 2015 in accordance with International Accounting Standard (IAS) 7 Statement of Cash Flows (revised). (40)
- (b) Evaluate the change in the gearing ratio of Maltese Construction plc from 31 March 2014 to 31 March 2015. State the formula that you have used. (12)

(Total for Question 1 = 52 marks)

Answer space for question 1 is on pages 2 to 7 of the question paper.

Question 1a Mark Scheme

Ticks in first column shows workings

Statement of Cash Flows for Maltese Construction for y/e 31 March 2015		✓	1
Cash Flows from operating activities			
Profit from operations (481 600✓ + 55 000 /2✓ + 90 000/2✓)	554 100	✓✓✓	
Add Depreciation	689 000	(5) below	
Add Loss on Sale of Non-current Asset (900 000-360 000) ✓ - 420 000✓	120 000	✓✓	
Operating cash flow before working capital changes	1 363 100	✓ o/f	
Decrease in inventories	88 000	✓	
Decrease in trade receivables	84 000	✓	19
Decrease in trade payables	(31 000)	✓	
Cash generated from operations	1 504 100	✓ o/f	
Less Interest Paid: Debenture	(27 500)	✓	
: Bank Loan	(45 000)	✓	
Less Tax Paid	(208 000)	✓	
Net Cash from Operating Activities	1 223 600	✓ o/f	
Cash Flow from Investing Activities			
Payments to acquire tangible non-current assets	(1 200 000)	✓	
Proceeds from sale of tangible non-current assets	420 000	✓	4
Payments to acquire shares in other companies	(175 000)	✓	
Net Cash Used in Investing Activities	(955 000)	✓ o/f	
Cash Flow from Financing Activities			
Redemption of Ordinary shares (500 000✓ + 50 000✓)	(550 000)	✓✓	
Redemption of debenture	(1 000 000)	✓	
Receipt of bank loan	1 500 000	✓	
Dividends Paid : Final 2014 (3 500 000✓ x 2p✓)	(70 000)	✓✓	11
Interim 2015 (3 000 000✓ x 1p✓)	(30 000)	✓✓	
Preference (320 000✓ x 3%✓)	(9 600)	✓✓	
Net Cash Used in Financing Activities	(159 600)	✓ o/f	
Net increase in cash and cash equivalents✓	109 000	✓o/f✓C	3
Cash and cash equivalents at the beginning of the year	326 000	✓	
Cash and cash equivalents at the end of the year	435 000	✓	2
	TOTAL	✓ x 40	40 Marks

<u>Depreciation calculation</u>		
Depreciation at 31 March 2015	1 979 000	✓
Less depreciation at 31 March 2014	(1 650 000)	✓
=	329 000	✓
Plus depreciation on assets sold	360 000	✓
Total depreciation for year	689 000	✓

1(b)

Using the formula Gearing Ratio = $\frac{\text{Debt}}{\text{Debt} + \text{equity}} \times 100$

$$\text{Gearing ratio at 31 March 2014} = \frac{(320\,000 + 1\,000\,000)}{(4\,973\,000 + 1\,000\,000)} \times 100 = 22.1\% \checkmark$$

$$\text{Gearing ratio at 31 March 2015} = \frac{(320\,000 + 1\,500\,000)}{(4\,727\,000 + 1\,500\,000)} \times 100 = 29.2\% \checkmark$$

Other formulas were accepted.

Strong points

Gearing ratio still below 30% o/f \checkmark and therefore low. \checkmark

Interest payments are easily covered \checkmark by profits for the period. \checkmark

Perhaps the bank loan does not have assets offered as security \checkmark (ie no charge on assets) which the debenture may have had. \checkmark

Share price may rise if shares redeemed \checkmark

Weak points

Ratio has increased \checkmark by 7.1% o/f points. \checkmark which is a worsening/increased risk \checkmark and increased interest payments \checkmark

Borrowing at 5.5% has been replaced \checkmark by higher borrowing at 6%. \checkmark Maybe the bank loan was the best interest rate available. \checkmark

Shares that were being given a nominal return of 3%, \checkmark seem to be replaced by borrowing at 6%. \checkmark What is the reason for this/ is there a reason? \checkmark

Shareholders equity holdings have been reduced \checkmark

Maximum of 8 marks for arguing one side.

Conclusion (2 marks)

Overall the gearing/financing position has worsened over the 12 months.

12 marks

Total 52 Marks

SOURCE MATERIAL FOR USE WITH QUESTION 2

- 2** Nazir Aiman bought a business producing t-shirts on 1 April 2014. When the business was purchased, the inventory was 4 200 t-shirts at an agreed value of £16 800. You are in practice as an accountant, and your client, Nazir, has asked you to prepare the accounts for the year ended 31 March 2015. Nazir has asked you to value the closing inventory using both the marginal costing method and the absorption costing method.

