

**Pearson Edexcel**  
International Advanced Level

**Accounting (Modular Syllabus)**  
**Unit 2: Corporate and Management Accounting**

Friday 10 June 2016 – Afternoon  
**Source Booklet**

Paper Reference  
**WAC02/01**

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**PEARSON**

**SECTION A****SOURCE MATERIAL FOR USE WITH QUESTION 1**

- 1** Chong and Mei are starting Lantau Insurance Agency Limited, which will sell insurance policies.

The new company is to be funded with a capital of £90 000 in the following ways:

- Friends and family of Chong and Mei will buy shares in the company for 30% of the capital required
- 40% of the capital required will be raised as a bank loan
- The remainder of the capital will be invested equally by Chong and Mei. This is to be raised in the following ratio:  
two thirds shares purchased : one third personal loan.

**Required:**

- (a) Prepare a Capital Budget for the start of the business.

(4)

The terms of the insurance policies sold mean the customer will pay a £30 premium on the date of the sale, then pay a monthly premium of £30 on the same date of each and every following month for the remainder of the policy. All policies have a minimum length of one year. The first three months of premiums collected are retained by Lantau Insurance Agency Limited as an introduction fee.

Chong and Mei are considering two options as business models on how to set up and run the company. Initial costs to set up the business will be £30 000, regardless of the option chosen. This is in addition to the costs shown below.

The two options are:

**Option 1:**

Operate the business from shop premises in the town centre.

Costs will be:

- Payment for lease on shop premises £10 000
- Purchase of furniture for shop £4 000
- Purchase of computers for shop £2 500
- Rent of shop premises £500 per month
- All other expenses total £1 800 per month.

Staff will receive basic pay, but will not be paid commission. Basic pay will be at a rate of £1 000 per month per employee. Six staff will be employed and each staff member will sell eight insurance policies per month.

**Option 2:**

Operate the business from an office on the edge of town.

Costs will be:

- Purchase of furniture for office £3 000
- Purchase of computers for office £2 000
- Rent of office premises £400 per month
- All other expenses total £1 600 per month.

Staff will receive basic pay and will also be paid a commission. Basic pay will be at a rate of £500 per month per employee. Staff will find and visit potential customers to sell insurance policies. Commission will be paid to staff at a rate of 25% of premiums paid by customers each month, for the first six months of the policy. Eight sales staff will be employed and each staff member will sell 12 insurance policies per month.

**Required:**

(b) Prepare a monthly Cash Budget for Lantau Insurance Agency Limited for **each** of the first three months of trading for

(i) Option 1

(17)

(ii) Option 2.

(19)

(c) Evaluate the **two** possible options on behalf of Lantau Insurance Agency Limited.

(12)

**(Total for Question 1 = 52 marks)**

**Answer space for Question 1 is on pages 2 to 8 of the question paper.**

## Section A

### 1 (a)

<b>Capital Budget</b>						
Shares to family	27000	✓				
Bank Loan	36000	✓				
Chong + Mei - Shares	18000	✓				
Chong + Mei - Loan	9000	✓				
	<u>90000</u>					<b>(4)</b>
<b>1 (b)</b>						
<b>Cash Budget</b>						
<b>Option 1</b>						
<u>Inflow</u>	<u>Month 1</u>		<u>Month 2</u>		<u>Month 3</u>	
Sales	1440	✓	2880	✓	4320	✓
<u>Outflow</u>						
Initial costs	30000					
Shop lease	10000					
Furniture	4000					
Computers	2500	✓	(all 4)			
Rent	500		500		500	✓ (all 3)
Staff wages	6000		6000		6000	✓ (all 3)
Other expenses	<u>1800</u>		<u>1800</u>		<u>1800</u>	✓ (all 3)
Total expenses	54800		8300		8300	✓o/f (all 3)
Monthly net cash flow	-53360	✓o/f	-5420	✓o/f	-3980	✓o/f
Balance b/f	90000	✓	36640	✓o/f	31220	✓o/f
Balance c/f	36640	✓o/f	31220	✓o/f	27240	✓o/f <b>(17)</b>
<b>Option 2</b>						
<u>Inflow</u>	<u>Month 1</u>		<u>Month 2</u>		<u>Month 3</u>	
Sales	2880	✓	5760	✓	8640	✓
<u>Outflow</u>						
Initial costs	30000					
Furniture	3000					
Computers	2000	✓	(all 3)			
Rent	400		400		400	✓ (all 3)
Staff wages	4000		4000		4000	✓ (all 3)
Commission	720	✓	1440	✓	2160	✓
Other expenses	<u>1600</u>		<u>1600</u>		<u>1600</u>	✓ (all 3)
Total expenses	41720		7440		8160	✓o/f (all 3)
Monthly net cash flow	-38840	✓o/f	-1680	✓o/f	480	✓o/f
Balance b/f	90000		51160	✓o/f	49480	✓o/f
Balance c/f	51160	✓o/f	49480	✓o/f	49960	✓o/f <b>(19)</b>

