Pearson Edexcel
International Advanced Level

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

Tuesday 25 October 2016 – Morning
Source Booklet for use with Questions 1 to 7

Paper Reference
WAC02/01

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PEARSON

SECTION A

SOURCE MATERIAL FOR USE WITH QUESTION 1

1 Compass Tablets plc produces tablet computers at its factory. These are then delivered to the company's warehouse, before sale to trade customers.

The following balances were in the books at 30 September 2016:

	Debit £	**Credit £**
Advertising and marketing costs	734 000	
Bad debts	323 000	
Bank	656 000	
Bank interest		6 200
Cash	342 000	
Corporation tax	680 000	
6.5% Debenture 2020		10 000 000
Direct materials	7 943 500	
Discount allowed	1 064 000	
Discount received		619 000
Factory buildings (cost)	21 000 000	
Factory buildings depreciation		4 620 000
Fuel and power	848 000	
Head office expenses	3 211 000	
Interest on debenture	325 000	
Inventory at 1 October 2015	1 758 000	
Motor vehicles (cost)	1 800 000	
Motor vehicles depreciation		988 000
Ordinary shares of £0.25		15 050 000
Other payables		49 000
Patents	750 000	
Production machinery (cost)	3 200 000	
Production machinery depreciation		998 000

Retained earnings	2 354 700	
Revenue		29 870 000
Sales commission	2 130 000	
Trade payables		1 288 000
Trade receivables	3 240 000	
Wages	5 510 000	
Warehouse premises (cost)	7 750 000	
Warehouse premises depreciation	–	2 131 000
	65 619 200	65 619 200

Additional information at 30 September 2016

- The debenture interest is paid every 6 months, in March and September. The interest due to be paid in September is outstanding.
- Inventory £1 424 000
- Advertising and marketing costs owing £124 000
- Head office expenses include £18 900 paid in advance.
- Wages consist of:

	£
Production staff	2 970 000
Head office staff	1 514 000
Motor vehicle drivers	1 026 000

- Assuming a nil residual value and using the straight line method, the
  - factory buildings are to be depreciated over a 50-year life
  - motor vehicles are to be depreciated over a 5-year life
  - production machinery is to be depreciated over a 10-year life
  - warehouse is to be depreciated over a 40-year life.
- Fuel and power consists of:

	£
Motor vehicles	525 000
Factory	226 000
Head office	97 000

- Corporation Tax payment has been made for £680 000. The Corporation Tax total for the year will be £1 350 000. A provision is to be made for the difference.

Required:

(a) Prepare for Compass Tablets plc, in accordance with International Accounting Standard 1 (IAS1) (Revised), a:

(i) Statement of Comprehensive Income for the year ended 30 September 2016

(23)

(ii) Statement of Financial Position at 30 September 2016.

(17)

(b) Evaluate the performance of Compass Tablets plc for the year ended 30 September 2016 and the financial position at 30 September 2016.

(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)(i)			**W1 Cost of Sales**			
			Opening inventory	1 758 000		
Statement of Comprehensive Income for			Direct materials	7 943 500		
Compass Tablets plc for year ending 30th September 2016			Less discount received	-619 000	√	both
			Factory depreciation	420 000	√	
Revenue	29 870 000	√	Machinery depreciation	320 000	√	
			Direct factory labour	2 970 000		
Cost of sales	(11 594 500)	√ o/f	Factory fuel	226 000	√	both
			Closing inventory	-1 424 000	√	both
Gross profit	18 275 500	√ o/f		11 594 500		**5 x** √
Distribution costs	(6 156 750)	√ o/f	**W2 Distribution Costs**			
			Advertising and marketing	858 000		
Administrative expenses	(5 126 100)	√ o/f	Discount allowed	1 064 000	√	both
			Warehouse depreciation	193 750	√	
Other Income - Interest receivable	6 200	√	Depreciation on motor vehicles	360 000	√	
			Fuel costs	525 000		
Financial cost	(650 000)	√	Motor vehicle driver wages	1 026 000	√	both
			Sales commission	2 130 000	√	
Profit on ordinary activities before tax	6 348 850	√ o/f		6 156 750		**5 x** √
Corporation tax	(1 350 000)	√	**W3Administrative Expenses**			
			Bad debts written off	323 000	√	
Profit on ordinary activities after tax	4 998 850	√ o/f	Head Office staff	1 514 000		
			Head Office fuel	97 000	√	both
Total 23 x √	**10 x** √		Head Office expenses	3 192 100	√	
				5 126 100		**3 x** √

1(a)(ii)