The following information is available for the year ended 31 March 2015.

- Fixed overheads – £2 450 per week
- Semi-Variable costs – £850 fixed element per week plus 22 pence (£0.22) per t-shirt
- Direct materials – 95 pence (£0.95) per t-shirt
- 25 direct staff are employed, who each work 8 hours and 20 minutes a day, for 5 days a week
- Direct labour – 25 minutes work per t-shirt at a wage rate of £6.00 per hour
- The quantity of t-shirts produced is determined by the speed of the direct labour, not the size of the order
- Sales price – £6.50 per t-shirt
- The business has a contract to supply a major overseas retailer with 2 400 t-shirts a week, which it fulfils. There are no other customers.
- Assume 50 weeks in a year

Required:

- (a) Calculate the quantity of t-shirts produced in one year. (6)
- (b) Prepare for Nazir, a statement showing the net profit, for the year ended 31 March 2015, using:
- (i) marginal costing inventory valuation
 - (ii) absorption costing inventory valuation
- (20)

Nazir is aware that his level of inventory is increasing. He has tried to find customers who may buy some of the inventory. He has received offers from a:

- (i) shop owner who has offered to buy 3 000 t-shirts at £4.00 per t-shirt.
- (ii) market trader who has offered to buy 2 000 t-shirts at £5.50 per t-shirt.
- (iii) wholesaler who has offered to buy 4 000 t-shirts at £3.50 per t-shirt.

Required:

- (c) Advise Nazir Aiman whether to accept the offer from the:
- (i) shop owner
 - (ii) market trader
 - (iii) wholesaler
- (14)

Nazir has stated, "I must prepare my final accounts using absorption costing, because it makes me more profit".

Required:

- (d) Evaluate this statement and advise Nazir whether he should use marginal costing or absorption costing to value his inventory.

(12)

(Total for Question 2 = 52 marks)

Answer space for question 2 is on pages 8 to 14 of the question paper.

Q2 Mark Scheme

(a)

	minutes per day	one unit time	days	weeks	staff	Total
Calctn of production	(500✓)	/25✓)	x 5✓	x 50✓	x 25✓	=125 000✓

(6 marks)

(b)

<u>Statement of Comprehensive Income</u>				
Calctn of revenue	(2 400	x 50) ✓	x £6.5 ✓	=780 000 ✓
	<u>Marginal</u>	<u>Absorption</u>		
Revenue	780 000	780 000		
Less				
Direct Materials	(118 750)	(118 750)	✓	
Direct Labour	(312 500)	(312 500)	✓✓✓ (below)	
Semi-variable costs	(70 000)	(70 000)	✓✓	
Fixed Overheads	(122 500)	(122 500)	✓	
	(623 750)	(623 750)		
Opening Inventory	(16 800)	(16 800)	✓	
Closing Inventory	33 764	45 908	✓ x7 (below)	
Profit	173 214	185 358	✓ o/f + ✓ o/f	

Calculation of Labour Cost breakdown

$$(25/60) \checkmark \times (£6.00 \times 125\,000) \checkmark = £312\,500 \checkmark$$

Calculation of Closing inventory

$$\text{Calculation of inventory quantity} = (4\,200 + 125\,000 - 120\,000) \checkmark = 9\,200 \checkmark$$

$$\text{Marginal Costing} = (2.50 + 0.95 + 0.22) \checkmark \times 9\,200 = £33\,764 \checkmark$$

$$\text{Absorption Costing} = \frac{623\,750}{125\,000} \checkmark \text{ o/f} = £4.99 \times 9\,200 = £45\,908 \checkmark$$

20 marks

(c) Answers could include:

Shop owner: (Maximum 5)

The order could be accepted ✓ on the grounds that £4.00 is greater ✓ than the marginal cost of £3.67 ✓ o/f ie a positive contribution ✓ of £0.33 OR total contribution of £990 ✓
However in the long term, ✓ selling at £4.00 would result in a Net Loss/ not all costs are covered. ✓

Market trader: (Maximum 5)

The order should be accepted ✓ on the grounds that £5.50 is greater ✓ than the marginal cost of £3.67 ✓ o/f ie a positive contribution ✓ of £1.83 OR a total contribution of £3 660 ✓ Marginal costs and fixed costs are covered Or a profit is made ✓

Wholesaler (Maximum 5)

The order should not be accepted ✓ on the grounds that £3.50 is less ✓ than the marginal cost of £3.67 ✓ o/f ie a negative contribution ✓ of £0.17 OR a total negative contribution of £680 ✓ A loss would be made in the short term or the long term. ✓