1 (c)

	<u>Advantage</u>	<u>Disadvantage</u>
Option 1	Monthly cash flow will soon be positive ✓ Possibility of passing trade ✓ Higher profile/ helps advertise business ✓	Negative monthly cash flow at present ✓/o/f Higher costs at start and per month ✓ Staff are not active in trying to sell policies ✓ Basic pay only gives no incentive to sell ✓
Option 2	Commission gives incentive to sell ✓ Staff are actively trying to sell policies ✓ Monthly cash flow is positive for month 3 and continues positive ✓/o/f Lower costs at start and per month ✓	Negative monthly cash flow for first two months ✓/o/f No possibility of passing trade ✓

Maximum of 4 ✓'s per box. Maximum of 10 ticks for all boxes.

General points:

Figures are only predictions, may not be actual figures. ✓

Conclusion

Option 2 is the best option ✓/✓

(12)

**Total for Question 1 = 52 Marks**

**SOURCE MATERIAL FOR USE WITH QUESTION 2**

- 2 You are the Finance Director of Bangla Homes Furnishings plc. The directors of Bangla Homes Furnishings plc and Red Sun Department Stores plc decided to merge to form a new company. The new company is called Style plc and has an Authorised Share Capital of 80 000 000 ordinary shares of £1 each. The new company was formed on 1 April 2016.

The Statements of Financial Position of the two companies on 31 March 2016 were as follows:

	Bangla Homes Furnishings plc £m		Red Sun Department Stores plc £m	
<b>ASSETS</b>				
<b>Non-current Assets</b>				
Buildings	22		25	
Fixtures and fittings	5		6	
Computer systems	3		4	
Vehicles	1		1	
		31		36
<b>Current Assets</b>				
Inventories	12		14	
Trade receivables	4		5	
Bank	2		-	
Cash	1		1	
		19		20
<b>Total Assets</b>		<b>50</b>		<b>56</b>
<b>EQUITY AND LIABILITIES</b>				
<b>Equity</b>				
Ordinary shares of £1 each	20		28	
Share premium	12		14	
Retained earnings	5		1	
		37		43
<b>Non-current Liabilities</b>				
Bank loan	8		5	
		8		5
<b>Current Liabilities</b>				
Trade payables	5		4	
Overdraft	-		4	
		5		8
<b>Total Equity and Liabilities</b>		<b>50</b>		<b>56</b>

Style plc is to settle the purchase consideration by issuing to the shareholders of Bangla Homes Furnishings plc and Red Sun Department Stores plc, ordinary shares of £1 in Style plc, at a value of £1.40 each.

Style plc is to take over all the assets and liabilities at book value, with the following exceptions:

- The buildings were revalued at:  
Bangla Homes Furnishings plc £27m  
Red Sun Department Stores plc £30m.
- The fixtures and fittings were revalued at:  
Bangla Homes Furnishings plc £4m  
Red Sun Department Stores plc £5m.
- The computer systems were revalued at:  
Bangla Homes Furnishings plc £2m  
Red Sun Department Stores plc £2m.
- The inventories of Red Sun Department Stores plc were revalued at £11m.
- The following trade receivables were written off as bad debts:  
Bangla Homes Furnishings plc £1m  
Red Sun Department Stores plc £2m.
- Goodwill was valued at:  
Bangla Homes Furnishings plc £3m  
Red Sun Department Stores plc £2m.
- The purchase price of Red Sun Department Stores plc was £42m.

**Required:**

- (a) (i) Calculate the purchase price of Bangla Homes Furnishings plc. (7)
- (ii) Calculate the total number of shares in Style plc that the shareholders of Bangla Homes Furnishings plc will receive. (4)
- (b) Prepare in the books of Bangla Homes Furnishings plc the:
- (i) Realisation Account (8)
- (ii) Sundry Shareholders Account. (7)

You have been asked to speak at an Extraordinary General Meeting of the shareholders of Bangla Homes Furnishings plc, who are considering the merger with Red Sun Department Stores plc.

**Required:**

- (c) Evaluate the merger on behalf of the shareholders of Bangla Homes Furnishings plc. (12)

The merger goes ahead and you are appointed as the Finance Director of Style plc.