Statement of Financial Position of Compass Tablets plc at 30 Sept 2016

ASSETS				
Non-current Assets	Carry over			
Property, plant & equipment	value			
Factory buildings	15 960 000	√		
Warehouse premises	5 425 250	√		
Production machinery	1 882 000	√		
Motor vehicles	452 000	√		
		23 719 250		
Intangibles - Patents		750 000	√	
			24 469 250	
Current Assets				
Inventories		1 424 000	√	
Trade and Other Receivables				
Trade receivables	3 240 000	√		
Prepayments	18 900	√		
		3 258 900		
Cash and Cash Equivalents				
Bank	656 000			
Cash	342 000	√ both		
		998 000		
			5 680 900	
Total Assets			30 150 150	

EQUITY AND LIABILITIES				
Equity				
Share Capital				
Ordinary shares of £0.25		15 050 000	√	
Retained earnings		2 644 150	√ o/f	
			17 694 150	
Non-current Liabilities				
Debenture 6.5% 2020	10 000 000	√		
			10 000 000	
Current Liabilities				
Trade and other payables				
Trade payables	1 288 000			
Other payables	49 000	√ both		
Advertising owing	124 000	√		
Debenture interest	325 000	√		
		1 786 000		
Provisions				
Corporation tax		670 000	√	
			2 456 000	
Total Equity and Liabilities			30 150 150	√ o/f
Total 17 x √				

1(b)

Strengths

Gross Profit is good √ at 61% of revenue. √
Net Profit before tax is good √ at 21% of revenue. √ This compares very well to eg bank deposits in times of low interest rates. √
Net Profit before tax for this year is £6.3m OR Net profit after tax for this year is £4.9m – very good. √
Return on Capital Employed is excellent √ at 25.27%, using the end year figure for capital employed √
Earnings per share is 8.3 pence per share √ which is good. √
Current ratio is good √ at 2.31:1. √
Acid ratio is good √ at 1.73:1. √
Working capital is good √ at £ 3 224 900. √
Company has tax bill of £670 000 to pay in 3 months, √ and £998 000 cash and bank. √
Gearing is good √ at 36%. √
Compass is in the tablet computer sector and there may be opportunities for expansion and investment. √

Weaknesses

Current ratio may be a little too high √ liquid funds maybe are not being used efficiently. √
Acid ratio is too high. √
Company has taken out a debenture of £10m until 2020 √ and will have to pay interest. √

Maximum of 8 marks for arguing only one side.

Conclusion - 2 marks
Should relate to points made above.
E.g. Compass Tablets plc has had a good trading year √ and has no serious liquidity problems. √

(12)

Total for Question 1 = 52 Marks

SOURCE MATERIAL FOR USE WITH QUESTION 2

2 Qaid Nasir has a 5-year agreement to rent retail premises and intends to open a souvenir shop. The initial project costs involved in obtaining the agreement and preparing the shop for opening are £20 000.

Additional information

- The shop will open for 50 weeks in a year.
- In the first week of the first year, 5 000 products will be purchased, at an average cost of £2.70 each.
- The mark up on **all** goods sold for **every** year will be 100%.
- In Year 1, sales will be 130 products per week, at an average price of £5.40 each.
- In the remaining 49 weeks of Year 1, goods purchased each week will replace goods sold each week, at an average price of £2.70 each.
- In Years 2 and 3, sales will be 150 products per week, bought at an average cost of £2.80 each.
- In Years 4 and 5, sales will be 160 products per week, bought at an average cost of £2.90 each.
- In Years 2, 3, 4 and 5, purchases will replace goods sold for the 50 weeks in the year.
- In Years 1 and 2, the expected running costs (including depreciation) will be £280 per week.
- In Years 3 and 4, the expected running costs (including depreciation) will be £300 per week.
- In Year 5, the expected running costs (including depreciation) will be £320 per week.
- Depreciation will be £4 000 per year for each of the 5 years of the agreement.

Required:

(a) Calculate the net cash flow for each of the five years of the agreement.

(18)

(b) Calculate the Payback period for the project.

(7)

Qaid Nasir is also appraising the project using the Internal Rate of Return method. He has decided to use 17% as the lower rate and 20% as the higher rate.

Tables for 17% and 20% discount factors are as follows:

Year	17%	20%
1	0.855	0.833
2	0.731	0.694
3	0.624	0.579
4	0.534	0.482
5	0.456	0.402

Required:

(c) Calculate the net present value of the net cash flows found in (a), to two decimal places, using a

(i) 17% discount factor

(3)

(ii) 20% discount factor.

(3)

(d) Calculate, clearly stating the formula used, the Internal Rate of Return correct to one decimal place.

(9)

(e) Evaluate Payback and the Internal Rate of Return as methods of appraising an investment.