Other points (to be scored only once) (Maximum 5)

New customer may result in more orders in the future, ✓ perhaps at a higher price. ✓

May be an incentive to offload t-shirts quickly ✓ before they go out of fashion. ✓

Existing customer/overseas retailer would be unhappy ✓ to hear of this low price on offer. ✓

Possible damage to image ✓ if t-shirts appear on market stall. ✓

Marginal costing should be used to make these decisions. ✓

14 marks

(d) Answers could include:

Statement is correct, as a greater profit is shown. ✓ However, this is only due to a larger figure for closing inventory, ✓ and does not result in higher sales or cash inflow. ✓ ie a higher "paper" profit ✓ Also, this year closing inventory is next years opening inventory, ✓ so next year's profit will be reduced. ✓

Maximum of 8 marks for argument of one side.

Case for Absorption Costing

Sees costs allocated to products. ✓ Could be useful for management ✓ when fixing prices ✓ or reviewing if a product/project has been profitable ✓ in the long term ✓

Recommended ✓ by IAS 2 ✓

Follows the matching concept ✓ ie matches costs with revenues earned for a particular product ✓

Case for Marginal Costing

Could be said to help decision making ✓ in the short term ✓ when deciding whether to accept an offer price ✓ or make or buy ✓ or discontinue a product/profit centre. ✓

Sees costs allocated to a time period, ✓ so it may be argued that profit for that time period is more accurate. ✓ External accounts ✓ are drawn up on the basis of a time period. ✓

Follows the prudence concept ✓ as lower figures for profit and closing inventory. ✓

Business owners may like this method as it shows a lower profit ✓ so less tax is paid ✓ which is probably one of the reasons why final accounts should not use the method. ✓

Conclusion

Max 2 marks available.

Should draw up accounts according to absorption costing method. ✓✓

(12 marks)

Total 52 marks

SOURCE MATERIAL FOR USE WITH QUESTION 3

- 3** Purple Waves plc has been granted a licence to operate a mobile phone network in another country for 5 years. The cost of the licence and other start-up costs total £400 million.

The finance director has prepared two possible options to finance the funding of the project. The details of each option are shown below.

Option A	£m	Interest Rate/ Expected return
Debenture	100	9%
Bank Loan	50	8%
Preference Shares	50	6%
Ordinary Shares	<u>200</u>	4%
Total	400	

Option B	£m	Interest Rate/ Expected return
Debenture	50	8%
Bank Loan	200	9%
Preference Shares	40	4%
Ordinary Shares	<u>110</u>	4%
Total	400	

Required:

- (a) For each funding option, calculate the weighted average cost of capital. (12)
- (b) (i) Select the most appropriate funding option for the directors of Purple Waves plc. (2)
- (ii) Give **one** reason for your choice of funding option. (2)

Additional Information:

- In year 1, the number of customers is estimated to be 1 million paying £180 each, a year.
- In years 2 and 3, the number of customers is estimated to be 1.8 million each year, paying £190 a year.
- In years 4 and 5, the number of customers is estimated to be 2.2 million each year, paying £200 a year.
- In year 1 the running costs (including depreciation) are estimated to be £285 million per year.
- In years 2 and 3, the running costs (including depreciation) are estimated to be £300 million for each year.
- In years 4 and 5, the running costs (including depreciation) are estimated to be £340 million for each year.
- Depreciation is estimated to be £80 million for each year.
- The directors of Purple Waves plc require investments to give an average rate of return (accounting rate of return) of 10%.
- A table showing the discount factors is given.

Year	3%	4%	5%	6%	7%	8%	9%
1	0.971	0.962	0.952	0.943	0.935	0.926	0.917
2	0.943	0.925	0.907	0.890	0.873	0.857	0.842
3	0.915	0.889	0.864	0.840	0.816	0.794	0.772
4	0.888	0.855	0.823	0.792	0.763	0.735	0.708
5	0.863	0.822	0.784	0.747	0.713	0.681	0.650

Required:

- (c) Calculate the Net Present Value of the project at the end of year 5. (15)
- (d) Calculate the average rate of return (accounting rate of return) of the project. (9)
- (e) Evaluate the project for the company, using the calculations made, and considering any other relevant factors. (12)

(Total for Question 3 = 52 marks)

Answer space for question 3 is on pages 15 to 23 of the question paper.