**Required:**

- (d) Prepare the Statement of Financial Position of Style plc at 1 April 2016. (14)

**(Total for Question 2 = 52 marks)**

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**Answer space for Question 2 is on pages 9 to 14 of the question paper.**



2 (a) (i) Calculation of Purchase price for Bangla Homes Furnishings plc

	£m
Buildings	27
Fixtures and Fittings	4
Computer system	2
Vehicles	1 ✓ (all NCA)
Inventories	12
Trade receivables	3 ✓ (any 2)
Bank	2
Cash	1 ✓ (all other CA)
Goodwill	3 ✓
Bank Loan	(8)
Trade payables	(5) ✓ (all Liab)
Purchase Price	42 ✓ o/f ✓ C

(7)

2 (a) (ii)

$$\text{Purchase Price } \frac{\text{£42 000 000}}{\text{£1.40}} \checkmark \text{ o/f} = 30\,000\,000 \text{ shares } \checkmark \text{ o/f } \checkmark \text{ C}$$

(4)

2 (b) (i)

**Bangla Homes Furnishings plc Realisation Account**

Buildings	22	Bank loan	8
Fixtures and Fittings	5	Trade payables	5 ✓ (all 2)
Computer systems	3	Style plc (Purchase Consideration) ✓	42 ✓o/f
Vehicles	1 ✓ (all NCA)		
Inventories	12		
Trade receivables	4		
Bank	2		
Cash	1 ✓ (all CA)		
Sundry Shareholders (Profit on Realisation) ✓	5 ✓ o/f ✓C		
	55		55

(8)

2 (b) (ii)

**Bangla Homes Furnishings plc Sundry Shareholders Account**

Style plc (Purchase Consideration) ✓	42 ✓o/f	Share Capital	20 ✓
		Share Premium	12 ✓
		Retained Earnings (Profit on Realisation) ✓	5 ✓ 5 ✓o/f
	42		42

(7)

2 (c) Possible answers could include:

For Merger

Style should enjoy benefits of horizontal/vertical integration ✓ as in same line of business ✓

New company could enjoy economies of scale ✓ eg bulk buying ✓

New company should be able to reduce costs ✓ eg reduce staff ✓ or close some branches ✓

Red Sun Department Stores plc is a similar size company ✓ eg assets and liabilities ✓ and shareholders are receiving a similar price for the company. ✓

Shareholders are receiving a profit on realisation ✓ and goodwill ✓ in the merger.

New firm may enjoy increased market share /power ✓

Against Merger

Dilution of ownership ✓ and voting power ✓

We do not know what the market price of Style plc shares is likely to settle at ✓ It is quite possible it will not settle at £1.40 ✓

Possible culture clash ✓ leading to demotivation etc ✓

Dividends may decrease in the future as more shareholders ✓

(Maximum of 8 marks for argument if candidate argues only one side of argument)

Conclusion

Should conclude and relate to points made above. ✓✓

(12)

2 (d)

**Statement of Financial Position of Style plc as at April 1<sup>st</sup> 2016**

<b>ASSETS</b>		
<b>Non-Current Assets</b>		
Buildings	57 ✓	
Fixtures and fittings	9 ✓	
Computer systems	4 ✓	
Vehicles	2 ✓	
Goodwill	5 ✓	
		77
<b>Current Assets</b>		
Inventories	23 ✓	
Trade receivables	6 ✓	
Bank	2	
Cash	2 ✓ (both)	
		33
<b>Total Assets</b>		<b>110</b>
<b>Equity and Liabilities</b>		
Ordinary shares of £1 each (30✓ o/f +30✓)	60 ✓✓	
Share premium (12✓ o/f +12 ✓)	24 ✓✓	
<b>Total Equity</b>		84
<b>Non-Current Liabilities</b>		
Bank loan	13 ✓	
		13
<b>Current Liabilities</b>		
Trade payables	9	
Overdraft	4 ✓ (both)	
		13
<b>Total Equity and Liabilities</b>		<b>110</b>

(14)

Total for Question 2 = 52 marks

**SOURCE MATERIAL FOR USE WITH QUESTION 3**

- 3** Mashariki Railways plc was formed to build and run a high-speed railway between two large cities. Since the railway opened, the line has been run at an operating profit. However, a high level of borrowing, has meant that Mashariki Railways plc has not been able to make a profit after interest payments.

The Equity and Liabilities section of the Statement of Financial Position of Mashariki Railways plc at 1 April 2015, the start of the financial year, is shown below.

**Equity and Liabilities**

<b>Equity</b>	<b>£m</b>	<b>£m</b>
Ordinary shares of £1	600	
Share Premium reserve	150	
Retained earnings	(120)	
General reserve	<u>20</u>	
		650
<b>Non-current Liabilities</b>		
8% Debenture 2022	500	
11% Debenture 2024	400	
9% Bank loan	<u>100</u>	
		1 000

The directors decided to raise another £200 million by an issue of shares.

On 1 May 2015, the company offered 160 million £1 ordinary shares at a price of £1.25 on the following terms:

- £0.60 on application
- £0.30 on allotment (including the 25p premium)
- £0.35 first and final call.

On 10 June 2015 applications for 185 million shares had been received. The directors rejected applications for 5 million shares and allotted shares to the remaining applicants on the basis of 8 shares for every 9 applied for.