(12)

(Total for Question 2 = 52 marks)

Answer space for Question 2 is on pages 9 to 15 of the question paper.

2 (a)

Inflows	Products		Weeks		Price		Total			
Year 1	130		50		5.4		35 100			
Year 2	150		50		5.6		42 000			
Year 3	150		50		5.6		42 000			
Year 4	160		50		5.8		46 400			
Year 5	160		50		5.8		46 400			
Purchases	Products		weeks		Price		Total			
Year 1	5 000		1		2.7		13 500	√		
	130		49		2.7		17 199	√		
Year 2	150		50		2.8		21 000	√		
Year 3	150		50		2.8		21 000			
Year 4	160		50		2.9		23 200	√		
Year 5	160		50		2.9		23 200		**4**	
Running costs	Per week		weeks				Deprectn		Total	
Year 1	280		50		14 000		4 000		10 000	√
Year 2	280		50		14 000		4 000		10 000	
Year 3	300		50		15 000		4 000		11 000	√
Year 4	300		50		15 000		4 000		11 000	
Year 5	320		50		16 000		4 000		12 000	√
									3	
Cash Flow	Inflow		Outflow		NCF					
Year 1	35 100	√	40 699	√	-5 599	√ o/f				
Year 2	42 000	√	31 000	√	11 000					
Year 3	42 000		32 000	√	10 000	√ o/f both				
Year 4	46 400	√	34 200	√	12 200					
Year 5	46 400		35 200	√	11 200	√ o/f both				
		3		**5**		**3**			**18 marks**	

2(b)

	NCF	Cumulative	
1	-5 599	-5 599	
2	11 000	5 401	√o/f
3	10 000	15 401	√o/f
4	12 200	27 601	

Payback period = 20 000 - 15 401 = 4 599 √ o/f

= 3 years $\frac{(4\ 599\ \text{o/f} \times 12)}{12\ 200\ \text{o/f}}$ √ = 3 years √ o/f 4.52 months √ o/f

(7)

2(c)
(i)

NPV			**17%**				
Year 0	-20 000		1		-20 000.00	√	
Year 1	-5 599		0.855		-4 787.15		
Year 2	11 000		0.731		8 041.00		
Year 3	10 000		0.624		6 240.00		
Year 4	12 200		0.534		6 514.80		
Year 5	11 200		0.456		5 107.20	√ all 5	
					1 115.86	√	

(3)

2(c)(ii)

NPV			**20%**				
Year 0	-20 000		1		-20 000.00	√	
Year 1	-5 599		0.833		-4 663.97		
Year 2	11 000		0.694		7 634.00		
Year 3	10 000		0.579		5 790.00		
Year 4	12 200		0.482		5 880.40		
Year 5	11 200		0.402		4 502.40	√ all 5	
					-857.17	√	

(3)

2(d)

Internal Rate of Return = Lower rate √ + (% difference between rates √ x NPV using lower % rate) √
Difference between NPVs) √

$$= 17\% \surd + \left(3 \surd \times \frac{1115.86) \surd}{1973.03 \surd}\right)$$

= 18.7% √ o/f

(9)

2(e) Answers may include:

Payback method –

this method measures the period of time it takes the cash flows of a project √ to repay the cost of the investment √

Advantages:

Simple to use √ and easy to understand the results. √

Can be used to compare different projects √ with different initial costs. √

Disadvantages:

Does not take account of the falling value of money √ over time. √

May not be suitable for projects that have uneven cash flows √ e.g. a project may payback quickly and look attractive, √ but have little cash inflows after payback √

Internal Rate of Return (IRR) method –

This method calculates the discounted cash flow that the project is expected to achieve √ ie the rate at which the net present value is zero √

Advantages:

Takes account of the falling value of money √ over time. √

Tells the business the exact discounted cash flow rate of return √ which the project is expected to achieve. √

Disadvantages:

Not simple to use, √ as formula is quite complicated. √

Can be time consuming √ as choosing rates for cost of capital can be hit and miss. √

Maximum for arguing one side only is 8 marks.

Conclusion - 2 marks

Payback method is good to use as a first screening of a project, √ but IRR gives a better indication of the expected return. √

(12)

Total for Question 2 = 52 marks

SOURCE MATERIAL FOR USE WITH QUESTION 3

3 The Statement of Changes in Equity of Chandani Banking plc for the year ended 30 September 2016 is being prepared and is shown below.