Q3 Mark scheme

a)

Package A	£ million	Interest Rate	Interest £m	
Debenture	100	9.00	9	
Bank Loan	50	8.00	4 ✓	both
Preference Share	50	6.00	3	
Ordinary Shares	<u>200</u>	4.00	<u>8</u> ✓	both
Total	400		24 ✓ o/f	

$$\text{WACC} = \frac{24 \text{ ✓ o/f}}{400 \text{ ✓}} \times 100 = 6\% \text{ ✓ o/f}$$

Package B	£ million	Interest Rate	Interest £m	
Debenture	50	8.00	4	
Bank Loan	200	9.00	18 ✓	both
Preference Shares	40	4.00	1.6	
Ordinary Shares	<u>110</u>	4.00	<u>4.4</u> ✓	both
Total	400		28 ✓ o/f	

$$\text{WACC} = \frac{28 \text{ ✓ o/f}}{400 \text{ ✓}} \times 100 = 7\% \text{ ✓ o/f}$$

(12)

b)

- (i) Purple Waves plc should choose package A ✓✓ (2)
- (ii) This is because the cost of capital is lower than Package B ✓✓ (2)

c)

	£(millions)			Discount	Discounted
<u>Year</u>	<u>Income</u>	<u>Expenditure</u>	<u>Net</u>	<u>Factor</u>	<u>Value</u>
0	0	400	-400	1	-400.00 ✓✓
1	180 ✓	205 ✓	-25 ✓ o/f	0.943	-23.575
2	342 ✓	220 ✓	122 ✓ o/f	0.890	108.58 ✓ o/f both
3	342	220	122	0.840	102.48
4	440 ✓	260 ✓	180 ✓ o/f	0.792	142.56 ✓ o/f both
5	440	260	180	0.747	134.46 ✓ o/f
				NPV	64.505 ✓o/f

(15)

d) Average Rate of Return (£m)

Total Surplus of Project = £ 1 744 √o/f - £ 1 565 √o/f = £ 179 √o/f

Average Annual return = $\frac{£179 \text{ o/f } \checkmark}{5 \text{ years } \checkmark} = £35.8 \text{ per year o/f } \checkmark$

Accounting rate of return = $\frac{£35.8 \text{ o/f } \checkmark}{£400 \checkmark} \times 100 = 8.95\% \checkmark \text{ o/f}$

(9)

(e)

Answers may include :

Against Investment

ARR states do not invest √ as project fails to meet the percentage o/f return figure of 10%√

For Investment

NPV states invest √ as project has a positive NPV after 5 years. o/f √

NPV a good method of appraisal √ as it takes account of the falling value of money over time.√

Project is profitable overall √ having total cash inflow £179 000 √ o/f

How realistic is the 10% return target of the company? √ It is higher than the returns given to the providers of capital to the company. √√

Mobile phones is a growing sector of the economy. √

Payback period is within 5 years√

Increases brand awareness√

Other Relevant Points :

Accuracy of predictions? √

May be better investment projects available √

Objectives/strategy of company? √

What happens after 5 years? – renewal of contract?√ Any other/further business? √

Other appraisal techniques are available√ e.g. payback period and IRR (need both) √

Total of 8 marks for arguing one side only.

Conclusion : 2 marks

Must relate to points made above

12 marks

Total 52 marks

SECTION B

SOURCE MATERIAL FOR USE WITH QUESTION 4

- 4 George and Mary run a farm. The business is seasonal, and on 1 July 2015, they expect to be overdrawn by £4 000. They have been asked to meet the bank manager to discuss the overdraft. The bank manager has asked George and Mary to bring a monthly cash budget for the 6 months 1 July 2015 to 31 December 2015 to the meeting. George and Mary have asked you, their accountant, to draw up the monthly cash budget.

The following information is available:

- The farm shop is only open in July and August and sells fruit for cash. Sales are expected to be £80 per day, 7 days a week.
- Expenses of the farm shop are £10 per day.
- The wheat is to be harvested in August and sold to a flour producer for £195 per ton. The harvest is estimated to be 45 tons. The flour producer will pay in September.
- In August and September, fruit will be sold to supermarkets for £2 500 for **each** month. The supermarkets will pay two months after the sale.
- Vegetables will be harvested and sold in September, October and November, for £900 **each** month, to a factory. The factory will pay one month after the sale.
- In November and December, animals will be taken to the market and sold for cash, for £130 per animal. Each month, 5 animals will be sold at the market.
- In July, August and September, a farm worker will be employed and paid £175 per week.
- Feed and fertiliser £235 per month
- Power and fuel £175 per month
- Depreciation £150 per month
- Other fixed costs £25 per week
- Drawings for George and Mary will be £180 each per week.
- Assume 4 weeks in a month.

Required:

- (a) Prepare a monthly cash budget for the farm, for **each** month of the 6 month period 1 July 2015 to 31 December 2015.

(24)

At the meeting, the bank manager recommends a 6 month bank loan for George and Mary from 1 July 2015 for £6 000.