On 20 June 2015 monies were returned to the unsuccessful applicants of the 5 million shares.

The balances due on allotment were fully received on 30 July 2015.

The first and final call was made on 1 December 2015 and the amounts were fully received on 30 December 2015.

**Required:**

(a) Prepare the following ledger accounts to record the transactions from May to December 2015:

- Ordinary Share Capital Account
- Share Premium Account
- Application and Allotment Account
- First and Final Call Account.

You must show the following where possible:

- dates
- opening balances at the start of the year
- closure of any relevant accounts during the year
- closing balances at the end of the year.

(20)

For the financial year ended 31 March 2016, Mashariki Railways plc made an Operating Profit Before Interest of £43 million.

**Required:**

(b) Calculate the Profit After Interest for Mashariki Railways plc for the financial year ended 31 March 2016.

(5)

Mashariki Railways plc has found it very difficult to meet the interest payments on debt. The directors of Mashariki Railways plc persuaded the holders of the 8% Debenture to convert the Debenture into Ordinary Shares of £1, on 1 April 2016.

**Required:**

(c) Prepare the Journal entry to show the conversion of the Debenture into Ordinary Shares.

(5)

(d) Calculate the gearing ratio on 1 April 2016, **after** the conversion of the Debenture into £1 Ordinary Shares, clearly stating the formula used.

(10)

(e) Evaluate the decision to convert the 8% Debenture into £1 Ordinary Shares from the viewpoint of the directors of Mashariki Railways plc.

(12)

**(Total for Question 3 = 52 marks)**

**Answer space for Question 3 is on pages 15 to 20 of the question paper.**

3 (a)

**Ordinary Share Capital Account**

			Apr 1 2015	Balance b/d	600√
			June 10	Applctn & Allotmnt	96√
			July 30	Applctn & Allotmnt	8√
Mar31	Balance c/d	<u>760</u>	Dec 30	First & Final Call	<u>56</u> √
		<u>760</u>			<u>760</u>
			Apr 1 2016	Balance b/d	760

+ √ if balanced off correctly

(5)

**Share Premium Account**

			Apr 1	Balance b/d	150√
Mar31	Balance c/d	<u>190</u>	Jul 30	Applctn & Allotment	<u>40</u> √
		<u>190</u>			<u>190</u>
			Apr 1	Balance b/d	190

+ √ if balanced off correctly

(3)

**Application and Allotment Account**

June 10	Ordinary Share Capital	96√	June 10	Bank	111√
June 20	Bank	3√	July 30	Bank	
					36√√
July 30	Ordinary Share Capital	8√√			
	Share Premium	<u>40</u> √			
		<u>147</u>			<u>147</u>

+ √ if balanced off correctly

(9)

**First and Final Call Account**

	Ordinary Share Capital	<u>56</u> √	Dec 30	Bank	<u>56</u> √
		<u>56</u>			<u>56</u>

+ √ if balanced off correctly

(3)

(total 20)

3 (b)

Profit after interest = 43 √ – 40 √ – 44 √ – 9 √ = £50m loss √ of

(5)

3 (c)

The Journal

		Dr	Cr
April 1 2016 ✓	8% Debenture 2022 ✓	500	
	£1 Ordinary shares ✓		500 ✓both
	Conversion of 8% Debenture 2022 into £1 Ordinary shares ✓		

(5)

3 (d) Gearing ratio =  $\frac{\text{Prior charge capital} \checkmark}{\text{Capital employed} \checkmark} \times 100$

$$= \frac{400\checkmark + 100\checkmark}{(760+500)\checkmark + 190\checkmark + (170)\checkmark + 20\checkmark + (400 + 100)\checkmark} \times 100$$

$$= \frac{500}{1800} \times 100 = 27.77\% \checkmark$$

(10)

3 (e) Answers may include:

Case for Ordinary shares/ For Conversion

- Shareholders do not have to be paid dividends, ✓ useful when short of funds. ✓
- No interest has to be paid, ✓ so profits of company higher (or smaller losses) ✓ which will result in share price rising ✓
- Assets no longer offered as security, ✓ so no claims on assets by debenture holders, if debenture not repaid, or company fails. ✓
- Share issue reduces gearing ✓ and therefore risk ✓ Very important here as gearing goes from above benchmark 50% ✓ to below 50% ✓
- OR Debenture results in higher gearing ✓ which increases risk to company ✓ (and may affect credit rating ✓)
- No "outside" parties (ie debenture holders) having any influence on running of company ✓ eg place on Board ✓
- Statement of financial position will look stronger ✓ and may attract investors ✓

Case for Debentures / Against Conversion

- Interest is allowable for tax, ✓ so company may be able to retain more funds than if paying dividends. ✓
- Keeping debenture sees no dilution of ownership ✓ for existing shareholders. ✓
- Debenture issuer may bring expertise and experience to company, ✓ and maybe Board. ✓
- Cost of share issue ✓ eg fees etc ✓
- The Memorandum of Association may have to be changed ✓
- There may be a fall in dividends per share ✓
- Share price may fall ✓

Maximum of 8 marks for arguing one side

Conclusion

Should relate to above points made.

