

Write your name here

Surname

Other names

**Pearson Edexcel**  
**International**  
**Advanced Level**

Centre Number

--	--	--	--	--

Candidate Number

--	--	--	--

# Accounting (Modular Syllabus)

## Unit 2: Corporate and Management Accounting

Tuesday 25 October 2016 – Morning  
**Time: 3 hours**

Paper Reference

**WAC02/01**

**You must have:**  
Source Booklet

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **five** questions, choosing **two** from Section A and **three** from Section B.
- All calculations must be shown.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*
- Do not return the insert with the question paper.

### Information

- The total mark for this paper is 200.
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.
- The source material for use with Questions 1 to 7 is in the enclosed source booklet.

### Advice

- Read each question carefully before you start to answer it.
- Write your answers neatly and in good English.
- Check your answers if you have time at the end.

Turn over ►

P50700A

©2016 Pearson Education Ltd.

1/1/1/1/1/1/1



**PEARSON**

**SECTION A**

**Answer TWO questions from this section.**

Indicate which question you are answering by marking a cross . If you change your mind, put a line through the box  and then indicate your new question with a cross .

If you answer Question 1, put a cross in the box .

**Source material for Question 1 is on pages 2 to 4 of the source booklet.**

- 1** (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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Handwriting practice area with 20 horizontal dotted lines.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Handwriting practice area with 20 horizontal dotted lines.



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

(17)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Handwriting practice area with 20 horizontal dotted lines.



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

(12)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Area with horizontal dotted lines for writing.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 1 = 52 marks)







DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Handwriting practice area with 20 horizontal dotted lines.



(b) Calculate the Payback period for the project.

(7)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

A large rectangular area with rounded corners, containing numerous horizontal dotted lines for writing.



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Area with horizontal dotted lines for writing the answer.



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

(12)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 2 = 52 marks)



If you answer Question 3, put a cross in the box  .

Source material for Question 3 is on pages 8 to 10 of the source booklet.

3 (a) Complete the Statement of Changes in Equity in the table below.

The Statement of Changes in Equity must record the figures in the table for items (i) to (ix).

(20)

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							

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





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

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

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

(2)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



(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)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(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)

.....

.....

.....

.....

.....

.....



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

(12)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 3 = 52 marks)

**TOTAL FOR SECTION A = 104 MARKS**



**SECTION B**

**Answer THREE questions from this section.**

**If you answer Question 4, put a cross in the box .**

**Source material for Question 4 is on pages 12 and 13 of the source booklet.**

**4** (a) Calculate for Year 1 the:

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

(10)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



(ii) expected profit or loss of the project.

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



(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)

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

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

(i) units

(2)

(ii) sales revenue

(2)

(iii) weeks.

(2)



P 5 0 7 0 0 A 0 2 5 4 0

(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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 4 = 32 marks)



If you answer Question 5, put a cross in the box  .

Source material for Question 5 is on pages 14 to 16 of the source booklet.

5 (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)

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



Inventories increased during the year.

(iii) Explain **one** advantage and **one** disadvantage of an increase in inventories. (4)

Advantage

.....

.....

.....

.....

Disadvantage

.....

.....

.....

.....

(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)

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



(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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



(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)

.....

.....

.....

.....

.....

.....

.....

.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

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)

Area with horizontal dotted lines for writing the answer.

(Total for Question 5 = 32 marks)



If you answer Question 6, put a cross in the box  .

**Source material for Question 6 is on pages 18 and 19 of the source booklet.**

6 (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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA





(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)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



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

(b) Evaluate the Managing Director's statement.

(8)

Area with horizontal dotted lines for writing the answer.

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(Total for Question 6 = 32 marks)



If you answer Question 7, put a cross in the box  .

Source material for Question 7 is on page 20 of the source booklet.

- 7 (a) Calculate the amount of steel that can be used for production in **one week**. (4)

.....  
.....  
.....  
.....  
.....

- (b) Calculate the optimum production mix that Acorn Supplies Limited should produce to give the maximum profit. (15)

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

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

(5)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

Sometimes, when demand for its products is high, Acorn Supplies Limited 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)

Area with horizontal dotted lines for writing the answer to question (d).

(Total for Question 7 = 32 marks)

**TOTAL FOR SECTION B = 96 MARKS**

**TOTAL FOR PAPER = 200 MARKS**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

**BLANK PAGE**





**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**

**Do not return the insert with the question paper.**

*Turn over* ►

P50700A

©2016 Pearson Education Ltd.

1/1/1/1/1/1/1



**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:

	<b>Debit £</b>	<b>Credit £</b>
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	_____ -	<u>2 131 000</u>
	<u>65 619 200</u>	<u>65 619 200</u>

### 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.**

**BLANK PAGE**  
**QUESTION 2 BEGINS ON THE NEXT PAGE.**

## 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.**

**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.

<b>Figures are in £ millions</b>	<b>£1 Ordinary Shares £m</b>	<b>Share Premium £m</b>	<b>Retained Earnings £m</b>	<b>General Reserve £m</b>	<b>Capital Replacement Reserve £m</b>	<b>Revaluation Reserve £m</b>	<b>Total Equity £m</b>
(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.**

**BLANK PAGE**  
**QUESTION 4 BEGINS ON THE NEXT PAGE.**

## 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.**

### 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.

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

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

**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.**



**BLANK PAGE**  
**QUESTION 6 BEGINS ON THE NEXT PAGE.**

### 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.**

### 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.**