Required:

(b) Evaluate the Bank Manager's recommendation.

(8)

(Total for Question 4 = 32 marks)

Answer space for question 4 is on pages 24 to 26 of the question paper.

Q4 Mark scheme							
(a)							
	July	August	September	October	November	December	
Income							
Farm shop	2240	2240					✓
Wheat sales			8775				✓
Fruit sales				2500	2500		✓
Vegetable sales				900	900	900	✓
Animal sales					650	650	✓
Total Income	2240	2240	8775	3400	4050	1550	✓o/f
Expenditure							
Farm shop expenses	280	280					✓
Farm worker	700	700	700				✓
Feed and fertiliser	235	235	235	235	235	235	✓
Power and fuel	175	175	175	175	175	175	✓
Other fixed costs	100	100	100	100	100	100	✓
Drawings	1440	1440	1440	1440	1440	1440	✓✓
Total Expenditure	2930	2930	2650	1950	1950	1950	✓o/f
Net Monthly Cash Flow	(690)	(690)	6125	1450	2100	(400)	✓✓✓o/f
Balance b/f	(4000) ✓	(4690)	(5380)	745	2195	4295	✓✓✓ o/f
Balance c/f	(4690)	(5380)	745	2195	4295	3895	✓✓✓ o/f

24 marks

b)

For the loan

Will ensure that they are not overdrawn. ✓

Allows some room/ "spare capacity" in case figures turn out worse than expected. ✓

Keeps business on good terms with the bank. ✓

Interest rate likely to be less ✓ than rate on an overdraft. ✓

Increase in inflows may allow business to advertise/promote/expand etc✓ Also pay suppliers on time and obtain discount etc✓

Against the loan

Do not need a 6 month loan, ✓ as overdrawn for less than 3 months. ✓ Will be paying interest for 3 months ✓ that is not necessary. ✓

Do not need a loan of £6 000, as only £5 380 o/f overdrawn. ✓

The bank may ask for assets as collateral ✓ which may be seized if loan is not repaid ✓

Maximum of 4 marks for arguing one side only.

Conclusion (2 marks)

Should relate to points made.

Business should (not) take the loan.

8 marks

Total 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 5

- 5 Middle East Medical plc agreed to purchase Lifejoy plc on 1 April 2015. The directors of Middle East Medical plc have agreed to take over all of the assets of Lifejoy plc, except cash and cash equivalents and to settle all the liabilities except the current tax payable. The purchase price was agreed as a cash payment of £1.03 for every one share held in Lifejoy plc.

The Statements of Financial Position of the two companies at 31 March 2015, before any revaluations, were as follows:

	MIDDLE EAST MEDICAL plc		LIFEJOY plc	
	£	£	£	£
Assets				
Non-current Assets				
Property, plant and equipment	355 000 000		80 382 000	
Intangible assets	<u>98 000 000</u>		<u>2 000 000</u>	
		453 000 000		82 382 000
Current Assets				
Inventories	27 800 000		3 120 000	
Trade and Other Receivables	14 660 000		624 000	
Cash and Cash equivalents	<u>258 117 000</u>		<u>78 000</u>	
		<u>300 577 000</u>		<u>3 822 000</u>
Total Assets		<u>753 577 000</u>		<u>86 204 000</u>
Equity and Liabilities				
Equity				
Ordinary Shares of £1 each	250 000 000			
Ordinary Shares of £0.25 each			24 000 000	
Share Premium	100 000 000		24 000 000	
Retained earnings	<u>286 595 000</u>		<u>16 760 000</u>	
		636 595 000		64 760 000
Non-current Liabilities				
Mortgage	100 000 000		-----	
Bank Loan	-----		<u>20 000 000</u>	
		100 000 000		20 000 000
Current Liabilities				
Trade and Other payables	12 263 000		524 000	
Current tax payable	4 719 000		795 000	
Short term provisions	-----		<u>125 000</u>	
		<u>16 982 000</u>		<u>1 444 000</u>
Total Equity and Liabilities		<u>753 577 000</u>		<u>86 204 000</u>

Additional information:

The assets of Lifejoy plc were revalued as follows:

- Property with a book value of £14 000 000 to a current market value of £17 750 000
- Plant with a book value of £6 000 000 was reduced by £1 200 000
- Trade Receivables were reduced by 10%
- A newly granted patent for a medical cure, classed as an intangible, was to be valued at £12 000 000 and entered into the books of Lifejoy plc

Required:

- (a) Calculate the purchase price of Lifejoy plc. (4)
- (b) Prepare the Acquisition Account in the books of Middle East Medical plc to show the purchase of Lifejoy plc. (6)
- (c) Prepare the Statement of Financial Position of Middle East Medical plc at 1 April 2015 after the purchase of Lifejoy plc. (14)
- Middle East Medical plc financed the purchase of Lifejoy plc by cash.
- (d) Evaluate the use of cash to finance the purchase of a company. (8)

(Total for Question 5 = 32 marks)

Answer space for question 5 is on pages 27 to 31 of the question paper.