Conversion will benefit Mashariki Railways plc ✓✓

(12)

**Total for Question 3 = 52 marks**



## SECTION B

## SOURCE MATERIAL FOR USE WITH QUESTION 4

- 4 Silverseal plc is a new company that produces batteries for smartphones. Silverseal plc has a four year contract to supply a major smartphone producer, Voyager plc, with 500 000 batteries per year.

The following information is available for the year ended 31 March 2016:

Opening inventory	Nil
Production	520 000 batteries
Semi-variable costs	£7 800 per month plus £0.45 per battery
Fixed overheads	£26 000 per month
Direct materials	£1.85 per battery
Direct labour	20 minutes work per battery at a wage rate of £5.40 per hour
Selling price	£5.95 per unit
Closing inventory	20 000 units

**Required:**

- (a) Prepare, for management, a Statement of Comprehensive Income for the year ended 31 March 2016. Closing inventory is to be valued using **absorption costing**.

(12)

On 1 April 2016, Konichiwa plc, a large smartphone producer, requested Silverseal plc to supply 50 000 batteries during April at a price of £4.75 per battery.

**Required:**

- (b) Advise management whether they should sell the 20 000 batteries in the inventory to Konichiwa plc at a price of £4.75 per battery, to meet part of the order.

(6)

If Silverseal plc decides to sell the inventory of 20 000 batteries to Konichiwa plc, the company has two options to supply the remainder of the order.

**Option 1**

Silverseal plc will produce 30 000 extra batteries to fulfil the order. This would require workers to work overtime at a wage rate of £6.60 an hour. Other costs remain the same.

**Option 2**

Silverseal plc can buy the 30 000 extra batteries at a price of £4.60 from another firm.

**Required:**

(c) Using **marginal costing**, advise, stating your reasons, which of the following courses of action Silverseal plc should select:

- Option 1
- Option 2
- reject the order.

(6)

(d) Evaluate the use of marginal costing in decision making.

(8)

**(Total for Question 4 = 32 marks)**

**Answer space for Question 4 is on pages 21 to 24 of the question paper.**

## Section B

### (4) (a)

Revenue	2 975 000 ✓
Direct Materials	962 000 ✓
Direct Labour	936 000 ✓
Semi-Variable Costs	327 600 ✓
Fixed Overheads	312 000 ✓
Less Closing inventories	(97 600) ✓✓✓✓✓
Cost of Sales	2 440 000
Profit	535 000 ✓ o/f ✓ C

Calculation of Inventories ie 5 ✓✓✓✓✓ shown above

Valuation of Closing Inventories  $\frac{2,537,600 \text{ ✓ o/f}}{520,000 \text{ ✓}} = £4.88 \text{ per unit ✓ o/f}$

$(£4.88 \text{ o/f} \times 20,000) \text{ ✓} = £97,600 \text{ ✓ o/f}$

(12)

### (4) (b)

The marginal cost of producing the units  
=  $(£0.45 + £1.85 \text{ ✓} + £1.80 \text{ ✓}) = £4.10 \text{ ✓ o/f}$

So, the 20 000 batteries should be sold ✓ as there is a positive contribution ✓ of £0.65 per battery. ✓

(6)

### (4)(c)

Option 1 The marginal cost of producing another 30 000 is  
 $(£0.45 + £1.85 + £2.20) = £4.50 \text{ ✓ o/f}$   
Therefore the units should be produced using option 1. ✓  
as there is a contribution. ✓ of £0.25 per unit. ✓ o/f

Option 2 Offer to supply from other firm using option 2 should be rejected ✓  
as a profit of only £0.15 per unit can be made ✓

Reject the order The order should not be rejected ✓ because options 1 & 2  
have a (positive) contribution ✓

Max (6)

(d)

Answers may include : (Maximum of 4 ✓ 's for one side of argument).

For Marginal Costing

Allows seeing whether a contribution is made ✓ to paying off fixed costs. ✓

Can be used in situations when deciding whether to accept an offer ✓ or

make or buy ✓ or to continue or discontinue production. ✓ find the optimal production mix when there is a shortage of an input ✓

Useful for short term decision making ✓

Complies with the prudence concept ✓

Allocates all costs to the time period ✓

Against Marginal Costing

Does not give the whole picture ie overall profit or loss ✓ as only considers variable costs/fixed costs need to be taken into account ✓

Not suitable for long term decision making ✓ eg fixing prices, ✓ when all costs need to be taken into account. ✓

Conclusion (✓✓)

Marginal costing is useful for short term decision making.