Figures are in £ millions	£1 Ordinary Shares £m	Share Premium £m	Retained Earnings £m	General Reserve £m	Capital Replacement Reserve £m	Revaluation Reserve £m	Total Equity £m
(i) Balance at 1 October 2015							
(ii)							
(iii)							
(iv)							
(v)							
(vi)							
(vii)							
(viii)							
(ix) Balance at 30 September 2016							

The Statement of Changes in Equity on Page 16 of the Question Paper must record the figures in the table for items (i) to (ix).

(i) Balances at 1 October 2015:
£1 Ordinary Shares – £400 million
Share Premium – £100 million
Retained Earnings – £4 million debit balance
General Reserve – £2 million
Capital Replacement Reserve – £1 million
Revaluation Reserve – £27 million

Enter the opening balances for the year ended 30 September 2016 and the Total Equity figure.

(ii) On 1 December 2015 a fully subscribed rights issue of 100 million £1 ordinary shares took place, at a premium of 5 pence per share.

(iii) On 10 December 2015 property that had been revalued from £60 million to £80 million, was sold for £80 million and the appropriate amount transferred to Retained Earnings. (It is usual for this to be shown as a separate item in the Statement of Changes in Equity.)

(iv) On 20 December 2015 an interim dividend for 2016 of 0.5 pence (£0.005) was paid to shareholders. Only the shareholders who held shares before 1 December 2015 were eligible for the dividend.

(v) On 31 January 2016 the balance on the General Reserve was transferred back to Retained Earnings.

(vi) On 10 February 2016 a transfer of £8 million was made from Retained Earnings to the Capital Replacement Reserve.

(vii) On 11 March 2016 a second interim dividend was paid for 2016. The dividend was 0.8 pence (£0.008) per share and all shareholders were eligible for the dividend.

(viii) The profit for the year ended 30 September 2016 was £7 million.

(ix) Show the balances at 30 September 2016 and the Total Equity at that date.

Required:

(a) Complete the Statement of Changes in Equity on Page 16 in your Question Paper.

(20)

(b) Explain which accounting concept applied in (a) (iii).

(4)

(c) State **two** examples of how the Capital Replacement Reserve could be used.

(2)

(d) Explain why there was no final dividend on Ordinary shares paid for 2015.

(2)

(e) Calculate the maximum that could be paid per Ordinary share as a final dividend for 2016.

(4)

(f) Calculate the percentage premium paid per share on the:

(i) shares issued before 1 October 2015

(2)

(ii) shares issued on 1 December 2015.

(2)

(g) Explain why there may be a difference in the percentage premium between the two share issues.

(4)

The Marketing Manager commented, 'I noticed that a rights issue of shares took place during the year. Was this really a good idea?'

Required:

(h) Evaluate the rights issue from the point of view of Chandani Banking plc.

(12)

(Total for Question 3 = 52 marks)

Answer space for Question 3 is on pages 16 to 21 of the question paper.

3 (a)

Figures are in £ millions	Ordinary £1Share Capital £m	Share Premium £m	Retained Earnings £m	General Reserve £m	Capital Replacement Reserve £m	Revaluation Reserve £m	Total Equity £m
(i) Balance at October 1st 2015	400	100 √ both	(4) √	2	1	27 √ all 3	526 √
(ii)	100 √	5 √					105
(iii)			20 √			(20) √ √ correct no	0
(iv)			(2) √				(2)
(v)			2 √	(2) √			0
(vi)			(8) √		8 √		0
(vii)			(4) √				(4)
(viii)			7 √				7
Balance at 30 September 2016	500	105 √ both	11 √	0	9	7 √ all 3	632 √ o/f

(20)

3(b)
(a)(iii) is an example of the realisation concept. √
Profits are not taken into account until realised. √
When the property was revalued upwards, the "profit" had not yet been realised. √
When it was sold the profit was realised and could be taken to the Statement of Comprehensive Income/retained earnings. √

Also acceptable
This is an example of the accruals concept. √
Similar argument as above.

(4)

3(c) Two examples of what the Capital Replacement reserve could be spent on (one √ per item)
Any 2 from – property plant equipment machinery furniture motor vehicles etc

(2)

3(d) No final dividend was paid because the balance on the Retained Earnings√ account was a debit√
OR Revenue reserves totalled √ a minus/debit figure. √ **(2)**

3(e) Maximum amount payable = $\frac{(11\surd + 9\surd)}{(400 + 100)\surd}$ = 4 pence per share √ o/f **(4)**

3(f) (i) Before 1 October 2015 = $\frac{100}{400}$ x 100 √ = 25% √ **(2)**

(ii) On 1 December 2015 = $\frac{5}{100}$ x 100 √ = 5% √ **(2)**

(g) Answers could include:
The difference is explained by the market price at the time of issue. √
Before October 2015 the market price of a £1 share was/thought to be around £1.25. √
In December 2015, the market price was around £1.05. √
This is lower because the company made a loss in the year to 30 September 2015. √
The market does not have so much confidence in the company in December 2015 when new share issue is made √