Q5. Mark scheme

(a) Purchase price = 24 000 000 ✓ x 4 ✓ x £1.03 ✓ = £98 880 000 ✓

4 marks

(b)

Acquisition account							
1 Apr	Property, Plant + Equipment	82 932 000	✓	Apr 1	Bank loan	20 000 000	both
	Intangibles	14 000 000	✓		Trade Payables	524 000	✓
	Inventories	3 120 000	both		Short term provisions	125 000	both
	Trade Receivables	561 600	✓		Purchase price		✓
	Goodwill	18 915 400	o/f		Cash	98 880 000	o/f
		119 529 000				119 529 000	

6 marks

(c)

Middle East Medical plc			
Assets			
<u>Non-current Assets</u>			
Property, plant and equipment	437 932 000	✓	
Intangible assets	112 000 000	✓	
Goodwill	18 915 400	✓ o/f	
			568 847 400
<u>Current Assets</u>			
Inventories	30 920 000	✓	
Trade and Other Receivables	15 221 600	✓	
Cash and Cash equivalents	159 237 000	✓	
-			205 378 600
Total Assets			774 226 000
Equity and Liabilities			
<u>Equity</u>			
Ordinary Shares of £1 each	250 000 000	✓	
Share Premium	100 000 000	✓	
Retained earnings	286 595 000	✓	
Total capital and reserves			636 595 000
-			
<u>Non-current liabilities</u>			
Mortgage	100 000 000	✓	
Bank Loan	20 000 000	✓	
			120 000 000
<u>Current Liabilities</u>			
Trade and Other payables	12 787 000	✓	
Current tax payable	4 719 000	✓	
Short term provisions	125 000	✓	
			17 631 000
Total Equity and Liabilities			774 226 000

14 marks

(d)

For financing using cash

Buyer may be able to afford purchase using cash / be cash rich ✓ better to use this cash than to have lying idle ✓

Only uses up about 40% of Middle East Medical plc's cash, ✓ so they will still be liquid after purchase ✓

Memorandum of Association ✓ may mean it is not possible to issue more shares, ✓ or may need to get approval from Stock Exchange Council ✓ to alter Memorandum and issue more shares. ✓

If issue more shares in buying company instead ✓ number of shareholders in buyer rises ✓ so dilution of powers of existing shareholders. ✓ and share price falls. ✓ and extra dividends may have to be paid in the future ✓

Quicker/easier/cheaper ✓

Against financing using cash

Use of cash is a drain on liquid resources. ✓ May need to take out loan etc to finance purchase. ✓

May not have enough cash to trade normally ✓ and enjoy discounts for early payments etc ✓

Maximum of 4 marks for arguing one side only

Conclusion – 2 marks

Financing purchase of another company using cash is good/ not good idea.

8 marks

Total 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 6

- 6 Tangapur Paper Limited produces paper at its factory. The company has a standard costing system.

The following information is available for the month of April 2015.

	BUDGET £	ACTUAL £	VARIANCE £
Revenue	165 000	162 500	
Less			
Material Costs	(47 890)	(49 910)	
Labour Costs	(24 640)	(24 057)	
Variable Overheads	<u>(36 620)</u>	<u>(38 880)</u>	
= Cost of Sales	(109 150)	(112 847)	
Gross Profit	55 850	49 653	
Less Fixed Overheads	<u>(54 750)</u>	<u>(54 750)</u>	
Net Profit	1 100	(5 097)	

Required:

- (a) Complete the Variance column, in the answer booklet, for the month of April 2015.

(7)

The following information is also available for April 2015:

- The budgeted production of 420 tons of paper for April 2015 was achieved.
- Budgeted labour was 28 workers, each working 40 hours a week, for four weeks in a month, at £5.50 per hour.
- One worker left on 31 March and was not replaced. This left 27 workers for the month of April.
- Management called an emergency meeting on 1 April and explained to workers the company was experiencing financial problems. Workers agreed to accept a 10 pence (£0.10) an hour reduction in pay with immediate effect.
- Due to mechanical problems, and to complete the budgeted production, all the workers worked 5 hours overtime at the reduced rate of pay.

Required:

(b) Calculate the:

(i) labour efficiency variance for the month of April 2015. (5)

(ii) labour rate variance for the month of April 2015. (5)

The budget for May 2015 has been produced. The budgeted fixed overheads for May 2015 are £56 290.