(8)

**Total for Question 4 = 32 marks**

**SOURCE MATERIAL FOR USE WITH QUESTION 5**

- 5 Yasmin had some surplus funds, which she decided to invest in a public limited company quoted on the Stock Exchange. Yasmin did some research and decided to buy shares in Dubarab Shipping plc on 1 April 2015.

Information concerning Dubarab Shipping plc for the financial year ended 31 March 2016 is shown below:

Authorised share capital	100 000 000 x £1.25 Ordinary shares
Issued share capital	84 000 000 x £1.25 Ordinary shares
Reserves	£27 000 000
Net profit before interest and tax	£5 160 000
Net profit after interest and tax	£3 360 000
Non-current liabilities	£40 000 000
Interim ordinary dividend paid September 2015	£672 000
Final ordinary dividend paid March 2016	£1 953 000
Share price on 1 April 2015	£1.20
Share price on 31 March 2016	£1.32

**Required:**

- (a) Calculate the profit **percentage** made by Yasmin due to the rise in the share price of Dubarab Shipping plc for the financial year ended 31 March 2016. (3)
- (b) Calculate the following ratios for Dubarab Shipping plc for the year ended 31 March 2016:
- (i) Return on capital employed (4)
  - (ii) Earnings per ordinary share (3)
  - (iii) Price/earnings ratio at 31 March 2016 (3)
  - (iv) Dividend paid per share (4)
  - (v) Dividend cover (3)
  - (vi) Dividend yield. (4)

On 1 April 2016, Yasmin has more funds, which she wants to invest in shares. She has decided to choose between two possible options:

- (i) Option 1 – make her own selection of the companies in which she will buy shares
- (ii) Option 2 – visit a stockbroker and invest in shares the stockbroker recommends.

The following information concerns the All Share Index of the Stock Exchange. The figures given are an average for all companies quoted on the Stock Exchange, for the year ended 31 March 2016.

Rise in share price	7%
Return on capital employed	5%
Dividend cover	2 times
Dividend yield	5.6%

Yasmin is not sure whether she is good at selecting shares in which to invest.

She needs to compare the performance of Dubarab Shipping plc shares with the All Share Index of the Stock Exchange.

**Required:**

- (c) Evaluate whether Yasmin should select her own shares, or invest in the shares recommended by a stockbroker.

(8)

**(Total for Question 5 = 32 marks)**

**Answer space for Question 5 is on pages 25 to 27 of the question paper.**

**(5) (a)**

$$\begin{aligned} \text{Profit percentage} &= \frac{\text{Increase in share price}}{\text{Share price when bought}} \times 100 \\ &= \frac{12}{120} \times 100 \checkmark = 10\% \checkmark \end{aligned}$$

**(3)****(5) (b) (i)**

$$\begin{aligned} \text{Return on Capital employed} &= \frac{\text{Net profit before interest and tax}}{\text{Capital employed}} \times 100 \\ &= \frac{£5\,160\,000}{£172\,000\,000} \times 100 \checkmark = 3\% \checkmark \end{aligned}$$

**(4)****(5) (b) (ii)**

$$\begin{aligned} \text{Earnings per ordinary share} &= \frac{\text{Net profit after interest and tax}}{\text{Issued ordinary shares}} \\ &= \frac{£3\,360\,000}{84\,000\,000} \checkmark = 4\text{p} \checkmark \end{aligned}$$

**(3)****(5) (b) (iii)**

$$\begin{aligned} \text{Price/earnings ratio} &= \frac{\text{Market price of share at year end}}{\text{Earnings per share}} \\ &= \frac{132\text{p}}{4\text{p}} \checkmark = 33 \text{ times o/f} \checkmark \end{aligned}$$

**(3)****(5) (b) (iv)**

$$\begin{aligned} \text{Dividend paid per share} &= \frac{\text{Total ordinary dividend}}{\text{Issued ordinary shares}} \\ &= \frac{£2\,625\,000}{84\,000\,000} \checkmark = 3.125\text{p per share} \checkmark \end{aligned}$$

**(4)**

(5) (b) (v)

$$\begin{aligned} \text{Dividend cover} &= \frac{\text{Net profit after interest and tax}}{\text{Total ordinary dividend}} \\ &= \frac{\text{£3 360 000} \checkmark}{\text{£2 625 000} \checkmark} = 1.28 \text{ times} \checkmark \end{aligned}$$

(3)

(5) (b) (vi)

$$\begin{aligned} \text{Dividend yield} &= \frac{\text{Dividend per share}}{\text{Market price of share}} \times 100 \\ &= \frac{3.125\text{p o/f} \times 100 \checkmark}{132\text{p} \checkmark \checkmark} = 2.37\% \text{ o/f} \checkmark \end{aligned}$$

