

---

**ACCOUNTING**

**9706/41**

Paper 4 Problem Solving (Supplementary Topics)

**May/June 2015**

**2 hours**

No Additional Materials are required.

---

**READ THESE INSTRUCTIONS FIRST**

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** questions.

All accounting statements are to be presented in good style.

International accounting terms and formats should be used as appropriate.

Workings should be shown.

You may use a calculator.

The number of marks is given in brackets [ ] at the end of each question or part question.

---

This document consists of **10** printed pages, **2** blank pages and **1** insert.



- 1 The financial statements for Zapf plc for the year ended 30 September 2014 have been completed.

The following information is available.

Zapf plc	
Summarised Income Statement for the year ended 30 September 2014	
	\$
Revenue	756 000
Cost of sales	<u>(454 000)</u>
Gross profit	302 000
Distribution costs	(96 000)
Administrative expenses	<u>(180 000)</u>
Profit from operations	26 000
Income from investments	5 000
Finance costs	<u>(12 000)</u>
Profit before taxation	19 000
Taxation	<u>(4 000)</u>
Profit for the year	<u>15 000</u>

Extract from Statement of Changes in Equity for the year ended 30 September 2014

	Retained earnings
	\$
Balance at 1 October 2013	24 000
Profit for the year	15 000
Dividends paid	<u>(9 000)</u>
Balance at 30 September 2014	<u>30 000</u>

Zapf plc  
Statement of Financial Position at 30 September 2014

	\$
Non-current assets	
Tangible	
Property, plant and equipment	304 000
Investments	<u>75 000</u>
	379 000
Intangible	
Goodwill	<u>60 000</u>
	<u>439 000</u>
Current assets	
Inventories	74 000
Trade and other receivables	<u>95 000</u>
	<u>169 000</u>
Total assets	<u>608 000</u>
Equity and liabilities	
Equity	
Ordinary shares of \$1 each	180 000
5% Non-redeemable preference shares	100 000
Share premium	30 000
Retained earnings	<u>30 000</u>
	<u>340 000</u>
Non-current liabilities	
6% Debentures (2021)	<u>150 000</u>
Current liabilities	
Trade and other payables	53 000
Taxation	4 000
Cash and cash equivalents	<u>61 000</u>
	<u>118 000</u>
Total equity and liabilities	<u>608 000</u>

## Extract from notes to the financial statements

Property, plant and equipment	Buildings	Plant and equipment	Motor vehicles	Total
	\$	\$	\$	\$
Cost	320 000	158 000	36 000	514 000
Depreciation	<u>112 000</u>	<u>78 000</u>	<u>20 000</u>	<u>210 000</u>
Net book value	<u>208 000</u>	<u>80 000</u>	<u>16 000</u>	<u>304 000</u>

The company accountant is now preparing the budgeted financial statements for the year ending 30 September 2015.

Budgeted information for the year ending 30 September 2015 is available.

- 1 Revenue is expected to increase by 4%.
- 2 The percentage of gross profit to sales is expected to increase to 42%.
- 3 Distribution costs and administrative expenses are both expected to increase by 3%.
- 4 Income from investments is not expected to change.
- 5 Finance costs are expected to decrease to \$10 000.
- 6 The tax rate will be 20% on the profit before taxation.
- 7 No dividends are expected to be paid on the ordinary shares during the year.
- 8 Capital expenditure for the year is expected to be:
  - \$40 000 on buildings
  - \$18 000 on plant and equipment
  - \$9 000 on motor vehicles
 No disposals are expected.
- 9 Depreciation for the year is expected to be:
  - \$18 000 on buildings
  - \$44 000 on plant and equipment
  - \$12 000 on motor vehicles
 Depreciation is included in administrative expenses.
- 10 The trade receivables collection period is expected to be 45 days. All sales will be on credit.
- 11 Closing inventory is expected to be valued at \$70 000.
- 12 The trade payables payment period is expected to be 40 days. All purchases will be on credit.

A proposed final dividend of \$0.10 per ordinary share is due to be paid on 31 October 2015.

**REQUIRED**

(Make all calculations to nearest thousand \$.)

**(a)** Prepare the following for the year ending 30 September 2015.

**(i)** the budgeted income statement [12]

**(ii)** the budgeted statement of changes in equity (retained earnings column **only**). [5]

**(b)** Prepare the following:

**(i)** the property, plant and equipment section of the non-current assets note to the budgeted financial statements for the year ending 30 September 2015. [7]

**(ii)** the budgeted statement of financial position at 30 September 2015. [16]

**[Total: 40]**

- 2 Andy and Nicole had been in partnership for some years sharing profits and losses in the ratio 2:1. Partners also receive interest on capital at 15% per annum.

On 1 January 2014 their statement of financial position was as follows.