(4)

(h) Advantages of Rights Issues

Allows the company to raise funds √ that can be used for the benefit of the company. √
Funds could be used to pay dividends to shareholders √ who did not receive a final dividend for 2015 √ who may be unhappy. √
Existing shareholders get the first rights to buy the shares, √ so

- administration costs √ will be lower than a public issue, √ if the rights are taken up. √
- Existing shareholders do not see a dilution √ of powers/ownership √

The company may appear a "bigger" company √ as it has a larger capital base. √
A successful rights issue shows the shareholders have confidence in the company. √
A rights issue helps banks maintain the capital base√ that is required for banks. √

Disadvantages of Rights Issues

Costs of administration. √
Rights may not all be taken up. √ This may mean:

- extra costs of having issue underwritten √ by e.g. merchant banks. √
- new shareholders take up the shares, √ so existing shareholders see powers diluted. √

Shareholders were probably unhappy at not receiving a final dividend for 2015, √ now they are being asked to pay up more cash, √ which will make them even more unhappy. √
If the market price of the shares falls below the issue price before the issue, √ nobody will take up the rights issue. √
Some ratios will now worsen, √ due to the larger capital base. √
E.g. Return on capital employed √ Earnings per share √ Dividends per share √ Dividend yield √ (max 2)
A rights issue may send out a signal to the market √ that the company is short of funds, √ so confidence in the company falls. √ This may effect the Price Earnings ratio, √ or even the credit rating of the company. √

Maximum of 8 marks for arguing one side.

Conclusion 2 marks

Chandani Banking plc could probably welcome the extra funds, √ but they run the risk of upsetting the shareholders and the market with a rights issue. √

(12)

Total for Question 3 = 52 marks

SECTION B

SOURCE MATERIAL FOR USE WITH QUESTION 4

4 Pranja Rahman is a businessperson who invests in projects she thinks will be profitable. She now has the opportunity to produce and distribute in her country, under licence, the international best-selling board game 'Whodunit?' Pranja uses break-even analysis to help her decide whether to invest.

The following information is available for Year 1 of the project:

- loan interest and repayment will be £365 per month
- rent of workshop unit will be £925 per month
- material costs per board game are 54 pence (£0.54)
- depreciation on the business assets will be £3 900 per year
- direct labour in production will be paid £3.50 per board game
- electricity bill is £455 a quarter (three-month period) plus 3 pence (£0.03) per board game
- insurance for the year is £2 000
- the manager will be paid a salary of £1 100 per month
- selling price of one board game is £8.99
- sales of board games are expected to be 200 board games per week
- delivery costs will be 25 pence (£0.25) for each board game sold
- the terms of the licence state that a 12 pence (£0.12) licence fee for each board game produced is payable
- all production is sold
- there are 52 weeks in one year
- Pranja requires a project to break-even in 40 weeks or less.

Required:

(a) Calculate for Year 1 the:

(i) number of board games to be sold to break-even

(10)

(ii) expected profit or loss of the project.

(4)

(b) (i) Calculate the number of weeks that the project will take to break-even.

(3)

(ii) Advise Pranja whether she should undertake the project.

(1)

(c) Calculate the margin of safety for the project in:

(i) units

(2)

(ii) sales revenue

(2)

(iii) weeks.

(2)

(d) Evaluate Pranja's use of break-even analysis and a 40-week break-even period, when deciding whether to invest in a project.

(8)

(Total for Question 4 = 32 marks)

Answer space for Question 4 is on pages 22 to 26 of the question paper.

Section B

4(a) (i)

Fixed Costs -	per year	Variable costs per unit
Loan	£4 380	(0.54 + 3.50 + 0.03 + 0.25 + 0.12) √
Rent	£11 100	Total £4.44 per unit √ o/f
Depreciation	£3 900 √ (any 3)	
Electricity	£1 820	
Insurance	£2 000	Contribution per unit
Manager	£13 200 √ (next 3)	(£8.99 - £4.44o/f) √ = £4.55 o/f √
Total FC	£36 400 √ o/f	

Break-even Point = $\frac{\text{£36 400 o/f } \surd}{\text{£4.55 o/f } \surd}$ = 8 000 games o/f √ **(10)**

4(a)(ii) Profit for Year 1

Sales = 200 x 52 x £8.99 = £93 496√
Less VC = 200 x 52 x £4.44 o/f = (£46 176)√ o/f
Less FC = (£36 400)√ o/f
Profit = £10 920 √ o/f **(4)**