(4)

(5) (c)

**For selecting own shares**

Her choice of share has risen by 3% points  $\checkmark$  o/f more than the market average over the year.  $\checkmark$

She has selected a share that has a lower dividend cover,  $\checkmark$

by 0.72 times  $\checkmark$  o/f which means they give out a higher percentage of profit as dividends.  $\checkmark$

Stockbroker will charge commission  $\checkmark$  for advice  $\checkmark$  which is likely to be higher than what she pays at the moment for buying shares.  $\checkmark$

**For visiting a stockbroker**

Her choice of share has a lower ROCE  $\checkmark$  by 2% points.  $\checkmark$  o/f

Her choice of share has a lower dividend yield  $\checkmark$  by 3% points.  $\checkmark$  o/f

Stockbroker will have more experience  $\checkmark$  and a greater knowledge of the market.  $\checkmark$

Maximum of 4 marks for arguing one side

Conclusion

Yasmin should choose shares herself / visit a stockbroker  $\checkmark \checkmark$

(8)

**Total for Question 5 = 32 marks**



**SOURCE MATERIAL FOR USE WITH QUESTION 6**

- 6 You are the Cost Accountant at Sliema Domestics Limited, which produces steel radiators and uses a standard costing system. You have been working on the management accounts for May 2016 and the report is partly completed and shown below.

	BUDGET £	ACTUAL £	VARIANCE £
Revenue	76 800	A	1 500 ADV
Less			
Material Costs	8 928	B	C
Labour Costs	10 120	D	88 ADV
Variable Overheads	<u>3 080</u>	<u>E</u>	<u>156 FAV</u>
= Cost of Sales	22 128	F	G
Gross Profit	54 672	H	I
Less Fixed Overheads	<u>17 575</u>	<u>J</u>	<u>195 FAV</u>
Net Profit	37 097	K	L

The following information is also available for May 2016:

- A budgeted production of 1 600 radiators for May 2016 was achieved
- There was no opening inventory of steel on 1 May 2016
- During the month of May, Sliema Domestics Limited purchased 14 550 kilograms of steel at a price of £0.60 per kilogram
- The closing inventory of steel was 70 kilograms at 31 May 2016
- Each radiator was budgeted to use 9 kilograms of steel at a price of £0.62 per kilogram
- The budgeted sales figure of 1 600 radiators was achieved.

**Required:**

- (a) Complete the spaces in the columns in the question paper, showing figures for A to L. (12)
- (b) Calculate for the month of May 2016 the:
- (i) material usage variance (5)
- (ii) material price variance (5)
- (iii) total material cost variance. (2)

At a meeting, the Sales Director stated "There is an adverse variance, comparing budgeted sales to actual sales, but this is not necessarily bad for the company".

**Required:**

- (c) Evaluate the statement made by the Sales Director from the point of view of Sliema Domestics Limited.

(8)

**(Total for Question 6 = 32 marks)**

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**Answer space for Question 6 is on pages 28 to 32 of the question paper.**

**(6) (a)**

	BUDGET £		ACTUAL £		VARIANCE £
Revenue	76 800	A	75 300 ✓		1 500 ADV
Less					
Material Costs	8 928	B	8 688 ✓	C	240 FAV ✓ o/f
Labour Costs	10 120	D	10 208 ✓		88 ADV
Variable Overheads	<u>3 080</u>	E	<u>2 924</u> ✓		156 FAV
= Cost of Sales	22 128	F	21 820 ✓ o/f	G	308 FAV ✓ o/f
Gross Profit	54 672	H	53 480 ✓ o/f	I	1192 ADV ✓ o/f
Less Fixed Overheads	<u>17 575</u>	J	<u>17 380</u> ✓		195 FAV
Net Profit	37 097	K	36 100 ✓ o/f	L	997 ADV ✓ o/f

**(12)**

**(6) (b) (i)**

$$\begin{aligned}
 \text{Material usage variance} &= [(1600 \times 9) \checkmark - (14\,550 \checkmark - 70 \checkmark)] \times \text{£}0.62 \checkmark \\
 &= (14\,400 - 14\,480) \times \text{£}0.62 \\
 &= \text{£}49.60 \text{ Adverse } \checkmark
 \end{aligned}$$

**(5)**

**(6) (b)(ii)**

$$\begin{aligned}
 \text{Material price variance} &= [(\text{£}0.62 \checkmark - \text{£}0.60 \checkmark) \times 1600] \times \frac{14\,480 \checkmark}{1\,600 \checkmark} \\
 &= (\text{£}992 - \text{£}960) \times 9.05 \\
 &= \text{£}289.60 \text{ Favourable } \checkmark
 \end{aligned}$$