A junior member of the accounting staff stated "I see that the figure for fixed overheads for May 2015 has risen. I thought the fixed overheads figure did not change."

Required:

(c) (i) Briefly explain why a fixed overhead figure may change. (1)

(ii) Give **three** examples of fixed overheads that may rise, and explain briefly why they may increase. (6)

(d) Evaluate the usefulness of a standard costing system to Tangapur Paper Limited. (8)

(Total for Question 6 = 32 marks)

Answer space for question 6 is on pages 32 to 35 of the question paper.

Q6. Mark Scheme

(a)

	<u>BUDGET</u> £	<u>ACTUAL</u> £	<u>VARIANCE</u> £
Revenue	165 000	162 500	(2 500) ADV ✓
Less			
Material Costs	(47 890)	(49 910)	(2 020) ADV ✓
Labour Costs	(24 640)	(24 057)	583 FAV ✓
Variable Overheads	(36 620)	(38 880)	(2 260) ADV ✓
= Cost of Sales	(109 150)	(112 847)	(3 697) ADV ✓
Gross Profit	55 850	49 653	6 197 ADV ✓
Less Fixed Overheads	(54 750)	(54 750)	0
Net Profit	1 100	(5 097)	6 197 ADV ✓

7 marks

(b)

(i) Labour Efficiency Variance = (Actual Hours - Standard hours) x Standard Rate

$$\begin{aligned}
 &= [(165\checkmark \times 27\checkmark) - (160 \times 28)\checkmark] \times \text{£}5.50 \checkmark \\
 &= (4455 - 4480) \times \text{£}5.50 \\
 &= \text{£}137.50 \text{ Favourable}\checkmark
 \end{aligned}$$

5 marks

(iii) Labour Rate Variance = (Actual Rate - Standard Rate) x Actual Hours

$$\begin{aligned}
 &= (5.40\checkmark - \text{£}5.50\checkmark) \times (27\checkmark \times 165\checkmark) \\
 &= (-0.10) \times 4455 \\
 &= \text{£}445.50 \text{ Favourable}\checkmark
 \end{aligned}$$

5 marks

(c)

(i) Fixed costs do not change with output, but they do change over time. ✓

1 mark

(ii) Rent ✓ may be increased each year/when lease is renewed. ✓
 Salaries ✓ may rise during annual pay review/ in line with inflation. ✓
 Depreciation ✓ may rise if more non-current assets are purchased in year. ✓

6 marks

d) Answers may include.

FOR usefulness

Allows performance to be compared ✓ with predetermined standards. ✓

Variances can be analysed ✓ and action taken to control costs. ✓

Helps eliminate waste, ✓ idle time, inefficiency etc ✓

Allows management by exception, ✓ which sees action taken only for large variances. ✓

Helps estimate production costs and therefore helps when giving a quotation ✓

Allows targets for workers to be set ✓ which may motivate workers when achieved ✓

AGAINST usefulness

Takes expertise ✓ and time/money to prepare. ✓

Inaccurate standards set ✓ may be misleading and unhelpful. ✓

Some variances may be outside the control of the business, ✓ and time may be wasted investigating them. ✓

Allows targets for workers to be set ✓ which can demotivate if not achieved ✓

Maximum of 4 marks for arguing one side.

Conclusion

Standard costing is useful ✓✓

8 marks

Total 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 7

- 7** Jiao Suen holds 500 shares in China Capital plc. She bought the shares on 31 March 2014 for £1.87 per share. At the end of the financial year ended 31 March 2015, she is considering two options:

- to keep the shares in China Capital plc

OR

- sell the shares in China Capital plc and buy shares in Kowloon Investments plc.

Jiao Suen has obtained a copy of the accounts of Kowloon Investments plc from the internet. The accounts show the following information.

Information for Kowloon Investments plc	
Authorised share capital	80 million (80 000 000) 75 pence (£0.75) Ordinary shares
Issued share capital	60 million (60 000 000) 75 pence (£0.75) Ordinary shares
Net profit before interest and tax	£5 760 000
Net profit after interest and tax	£4 320 000
Total Equity	£49 500 000
Non-Current liabilities	£10 500 000
Total ordinary dividend paid for year	£ 2 880 000
Share price	£1.20

Required:

- (a) Using the information for Kowloon Investments plc calculate the following ratios:

- | | |
|----------------------------------|-----|
| (i) Return on Capital Employed | (3) |
| (ii) Earnings per ordinary share | (3) |
| (iii) Price/earnings ratio | (3) |
| (iv) Dividend paid per share | (3) |
| (v) Dividend cover | (3) |
| (vi) Dividend yield | (3) |