4(b) (i) Break-even is after $\frac{\text{8 000 } \surd}{\text{200 } \surd}$ = 40 weeks √ **(3)**

(ii) Yes, Pranja should invest in the project √ o/f **(1)**

4(c) Margin of safety = (10 400 - 8000o/f) √ = 2 400 units o/f √ **(2)**

Margin of safety = (£93 496 - £71 920o/f) √ = £21 576 o/f √ **(2)**

Margin of safety = (52 - 40 o/f) √ = 12 weeks o/f √ **(2)**

4(d)

FOR use:

Break-even is a tool that allows a business to forecast profit/loss at different output levels. √

Helps a business break down costs into fixed or variable. √

Helps identify the margin of safety √

Could be presented to a bank to help raise finance √

BEP after 40 weeks means 12 weeks output and sales contribution will be profit, √ which should give a reasonable profit margin for the year. √

AGAINST effectiveness

Cost and revenue figures are only predictions √

Analysis assumes straight lines (on graphs) √ but these are likely to be curves √ as discounts are given or received for bulk sales OR overtime worked at a higher rate. √

Theory assumes that all output is sold √ which may not happen/ some production left unsold.√

Many projects require more than 40 weeks in order to break-even,√ and are still profitable overall √

Maximum of 4 marks for arguing only one side of argument.

CONCLUSION

Break-even analysis is one of a number of tools that can be used to aid business decision-making√

40 weeks break-even period would only apply to a small-scale project. √

(8)

Total for Question 4 = 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 5

5 The Statement of Cash Flows for Indian Ocean Containers plc has been drawn up in accordance with International Accounting Standard 7 (IAS7) and is shown below.

Statement of Cash Flows for Indian Ocean Containers plc for year ended 30 September 2016		
Cash Flows from Operating Activities	**£ 000's**	**£ 000's**
Profit from operations	45	
Add depreciation on non-current assets	52	
Add loss on sale of non-current asset	13	
Operating cash flow before working capital changes	**110**	
Increase in inventories	(27)	
Decrease in trade receivables	31	
Increase in trade payables	35	
Cash generated from operations	**149**	
Less interest paid: Bank overdraft	(9)	
Bank loan	(40)	
Less tax paid	(22)	
Net cash from operating activities		**78**
Cash Flows from Investing Activities		
Payments to acquire tangible non-current assets	(110)	
Proceeds from sale of tangible non-current assets	23	
Proceeds from sale of shares in other companies	70	
Dividends received from shares in other companies	4	
Net cash used in investing activities		**(13)**

Cash Flows from Financing Activities		
Issue of Ordinary Shares	45	
Dividends paid: Final 2015	(24)	
Interim 2016	(7)	
Preference	(12)	
Net cash from financing activities		**2**
Net increase in cash and cash equivalents		**67**
Cash and cash equivalents at the beginning of the year		**(106)**
Cash and cash equivalents at the end of the year		**(39)**

Required:

(a) Prepare answers to the following:

(i) Calculate the profit or loss, after interest payments, for the year ended 30 September 2016.

(2)

(ii) Equipment was the only non-current asset sold in the year, for £23 000. State the net book value of the equipment when sold.

(2)

Inventories increased during the year.

(iii) Explain **one** advantage and **one** disadvantage of an increase in inventories.

(4)

(iv) Customers owed £65 000 at the end of the year. Calculate the amount customers owed at the start of the year.

(2)

(v) Suppliers were owed £58 000 at the start of the year. Calculate the amount suppliers were owed at the end of the year.

(2)

(vi) The 8% Bank loan was issued on 1 October 2014. Calculate the amount of the loan.

(3)

(vii) State **three** reasons why Indian Ocean Containers plc would sell the shares it holds in other companies.

(3)

(viii) At 1 October 2015, Indian Ocean Containers plc had an overdraft of £135 000. Calculate the cash balance of the company at this date.

(2)

(ix) At 30 September 2016, Indian Ocean Containers plc had £9 000 cash. Calculate the exact movement on the bank balance during the year.

(4)

There are three sections on a Statement of Cash Flows: Operating Activities, Investing Activities and Financing Activities.

(b) Evaluate in which of the three sections it would be most important to have a positive cash flow, for **any** company.