**(5)**

**(6) (b)(iii)**

$$\begin{aligned}
 \text{Total material cost variance} &= (\text{£}49.60 \text{ Adv} + \text{£}289.60 \text{ Fav}) \checkmark \\
 &= \text{£}240 \text{ Fav } \checkmark \text{ o/f}
 \end{aligned}$$

**(2)**

**(6) (c)**For the statement

May have given lower price/discount ✓ in order to obtain future orders ✓ possibly at a higher price ✓

The profit margin is very large ✓ at about 50% ✓ so there is room for flexibility on prices ✓ or the variance is very small ✓

Budget maybe inaccurate ✓

Against the statement

Lower price may be due to competition in the market ✓ which means market price may be falling ✓

May have accepted lower price in order to meet sales units target ✓ or ensure sales are made to earn commission. ✓

Sales staff may be demotivated ✓

Maximum of 4 marks for arguing one side only

## Conclusion

Adverse variance may not be all bad ✓✓ or is bad ✓✓

**(8)****Total for Question 6 = 32 marks**

**SOURCE MATERIAL FOR USE WITH QUESTION 7**

- 7 Suntours plc are considering building a hotel in the seaside resort of Komos. The initial cost of building the hotel will be £2 000 000.

The following budgeted information is available:

Year	Room occupancy	Charge per room per week	Running costs per room (including depreciation)
1	60%	£225	£135
2	80%	£230	£135
3	80%	£230	£140
4	90%	£235	£140
5	90%	£235	£145

- The hotel has 5 floors with 16 rooms on each floor
- Depreciation will be £250 000 per year
- Assume 52 weeks in a year
- It is company policy to have a positive net present value on projects within five years
- The cost of capital for the company is 8%.

A table showing the discount factors is given below.

Year	8%
1	0.926
2	0.857
3	0.794
4	0.735
5	0.681

**Required:**

- (a) Calculate the net present value of the project at the end of Year 5. (24)
- (b) Evaluate the project for Suntours plc, using calculations made in (a) and considering any other relevant factors. (8)

**(Total for Question 7 = 32 marks)**

**Answer space for Question 7 is on pages 33 to 36 of the question paper.**

<b>(7)(a)</b>				<u>Occupancy</u>		<u>Price</u>		
<b>Sales</b>	<u>Floors</u>	<u>Rooms</u>	<u>weeks</u>	<u>Rate</u>	<u>Rooms sold</u>	<u>per Room</u>	<u>Inflow</u>	
Year 1	5	16	52	0.6	2496√	£225	£561,600	√
Years 2 + 3	5	16	52	0.8	3328√	£230	£765,440	√
Years 4 + 5	5	16	52	0.9	3744√	£235	£879,840	√
<b>Running costs</b>	<u>Rooms</u>	<u>Cost</u>	<u>Total</u>	<u>Depreciatn</u>	<u>Outflow</u>			
Year 1	2496	£135	£336,960√	£250,000	£86,960	√ o/f		
Year 2	3328	£135	£449,280√	£250,000	£199,280	√ o/f		
Year 3	3328	£140	£465,920√	£250,000	£215,920	√ o/f		
Year 4	3744	£140	£524,160√	£250,000	£274,160	√ o/f		
Year 5	3744	£145	£542,880√	£250,000	£292,880	√ o/f		
<b>NPV</b>			<u>Net</u>	<u>Discount</u>	<u>Discounted</u>			
	<u>Inflow</u>	<u>Outflow</u>	<u>Cash flow</u>	<u>Factor</u>	<u>Net CF</u>			
Year 0		£2,000,000		8%	-£2,000,000	√		
Year 1	£561,600	£86,960	£474,640	0.926	£439,517	√ o/f		
Year 2	£765,440	£199,280	£566,160	0.857	£485,199	√ o/f		
Year 3	£765,440	£215,920	£549,520	0.794	£436,319	√ o/f		
Year 4	£879,840	£274,160	£605,680	0.735	£445,175	√ o/f		
Year 5	£879,840	£292,880	£586,960	0.681	£399,720	√ o/f		
						√o/f		
				<b>NPV</b>	£205,929	√C		

**(7) (b)**

Answers may include :

For investment

NPV method states invest as company policy is met ✓ as NPV is positive after 5 years ✓

Net cash flow is positive each year ✓

NPV method takes account of the falling value of money over time/uses a discount factor ✓

**Other Relevant Points** – could be For or Against investment.

How accurate are the predictions for costs, cost of capital, and revenues? ✓

Are there other possible investment projects available at present? ✓ Are these more or less profitable? ✓

What are the objectives/strategy of company? ✓ Is this investment in line with objectives? ✓

Which other methods of investment appraisal could be used ✓ e.g. payback method and internal rate of return ✓

Maximum for arguing one side only is 4 marks

**Overall Conclusion - 2 marks**

Company should invest in project. ✓✓

**(8)**