Andy and Nicole Statement of Financial Position at 1 January 2014			
	\$	\$	\$
Non-current assets	Cost	Depreciation	Net book value
Property	100 000	6 000	94 000
Equipment	<u>51 000</u>	<u>24 600</u>	<u>26 400</u>
	<u>151 000</u>	<u>30 600</u>	<u>120 400</u>
Current assets			
Inventory			13 100
Trade receivables			19 100
Cash and cash equivalents			<u>600</u>
Total assets			<u>153 200</u>
Capital accounts			
Andy		70 000	
Nicole		<u>50 000</u>	120 000
Current accounts			
Andy		20 400	
Nicole		<u>2 000</u>	22 400
Current liabilities			
Trade payables			<u>10 800</u>
Total capital and liabilities			<u>153 200</u>

Additional information

- 1 In the period 1 January to 30 June 2014 the following occurred.

Current assets increased by 20%  
 Current liabilities increased by 10%  
 A long term loan of \$8000 was taken out  
 New equipment costing \$16000 was bought on 1 April  
 Drawings amounted to \$3000 for Andy and \$6170 for Nicole

- 2 \$40 000 of the cost of the property relates to land.
- 3 All non-current assets are depreciated on a monthly basis. Equipment is depreciated at the rate of 10% per annum on cost. Property is depreciated at the rate of 2% per annum on cost.

**REQUIRED**

- (a) Calculate the net assets of the partnership at 30 June 2014. [8]
- (b) Calculate the profit for the period 1 January to 30 June 2014. [4]

**Additional information**

On 1 July 2014 Zola was admitted to the partnership.

The following information was available on 1 July 2014.

- 1 The new profit sharing ratio for Andy, Nicole and Zola was 2:1:1 respectively.
- 2 Interest on capital was increased to 20% per annum for all partners.
- 3 Zola brought into the business \$10 000 in cash and a new property worth \$60 000.
- 4 The original partnership property was revalued at \$154 000.
- 5 The goodwill of the business was valued at \$12 000 at the time of Zola's admission and was not to be retained in the books of account.

The profit for the six months ended 31 December 2014 was \$23 000. During this period drawings amounted to \$3000 for Andy, \$7400 for Nicole and \$4100 for Zola.

**REQUIRED**

- (c) Prepare the partners' capital accounts for the year ended 31 December 2014. [10]
- (d) Prepare the partners' current accounts for the year ended 31 December 2014. [12]

**Additional information**

During 2013 Andy had made drawings of \$6000 and Nicole of \$12 900.

**REQUIRED**

- (e) Compare the impact on the partnership of the drawings of **each** of the original partners in 2014. [6]

**[Total: 40]**

- 3 Abdul has a taxi business and is considering investing in an additional taxi, the London or the Paris.

The useful life of the taxi is expected to be 5 years, and it will then be scrapped with no sale proceeds. Depreciation will be provided on the straight-line basis.

The following information is available about the London taxi.

Cost of vehicle	\$20 000
Additional revenue in year 1	\$10 000
Annual rate of increase in revenue	5%
Additional direct costs in year 1	\$2 000
Annual rate of increase of direct costs	3%
Annual fixed costs	\$1 600
Cost of capital	8%

Discounting factors showing net present value of \$1		
Year	8%	25%
1	0.926	0.800
2	0.857	0.640
3	0.794	0.512
4	0.735	0.410
5	0.681	0.328

### REQUIRED

- (a) Copy the table below into your answer booklet.

Complete the table and calculate the net present value of the investment in the London taxi using a discount factor of 8%.

Year	Revenue	Direct costs	Fixed costs	Net cash flows	8% Discount factor	Present value
	\$	\$	\$	\$		\$
Net present value						

[12]



(b) (i) Copy the table below into your answer booklet.

Complete the table and calculate the net present value of the investment in the London taxi using a discount factor of 25%.

Year	Net cash flows	25% Discount factor	Present value
	\$		\$
Net present value			

[6]

(ii) Calculate the internal rate of return (IRR) on the investment in the London taxi.

Show your workings in detail and give your answer to **two** decimal places.

[4]

### Additional information

The following information is available for the Paris taxi.

Net present value	\$7489
Internal rate of return	24.56%
Average accounting rate of return	30.10%

### REQUIRED

(c) Calculate the accounting rate of return for the **London** taxi.

[6]

(d) State, with reasons, which of the two makes of taxi Abdul should buy.

[4]

### Additional information

Abdul is considering forming a company by issuing ordinary and preference shares.

### REQUIRED

(e) State **one** advantage and **one** disadvantage of ordinary shares to:

(i) the company

[2]

(ii) a shareholder.

[2]

(f) State **one** advantage and **one** disadvantage of preference shares to:

(i) the company [2]

(ii) a shareholder. [2]

**[Total: 40]**



**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.