(8)

(Total for Question 5 = 32 marks)

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

5(a)(i) (£45 000 - £49 000) √ = Loss (£4 000) √ **(2)**

5(a)(ii) (£23 000 + £13 000) √ = £36 000 √ **(2)**

5(a)(iii) Advantage
More /wider range in inventory which allows unexpected orders √ or large orders to be met. √ **(2)**
Disadvantage
Greater costs of storing inventory√ eg rent, insurance, security √
Liquid funds/working capital is tied up √ and it may be put to better use elsewhere √ **(2)**

5(a)(iv) (£65 000 + £31 000) √ = £96 000 √ **(2)**

5(a)(v) (£58 000 + £35 000) √ = £93 000 √ **(2)**

5(a)(vi) Size of loan = £40 000 √ x $\frac{100}{8}$ √ = £500 000 √ **(3)**

5(a)(vii) Indian Ocean Containers plc are in need of liquid funds √
Shares are not paying sufficient dividends √
Share price is falling / or has risen and gain is being taken √ **(3)**

5(a)(viii) (£135 000 - £106 000) √ = £29 000 √ **(2)**

5(a)(ix) Year end bank balance = (£39 000 + £9 000) √ = £48 000 overdraft √
Yearly movement = (£135 000 - £48 000) √ = £87 000 increase √ **(4)**

5(b)

Operating Activities

Very important. √ The business cannot survive in the long term without cash inflows from operations. √

Investing Activities

A negative cash flow could mean that the company is investing for the future √ eg in non-current assets, or more modern technology.√

A positive cash flow could indicate that the company is selling off non-current assets, √ which may be worrying. √

A positive cash flow could signify that the company is selling off non-core business, √ which may be a good strategy. √

Financing Activities

A positive cash flow would be expected during the first year of trading, √ as the company attracts finance in order to commence trading. √

A positive cash flow would be good √ if the company needs to attract funds in order to expand. √

A positive cash flow would be bad √ if the company needs to attract funds in order to survive/ meet debts etc. √

A negative cash flow would be good √ if the company is paying back debt. √

A negative cash flow would be good √ if it were paying high levels of dividends because they are making high profits. √

Maximum of 4 marks for discussing one section.

Conclusion

Operating activities is probably the most important, as they cannot survive without making cash inflows from operations√√

(8)

Total for Question 5 = 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 6

6 Andromeda plc manufactures a fragrance, 'Anastazia'. Sales are seasonal, building up to a peak in December. After December, monthly sales of 'Anastazia' decline.

The following information is available:

- expected sales of bottles of 60 millilitres

November	December	January	February	March
22 000	38 000	12 000	16 000	20 000

- production takes place one month before sales
- raw materials are bought at the start of the month, in quantities to meet the month's production
- 2% of raw material is wasted during the production process
- 5% of the finished products are rejected after inspection at the end of the production process
- water is free, and is taken from a stream on the site
- each bottle contains 10 millilitres of raw material, to which water is added, to produce the finished product
- raw material costs £55 per litre
- there are 1 000 millilitres in 1 litre
- inventory at the end of the month is always planned to be 20% of the following month's sales
- each bottle sells for £4.50
- trade receivables:

  10% of customers pay cash when the sale is made
  30% of customers pay by cheque in the month of the sale
  60% of customers pay by cheque in the month following the sale.

Required:

(a) Prepare for Andromeda plc, the following budgets for 'Anastazia' for the three months from December to February. You should prepare the budgets in columnar format. Show each of the three months in a separate column. You should round up to the nearest whole number where appropriate.

(i) Inventory budget (in bottles)

(3)

(ii) Production budget (in bottles)

(10)

(iii) Raw material purchases budget in millilitres

(5)

(iv) Raw material purchases budget in pounds (£)

(3)

(v) Trade receivables budget, showing the amount owed at the end of the month

(3)

The Managing Director has stated, 'I am worried that too many finished goods of 'Anastazia' are being rejected.'

Required:

(b) Evaluate the Managing Director's statement.

(8)

(Total for Question 6 = 32 marks)

Answer space for Question 6 is on pages 32 to 34 of the question paper.

6 (a)

(i)Inventory Budget							
	December		January		February		
Inventory	2400	√	3200	√	4000	√	**(3)**
(a)(ii)Production Budget							
	December		January		February		
For next month sales	12000		16000		20000	√	
Inventory adjustment	-5200	√o/f	800		800	√o/f	
Required good production	6800		16800		20800	√o/f	
Rejects	358	√o/f	884	√o/f	1095	√o/f	
Total production	7158	√o/f	17684	√o/f	21895	√o/f	**(10)**
(iii)Raw materials purchases (mls)							
	December		January		February		
For production	71580		176840		218950	√o/f	
Wastage	1461		3609		4468	√o/f	
Total materials required	73041	√	180449	√	223418	√o/f	**(5)**
(iv)Raw materials purchases £							
	December		January		February		
Total cost	4017	√o/f	9925	√o/f	12288	√o/f	**(3)**
(v)Trade Receivables Budget							
	December		January		February		
Sales	38000		12000		16000		
Total Trade Receivables at month end	102600	√o/f	32400	√o/f	43200	√o/f	**(3)**