Jiao Suen has been sent a copy of the final accounts of China Capital plc for the financial year ended 31 March 2015. These accounts show:

Information for China Capital plc	
Return on capital employed	8.1%
Earnings per ordinary share	15 pence (£0.15) per share
Price/earnings ratio	14 times
Dividend paid per share	6.3 pence (£0.063) per share
Dividend cover	2.38 times
Dividend yield	3%
Share price at 31 March 2014	£1.87
Share price at 31 March 2015	£2.10

Required:

(b) Calculate the:

- (i) total capital gain made by Jiao Suen, due to the rise in the share price, over the financial year ended 31 March 2015, for the shares she holds in China Capital plc. (3)

- (ii) total income received by Jiao Suen as a result of the dividends paid for the financial year ended 31 March 2015, for the shares she holds in China Capital plc. (3)

- (c) Evaluate whether Jiao Suen should keep her shares in China Capital plc, or sell her shares and buy shares in Kowloon Investments plc. (8)

(Total for Question 7 = 32 marks)

Answer space for question 7 is on pages 36 to 39 of the question paper.

7. Mark scheme

(a)

$$\begin{aligned} \text{(i) Return on Capital employed} &= \frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100 \\ &= \frac{\pounds 5\,760\,000}{\pounds 60\,000\,000} \times 100 = 9.6\% \end{aligned}$$

(3)

$$\begin{aligned} \text{(ii) Earnings per ordinary share} &= \frac{\text{Net profit after interest and tax}}{\text{Issued ordinary shares}} \\ &= \frac{\pounds 4\,320\,000}{60\,000\,000} = 7.2\text{p per share} \end{aligned}$$

(3)

$$\begin{aligned} \text{(iii) Price/earnings ratio} &= \frac{\text{Market price of share}}{\text{Earnings per share}} \\ &= \frac{120\text{p}}{7.2\text{p}} = 16.67 \text{ times} \end{aligned}$$

(3)

$$\begin{aligned} \text{(iv) Dividend paid per share} &= \frac{\text{Total ordinary dividend}}{\text{Issued ordinary shares}} \\ &= \frac{\pounds 2\,880\,000}{60\,000\,000} = 4.8\text{p per share} \end{aligned}$$

(3)

$$\begin{aligned} \text{(v) Dividend cover} &= \frac{\text{Net profit after interest and tax}}{\text{Total ordinary dividend}} \\ &= \frac{\pounds 4\,320\,000}{\pounds 2\,880\,000} = 1.5 \text{ times} \end{aligned}$$

(3)

$$\begin{aligned} \text{(vi) Dividend yield} &= \frac{\text{Dividend per share}}{\text{Market price of share}} \times 100 \\ &= \frac{4.8\text{p}}{120\text{p}} \times 100 = 4\% \end{aligned}$$

(3)

$$\text{(b) (i) Capital gain} = (\pounds 2.10 - \pounds 1.87) \times 500 = \pounds 115.00$$

(3)

$$\text{(ii) Revenue gain} = 500 \times 6.3\text{p} = \pounds 31.50$$

(3)

(c)

Case For Buying Kowloon Investments plc shares

Dividend yield is better/higher ✓ by 1% point ✓ (K 4% CC 3%) o/f

ROCE is better/higher ✓ by 1.5% points ✓ (K 9.6% CC 8.1%) o/f

Price/Earnings ratio is better/higher ✓ by 2.67 points ✓ (K 16.67 times CC 14 times) o/f
which indicates higher market confidence in Kowloon ✓

Dividend cover is lower by 0.88 times ✓ meaning a more generous dividend policy. ✓
(K 1.5 times CC 2.38 times) o/f

She holds 500 shares in CC paying a dividend of 6.3p per share = £31.50 ✓

If she sells her 500 shares in CC at £2.10 each, she receives £1050. With this amount
she can buy 875 ✓ shares in Kowloon. These shares pay a dividend of $875 \times 4.8p = £42$ ✓
Therefore she receives £10.50 more in dividends from Kowloon ✓

Case for holding on to China Capital plc shares

Dividend cover is higher by 0.88 times ✓ meaning a safer dividend policy. ✓
(K 1.5 times CC 2.38 times) o/f

Using current share prices, and earnings per share, China Capital would "earn" the price
paid in 14 years ($210/15$) ✓ compared to 16.6 years in Kowloon ($(120/7.2)$) ✓ which is
2.6 years quicker. ✓

Maximum of 4 marks for arguing one side only

Conclusion

Best to sell shares in China Capital plc and buy shares in Kowloon Investments plc as a
business has performed better. ✓✓

8 marks

Total 32 marks