6(b)

Advantages of Rejecting finished goods

By rejecting damaged goods/ goods not perfect, the company are assured that goods in the stores are of merchantable/ good quality. √ This will ensure the brand name is not damaged /has a good reputation. √ This is particularly important in the fragrance market, √ where a quality brand name can command a premium price. √
High levels of rejections would mean the inspection process is rigorous /doing its job. √

Disadvantages of Rejecting finished goods

Rejected finished goods means resources have been wasted. √ These would be materials √ and/or labour. √ It also means capital/finance is wasted. √
The company should investigate the possible cause of this rejection √ e.g. poor quality of materials, or unskilled or untrained labour, faulty machinery etc √ (need one possibility for maximum of one tick)

Maximum of 4 marks for arguing only one side of argument.

Conclusion – 2 marks
Andromeda plc should be concerned about the rejection of finished goods as resources are wasted √√

(8)

Total for Question 6 = 32 marks

SOURCE MATERIAL FOR USE WITH QUESTION 7

7 Acorn Supplies Limited has a small factory, where it produces four steel products for the construction industry: beams, fence posts, brackets, and lintels. Production is planned according to demand, and the company has seen demand increase. When production is planned for Week 43, Acorn Supplies Limited is not sure it is able to meet all the orders. This is because it does not have the capacity to heat and melt enough steel.

There is one furnace which can be used to heat and melt the steel, to produce any of the four products. The furnace can operate for 12 hours a day. The furnace holds 50 kilograms of metal, which takes 45 minutes to melt, to use for production. The company is only able to operate the furnace for 12 hours a day, for 6 days a week.

Required:

(a) Calculate the amount of steel that can be used for production in **one week**.

(4)

The following information is available for Week 43:

Product	**Beams**	**Fence posts**	**Brackets**	**Lintels**
Materials (steel) per unit (kgs)	12	10	6	8
Variable costs per unit	£18	£10	£9	£7
Selling price per unit	£45	£28	£21	£15
Sales units	265	135	120	95

(b) Calculate the optimum production mix that Acorn Supplies Ltd should produce to give the maximum profit.

(15)

(c) Calculate the forecast profit for Week 43 for the optimum production mix if fixed costs for Week 43 are £6 845

(5)

Sometimes, when demand for its products is high, Acorn Supplies Ltd may decide **not** to produce **all** of its product range for a few weeks.

(d) Evaluate the decision of Acorn Supplies Limited not to produce all of its product range for a few weeks.

(8)

(Total for Question 7 = 32 marks)

Answer space for Question 7 is on pages 35 to 37 of the question paper.

7							
(a)			Times	number	kilos	Total kilos	
Steel for production	(12 x 60)√	=	16 √ x	(6 x	50) √	4 800 √	**(4)**
	45						
(b)							
Optimum Production	Beams	Fence posts	Brackets	Lintels			
Selling price per unit	£45	£28	£21	£15			
Variable cost per unit	£18	£10	£9	£7			
Contribution	£27√	£18√	£12√	£8√			
Materials per unit	12	10	6	8			
Contribution/Material unit	2.25√	1.8√	£2√	£1.00√			
Order	1	3√	2	4√			
Production							
	Steel	Output					
Beams	3 180	265	√				
Brackets	720	120	√				
Fence posts	900	90	√√				
Lintels	0	0	√				
Total maximum output	4 800				**(15)**		
(c)Profit							
	Contbtn	Sales	Total				
Beams	27	265	7 155	√			
Brackets	12	120	1 440	√			
Fence posts	18	90	1 620	√			
			10 215				
Less Fixed Costs			6 845	√			
Profit			3 370	√	**(5)**		

7(d)

Case For not producing all of the product range

Profits can be maximised, √ by ranking in order the products with the highest contribution per unit of limiting factor first. √
Profits built up when demand is high, √ can help cushion the company when demand and profits are low √
It will be possible to build up inventory when demand is low √ as the product is not perishable. √

Case Against not producing all of the product range

Customers may be annoyed that there is a waiting time for the order. √ This is especially applicable for small building/repair jobs √ which have not planned a schedule in advance. √ Work may have to stop on the job, whilst supplies are awaited. √
The customer may decide to look elsewhere for supplies. √ They may not return to Acorn. √
The customer may be looking to buy similar products/ products in the same product range. √

Maximum of 4 marks for arguing one side.

<u>Conclusion</u> – 2 marks

Not producing all of the product range may/may not be a good idea.

(8)

Total for Question 7 = 32 marks